

HISTORIC AMERICAN BUILDINGS SURVEY

NEWELL'S RESERVE PARCEL
(Jonathan Ogden Armour Estate)
(Mellody Farm)

LOCATION:

Newell's Reserve by Kendler
350 Waukegan Road
Lake Forest, Lake County, Illinois

Newell's Reserve project boundaries are as follows: eastern boundary is IL RT. 43 (Waukegan Road former Telegraph Road); northern boundary is Meadowood Subdivision; western boundary is the Northern Branch of the Chicago River; and the southern boundary is a tree stand delineating the edge of a cornfield.

Libertyville and Waukegan 7.5 minute series Quadrangles, Universal Transverse Mercator Coordinates:
Zone 16 Easting 427538 Northing 4677316

PRESENT OWNER:

Richard Kendler Company and Lake Forest Open Lands Commission

PRESENT OCCUPANT:

Portions are a new residential development and portions are managed by the Lake Forest Open Lands Commission.

SIGNIFICANCE:

The Jonathan Ogden Armour Estate is an Estate Grounds type of designed historic landscape. It was designed by local, state and national architects important in the historic development and practice of architecture and landscape architecture. Its significance derives from the landscape design and the interrelationships between architecture and landscape. Specifically, the Armour Estate is an example of a Prairie Style designed historic landscape and the Country Place type.

Newell's Reserve, a portion of the Jonathan Ogden Armour Estate, is considered eligible for listing on the National Register of Historic Places by the Illinois Historic Preservation Agency. The Armour Estate designed historic landscape is associated with the lives of persons significant in our past. The period of significance for the

Armour Estate ranges from 1904 through 1935. The preliminary boundaries of the Estate are approximated from the Jens Jensen original topographic survey of the entire Estate (SEE PHOTOGRAPH IL-L-1995-1-42). This topographic survey was probably executed prior to the time his sketches were made into the final planting plans (Eaton 1964:93). These preliminary boundaries were subsequently drawn onto a current U.S.G.S. topographic map (SEE IL HABS No. L-1995-1 page 35). It should be noted that no scale was included on the Jensen original topographic survey. No survey or map that delineated the exact Estate boundaries were encountered in the historic document search. Therefore, the original Estate boundaries may only be approximated.

It should be noted that Newell's Reserve is a parcel of the entire Armour Estate. The relationship of Newell's Reserve to the approximated Estate boundaries is indicated on the U.S.G.S topographic map and drawn onto the original Jensen survey map (SEE HABS PAGE 36). Newell's Reserve is the most recent name assigned to this parcel of the Armour Estate. Research indicates that Jonathan Ogden Armour began purchasing land for his estate in 1904. It was noted that his purchases included a parcel of land owned by Martin Melody and his wife. Subsequently, Armour named his estate Mellody Farm. He apparently added the extra "L" to distinguish his estate from the previous owner (Hinchcliff 1892:1). Lake Forest Academy currently owns the original Armour house while other portions of the Estate were parceled off at various times. Newell's Reserve is related to Mellody Farm as a subparcel of the entire Jonathan Ogden Armour Estate.

PART I. HISTORICAL INFORMATION

A. Physical History

1. Date of Erection: 1904-1919

2. Architects: Jens Jensen, according to identified landscape plans, appears to be the major landscape architect for the Armour Estate. Jensen's original pre-landscape photographs of the project area indicate his involvement as early as 1909 (Morton Arboretum Collection). His offices were out of Steinway Hall. Steinway Hall was utilized as office space by other prominent architects. It appears likely that informal and formal interactions between architects were forged in the context of Steinway Hall.

Arthur Heun was the second identified architect master. He appears to be the sole designer of the Armour Estate house, gate lodge, garage, deer shelter, a planting plan for the entrance, and other associated buildings on the estate. There is precedence for Heun and Jensen collaborating on residential development on the north shore of Chicago (Sniderman 1994, Grese 1992:appendix A). Heun also maintained offices in Steinway Hall. Heun established a reputation as a designer of wealthy homes in the north shore and in the city of Chicago (Hinchcliff 1983). Some of his more important contributions were the William McCormick Blair and Albert Loeb homes, and the Casino and Arts Clubs in Chicago (Mumford personal communication 1994). Heun established a reputation early in his career as a Prairie Style architect. However, by the time Heun was commissioned by Armour, he had abandoned the Prairie Style and was working in the Revivalist Style.

Finally, Ossian Cole Simonds was the other major identified landscape architect master. An obscure reference exists on the back of Jens Jensen original pre-landscape photographs (Morton Arboretum Collection) which attributes the estate entrance road grading to Simonds' plans. Although Jensen and Simonds typically did not collaborate extensively, it was not unusual for Simonds to collaborate in initial site planning and grading (Sniderman personal communication 1994). In fact, few records of O. C. Simond's residential jobs survive and therefore it is difficult to establish the extent of his relationship with Jensen (Grese 1992:47). The relationship, at least, included respect for each other's work; Simond's frequently visited Jensen's office to "see how things were going" (Grese 1992:264n88). It should also be noted that both were members of the Cliff Dwellers, a downtown club of prominent men.

