NPS Form 10-900 (Oct. 1990)

United States Department of the Interior National Park Service

National Register of Historic Places Registration Form

1. Name of Property					
historic name Ford Motor Company Building other names/site number McQuay Norris Manufacturing Company Plant for the U.S. Navy; Acme Premium Supply Company; FPS Inc. Building					
2. Location					
street & number4100 Forest Park Avenue		[N/A] not for publication			
city or town St. Louis (Independent City)		[N/A] vicinity			
state Missouri code MO county St. L	ouis City code 510 zip co	ode <u>63108</u>			
3. State/Federal Agency Certification					
As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this [] nomination[X] request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property [X] meets [] does not meet the National Register criteria. I recommend that this property be considered significant [] nationally [] statewide [X] locally. (See continuation sheet for additional comments [].) Signature of certifying official/Title Claire F. Blackwell/Deputy SHPO Date Missouri Department of Natural Resources State or Federal agency and bureau In my opinion, the property [] meets [] does not meet the National Register criteria. (See continuation sheet for additional comments [].) Signature of certifying official/Title State or Federal agency and bureau					
4. National Park Service Certification					
I hereby certify that the property is: [] entered in the National Register	Signature of the Keeper	Date			

5. Classification				
Ownership of Property [X] private [] public-local [] public-State [] public-Federal	Category of Property [X] building(s) [] district [] site [] structure [] object		ces within Property encontributing buildings sites structures objects Total	
Name of related multiple property listing.		Number of contributing resources previously listed in the National Register.		
6. Function or Use	***************************************			
1110101101		Current Functions INDUSTRY: Industrial Storage		
7. Description				
LATE 19 TH AND 20 TH CENTURY AMERICAN MOVEMENTS: Commercial Style r		Materials foundation_CONCRETE wallsCONCRETE BRICK roofASPHALT other_TERRA_COTTA		

The Ford Motor Company Building St. Louis, Missouri

8. Statement of Significance	
Applicable National Register Criteria	Areas of Significance
[X] A Property is associated with events that have made a significant contribution to the broad patterns of our history	INDUSTRY
[] B Property is associated with the lives of persons significant in our past.	
[] C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.	Periods of Significance 1914-1942
[]D Property has yielded, or is likely to yield, information important in prehistory or history.	Significant Dates
Criteria Considerations	1914
Property is:	1916
[] A owned by a religious institution or used for religious purposes.	Significant Person(s)
[] B removed from its original location.	N/A
[] C a birthplace or grave.	14//
[] D a cemetery.	
[] E a reconstructed building, object, or structure.	Cultural Affiliation
[] F a commemorative property.	N/A
[] G less than 50 years of age or achieved significance within the past 50 years.	Architect/Builder
	Clymer & Drischler (St. Louis, Missouri) Kahn, Albert (Detroit, Michigan)
Narrative Statement of Significance (Explain the significance of the property on one or more continuation	sheets.)
9. Major Bibliographic References	
Bibliography (Cite the books, articles and other sources used in preparing this form	n on one or more continuation sheets.)
Previous documentation on file (NPS):	Primary location of additional data:
[] preliminary determination of individual listing (36 CFR 67)	[X] State Historic Preservation Office
has been requested	[] Other State Agency
[] previously listed in the National Register [] previously determined eligible by the National Register	[] Federal Agency
[] designated a National Historic Landmark	[] Local Government
[] recorded by Historic American Buildings Survey	[] University
#	[X] Other:
[] recorded by Historic American Engineering Record	Name of repository: Henry Ford Museum & Greenfield Village
#	Research Center: Ford Motor Company Archives

10. Geogi	raphical Data			_		
Acreage of	of Property <u></u>	_ess than 1 Acre				
UTM Refe	rences					
A. Zone 15	Easting 73955 0	Northing 4279920	B. Zone	Easting	Northing	
C. Zone	Easting	Northing	D. Zone	Easting	Northing	
			[] See cor	ntinuation sheet		
	oundary Desc boundaries of the	ription property on a continuation	sheet.)			
	/ Justificatior the boundaries we	I re selected on a continuati	on sheet.)			
11. Form	Prepared By	M016-11 .				
name/title	Laura Johr	nson				_
	on <u>Trivers</u> A			date <u>O</u>	october 26, 2001	
street & n	umber 100 N	North Broadway, Sui	te 1800	telepl	hone <u>314-241-2900</u>	<u>)</u>
city or town St. Louis state Missouri zip code 63102						
	al Documenta e following iter	tion ns with the complete	ed form:			
Continua	tion Sheets					
Maps						
A USG	5 map (7.5 or 15 m	ninute series) indicating the	property's location.			
A Sketo	ch map for historic	districts and properties ha	ving large acreage or numero	ous resources.		
Photogra	phs					
Repres	entative black and	white photographs of the	e property.			
Additiona (Check	al Items with the SHPO or	FPO for any additional iter	ns)			
Property (Complete th	Owner is item at the reque	est of SHPO or FPO.)				
nameF	PS, Inc. Cor	<u>ntact: Robert B. Glar</u>	ner, Jr.			_
street & n	umber <u>4343</u>	Duncan Avenue		telephone	e <u>314-535-8700</u>	_
city or tow	/n_St. Louis		state <u>Missouri</u>	zip code_	63110	

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Ford Motor Company Building St. Louis, Missouri (Independent City)

SUMMARY

The Ford Motor Company Building at 4100 Forest Park Avenue in St. Louis was built in two stages, the first completed in 1914 and the second in 1916. It is a five-story brick-faced reinforced concrete building with a rectangular plan. The first phase, built at the corner of Sarah Street and Forest Park, was designed by Clymer & Drischler of St. Louis and measures approximately 145' deep by 150' wide. The second phase was designed by Albert Kahn of Detroit Michigan, extending the building another 150' to the west. The north and south elevations, oriented parallel with Forest Park, consist of twelve bays while the east and west elevations are five bays deep. The north, east and eastern half of the south elevation are faced in brick while the south and west elevations of the 1916 addition are exposed concrete. Decorative terra cotta accents the primary elevations. The building has a flat roof with brick and concrete parapets. A set of 1944 construction drawings documents the majority of the exterior modifications to the building. These changes were necessary for World War II efforts by the U.S. Navy and include items such as the replacement of many original steel sash windows with glass block. A modern one-story addition for a loading dock exists at the east end of the south elevation, along with a full-height concrete block elevator tower at the seventh bay from the east. At the western end of the south elevation is a brick pump and compressor building that is not attached to the main building and does not appear on the 1939 site plan documenting the complex.² (See "Plat Plan" Section 8) Set back from the southeast corner, one bay to the north is a concrete bridge connecting the Ford Motor Company building to the Goodwill Industries building to the west. The bridge is concrete, one-bay wide and five stories tall, although open at the ground floor. The Goodwill Building was constructed in 1919 for the Standard Sanitary Manufacturing Company.³ It was not linked to the Ford Building until Goodwill Industries owned both properties from 1966 to 1978. 4 & 5 When Goodwill Industries sold the Ford Building, the property line was set at the mid-span of the bridge. Passages between the buildings were then blocked, converting the structure to storage space. The Ford Motor Company Building is a classic example of Early 20th Century American Commercial Style Architecture applied to early reinforced concrete construction. It contributes to the context of this historically industrial area of St. Louis by design, location, setting, materials, workmanship, feeling and its association with the assembly and distribution of early Ford automobiles to St. Louis and a six state area of the Midwest from 1914 to 1942.

NARRATIVE DESCRIPTION

The building was designed to serve two distinct purposes and reflects this in the treatment of the facades. The primary north and east elevations are similar in detailing and in fact contain the only ornamentation on the

¹ Mauran Russell Crowell & Mullgardt & John D. Falvey Architects Engineer "McQuay Norris Mfg. Co., Plant for the U.S. Navy", 4100 Forest Park Blvd., St. Louis, MO June 26, 1944-November 10, 1944.

^{2 &}quot;Plat Plan" dated October 1, 1936 and revised August 7, 1939, Ford Motor Company Archives, Plant Engineering-Contracts Collection.

³ Building Permit, July 18, 1919. City of St. Louis Division of Building and Inspection-Permit Archives

⁴ Pitzman's Co. of Surveyors and Engineers/Schartz & Van Hoefen Architects/Ferris & Hamig Mechancial Engineers ", survey by orders of Acme Premium Supply Corporation", 4100 Forest Park Blvd., St. Louis, MO July 15, 1978. (General Services Administration title block dated June 13, 1963).

⁵ Deed, July 15, 1966 & Deed-October 11, 1978. City of St. Louis Recorder of Deeds.

⁶ Mutual Easement, October 10, 1978. City of St. Louis Recorder of Deeds.

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Ford Motor Company Building St. Louis, Missouri (Independent City)

building, as they face the public. (See photos #1, 2, 6-8, G-I) The south and west elevations are devoid of decorative elements, reflecting the utilitarian activities that have always occurred at the rear of the building. (See photos #3-6, B, D & E) The use of poured reinforced concrete construction was in its early stages of actual use in 1914, especially in the building's planning stages when Clymer & Drischler were hired to design the factory in 1912. In fact, the use of this material in the first decade of the 20th century was unusual, and basic experimentation was still being performed.

NORTH AND EAST ELEVATIONS

Design: Brick veneer with decorative terra cotta elements over the concrete frame was applied to the north and east elevations to portray a cleaner and more impressive appearance to the general public. The original 1914 building consists of five bays in each direction from the corner of Sarah Street and Forest Park Avenue, measuring approximately 145' deep and 150' wide. The width includes the railroad track structure, referred to as the "track slab" in original construction documents, at the western end of the original building. The basement of the 1914 building extends under this bay and the original construction included a covered exterior elevated railroad track at this location along the original west elevation. The thickened slab can be seen at the underside of the second floor. Presumably, access doors and windows then enclosed the west elevation from the second through the fifth floors until the addition was finally erected. The 1916 addition matches the earlier construction in design and depth, extending the building another 150'. It is comprised of six bays and enclosed the railroad track at its construction. The "track slab" bay is offset from the rest of the building by about four inches. The exterior offset detracts from any difference in brick color between the two construction phases and avoided the necessity of "toothing-in" the brick at the parapet.

The brick detailing at each column enhances the structural repetition of the building. The borders of the columns are flush with the parapet and double step from the face of the building for a "paneled" effect. This detail terminates level with the top of the fifth floor windows and extends to the base of the building, two bricks from the granite water table. The spandrel panels between the upper windows include brick headers set in a rectangular pattern. The brickwork above the fifth floor extends six courses from the lintel then projects outward, flush with the parapet wall.

Terra Cotta: The "paneled" brick column detail is only interrupted at the white terra cotta banding defining the top of the first floor level. Strong horizontal decorative detailing exists between the first and second floors along both the north and east elevations. Overlapping terra cotta coping tiles just under the second floor windows act as sills and protect the projecting decorative bull-nosed segments. Below this, a strip of

^{7 &}quot;Architect's contract" June 17, 1912, Henry Ford Museum & Greenfield Village Research Center, Plant Engineering-Contracts Collection.

⁸ Carole Rifkind, A Field Guide to American Architecture (Boston-Toronto: Little Brown and Company, 1986), p.293.

^{9 &}quot;Condron Company Bill", March 31, 1913 & "St. Louis Service Building of Ford Motor Company", May 11, 1914, Henry Ford Museum & Greenfield Village Research Center, Plant Engineering-Contracts Collection.

^{10 &}quot;History of Ford Motor Company in St. Louis", p. 2; Ford Papers, Corporations & Industry Collection, Missouri Historical Society, St. Louis

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Ford Motor Company Building St. Louis, Missouri (Independent City)

terra cotta units extends from column to column, bordered on four sides by brick. Yet another decorative band of terra cotta below this extends continuously on both elevations. Centered on each column, at this level, are stepped segments of terra cotta with a center projected circle design. Terra cotta trim still frames the storefront openings that originally displayed it in historic photographs. Originally, this same decorative material was used at the parapet as a cornice, creating a defined entablature. (See photos #G, H & I)

Windows & Storefronts: Set back four inches from the columns are the eight-inch brick jambs surrounding the windows. The reinforced concrete construction allowed window openings to literally extend to the structural frame of the building. This fit the industrial use for the Ford Motor Company, as a tremendous amount of natural light was ideal for efficient production. Original steel sash windows are in place at the second floor only. The third through fifth floor steel sash windows were replaced with glass block during World War II, most likely for security reasons during manufacturing for the U.S. Navy. Louvers are interspersed throughout the glass block, and a few individual steel sash units on the second floor were replaced with miscellaneous vents and louvers. During the glass block installation, terra cotta window heads were replaced with brick; and terra cotta sills were replaced with poured-in-place concrete. (See photos #1, 2, H & I)

The entrance to the original showroom was located on the north elevation at the second bay from Sarah Street. The surrounding masonry is quite different in that a decorative pediment projects above the opening with scrolled terra cotta elements on either side. A sign existed at the now blank surface that once read, "Ford". (See photo #1, 7, H & I) During the Ford occupation, the opening consisted of a pair of glazed doors, transom and fluted columns that are described in construction documentation from the Ford History Museum. (See photo #I) Also, Albert Kahn & Associates retain original architectural drawings of this building. The pedestals for these fluted columns still exist. (See photo #7) The second bay from the corner on the east elevation is unique in that two brick vertical mullions separate the glazed openings into three parts. A door with an awning exists at the base of this bay.

SOUTH AND WEST ELEVATIONS

Design: The earlier half of the south elevation is faced with brick over the concrete frame. The eastern half of the south elevation and the entire west elevation are exposed concrete frames, devoid of any decorative detailing. The only other brick facing at these elevations occurs on the three roof top penthouses visible from the south elevation and from a distance. (See photos #2-6) A modern one-story addition for a loading dock exists at the east end of the south elevation, along with a full-height concrete block elevator tower at the

¹¹ Mauran Russell Crowell & Mullgardt & John D. Falvey Architects Engineer "McQuay Norris Mfg. Co., Plant for the U.S. Navy", 4100 Forest Park Blvd., St. Louis, MO June 26, 1944-November 10, 1944.

^{12 &}quot;Specifications of Material to be Furnished & Labor Required for the Erection and Completion of Reinforced Concrete & Brick, Fireproof, Five Story & Basement Assembling Plant for Ford Motor Company to be Erected at the Southwest Corner of Forest Park Boulevard, and Sarah Street, St. Louis, Missouri", February 7, 1913, Henry Ford Museum & Greenfield Village Research Center, Plant Engineering-Contracts Collection.

¹³ Albert Kahn & Associates (Project No. 701), 7430 2nd Avenue Detroit Michigan 48202 (313-202-7000)

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Ford Motor Company Building St. Louis, Missouri (Independent City)

seventh bay from the east. At the western end of the south elevation is a brick pump and compressor building that is not attached to the main building. Set back from the southeast corner, one bay to the north is a modern concrete bridge connecting the Ford Motor Company building to the Goodwill Industries building to the west from floors two through five.

Concrete Frame: An interesting concrete construction detail occurs on the 1914 building at the south elevation in that the edges of the concrete column caps protrude beyond the brick facing of the columns. (See photo #5) Only one column cap form was made and used for every column cap casting, including the exterior versions. Although reinforced concrete dates to as early as 1860 in the United States, it remained a novelty until later innovations after 1900.¹⁴ By the early 20th century, reinforced concrete had recently become the most efficient material for construction, complementing the assembly based production theories of the Ford Motor Company. Albert Kahn had been using reinforced concrete on automobile plants since 1905. His first of many Ford commissions was the 1909 Highland Park Plant, which has been described as Detroit's own "Crystal Palace". 15 St. Louis architects, Clymer & Drischler, may have been directed to use this structural system by the Ford Motor Company for its many benefits to industrial activities. 16 Concrete had proven to be remarkably strong, fireproof, cheap to erect and able to span long distances, thus eliminating interfering columns. The exterior walls were no longer the bearing system, allowing large window openings that literally spanned from column to column, allowing much needed light into the tasks involved in production. Albert Kahn was hired as architect for the St. Louis Ford Assembly Plant addition completed in 1916. 17 Albert Kahn's later design displays modifications to this building that represent improvements during the early use of reinforced concrete. Such improvements include the use of concrete columns integrated into a partial concrete exterior wall and octagon shaped drop panels above the column caps as opposed to round, potentially to save on material and eliminate extra weight. One year later, Albert Kahn designed the infamous Rouge Plant constructed in 1918.¹⁸

Windows & Storefronts: The U.S. Navy operation in this building from 1942 to the end of World War II left very little of the original sash still in place on the south and west elevations. The only remaining units are within the first three bays on the second floor at the eastern end of the south elevation, the eighth bay from the eastern end of the south elevation and almost four entire bays on the second floor of the west elevation. (See photos #3-5) The rest of the openings were in-filled with either concrete or glass block.

¹⁴ Coney, William B. AIA, Preservation Brief #15: Preservation of Historic Concrete; Problems and General Approaches (Washington D.C.: U.S. Government Printing Office), p. 2.

¹⁵ Robert Lacey, Ford: The Men and the Machine (Boston-Toronto: Little Brown and Company, 1986), p.104 & 105.

^{16 &}quot;Architect's contract" June 17, 1912, Henry Ford Museum & Greenfield Village Research Center, Plant Engineering-Contracts Collection.

^{17 &}quot;Architect's contract" August 14, 1915, Henry Ford Museum & Greenfield Village Research Center, Plant Engineering-Contracts Collection.

¹⁸ Robert Lacey, Ford: The Men and the Machine (Boston-Toronto: Little Brown and Company, 1986), p. 157.

¹⁹ Mauran Russell Crowell & Mullgardt & John D. Falvey Architects Engineer "McQuay Norris Mfg. Co., Plant for the U.S. Navy", 4100 Forest Park Blvd., St. Louis, MO June 26, 1944-November 10, 1944.

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Ford Motor Company Building St. Louis, Missouri (Independent City)

Modern Additions: Major exterior modifications to the building are primarily at the south and west elevations. The existing concrete block loading dock, built in 1986, located at the eastern end of the south elevation replaced a previous U.S. Navy loading dock. 20 &21 This work was done during Acme Premium Supply Company's ownership.²² Duncan Avenue Properties added the concrete block freight elevator enclosure at the seventh bay from Sarah Street running the full height of the building in 1998.²³ The five story concrete bridge, open at the ground floor as described above, was added to link the Ford Building to the Goodwill Building to the west sometime during Goodwill's ownership of both properties between 1966 and 1978. 24, 25 & 26 (Also see 1950 Sanborn Map vs. 1989 Sanborn Map, Section 8) Original masonry window openings at the east elevation of the Standard Sanitary Manufacturing Company building, built in 1919, were retrofitted and enlarged for modern overhead metal doors at each level and one man-door on the fourth floor. These have now become "metal partition walls" since keys were not passed down to the current owners and it is possible they are spot-welded closed. The bridge is typical concrete construction, still in use today. Modern wall ties, once connecting the re-usable forms, are exposed and the concrete is smooth as a result. In comparison, the concrete slabs and exterior column walls of the Ford building were formed entirely with individual wood boards. (See photo #3) The bridge is not a contributing historic element and its removal would be considered an improvement to the integrity of the Ford Building. It is interesting to note that the property line runs down the middle of this bridge and current owners of these adjacent properties split responsibility of maintaining it.²⁷

Site Description: The Ford Motor Company Building is located in an area of St. Louis that was, and still is, highly industrial. A Wabash Railroad line overpass was once at the intersection of Sarah Street and Duncan Avenue, one block to the south of Forest Park Avenue. A berm continued onto the southeast corner of the Ford site and curved westward through the center of the block. (See Sanborn Maps, Section 8 and photo #B) This spur serviced the early businesses such as the Ford Building and the Standard Sanitary Manufacturing Company just to the west where Goodwill Industries is now located. (See "Plat Plan", Section 8) A 25' wide separation exists between these two buildings. This particular strip of Forest Park retains many of the original structures from this era, including the Dorris Motor Car Company Building at the northeast corner of

²⁰ Mauran Russell Crowell & Mullgardt & John D. Falvey Architects Engineer "McQuay Norris Mfg. Co., Plant for the U.S. Navy", 4100 Forest Park Blvd., St. Louis, MO June 26, 1944-November 10, 1944.

²¹ Lapin-Ellis & Associates Structural and Civil Engineers Land Surveyers, 1985 Site Survey & March 3, 1986 issued drawings for Acme Premium Supply Co. "Loading Dock Addition.

²² Building Permit, February 24, 1986. City of St. Louis Division of Building and Inspection-Permit Archives

²³ Building Permit, May 5, 1998, City of St. Louis Building Division-Permit Archives.

²⁴ Pitzman's Co. of Surveyors and Engineers/Schartz & Van Hoefen Architects/Ferris & Hamig Mechancial Engineers ", survey by orders of Acme Premium Supply Corporation", 4100 Forest Park Blvd., St. Louis, MO July 15, 1978. (General Services Administration title block with June 13, 1963 date).

²⁵ Deed-July 15, 1966 & Deed-October 11, 1978. City of St. Louis Recorder of Deeds.

²⁶ Schwarz & Van Hoefen Architects/Ferris & Hamig Mechanical Engineers ", for General Services Administration, "Building Rehabilitation, 4100 Forest Park Blvd., St. Louis, MO June 13, 1963.

²⁷ Mutual Easement-October 10, 1978. City of St. Louis Recorder of Deeds.

^{28 &}quot;Plat Plan" dated October 1, 1936 and revised August 7, 1939, Ford Motor Company Archives, Plant Engineering-Contracts Collection.

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Ford Motor Company Building St. Louis, Missouri (Independent City)

the same intersection with Sarah Street. This manufacturing plant was recently placed on the National Register of Historic Places and is currently being re-developed. The railroad bridge and tracks were removed during major site work in 1986.²⁹ A building originally used for compressors is located 7'-0" away from the west end of the south elevation. It is a trapezoidal shaped, one-story building measuring 95' long against the Ford building, extending 25' at the west elevation and 35' at the east elevation. The south wall then angles accordingly. The foundation is concrete and the walls are brick. An overhead door and loading dock is centered on the east elevation with glass block openings and the windows are wood. This structure is not on the 1939 site plan produced by the Ford Motor Company, documenting the complex shortly before relocating.³⁰ (See "Plat Plan" Section 8) The structure is also not present in the 1950 Sanborn Map, although 1944 modification by the U.S. Navy indicates its construction.³¹ (See 1950 Sanborn Map, Section 8)

Interior: The interior of the Ford Motor Company Building is overall very utilitarian, displaying the exposed concrete structure with brick infill for exterior walls and interior walls as necessary between concrete columns. Added masonry walls are constructed with either structural clay tile or concrete block. The exposed concrete flatwork, such as floors, ceilings and extended walls at exterior columns were formed with individual wood boards. This early method of installing poured-in-place concrete left the texture and outline of the board forms on ceilings and walls.

Remnants of the original showroom include decorative treatment at the column caps, coffered beams and wood wainscoting. (See photos #9 &10) A staircase leads from what was the showroom to the upper levels. These stairs are comparatively more decorative than the purely warehouse stairs of the same era. (See photos #11 & 12) A ramp exists at the first floor between the original building and the 1916 addition. The transition between the two phases of construction is even more evident on the upper floors as the concrete jambs still remain that once framed the 1914 west-facing windows. Also, on the second floor are steel beams and pulleys, which were potentially used to unload rail cars that were rolled onto the second floor from the elevated track. (See photos #15 & B) The floor of this shallow bay, which is at approximately the center of the building length, is concrete with an extremely thick slab. This is documented as the "track slab" in original construction documents.³²

The detailing of the columns changed between the 1914 and 1916 construction, potentially due to improvements being made to reinforced concrete construction methods. The earlier columns have square drop panels at the ceiling while the later columns change to an octagon drop panel. (See photos #13 & 14)

²⁹ Lapin-Ellis & Associates Structural and Civil Engineers Land Surveyors, 1985 Site Survey & March 3, 1986 issued drawings for Acme Premium Supply Co. "Loading Dock Addition".

^{30 &}quot;Plat Plan" dated October 1, 1936 and revised August 7, 1939, Ford Motor Company Archives, Plant Engineering-Contracts Collection.

³¹ Mauran Russell Crowell & Mullgardt & John D. Falvey Architects Engineer "McQuay Norris Mfg. Co., Plant for the U.S. Navy", 4100 Forest Park Blvd., St. Louis, MO June 26, 1944-November 10, 1944.

^{32 &}quot;St. Louis Service Building of Ford Motor Co., May 11, 1914, Henry Ford Museum & Greenfield Village Research Center, Plant Engineering-Contracts Collection.

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This later version may have saved on material and reduced the weight of the building, being more than likely designed by Albert Kahn's engineer, Ernest Ransome.³³ The transition at the ceiling is interesting in that the drop panels of the west addition extend across the ceiling to connect with the east columns, linking the two buildings structurally. (See photo #14)

Overall, the Ford Motor Company Building maintains a high degree of integrity in its location, design, setting, materials and workmanship of the era it was constructed, feeling, and association with its historically industrial location. Although some changes altered the appearance of the building slightly, the original design intent, construction techniques and assembly to showroom automobile production process of the early 20th century still reads clearly today. The architectural movement this building represents was based on using the newly discovered reinforced concrete frame to maximize the efficiency of a heavy-duty building while allowing in more natural light and ventilation. Even from the exterior it is evident that this structural system is a major change from the typical masonry bearing wall systems of this era and earlier simply because every window opening extends from column to column.

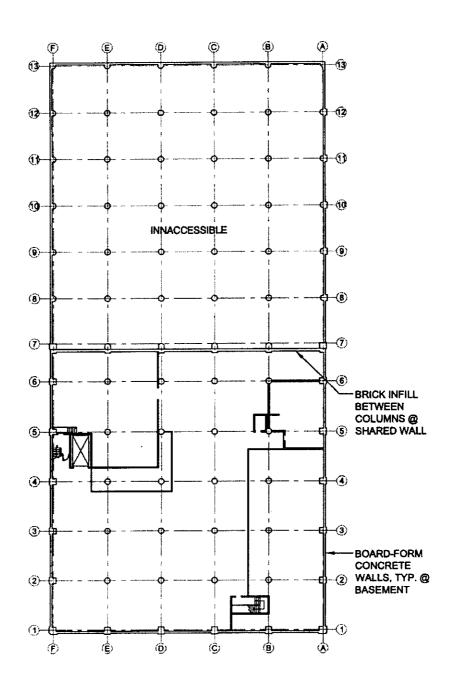
Many original construction documents and photographs are available to reverse modifications that were done over the years. For instance, the future owners intend to replace the glass block window infill with replicated steel sash windows to match the original design, along with re-opening the storefronts. Later additions such as the modern loading dock and freight elevator at the south elevation may be retained to compliment the future use of the building. The concrete multi-level bridge will be either removed or retained according to expansion plans unknown at this time. The open floor plan, strong construction, fireproof materials and large window openings inherent in the architectural character of this building are considered a great asset to the intended future use as a biotechnology and life sciences research complex. This will involve upgrading the existing mechanical, electrical and plumbing systems to conform to current building code standards and required ADA guidelines. During this process, historic features will be retained, enhanced and restored where possible. Just as the Ford Motor Company led the way in automobile design and production here, this building will again be utilized for an innovative purpose by providing an environment custom-tailored for new companies that will be leading the way in the research of life sciences.