Jensen and Simonds were leading Prairie Style landscape

architects. They insisted that the landscape design plans conform to the surrounding region. Jensen used flora and landforms that corresponded to the prairie region. The openness and flatness of the Chicago Midwest was emphasized (Grese 1992:45). Their emphasis was extended to include highway planning in chapters such as "The 'Illinois Way' of Roadside Planting" (Illinois Highway Commission 1913:334).

It is important to note that an estate the size of the Armour's probably included the input of other architects and landscape architects. Many of the prominent architects maintained offices at Steinway Hall and were also members of the Cliff Dwellers Club. It is highly probable that other formal and informal relationships existed for the planning of the Armour Estate. However, the available documentary and archival evidence on the Armour Estate makes it unlikely to positively identify all the planners, architects and landscape architects for the estate. In fact, it should be further noted that a railroad and a river were included within the estate boundaries and also would have needed special planning.

3. Original and Subsequent Owners:
- | | |
|----------|--|
| pre-1904 | Martin Melody and wife
Thomas Steele and wife
Patrick Farrell
John Griffen and wife |
| 1904 | Jonathan Ogden Armour |
| pre-1935 | Samuel Insull and a group of businessmen |

The following owners are not significant nor do the dates lie within the period of significance.

post 1935 Frank Lewis

Insull sold the estate to Frank Lewis during the depression.

1947 Lake Forest Academy

Lewis sold off large portions of the estate and in 1947 sold the remaining 600 acres to Lake Forest Academy.

unknown Lake Forest Academy further reduced the estate to 200 acres (Hinchcliff 1983).

unknown Newell

unknown to present Richard Kendler

4. Builder: Unknown
5. Original plans and construction: A full set of original plans and construction drawings dated between 1904 and 1919 are archived at Lake Forest Academy (Lake Forest Academy Archives reviewed by K. Poulson, August 1994 and June 1995). These plans include several within the title block that are signed and dated by Jens Jensen for Newell's Reserve and portions of the entire Armour Estate. Others simply title individual plans with Estate of J.O. Armour Esq. Lake Forest, Illinois. These plans are distinctively drawn and lettered by Jensen himself.

An incomplete set of Jens Jensen original plans and construction drawings are archived at the University of Michigan, Art and Architecture Library in the Jens Jensen Special Collections (University of Michigan archive list reviewed by K. Poulson, September 1994). The University of Michigan collection contains the only identified topographic survey of the Armour Estate drawn by Jensen. No scale was included on the survey and therefore, approximate boundaries were drawn onto a current U.S.G.S. topographic map (SEE HABS No. IL-L-1995-1 page 35).

Pre-landscape Jens Jensen photographs of the Armour Estate are archived at Morton Arboretum, Jens Jensen Special Collection, Lisle, Illinois (Morton Arboretum Collection reviewed by K. Poulson, August 1994). These original photographs of the project area indicate his involvement as early as 1909 (Morton Arboretum Collection).

These plans also include original sepias by Arthur Heun for the main gate lodge and garage, and a planting plan for the areas surrounding the structures (Lake Forest Academy Archives reviewed by K. Poulson, August 1994 and June 1995). The title block which reads "Arthur Heun, Arch't., 810 Steinway Hall, Chicago, Illinois", are neither signed nor dated. It should be noted that no Arthur Heun archives are presently known (personal

communication Mrs. L. Mumford, Art Institute of Chicago). It appears that the Arthur Heun original sepias of the Armour Estate may be the only known surviving Heun drawings.

Finally, no detail plans of the bridge leading from Newell's Reserve into the Middle Fork Savanna were encountered during the archival review of the plans at Lake Forest Academy. However, it is probable that this is the original bridge constructed during the period of significance for the Armour Estate.

6. Alterations and additions:

Heun Architecture and Planting Plans

A review of the Arthur Heun plans indicate several pre-execution design changes. It is unclear when the design changes occurred in the planning process since none of the plans are dated. However, the architectural renderings of the gate house and garage indicate a high degree of integrity with the current buildings. A discussion of the architectural review follows.

1904-1908? In a review of the Planting Plan of Entrance of J. Ogden Armour, Esq., Arthur Heun depicts one "I" shaped structure with a main drive entrance from Telegraph Road (currently Il Rte. 43 or commonly Waukegan Road). An oval area is depicted in front of a fence line and presumed gate entrance. In front of the not quite circular area are two rectangles on either side of the drive. These two rectangles probably represent the main entrance gates for the Armour Estate (See Final Report: A Determination of Eligibility for Newell's Reserve). The gates are no longer present. It is unclear whether this set of gates was actually constructed. A service drive is drawn to the north of the "I" shaped structure (SEE Sheet No. 1 of 10).

1904-1908? In a review of the Main Entrance Plan Estate of Mr. J. Ogden Armour, Arthur Heun depicts a main drive and a service drive in the same location as the above mentioned plan. However, a change is noted from the "I" shaped structure to a Lodge and a garage. The oval area is now depicted as circular. It is presumed that

this plan was more current than the above mentioned plan since the current standing structures are a gate lodge and a garage. However, no dates are indicated on the plans (SEE Sheet No. 2 of 10).