³³ William Curtis, Modern Architecture Since 1900 (New Jersey: Prentice Hall, Inc. 1987), p.43.

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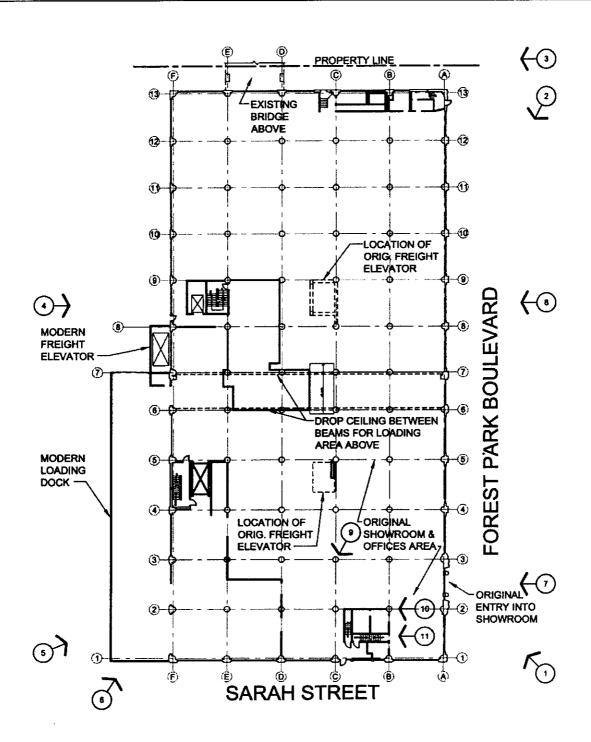




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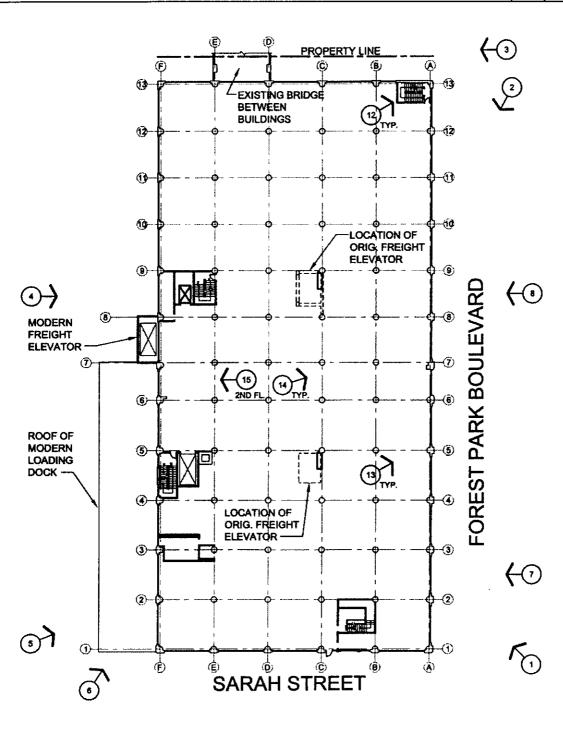


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Ford Motor Company Building St. Louis, Missouri (Independent City)



EXISTING SECOND FLOOR PLAN

1' = 50'-0'

/ O

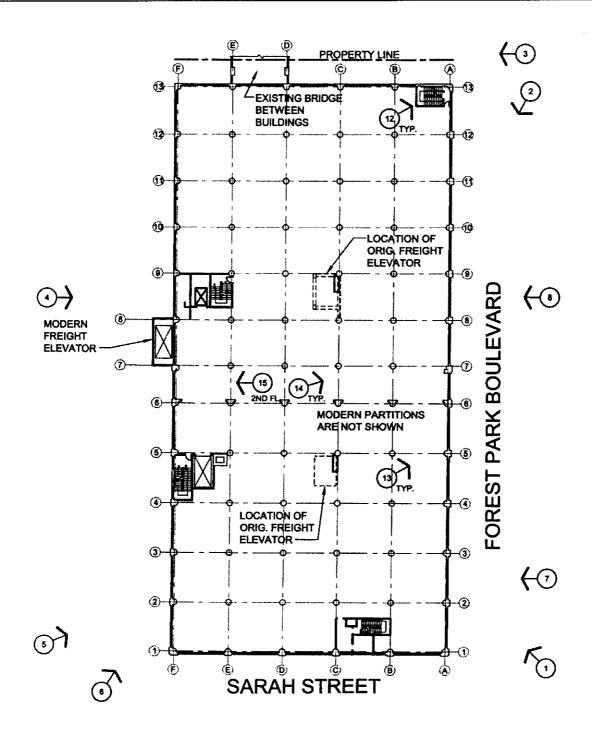
PHOTOGRAPH NUMBER



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Ford Motor Company Building St. Louis, Missouri (Independent City)

SUMMARY

The Ford Motor Company Building at 4100 Forest Park Avenue is eligible for listing on the National Register of Historic Places under Criterion A for its significance in Industry. This building is located in the industrial area near a railroad line between the Midtown and Central West End Historic Districts of St. Louis. The Ford plant played a major role in the introduction of the automobile to St. Louis and a six state area of the Midwest during the first half of the 20th century as an assembly and distribution point. The Ford plant shared the industry in St. Louis, in the early days, with eight other manufacturers. Five of these were also factory assembly branches and three were full manufacturing plants.³⁴ The building was constructed in 1914 in order to keep up with the great demand of the affordable automobile, the Model T, which had been introduced in 1908. Within one year, it was necessary to double the size of this branch with an addition in 1916. The building was constructed prior to the use of moving assembly lines for this industry, which were first introduced for automobile production by Henry Ford in 1914 at the Highland Park manufacturing plant in Detroit.³⁵ The St. Louis plant experienced this major transition, following World War I, to a conveyor belt system with the same drastic improvements in production experienced in Detroit.³⁶ (See 1939 Floor Plans, Section 8) The peak production year for this plant occurred in 1923 with 87,875 units.³⁷ The building contributes to the historic industrial context of the area in which it is located. In fact, the Ford Building is one of the many remaining first generation buildings developed here in the earliest part of the 20th century that still exist. (See Sanborn Maps, Section 8)

The Ford Motor Company Building is a classic example of Early 20th Century American Commercial Style Architecture applied to an early reinforced concrete structure. Clymer & Drischler Architects, of St. Louis, designed the 1914 construction.³⁸ Albert Kahn, a Detroit architect hired by Henry Ford for many facilities across the country, such as Highland Park in 1909 and the Rouge beginning in 1918, designed the 1916 addition.^{39 & 40} The period of significance is the date of construction through the Ford Motor Company occupation, 1914-1942. The U.S. Navy then owned the building for use during World War II.⁴¹ Following World War II, the Ford Motor Company resumed operation at its current larger complex in Hazelwood.⁴²

^{34 &}quot;The Automobile Industry in Missouri", 1907 and 1914, p. 2; Ford Papers, Corporations & Industry Collection, Missouri Historical Society, St. Louis

³⁵ Robert Lacey, Ford: The Men and the Machine (Boston-Toronto: Little Brown and Company, 1986), p.120.

^{36 &}quot;History of Ford Motor Company in St. Louis", p. 1; Ford Papers, Corporations & Industry Collection, Missouri Historical Society, St. Louis, p. 4.

^{37 &}quot;Yearly Production – Ford Motor Company in St. Louis", p. 1; Ford Papers, Corporations & Industry Collection, Missouri Historical Society, St. Louis

^{38 &}quot;Architect's contract" June 17, 1912, Henry Ford Museum & Greenfield Village Research Center, Plant Engineering-Contracts Collection.

³⁹ Robert Lacey, Ford: The Men and the Machine (Boston-Toronto: Little Brown and Company, 1986), pp.104 & 157.

^{40 &}quot;Albert Kahn's contract (Service Building)" August 14, 1915, Henry Ford Museum & Greenfield Village Research Center, Plant Engineering-Contracts Collection.

⁴¹ Deed-May 23, 1942, City of St. Louis Recorder of Deeds.

^{42 &}quot;History of Ford Motor Company in St. Louis", p. 4; Ford Papers, Corporations & Industry Collection, Missouri Historical Society, St. Louis.

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Various owners then primarily used the building as a storage facility, which continues to be its function to date.

ELABORATION

The early years: The automobile was hardly more than a curiosity and rarely made the front pages of the St. Louis newspapers in the early years of development. This was the attitude when St. Louis hosted the second annual automobile show in 1907, a major event that had only occurred in New York and Chicago the year before. St. Louisans, as well as the rest of Missouri in general, had little interest in the automobile. In fact, State Representative H.F. Stapel of Rockport, a candidate for governor, came out as "being opposed to the automobile and announced that he was seriously considering introducing a bill banning the machines from Missouri Highways." Needless to say, he did not win the election.

Later in 1907, the Ford Motor Company first became a presence in St. Louis, although there was little or no public notice. The sales branch and service stock department, the tenth to be opened in the country, was located in a small rented building at 3667 Olive Street. The two-story building had a showroom on the first floor and a small repair shop in back. The second floor was a parts storage area. The Ford Motor Company predicted that the Model T, to be introduced in October of 1908, would essentially take over this early automobile market due to its sturdiness, power, and value for the money. Even these optimistic predictions were surpassed when, late in the winter of 1908, Ford had to announce that no more orders could be taken because the factory in Detroit would need until August to fulfill delivering the cars already promised. The sales are already promised.

The 1909 Sanborn Insurance map shows only a few residences on the block across what was then called Forest Park Boulevard from the future Ford building site and no buildings at all on the entire block that the Ford building now occupies. It is clear that plans were in place for Forest Park to be a major artery from downtown as the street was constructed to be a wide boulevard with a center median. (See 1909 Sanborn Map, Section 8)

During these early years there were no Ford dealerships, and Ford cars were delivered direct from the branch location to purchasers throughout the territory. The St. Louis branch territory included the eastern half of Missouri, southern Illinois, western Kentucky, western Tennessee, the northern half of Mississippi and all of Arkansas. It even included a strip of land adjacent to Fort Smith, then known as the "Indian Territory." Ford's timing was right on target for immediately following the establishment of the first St. Louis operation on Olive Street, demand for motor cars increased dramatically. In 1909 there were only 306,000 passenger cars on the nation's highways. By 1914 this had increased five-fold to 1,664,000.

^{43 &}quot;The Automobile Industry in Missouri", 1907 and 1914, p. 1; Ford Papers, Corporations & Industry Collection, Missouri Historical Society, St. Louis

^{44 &}quot;History of Ford Motor Company in St. Louis", p. 1; Ford Papers, Corporations & Industry Collection, Missouri Historical Society, St. Louis

⁴⁵ Robert Lacey, Ford: The Men and the Machine (Boston-Toronto: Little Brown and Company, 1986), p.94.

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Consequently, the company's board of directors approved construction of Ford's first St. Louis assembly plant, to be located at the intersection of 4100 Forest Park Boulevard and Sarah Street. ⁴⁶ A later, 1923 ordinance changed the name from Forest Park Boulevard to Forest Park Avenue. ⁴⁷ A contract was signed June 20, 1912 with St. Louis architects, Clymer & Drischler. ⁴⁸ This firm was renowned in St. Louis for designing stately homes in University City, Central West End and Compton Heights along with factories, lofts, an addition to the Moon's Buggy Company, and various theatres and schools. ^{49 & 50}

Henry Ford surrounded himself with innovative people from metallurgists to mechanical engineers who constantly pushed the limits of current knowledge. Architect Albert Kahn, along with structural engineer Ernest Ransome, were no different. They were leading the way in American experimentation and use of a new method of construction, reinforced concrete. This material and installation process fit the same theories Henry Ford applied to producing cars. It provided quality construction much more efficiently and affordably, while at the same time spanning greater distances than the conventional brick-bearing wall with timber framing typical of the period. Concrete proved to be extremely strong, fireproof, and allowed for large expanses of glass necessary for natural light. Architect Albert Kahn had already been hired to design Ford's Detroit Highland Park complex and other facilities in reinforced concrete by the time the St. Louis Assembly Plant was in the planning stages. We can assume that architects Clymer and Dryschler were directed to use this type of construction. Both firms were under the review of John Graham, Supervising Architect of the Ford Motor Company. Architect of the Ford Motor Company.

The necessity for expansion into larger Ford facilities across the country correlates with the dramatic increase in production at Highland Park in 1913. Henry Ford had introduced his invention of the first automatic conveyor belt. ⁵⁴ This was the key to the assembly line process that radically changed the way Americans worked. It converted the horseless carriage from a curiosity to a commodity by cutting the total time of construction from fourteen hours to ninety-three minutes for each chassis. ⁵⁵ Henry Ford states in his autobiography, "Every piece of work in the shops moves, it may move on hooks, on overhead chains…it may travel on a moving platform, or it may go by gravity, but the point is that there is no lifting or

^{46 &}quot;History of Ford Motor Company in St. Louis", p. 2; Ford Papers, Corporations & Industry Collection, Missouri Historical Society, St. Louis

⁴⁷ Ordinance #32738 November 28, 1923, Register's Office, St. Louis City Hall.

^{48 &}quot;Architect's contract" June 17, 1912, Henry Ford Museum & Greenfield Village Research Center, Plant Engineering-Contracts Collection.

^{49 &}quot;St. Louis Architects: Famous and Not So Famous", Landmarks Association of St. Louis Newsletter, May 1985, p. 2.

⁵⁰ Judy Little, University City Landmarks and Historic Places (City of University City, 1997), p.20, 47

⁵¹ William Curtis, Modern Architecture Since 1900 (New Jersey: Prentice Hall, Inc. 1987), p.43.

⁵² Robert Lacey, Ford: The Men and the Machine (Boston-Toronto: Little Brown and Company, 1986), p. 104.

^{53 &}quot;Architect's contract" June 17, 1912, Henry Ford Museum & Greenfield Village Research Center, Plant Engineering-Contracts Collection.

⁵⁴ Robert Lacey, Ford: The Men and the Machine (Boston-Toronto: Little Brown and Company, 1986), p.108.

⁵⁵ Richard Feldman and Michael Betzold, ed., End of the Line, Autoworkers and the American Dream (New York: Weidenfeld & Nicolson, 1988), p. 5-6

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trucking...No workman has anything to do with moving or lifting anything". The conveyor now did the walking, saving an incredible amount of time. The Highland Park, Michigan, plant attested to the significance of this invention when, in 1913-1914, production nearly doubled from the previous year while the number of workers remained the same. Ford's motivation to improve efficiency was driven by his desire to lower the cost of his automobiles so that it was not only the wealthy that could afford this convenience, but the average American.

In January 1914, Ford's plan to raise the salaries of production line workers from \$2.34 to \$5.00 per day across the board was announced; a full day's work was reduced to eight hours. This raise included a "profit-sharing" bonus, earned after six months' service. The reason for this was to reduce labor turnover and create a more stable and committed workforce. Critics were sure that the Ford Motor Company could not afford this. What they didn't know was that the assembly line installed during the Christmas holiday of 1913 at Highland Park had reduced the man-minutes per car from 728 to only 93.⁵⁷

Upon its completion in 1914, the new Ford plant was described as "one of the best lighted factory buildings in St. Louis". A switch from the main line of the Wabash railroad is described as running "alongside the second floor on a concrete building so arranged that the freight car becomes part of the building". This description applies to the configuration of the building prior to the 1916 addition to the west, which then concealed the track to the interior of the building.

The railroad was essential to the mass production of automobiles at this time. W.C. Anderson, the company's first branch manager, told the <u>Globe-Democrat</u> reporter the reason for building the facility in St. Louis: "We could not get railroad cars to handle the output if we shipped the cars assembled from Detroit. Shipped in knocked down form, a single railroad car will carry as many motorcars as a train would carry if the motorcars were assembled. All the parts are tested before they are shipped and the work is so standardized that the assembling is easy." It was projected that once the factory was settled into its new location it would assemble 75 cars each day. At the same time the company's Detroit plant built and shipped 1,179 cars every day and the first seven months of the year had yielded 145,000 Model T's. The plant manager estimated that the new assembly plant would construct 15,000 Fords, including Model T's, by the end of the fiscal year. ⁵⁹ (See photos A-F & J)

By the time the new Ford Motor Company assembly plant in St. Louis was completed in mid-1914, it was generally agreed that the horseless carriage was here to stay. In fact, both the St. Louis <u>Post-Dispatch</u> and the <u>Globe-Democrat</u> carried regular pages of automobile ads each Sunday. In January 1914, the <u>Post-Dispatch</u> reported an increase of nearly 10,000 car registrations over the previous year. Specifically,

⁵⁶ Robert Lacey, Ford: The Men and the Machine (Boston-Toronto: Little Brown and Company, 1986), p.109.

⁵⁷ Ibid, p.117 & 120.

^{58 &}quot;History of Ford Motor Company in St. Louis", p. 2; Ford Papers, Corporations & Industry Collection, Missouri Historical Society, St. Louis

⁵⁹ Ibid, pp. 2-4.

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licenses were issued for 38,000 automobiles in Missouri, of which about 9,800 were in St. Louis. An estimated 600 trucks were in use on St. Louis streets. Nationally, the <u>Post-Dispatch</u> reported that by 1914, approximately 1,000,000 passenger cars were on American roads. ⁶⁰ Ford's mission to produce a "people's car" had succeeded. The automobile was no longer an individually crafted machine. Identical, interchangeable parts now made up the car, making construction efficient enough for more and more Americans to be able to afford and benefit from them. ⁶¹

An article in the <u>Post-Dispatch</u> on February 8, 1914 read, "St. Louis has become an immense distributing point for motor cars. Half a dozen factory branches are located here, including Ford, Locomobile, Buick, White, Studebaker, International Harvester Co., General Motors Truck Company, and others." Also, three makes of vehicles were completely manufactured in St. Louis at this time, the Dorris, Moon and Mogul trucks. Car ownership was still such a novelty that the paper published a listing of each person who had purchased a car during the preceding week in the St. Louis area. 62

The April 26, 1914 issue of the Globe-Democrat reported on the first known compilation of the total numbers of each make of car licensed in St. Louis. The report showed that there were a total of 140 major makes registered to operate in St. Louis at this time. Ford, with a total registration of 1,561, was four times larger than its nearest competitor, Cadillac, which had 392 registrations. Third was St. Louis-made Dorris with 390; fourth was Packard with 385; and fifth was Studebaker with 307. Future giant, Chevrolet had three registrations during the period and Chandler and Havers had one each. There were a total of 8,330 new registrations for 1914 model cars purchased by April 1 of that year. At this time, the famous Model T was being assembled at 4100 Forest Park, with the Fordson tractor added a short time later.

On August 1, 1914, Henry Ford announced a dramatic marketing scheme. If the company could sell 300,000 units within the next year, anyone who had bought a car during this time would share between \$12,000,000 and \$15,000,000 in the form of a rebate of \$40 to \$60. This was substantial in comparison to the price of cars at this time. Roadsters were \$500, touring cars sold for \$550, and the town cars went for \$740.⁶⁵ This action had a direct effect on the St. Louis Plant in that within only one year this new facility was too small and an addition of the same size was added in 1916.⁶⁶

^{60 &}quot;The Automobile Industry in Missouri, 1907 and 1914", p. 1 & 2; Ford Papers, Corporations & Industry Collection, Missouri Historical Society, St. Louis

⁶¹ Robert Lacey, Ford: The Men and the Machine (Boston-Toronto: Little Brown and Company, 1986), pp.97-109.

^{62 &}quot;The Automobile Industry in Missouri, 1907 and 1914", p. 1 & 2; Ford Papers, Corporations & Industry Collection, Missouri Historical Society, St. Louis

⁶³ Ibid, p. 3

^{64 &}quot;Ford in St. Louis", p. 1; Ford Papers, Corporations & Industry Collection, Missouri Historical Society, St. Louis

^{65 &}quot;History of Ford Motor Company in St. Louis", pp. 3 & 4; Ford Papers, Corporations & Industry Collection, Missouri Historical Society, St. Louis

^{66 &}quot;History of Ford Motor Company in St. Louis", p. 4; Ford Papers, Corporations & Industry Collection, Missouri Historical Society, St. Louis

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Architect Albert Kahn was hired to design the new addition in 1915.⁶⁷ His expertise with reinforced concrete construction and response to the needs of the Ford Motor Company earned him over 1,000 commissions and a lifelong collaboration with Henry Ford that gained him recognition worldwide. Original drawings are available from the current Albert Kahn & Associates office in Detroit.⁶⁸ This addition, along with the elevated loading dock at the south elevation is also recorded in a 1939 plat plan and building plans.^{69 & 70} (See "Plat Plan" Section 8 & Floor Plans, Section 8) Similar to Clymer & Drischler, Albert Kahn was designing both utilitarian factories and fashionable private homes.⁷¹ Along with engineer Ernest Ransome, Kahn's factory work was revered as beginning a new, universal language of architecture in concrete. This material and utilitarian style was re-interpreted by famous designers Le Corbusier, Mies van der Rohe and Walter Gropius.⁷²

World War I: During World War I, the plant was used as a government warehouse from May 1917 to March 1919.⁷³ It is not known what its specific use was during this time but historic photographs taken after this event do not display any obvious modifications. (See photos #A-J) Following the war, the Standard Sanitary Manufacturing Company constructed a building 25' to the west.⁷⁴

Peak production years: When production of motor vehicles resumed after the war, conveyors were introduced at this plant, bringing about the peak production of 325 Model T's per day in 1923-1924 which ultimately reached 79,594 units in 1923. (See photos #A, C & F) An assembly line to produce tractors, also in operation at this time, assembled 8,281 units within the same year. The Model T was phased out in 1927, after 19 years of production, for the Model A automobile. (See photos #D & E) The improved American roads were partly responsible for this as the Model T was considered a pioneer, designed for a variety of surfaces, such as dirt roads and fields. The Great Depression interrupted production in 1933, reducing the St. Louis plant to a sales and service branch office until operations were resumed again in January 1935. The 1939 plat plan and building plans are an excellent record of the entire complex just

^{67 &}quot;Architect's contract" August 14, 1915, Henry Ford Museum & Greenfield Village Research Center, Plant Engineering-Contracts Collection.

⁶⁸ Albert Kahn & Associates (Project No. 701), 7430 2nd Avenue Detroit Michigan 48202 (313-965-3100)

^{69 &}quot;Plat Plan" dated October 1, 1936 and revised August 7, 1939, Ford Motor Company Archives, Plant Engineering-Contracts Collection.

⁷⁰ Building Plans dated August 7, 1939, Ford Motor Company Archives, Plant Engineering-Contracts Collection.

⁷¹ Leland Roth, A Concise History of American Architecture (San Francisco - London: Harper & Row, Publishers, 1980), p.235.

⁷² William Curtis, Modern Architecture Since 1900 (New Jersey: Prentice Hall, Inc. 1987), pp.44 & 66.

^{73 &}quot;Ford in St. Louis", p. 1; Ford Papers, Corporations & Industry Collection, Missouri Historical Society, St. Louis

⁷⁴ Building Permit, July 18, 1919. City of St. Louis Division of Building and Inspection-Permit Archives

^{75 &}quot;Yearly Production - Ford Motor Company in St. Louis", Ford Papers, Corporations & Industry Collection, Missouri Historical Society, St. Louis

^{76 &}quot;From the Background Files of the Ford Motor Company News Department", p. 4; Ford Papers, Corporations & Industry Collection, Missouri Historical Society, St. Louis

^{77 &}quot;History of Ford Motor Company in St. Louis", p. 4; Ford Papers, Corporations & Industry Collection, Missouri Historical Society, St. Louis

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prior to World War II and the termination of the Ford operation at this location. The plans clearly show the extent of the building, how the complex operated and even the employee parking lot at the south side of the elevated railroad tracks. ^{79 & 80} (See "Plat Plan" Section 8 & Floor Plans, Section 8)

World War II: On February 10, 1942, the last 1942 Ford passenger car rolled off the line at the Forest Park plant following the United States' involvement in World War II.81 Just three months later, the U.S. Government took over the property for use as a plant for the U.S. Navy. 82 By this time the Ford Motor Company had already purchased 345 acres of land in Hazelwood, just outside St. Louis in 1937.83 Construction drawings, dating from 1944, document the modifications to the building by McQuay Norris Manufacturing Company for its operation on behalf of the U.S. Navy. 84 While many existing facilities and walls were utilized, war production use converted the open plan into smaller spaces, obviously for the assembly of smaller objects than cars. Security upgrades were necessary, such as the addition of a guardhouse, fences and the replacement of a majority of the steel sash windows and storefront with opaque glass block. Interior partitions and room titles on the drawings give clues as to what went on within the building. The loading dock was expanded and a Shipping and Receiving area was installed. The rest of the first floor was used for administrative offices for departments such as Engineering, Personnel and Navy. Other major installations were a large kitchen including refrigerators, and areas called out for peelers and kettles. Adjacent to the kitchen and cafeteria was an area labeled "Packing and Material Storage" and "Carton Manufacturing". The rest of the building was primarily for receiving, inspection, storage, final assembly, Navy warehousing, and inspection. In general, most of the significant modifications following the Ford occupation of this site took place during the urgent necessity to convert this building into a productive and secure operation for World War II.

The Post War Years: After the war, when Ford again resumed production in the St. Louis area, it was in a new plant, located on Lindbergh Boulevard in Hazelwood, on the property purchased in 1937. Operations began there in March 1948. Following World War II, the federal government continued to own the Forest Park Avenue site, most likely using it for storage. Construction drawings were produced in 1963 proposing

^{78 &}quot;Henry Ford Saw Potentials for Car Making in St. Louis", p. 92; Mercantile & Manufacturing, Missouri Historical Society, St. Louis.

^{79 &}quot;Plat Plan" dated October 1, 1936 and revised August 7, 1939, Ford Motor Company Archives, Plant Engineering-Contracts Collection.

⁸⁰ Building Plans dated August 7, 1939, Ford Motor Company Archives, Plant Engineering-Contracts Collection.

^{81 &}quot;Ford Motor Company, Historic Dates and Events", p. 2; Ford Papers, Corporations & Industry Collection, Missouri Historical Society, St. Louis

⁸² Deed-May 23, 1942, City of St. Louis Recorder of Deeds.

^{83 &}quot;History of St. Louis Branch", Reported March 18, 1941, page 2; Ford Motor Company Archives, Plant Engineering-Contracts Collection.

⁸⁴ Mauran Russell Crowell & Mullgardt & John D. Falvey Architects Engineer "McQuay Norris Mfg. Co., Plant for the U.S. Navy", 4100 Forest Park Blvd., St. Louis, MO June 26, 1944-November 10, 1944

^{85 &}quot;History of Ford Motor Company in St. Louis", p. 4; Ford Papers, Corporations & Industry Collection, Missouri Historical Society, St. Louis

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the conversion of the building into government offices and adding two passenger elevators near the northeast corner. 86 These plans never seemed to materialize and in 1966 the United States Government sold the building to Missouri Goodwill Industries who had already located next door in the Sanitary Manufacturing Company Building.⁸⁷ Various building permits were approved to upgrade the structure following its purchase by Goodwill, primarily to comply with current building and life safety codes.⁸⁸ It may have been at this time that some of the glass block installed by the Navy operation was replaced with concrete block. In order to access each level from the adjacent building, Goodwill Industries constructed the five story concrete bridge still in place at the west elevation of the Ford Building. (See photos #2 & 3) A series of chutes with diverters were also added for the convenience of separating items to specified areas. The concrete bridge is not a historic element and its removal would be considered an improvement to the integrity of the Ford Building. The bridge is typical concrete construction, still in use today. In 1978, Goodwill sold 4100 Forest Park and one-half of the connecting bridge to Acme Premium Supply Corporation and a Mutual Easement was put in place to share ownership and responsibility for the bridge. 89 Passages between the buildings were then closed and locked, converting the bridge to storage space. Other modifications by Acme Premium Supply for their use include a substantial amount of site work, replacing the U.S. Navy loading dock and upgrading the elevators. 90 & 91 This company then sold the building in 1994 to MRKP Partnership who owned it until June of 1996 when it was sold to the current owner, FPS, Inc. 92 The 20,000-pound capacity freight elevator enclosed in concrete block at the south elevation was then added in 1998.⁹³ The building is currently used to store records and supplies.

In Closing: From 1914 through 1942, the Forest Park Avenue Ford Motor Company plant assembled more than 800,000 units, not including tractor production, before outgrowing the facility. This building played a part in Ford's efforts to put the nation on wheels early in the 20th century which ultimately changed American culture and architecture. The Ford Motor Company grew to currently be the world's largest producer of trucks and the second-largest producer of cars. The company has operations in more than 30 countries, and employs more than 340,000 men and women around the world. About 60,000 companies worldwide supply Ford Motor Company with goods and services. The company's annual sales exceed the gross national products of many industrialized nations. The Ford Motor Company Building in St. Louis,

⁸⁶ Schwarz & Van Hoefen Architects/Ferris & Hamig Mechanical Engineers ", for General Services Administration, "Building Rehabilitation, 4100 Forest Park Blvd., St. Louis, MO June 13, 1963.

⁸⁷ Deed-July 15, 1966.

⁸⁸ Building Permits, City of St. Louis Building Division-Permit Archives.

⁸⁹ Mutual Easement, October 10, 1978 & Deed-October 11, 1978,

⁹⁰ Building Permits, City of St. Louis Building Division-Permit Archives.

⁹¹ Pitzman's Co. of Surveyors and Engineers/Schartz & Van Hoefen Architects/Ferris & Hamig Mechancial Engineers ", survey by orders of Acme Premium Supply Corporation", 4100 Forest Park Blvd., St. Louis, MO July 15, 1978. (General Services Administration title block with June 13, 1963 date).

⁹² Deed-January 27, 1994 & Deed-June 6, 1996.

⁹³ Building Permit, April 27, 1998. City of St. Louis Division of Building and Inspection-Permit Archives

⁹⁴ Ibid

⁹⁵ Ford Motor Company Heritage, Official Website; www. ford.com.

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being Ford's first St. Louis assembly plant, made a significant contribution to St. Louis' industrial history and to the growth of one of the nation's most significant companies.⁹⁶

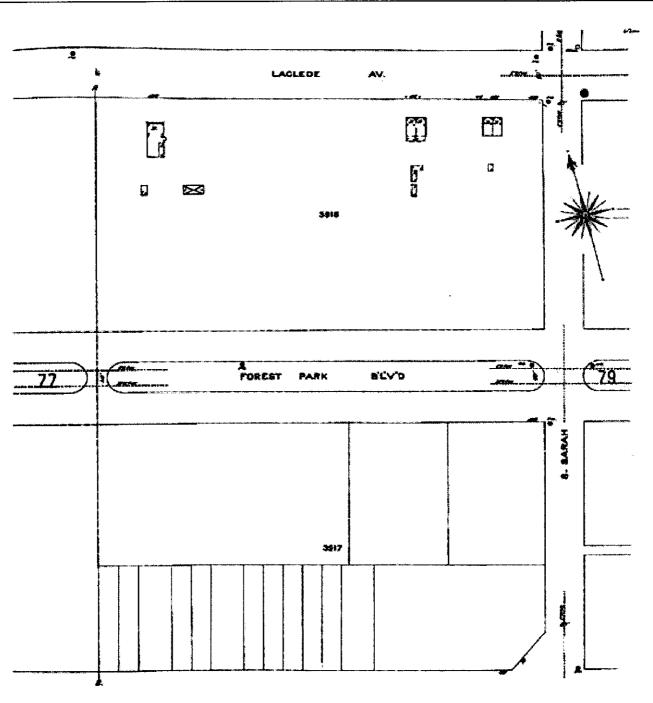
Future Plans: The Ford Motor Company Building is located at approximately the center of what has recently been deemed "Technopolis St. Louis". This area is bounded by a variety of well-established research centers; Washington University/Genome Sequencing Center and Barnes Jewish Research and Medical Centers to the west, the Center for Emerging Technologies (CET) at the core, the world-renowned Missouri Botanical Gardens Monsanto Center just to the south, and St. Louis University's Main Campus and Medical and Research Hospital to the east. (See "Major St. Louis Sites" and "Technopolis St. Louis" Maps, Section 8) CET is a nationally recognized center that provides state of the art laboratory space to biotechnological research in its earliest stages. It is currently expanding its facilities into a historic property, the Dorris Motor Car Company Building, across the street from the Ford Building. This is a tremendous opportunity for an area of St. Louis that still maintains a significant amount of the historic properties from its early development. The City of St. Louis has assisted in defining the district and is committed to supporting it with an enhanced infrastructure. The fact that many original buildings still exist in the surrounding area contributes to the Ford Building's setting and association with the surrounding context.

The future owner plans to utilize historic tax credit programs to convert the Ford Motor Company Building into a biotechnology and life sciences research complex, similar to the CET facility, although housing firms in more advanced stages of development. This type of environment supports emerging companies with not only the proper facilities, but also the opportunity for support from adjacent companies within the same complex or nearby. The rehabilitation will involve upgrading the existing mechanical, electrical and plumbing systems to 21st Century requirements and meeting the current building code standards and required ADA guidelines.

Overall, the Ford Motor Company Building maintains a high degree of integrity in its location, design, setting, materials, workmanship of the era, feeling and association with its historically industrial location. Many inherent architectural features of the building are considered great assets for the future plans, such as the large window openings, the open floor plan, fireproof material, and the strength of the reinforced concrete construction. During the overall rehabilitation process in general, contributing historic features will be retained, enhanced and restored where possible.

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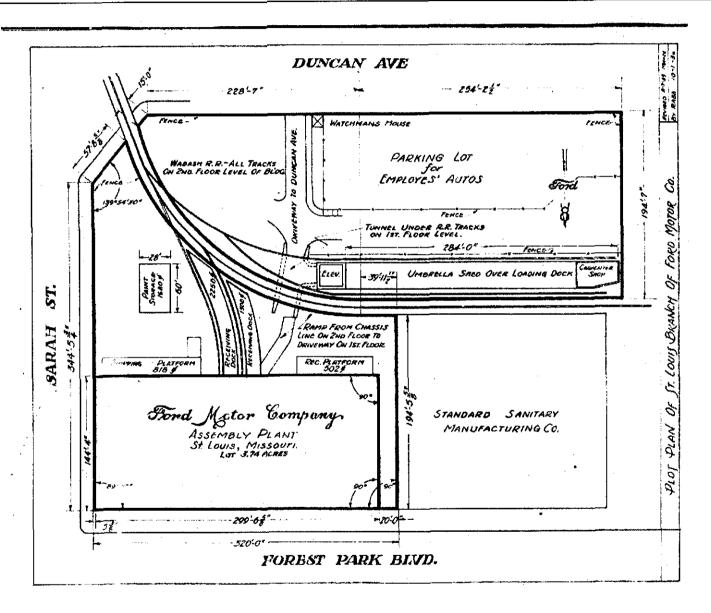
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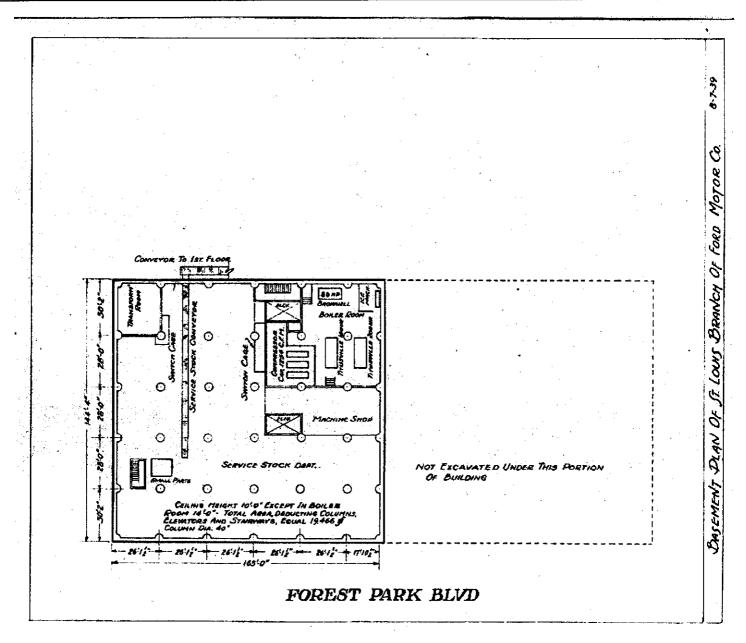


"Plat Plan" dated October 1, 1936 and revised August 7, 1939, Ford Motor Company Archives, Plant Engineering-Contracts Collection.

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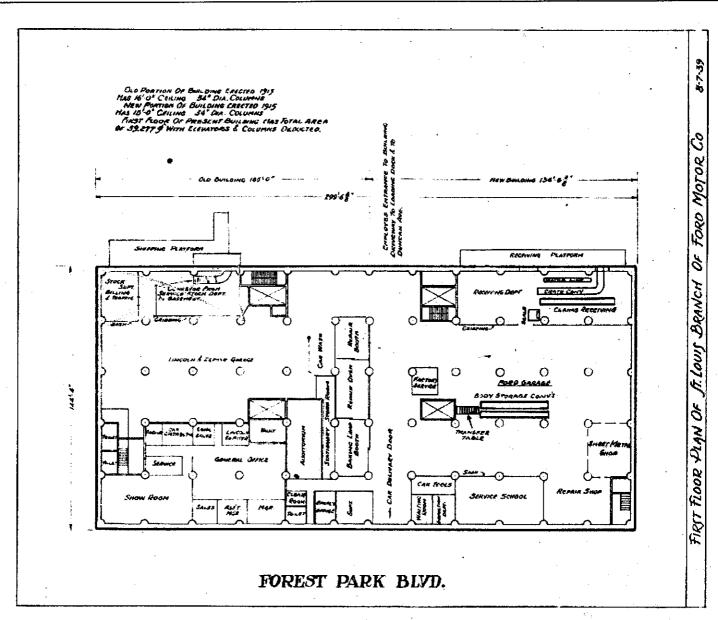


Basement Floor Plan, August 7, 1939, Ford Motor Company Archives.

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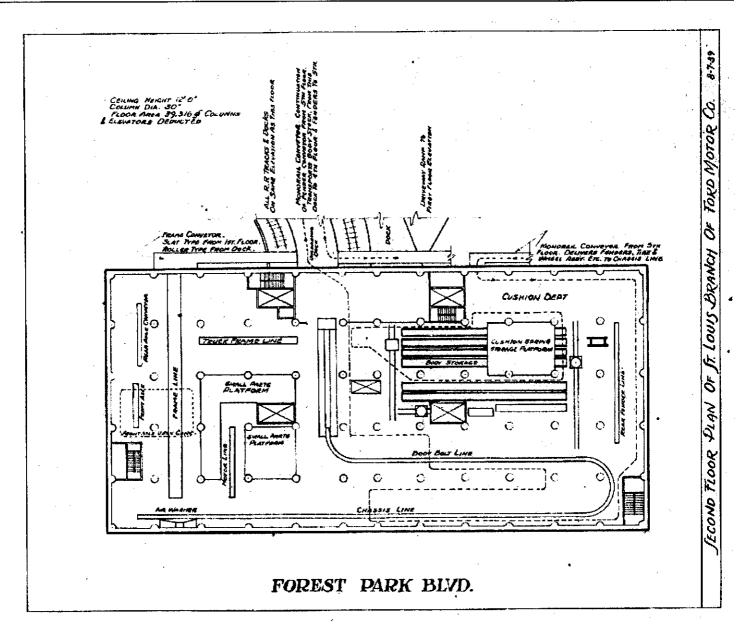
First Floor Plan, August 7, 1939, Ford Motor Company Archives.

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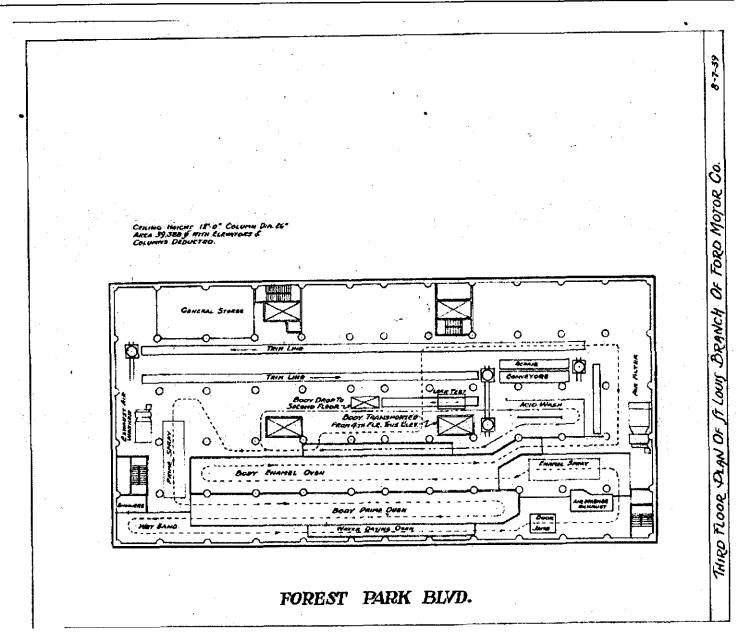
Second Floor Plan, August 7, 1939, Ford Motor Company Archives.

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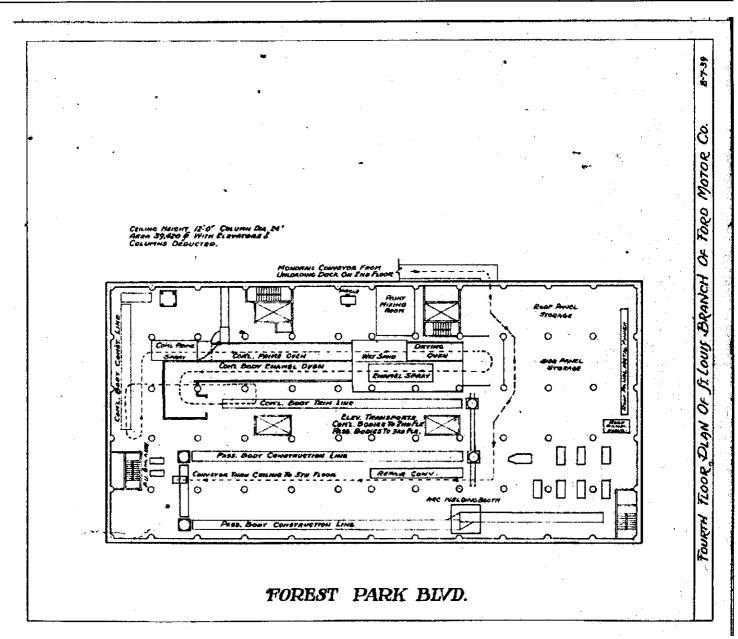
Third Floor Plan, August 7, 1939, Ford Motor Company Archives.

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Ford Motor Company Building St. Louis, Missouri (Independent City)

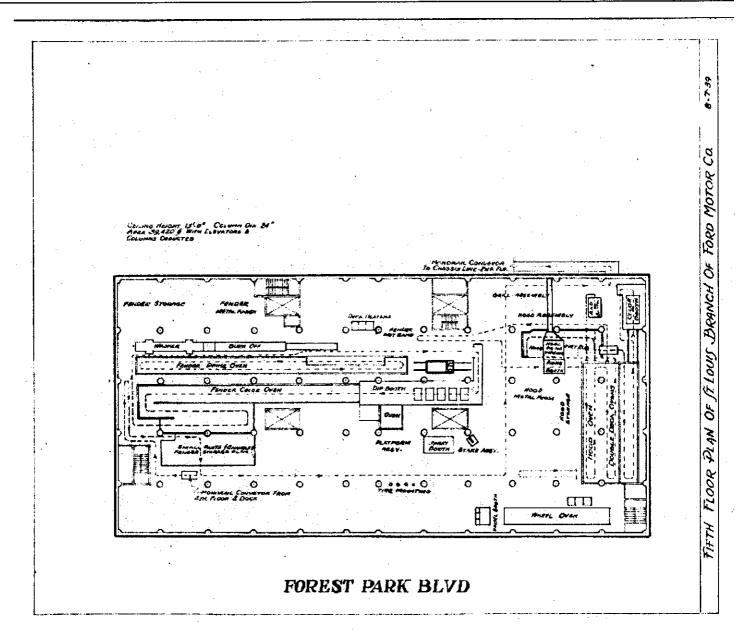


Fourth Floor Plan, August 7, 1939, Ford Motor Company Archives.

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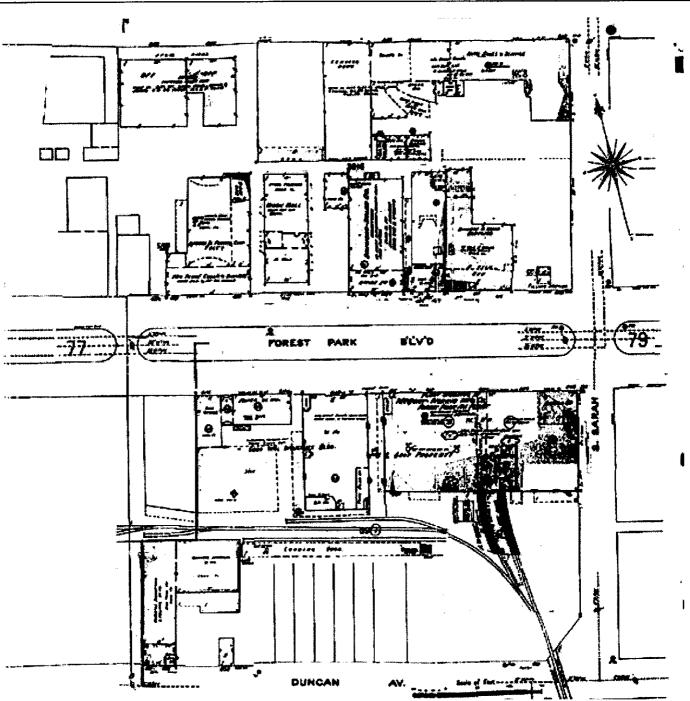


Fifth Floor Plan, August 7, 1939, Ford Motor Company Archives.

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

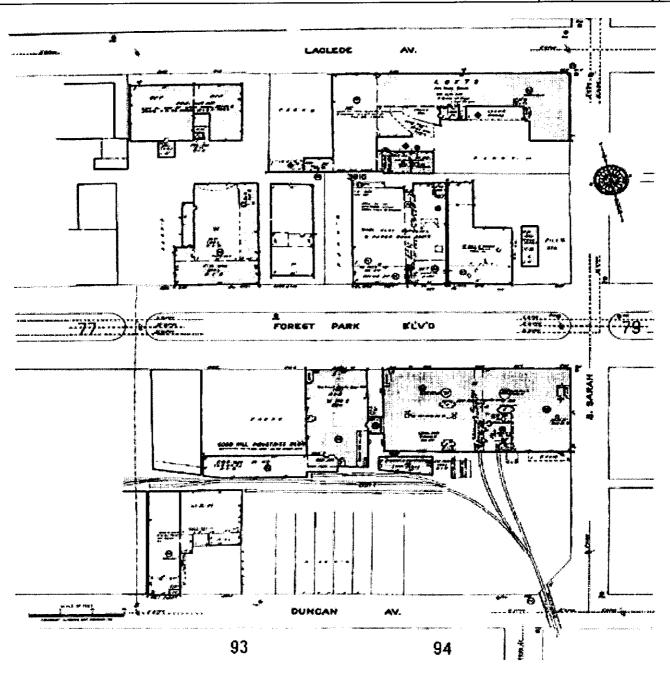
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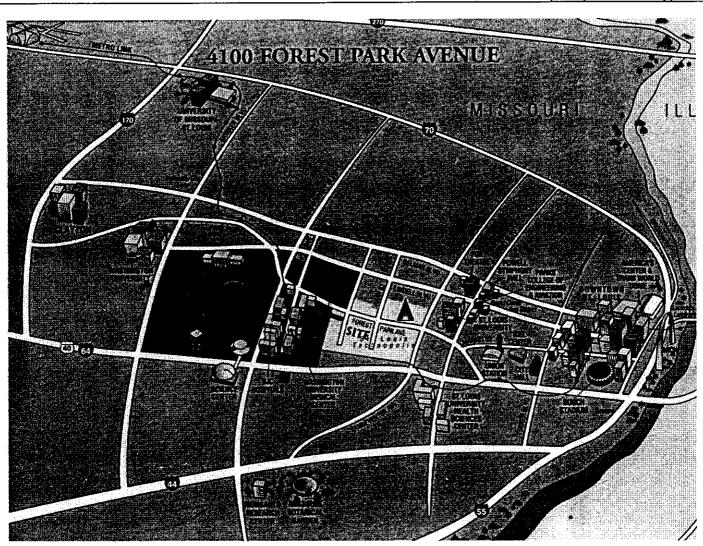
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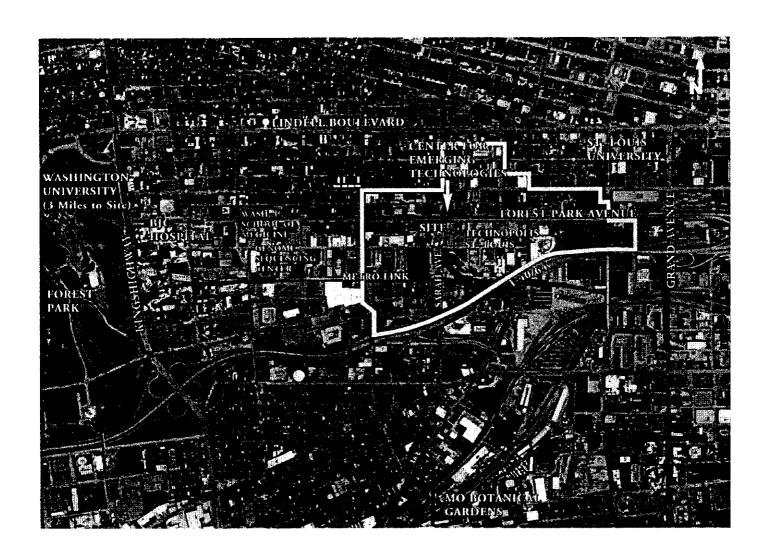


Major St. Louis Sites Map

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Technopolis St. Louis Map

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Ford Motor Company Building St. Louis, Missouri (Independent City)

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Ford Motor Company Building St. Louis, Missouri (Independent City)

- Ford Motor Company Papers-Corporations and Industry Collection, Missouri Historical Society, St. Louis, Missouri.
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- Lapin-Ellis & Associates Structural and Civil Engineers Land Surveyors, issued drawings for Acme Premium Supply Co "Loading Dock Addition", 1985 Site Survey & March 3, 1986.
- Mauran Russell Crowell & Mullgardt & John D. Falvey Architects Engineer "McQuay Norris Mfg. Co., Plant for the U.S. Navy," 4100 Forest Park Blvd., St. Louis, MO June 26, 1944-November 10, 1944.
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Ford Motor Company Building St. Louis, Missouri (Independent City)

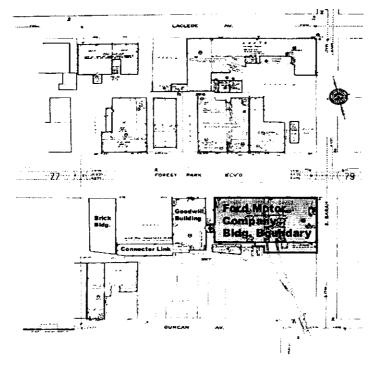
Verbal Boundary Description

The perimeter boundary of a building on a parcel of ground in block 3917, of the City of St. Louis, Missouri; more particularly described as follows:

Beginning at the point of intersection of the Southern line of Forest Park Avenue, 150' wide, with the Western line of Sarah Street, 60' wide; thence Westwardly 299.64' along the Southern line of said Forest Park Avenue; thence Southwardly approximately 86' along a line parallel with the Western line of said Sarah Street to the northern face of a concrete bridge; thence west 12.86' to the property line in the center of the bridge; thence south along property line 30' to the southern face of said concrete bridge; thence east 12.86' to the western face of main building; thence south 27.9' the southern line of the exterior wall of existing building; thence east along said exterior wall 129.26' to an offset in the structure; thence south 17.70' to the corner of said structure; thence east 14.65' to the inside corner of a one-story loading dock structure; thence south 11.96' to the corner of said loading dock; thence east 155' to the Western line of said Sarah Street; thence northward 174.06' to the Southern line of said Forest Park Avenue and the point of beginning.

Boundary Justification

The register boundary is the footprint of the existing Ford Motor Company Building and its later additions up to the western legal property line. The western property line runs through the center of the post 1966 elevated, freestanding concrete bridge. The doors within the bridge to the adjacent property have been locked and unused since 1978. The modern concrete bridge and other properties to the west are not associated with the Ford Motor Company operation.



Ford Motor Company Building Boundaries overlayed on 1995 Sanborn Map

United States Department of the Interior National Park Service

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Section Photographs Page 36

Ford Motor Company Building St. Louis, Missouri (Independent City)

EXISTING PHOTOGRAPHS

The following information is the same for all photographs except as noted:

Ford Motor Company Building

St. Louis Missouri

Photographer: Laura Johnson, Trivers Associates

Date taken: February 23, 2001

Negatives location: Trivers Associates, 100 North Broadway Suite 1800, St. Louis MO 63102

- 1. East and north elevations looking southwest.
- 2. North and west elevations looking southeast.
- 3. West elevation and west bridge connecting Ford Building to Goodwill Industries.
- 4. Western end of south elevation looking north.
- 5. South elevation looking northwest.
- 6. East elevation and partial south elevation looking northwest.
- 7. Original north entrance.
- 8. Typical first floor bay.
- 9. Column cap detail between showroom and storage area where wall was removed.
- 10. Column base with wood wainscoting in place in original showroom area.
- 11. Staircase from original showroom area to second floor.
- 12. Utilitarian staircase between floors at storage/assembly areas.
- 13. Second floor view with original steel sash.
- 14. Transition between 1914 building and 1916 expansion.
- 15. Steel beams and pulleys at south end of second floor.

HISTORIC PHOTOGRAPHS

A. Ford Motor Company Building

St. Louis, Missouri

Photographer: "G.E. Palfrey, Granite Building, St. Louis, MO"

Date taken: circa 1920

Negative location: Henry Ford Museum, 20900 Oakwood Boulevard, P.O. Box 1970, Dearborn, MI

48121-1970, 313-982-6244, photo #4228

Remarks: Testing Model T engines at FMC's St. Louis plant. In lower image area are "St. L. BR. "E"

and "G.E. Palfrey, Granite Building, St. Louis, MO"

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Section Photographs Page 37

Ford Motor Company Building St. Louis, Missouri (Independent City)

B. Ford Motor Company Building

St. Louis, Missouri Photographer: unknown Date taken: March 20, 1925

Negative location: Henry Ford Museum, 20900 Oakwood Boulevard, P.O. Box 1970, Dearborn, MI

48121-1970, 313-982-6244, photo #833.41945

Remarks: Exterior view of the FMC St. Louis Branch. View is side of plant, several railroad tracks

are in the foreground of photo-print

C. Ford Motor Company Building

St. Louis, Missouri Photographer: unknown Date taken: circa 1930

Negative location: Henry Ford Museum, 20900 Oakwood Boulevard, P.O. Box 1970, Dearborn, MI

48121-1970, 313-982-6244, photo #4229

Remarks: Interior of FMC's St. Louis assembly plant

D. Ford Motor Company Building

St. Louis, Missouri

Photographer: "A.W. Sanders Co. Commercial Photographer" 141431 Locust Street, St. Louis, MO Date taken: January 23, 1935

Negative location: Henry Ford Museum, 20900 Oakwood Boulevard, P.O. Box 1970, Dearborn, MI 48121-1970, 313-982-6244, photo#12205

Remarks: Finished automobile leaving FMC's St. Louis assembly plant, "Power & Construction Dept., Jan 23 1935" and "A.W. Sanders Co., Commercial Photographers, 1431 Locust St., St. Louis, MO. Phone, Central 1634"

E. Ford Motor Company Building

St. Louis, Missouri

Photographer: A.W. Sanders Co. Commercial Photographer 141431 Locust Street, St. Louis, MO Date taken: January 23, 1935

Negative location: Henry Ford Museum, 20900 Oakwood Boulevard, P.O. Box 1970, Dearborn, MI 48121-1970, 313-982-6244, photo #12207

Remarks: Finished automobile leaving FMC's St. Louis assembly plant, "Power & Construction Dept., Jan 23 1935" and "A.W. Sanders Co., Commercial Photographers, 1431 Locust St., St. Louis, MO. Phone, Central 1634"

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Ford Motor Company Building
St. Louis, Missouri (Independent City)

F. Ford Motor Company Building

St. Louis, Missouri

Photographer: unknown

Date taken: circa 1935

Negative location: Henry Ford Museum, 20900 Oakwood Boulevard, P.O. Box 1970, Dearborn, MI

48121-1970, 313-982-6244, photo #4227 Remarks: Assembly lines, Pressurized tanks.

G. Ford Motor Company Building

St. Louis, Missouri

Photographer: unknown

Date taken: 1936

Negative location: Henry Ford Museum, 20900 Oakwood Boulevard, P.O. Box 1970, Dearborn, MI

48121-1970, 313-982-6244, photo #4225

Remarks: Artist's drawing of FMC's St. Louis plant

H. Ford Motor Company Building

St. Louis, Missouri

Photographer: unknown

Date taken: 1936

Negative location: Henry Ford Museum, 20900 Oakwood Boulevard, P.O. Box 1970, Dearborn, MI

48121-1970, 313-982-6244, photo #4226

Remarks: FMC's St. Louis plant

I. Ford Motor Company Building

St. Louis, Missouri

Photographer: unknown

Date taken: November 8, 1936

Negative location: Henry Ford Museum, 20900 Oakwood Boulevard, P.O. Box 1970, Dearborn, MI

48121-1970, 313-982-6244, photo #833.67899

Remarks: Exterior view of FMC St. Louis Branch

J. Ford Motor Company Building

St. Louis, Missouri

Photographer: unknown Date taken: May 25, 1939

Negative location: Henry Ford Museum, 20900 Oakwood Boulevard, P.O. Box 1970, Dearborn, MI

48121-1970, 313-982-6244, photo #833.71870

Remarks: Interior view of the FMC St. Louis plant showing installation of enamel dip tanks &

circulating pumps

Ford Motor Company Building, 4100 Forest Park Timeline

- Ford first moved to St. Louis, the sales branch and service stock department, the 10th in the company, was located in a small rented building at 3667 Olive Street. Two story structure with showroom on the first floor, in back a small repair shop and on the second floor a parts storage area.
- 1908 October 1 The Model T first went on the market Ford: The Men and the Machine p. 94.
- 1909 306,000 passenger cars on the nation's highways, "History of Ford Motor Company in St. Louis"
- 1909 Sanborne map showing only a few residences at block across the street but nothing at Ford location
- 1912 June 3 Warranty Deed (from reference only, original in book 2544, page 231)

buyer: Ford Motor Company

seller: Hawthorne Investment Corporation

property: A lot in City Block 3917 of the City of St. Louis, state of Missouri

Fronting 150' on the south line of Forest Park Boulevard, by a depth southwardly along the west line of Sarah Street to a railroad right of way 16' in width running through said block and more fully described in said deed. <THIS IS THE CORNER PROPERTY FOR THE ORIGINAL STRUCTURE>

1912 December 18 Deed

buyer: Ford Motor Company

seller: Hawthorne Investment Corporation property: A lot in City Block 3917 of the City of St. Louis, state of Missouri

Beginning at a point in the south line of Forest Park Boulevard 150' west of the west line of Sarah Street thence west along the south line of Forest Park Boulevard 150' to a point thence southwardly and parallel with Sarah Street 194'-6 ¼" to the north line of a 16' railroad right of way thence eastwardly along said railroad right of way and parallel with a line midway between Forest Park Boulevard and Duncan Avenue 19'-11 ½" to a point of curve in said railroad right of way thence continuing eastwardly along the north and east line of said railroad right of way on a curve bearing to the south with a radius of 248'-5 3/8" a distance of 178'-11 ½" to a point thence northwestwardly 50' to a point thence northwardly and parallel with Sarah Street 219'-9 3/8" to the south line of Forest Park Boulevard and the point of beginning. Railroad embankment to be protected for Hawthorne Investments to the west. <THIS IS THE LAND FOR THE WEST ADDITION>

- 1912 June 17 Architect Contract with Clymer & Drischler of St. Louis for Assembly Plant at 4100 Forest Park, Henry Ford Museum & Research Center.
- **1913 Spring** World's first assembly line in the magneto department at Highland Park
- 1913 May 28 Building Permit issued for St. Louis Plant Foundation-Factory (Ford Motor Company, 4100-12 Forest Park, 201-11 South Sarah), City Hall St. Louis
- 1914 1,664,000 passenger cars on the nation's highways, "History of Ford Motor Company in St. Louis"
- 1914 January Post-Dispatch article stating increase in auto registrations from the previous year b;y 10,000. Licenses were issured for 38,000 automobiles in Missouri, 9,800 of which went to St. Louis. Nearly 600 trucks in use on St. Louis streets. "The Automobile Industry in Missouri, 1907 and 1914."
- 1914 January 5 Henry Ford announces \$5.00 a day wage increase to production line workers Ford:

 The Men and the Machine p. 117.

Ford Motor Company Building, 4100 Forest Park Avenue St. Louis, Missouri

1914 February 25 Ford began moving into its new assembly plant. ...one of the best lighted factory buildings in St. Louis, and added that a switch from the main line of the Wabash runs alongside the second floor on a concrete structure so arranged that the freight car becomes part of the building. "Globe Democrat article dated February 8, 1914. "History of Ford Motor Company in St. Louis"

Power supplied by 50 HP boilers in the basement, coal burning and hand fired, this system took at least 2 carloads of coal weekly by house track running directly into the building. Ford Motor Company Archives "History of St. Louis Branch, reported May 18, 1941" p. 1.

- 1914 March 15 Ford ready for business at 4100 Forest Park Boulevard "Globe Democrat article dated February 8, 1914. "History of Ford Motor Company in St. Louis"
- 1914 April 19 Apparently 4100 Forest Park not open yet according to Globe Democrat "History of Ford Motor Company in St. Louis"
- 1915 April 26 Globe-Democrat article stating 140 major makes registered to operate in St. Louis. "The Automobile Industry in Missouri, 1907 and 1914."
- 1914 August 1 Henry Ford offers "profit-sharing if 300,000 cars sold within next year to these purchasers
- 1914 September 24 Building Permit Alter Brick Factory (Ford Motor Company, 4100 Forest Park), City Hall St. Louis
- 1915 Addition built at 4100 Forest Park Boulevard, same size as original building (150'x150')
- 1915 August 14 Architect Contract with Albert Kahn of Detroit, Michigan for Service Building at 4100 Forest Park, Henry Ford Museum & Research Center
- 1915 October 26 Building Permit 5 story 1st class Assembling Room (Ford Motor Company, 4114-28 Forest Park), City Hall St. Louis
- 1917-1919 Production stopped at the St. Louis plant due to World War I, plant was used as a government warehouse.
- 1917 February 14 Warranty Deed (from reference only, original in book 2987, page 357)

buyer: Ford Motor Company seller: Quality Realty Company

property: A lot in City Block 3917 of the City of St. Louis, state of Missouri

Certain property in said block fronting 20' on the south line of Forest Park Boulevard by a depth southwardly to said railroad right of way, and bounded east by the property last above described as referred to (12/18/1912). <THIS IS THE LAND BETWEEN THE FORD ADDITION AND THE PRESENT GOODWILL>

- 1917 May Production stops temporarily, plant begins being used as government warehouse during World War I Ford in St. Louis p. 1.
- 1919 March Auto production restored at St. Louis plant following WWI. Ford Motor Company Archives "History of St. Louis Branch, reported May 18, 1941" p.1.
- 1919 July 18 Building Permit 6 story 1st Class Building Warehouse (Standard S.M. Co., 4140 Forest Park), City Hall St. Louis
- 1919 October 28 Deed

buyer: Ford Motor Company, State of Michigan

seller: Quality Realty Company

property: A lot in City Block 3917 of the City of St. Louis, state of Missouri

Beginning in the north line of Duncan Avenue, at the intersection with the western line of a triangular parcel of ground dedicated to public use, thence west along the north line of Duncan Avenue 482'-3" to the southeast corner of a parcel of land owned by Bradbury

Marble Company, thence north along the east line of said property of Bradbury Marble Company 193'-10 1/8" to the south line of a railroad right of way 16' wide, running through said block; thence eastwardly on the southern line of said railroad right of way 254'-2 1/8" to a point, thence continuing along the southern and western line of said railroad right of way on a curve southwardly with a radius of 232.45' a distance of 293'-6 3/8", thence continuing along the western line of said railroad right of way 31'-2" to its intersection with the line of the triangular parcel of ground dedicated as aforesaid; thence southwestwardly along the line of said parcel so dedicated 4'-0-3/4" to the point of beginning. Railroad embankment to be protected. <PROPERTY SOUTH OF R.R. R.O.W. WESTWARD>

1919 October 28

ctober 28 Agreement
party of the 2nd part: Ford Motor Company
party of the 1st part: Quality Realty Company

Agreement: "...it is the desire and intention of the Ford Motor Company to construct and operate in its business, various buildings, on each side of said parcels of land aforesaid, to be used for manufacturing purposes, and whereas the said right of way and railroad track of the Realty Company operates the said two parcels of land and thereby renders it inconvenient and dangerous for the Motor Company in the necessary conduct of its business, to cross and re-cross the said railroad back at grade, and whereas it will greatly benefit the said Motor Company and greatly enhance the value of its said lands, to be permitted by the Realty Company to construct and maintain one or more under-crossings or subways, through the right of way and beneath the railroad tracks of the Realty Company, so as to connect, by means of rail subway or subways at one or more places, the said parcels of land of the Motor Company, for the right, license and permission to construct and thereafter maintain one or more undercrossings or subways to be used by the Motor Company for the purposes aforesaid; and Now therefore, in consideration of the premises, and in consideration of the strict and full performances by the Motor Company of the terms, conditions and stipulations hereinafter stated and by it to be performed, it is hereby agreed between the parties hereto as follows:

First: The Realty Company does hereby give the Motor Company the irrevocable right, license and permission to construct one or more undercrossings or subways, for the entire length, also any over-head crossings or wings not to interfere with the operation of the railroad ears or switch privileges through that part of the right of way and under the railroad tracks of the Realty Company...." <QUALITY REALTY'S PERMISSION FOR FORD TO BUILD OVER AND UNDERPASSES RAILROAD TRACKS

Agreement 1919 November 8

party of the 2nd part: Ford Motor Company party of the 1st part: Quality Realty Company

Agreement: "...Give, grant and convey unto the said party of the 2nd part, its successors and assigns, the irrevocable right and privilege to forever use, in common with other owners of property abutting thereon, the certain railroad track, or tracks over the entire length, laid or to be laid on the said strip of land last hereinbefore described, together with the certain track or tracks laid or to be laid on viaduct over Duncan Avenue at Sarah Street and connecting with the main line of the Wabash Railroad Company, which track or tracks shall be used for switching purposes only, and shall be forever maintained in good operating condition by the Quality Realty Company...." <FORD'S PERMISSION TO USE TRACKS AND QUALITY REALTY COMPANY WILL MAINTAIN>

- 1920 early Production started back up again at 4100 Forest Park with 17,800 vehicles being assembled that year "Henry Ford Saw Potential for Car Making in St. Louis" Mercantile & Manufacturing Volume III, p. 18, 1960.
- 1920 April 2 Building Permit – 2 heating boilers-warehouse (Standard S.M. Co., 4140 Forest Park), City Hall St. Louis
- Building Permit 1 story brick shop & store (Standard S.M. Co., 4144 Forest Park), City 1920 April 26 Hall St. Louis

Ford Motor Company Building, 4100 Forest Park Avenue

St. Louis, Missouri

1920 May 1st Deed

buyer: Ford Motor Company, a Delaware Corporation seller: Ford Motor Company, a Michigan Corporation

property: same as November 8, 1919 deed

- 1920 June 17 Building Permit 1 Steel Stack-factory (Standard S.M. Co., 4140 Forest Park), City Hall St. Louis
- 1920 December 11 Building Permit Alter brick factory (Ford Motor Company, 4100-12 Forest Park), City Hall St. Louis
- 1923 July 31 Building Permit 6 steel stacks factory (Ford Motor Company, 4100-12 Forest Park), City Hall St. Louis
- 1923 October 30 Building Permit Alter Brick assembly plan (Ford Motor Company, 4100 Forest Park), City Hall St. Louis
- 1923 November 28 Ordinance 32738 Changed Forest Park Boulevard to Forest Park Avenue, City Hall St. Louis
- 1924 Conveyor plant installed just prior to this year, exact date unkown "History of Ford Motor Company in St. Louis" p. 4.
- 1925 January 20 Building Permit alter brick factory (Ford Motor Company, 4100 Forest Park), City Hall St. Louis
- 1925 February 19 Building Permit wood platform-loading dock (Ford Motor Company, 4100-12 Forest Park), City Hall St. Louis
- 1925 March 30 Building Permit 1 fuel oil tank storage (Ford Motor Company, 4100 Forest Park), City Hall St. Louis
- 1925 April 9 Building Permit 1 steel stack factory (Ford Motor Company, 4100 Forest Park), City Hall St. Louis
- 1926 September 13 Building Permit 4 stacks brick factory (Ford Motor Company, 4100 Forest Park), City Hall St. Louis
- 1926 October 14 Building Permit two, steel stacks Mfg. Plant (Ford Motor Company, 4100 Forest Park), City Hall St. Louis
- 1927 March 12 Building Permit 8 stacks Mfg. Plant (Ford Motor Company, 4100 Forest Park), City Hall St. Louis
- 1927 December 2 Model A introduced
- 1929 October 24 Stock market crash, Great Depression begins
- 1933-January 1935 Production stopped at St. Louis Plant due to depression "History of Ford Motor Company in St. Louis" p. 4.
- Ford Motor Company purchases 345 Acres of land in St. Louis County for the purpose of erecting a new plant. "History of St. Louis Branch" p. 2.
- 1937 December 10 FMC announces new St. Louis plant plans. Timeline, Saint Louis.
- 1939 January 21 Building Permit erect tank private storage (Ford Motor Company, 4100 Forest Park), City Hall St. Louis
- 1941 December 7 Attack on Pearl Harbor, beginning of World War II

Ford Motor Company Building, 4100 Forest Park Avenue St. Louis, Missouri

- World War II halts civilian car production "Ford Motor Company, Historic Dates 1942 February 10 and Events" p. 2. Last 1942 passenger car rolled off the line at St. Louis Plant due to World War Il "History of Ford Motor Company in St. Louis" p. 4. (misprinted at 1943 in publication)
- 1942 May 23 Property taken by:

buyer: United States of America

seller: Ford Motor Company of Deleware

property:

previous deed location:

- 1942 June 29 4100 Forest Park Plant closed Ford Motor Company Archives "History of St. Louis Branch, reported May 18, 1941" p. 2 printed information.
- Drawings by McQuay Norris Manufacturing Company, Plant for the U.S. Navy 1944

New Guard House @ 3rd column from southwest corner of building

Receiving and Shipping Office

Loading Platform @ southeast corner of building w/metal sheet metal roof only

Fireman's access balcony to Roof @ north end of west elevation, 5^{th} floor Conveyor openings @ 3^{rd} and 5^{th} floors

Personnel Physical Examination Department (4th bay to south from north elevation at west end of building

Employee entrance foyer 7th bay from southeast corner & wood awning added to south & west elevations from northwest corner to new entrance @ south elevation

Present Railroad Loading dock to remain, modifications at elevated rail and structure curved & adjacent to it

Food service equipment on 3rd floor & kitchen flue (northeast corner @ fire stair)

Glass bock work to windows & louvers shows existing terra cotta head & sills to remain Swing gates @ Sarah & Duncan

Modifications/additions to fire escapes, 2 new fire escapes at north & south elevations Modification around showroom stairs

Doctor's/waiting room/treatment rooms @ mezzanine & new freight elevator/rest of mezzanine to southeast corner to remain/new penthouse for new freight elevator

Large open freight elevators (2) removed & concrete deck filled in w/concrete & pipe shafts added at this location at this time

New guard house @ west end of building

Compressor building shown on drawings, not sure if built at this time (pump house) Bridge between buildings not existing, sash at this area are called out to remain

- Civilian truck production resumes after World War II nationally "Ford Motor 1945 January 1 Company, Historic Dates and Events" p. 2.
- Ford passenger car production resumes after World War II nationally" Ford Motor 1945 July 3 Company, Historic Dates and Events" p. 2.
- 1946 January 12 Building Permit - Alt 6 story brick storage & Mfg. (Goodwill Industries, 4144 Forest Park), City Hall St. Louis
- 1948 March Operations resume at Hazelwood facility after World War II. "History of Ford Motor Company in St. Louis" p. 4.
- 1950 Sanborne map shows elevated loading dock existing and guard house but no bridge between buildings & no pump house
- 1962 July 2 Building Permit - Erect addition to present building and remodel front of building (Goodwill Industries, 4140 Forest Park), City Hall St. Louis
- 1962 October 18 Survey drawings done for GSA (property 320' long on Forest Park) Link between Ford Building and Goodwill not existing on site survey Pump house existing

Elevated loading dock no longer there

Curb cut at south end of property w/ retaining walls & incinerator

Guard house existing

No bridge between buildings

Rear (south elevation) vestibule remaining between column lines 7 & 8 Fence existing 5' away from Goodwill building (at old property line)

1963 June 18 GSA drawings for upgrading the building mechanically and converting to offices/storage, Navy use still in place. Work includes:

2 passenger elevators at the northeast core

One-story frame entrance vestibule at south elevation to remain

Pump house exists

Bridge is not shown in plans and layout of interior does not indicate passage, glass block to remain at these openings

1965 October 27 Building Permit – Alter front of structure (Goodwill Industries, 4140 Forest Park), City Hall St. Louis

1966 July 15 Deed

buyer: Missouri Goodwill Industries

seller: U.S. of America, by Admin. Of General Services

property:

previous deed location: 1144-101

- 1966 August 11 Building Permit necessary repairs to comply w/ letters dated 6-22-66 from FM office & 6-23-66 from 407 (Goodwill Industries, 4100 Forest Park), City Hall St. Louis
- 1967 May 22 Building Permit remove 5 fire escapes (Goodwill Industries, 4100 Forest Park), City Hall St. Louis
- 1967 November 21 Building Permit remove 6" sq. glass blocks and replace with plate glass windows (Goodwill Industries, 4100 Forest Park), City Hall St. Louis
- 1968 January 4 Building Permit make necessary repairs to comply with letters dated 6-22-66 & 6-23-66 (Missouri Goodwill Industries, 4100 Forest Park), City Hall St. Louis
- 1968 February 1 Building Permit make interior alterations to "Goodwill Bldg. 2 enclosures, paint stripping Plans (Goodwill Industries, 4100 Forest Park), City Hall St. Louis
- 1971 December 1 Building Permit work wood covered loading dock (Goodwill Industries, 4100 Forest Park), City Hall St. Louis
- 1972 July 14 Building Permit replace existing loading dock per plans (Goodwill Industries, 4100 Forest Park), City Hall St. Louis
- 1976 December 3 Building Permit make interior alterations per plans 3rd floor (Goodwill Industries, 4140 Forest Park), City Hall St. Louis
- 1977 January 17 Building Permit Install auto sprinkler system as per plans on third floor (Goodwill Industries, 4100 Forest Park), City Hall St. Louis
- 1978 July 15 Survey drawings done while Acme Premium Supply Corporation prior to purchasing property

Link between Ford Building and Goodwill is existing on site survey

Pump house existing

Elevated loading dock no longer there

Walkway and south employee entrance remaining

Guard house removed

Ford Motor Company Building, 4100 Forest Park Avenue St. Louis, Missouri

party of the 2nd part: Missouri Goodwill Industries party of the 1st part: Acme Premium Supply Corp.

property: 25' walkway between the two buildings fronting on the south line of Forest Park Boulevard; that the two buildings are joined by a four story concrete block bridge or passageway, which is located between the 2nd and 5th floors of each parties' building and which is located across said walkway approx. 91.24' south of the south line of Forest Park Boulevard, and which is approx. 30' wide so that is terminates approx. 121.24' south of the south line of Forest Park Boulevard; that the concrete block bridge or passageway is joined to each of the parties' building; that it is open at the 2nd through 5th floors of each parties' respective building; and that each building can be separated from the other by lowering and raising gates and that the 25' walkway heretofore referred to is owned ½ by Acme and ½ by Goodwill.

price:

previous deed location:

1978 October 11 Deed (#109)

buyer: Acme Premium Supply Co. **seller:** Missouri Goodwill Industries

property:

previous deed location: 1571-267

- 1979 April 13 Building Permit 1-400 amp, etc. electrical work (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis
- 1980 February 7 Building Permit 60 amp service (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis
- 1983 November 4 Building Permit wreck tower (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis
- 1984 January 6? Building Permit 100 amp (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis
- 1984 September 18 Building Permit erect bus shelter per sketch (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis
- 1985 Site Survey by Lapin-Ellis & Associates shows railroad trestle up to south elevation of building and concrete & steel trestle over Duncan/Sarah still existing
- 1985 February 25 Building Permit replace facing on existing sign per plans (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis
- 1986 Site work done at back of building, railroad trestle removed at this time New rear dock 1986 drawings
- 1986 February 24 Building Permit wreck loading docks & retaining walls, chimney (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis
- 1986 May 22 Building Permit repair & replace broken sign faces, wall sign (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis
- 1986 November 10 Building Permit construct loading dock per plans (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis
- 1986 November 20 Building Permit wreck loading dock, retaining walls & chimney (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis
- 1987 January 8 Building Permit electrical work required for new loading dock facility (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis

Ford Motor Company Building, 4100 Forest Park Avenue

St. Louis, Missouri

1987 April 14 Building Permit – 2/out (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis

1987 August 4 Deed

buyer: Acme Premium Supply Co.

seller: Wabash Railroad Co., & Norfolk & Western Railway Co.

property:

previous deed location: 1631-195 (this is actually the Goodwill to Acme deed from 10/11/78)

- 1987 November 23 Building Permit install boiler (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis
- 1988 June 17 Building Permit Repair 480 volt service conductors (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis
- 1989 Sanborne map shows bridge and compressor building, no elevated loading dock but train tracks still shown up to rear of building
- 1989 March 15 Building Permit install one hydraulic electric passenger elevator, 5 stops/ 5 openings, 3500 lbs and 150 fmp simplex collective, Otis #404903 (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis
- 1989 March 28 Building Permit enclose opening in elevator shaft (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis
- 1989 April 10 Building Permit install 1-30 ton AHU, 1-20 ton AHU, 1 chiller & fire damper (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis
- 1989 April 19 Building Permit 3rd floor office additions (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis
- 1989 June 30 Building Permit interior alteration (per plans) 3rd floor plumbing (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis
- 1989 July 19 Building Permit 1-fee/1-r/1-f/8-fix, 3rd floor (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis

1994 January 27 Deed, (stamp 1043/147, #38)

buyer: MRKP Partnership

seller: Acme Premium Supply Corp.

property:

previous deed location: 1631-194 & 195 (10-11-78, #109), 1674-406 (8-14-87, #80)

- 1994 April 15 Building Permit emergency lighting conversions (Acme Premium Supply Corp., 4100 Forest Park), City Hall St. Louis
- **1996 June 6** Deed, (stamp 1214/1015, #104)

buyer: FPS, Inc.

seller: MRKP Partnership

property:

previous deed location:

1998 April 27 Building Permit – one hydraulic freight elevator, capacity 20,000 lbs., 5 incline stops, 50 fpm travel 56'-3" (Duncan Avenue Properties, 4100 Forest Park), City Hall St. Louis

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