1904-1908? The planting plan for the "I" shaped Heun planting plan depicts vegetation consistent with Jensen's Prairie Style landscape (SEE Sheet Nos. 1 of 10, 2 of 10 in comparison with Sheet No.7 of 10).

1996 An inspection of the current structures, main entrance drive and service drive indicate one change. The service drive now appears to diverge to the garage originating from a point in front of the circular area. The structures appear to not have any outside modifications.

Jensen Planting Plans:

A review of the Jens Jensen plans also indicates several pre-execution design changes. These changes occur within the pond and oak savanna renderings. However, the 1919 architectural rendering (the presumed final rendering) indicates a high degree of integrity with the current pond and oak savanna. A discussion of the pond and oak savanna review is also discussed below.

The February 1916 Jensen pond plan indicates a bridge to be built in the vicinity with no depiction of a summer house. This plan also indicates a campfire which is not mentioned on subsequent plans (SEE IL HABS No. L-1995-1 page 37). The campfire is Jensen's precursor to the council ring.

The September 1916 and October 1916 Jensen plans indicate a summer house to be constructed next to the pond area (SEE IL HABS No. L-1995-1 pages 38 and 39).

The November 1917 signed and dated Jens Jensen Sections Showing Proposed Cut & Fill for Pond indicates four possible designs (SEE HABS No. IL-L-1995-1 page 40). Current pond cut and fill indicates that design "C" was the final rendering.

The April 1919 rendering which appears to be the

final Jens Jensen Planting Plan rendering, again depicts a summer house (SEE Sheet No. 7 of 8).

A. B. Yeomans designed a summer house, or "Lolita Pavilion", for the pond area within Newell's Reserve (Lake Forest Academy Archives reviewed by K. Poulson August 1994).

Arthur Heun's neither signed nor dated Deer Shelter Plans do not indicate the location where it was to be built. However, during the surface inspection within the area, the foundations of the deer shelter were encountered.

Archaeological investigations indicate that the summer house, indicated on Jensen's pond plans, or the "Lolita Pavilion" as designed by A. B. Yeomans do not exist. Archaeological investigations encountered no foundations in the area indicated on Jensen's plans. The "Lolita Pavilion" as designed by Yeomans, was probably never built, or was not built in the pond area. However, it should be noted that the area was not shovel tested due to the possible adverse effect on plantings.

Post-Jensen/Heun Planting Alterations:

Newell's Reserve has undergone several planting alterations over the recent years, however, changes to the overall appearance and character of the landscape and the standing structures have been minimal. The known minor alterations are discussed below. It should be noted that the exact dates of the alterations are unknown, but they are presumed to be at the time of occupancy by Newell. A discussion of the planting alterations follows.

Unknown to 1996: One major change that was implemented to the planting plan is a hedge probably added at the time of Newell's occupancy. The hedge does not keep with the Prairie Style landscape architecture. The hedge impacts the horizontal lines, openness, and flatness of the Midwest. However, the hedge is ephemeral to the landscape's integrity as it can be removed.

Unknown to 1996: The southern portion of the pond is choked with garlic mustard and buckthorn.

The understory of the oak savanna also contains garlic mustard, buckthorn and honeysuckle. The oak savanna and pond areas may have been part of controlled burning in the past which probably suppressed the garlic mustard, buckthorn and honeysuckle.

B. Historical Context:

Development of Park Movement on a National Level

The national development of landscape design and planning profession is important in understanding the development of the J. O. Armour Estate. The development of the profession up to 1857 was concerned with the estate, cemetery and other small-site designs; aesthetic concerns being primary (Pregill 1993:423). The establishment of New York City's Central Park, designed by Frederick Olmstead and Calvert Vaux, changed the concept of designed historic landscape forever.

The movement to establish Central Park merged design with social and political goals to achieve an important civic amenity. Several important social forces created this public interest in open spaces. The most significant forces were the growth of cities and the limitations that the growth of cities placed on large outdoor open spaces. The growth of cities was complicated by the new work environments within factories and workshops. Work schedules of ten to twelve hours a day, six days a week left little leisure time to travel to pastoral recreation areas (Pregill 1993). Urban growth also created problems of air, water and solid waste pollution. Parks were not recognized as the panacea to these problems, but were considered an aid to cleaner air.

Chicago Park Movement

The concept of parks as open spaces, within the city of Chicago's context, is especially important to the establishment of the Armour Estate. McKinley Park on the south side was settled by Irish canal workers. Originating as a farming community in the 1840s it grew into an industrial center incorporated as the town of Brighton in 1851. Samuel E. Gross created several developments of small-scale worker's cottages that still exist within the community. The workers were employed in industrial complexes. An example of a

industrial complex is the Central Manufacturing District. The Central Manufacturing District (CMD) is identified by the American Institute of Architects as part of the first American industrial park. The original park was established in 1905 and was full by 1915. In 1915, the CMD began to purchase the entire south frontage of 39th Street, from Ashland Avenue to Western Avenue, extending south to the Chicago Junction Railways' classification yards. The Pershing Road Development extended the industrial park concept to include comprehensive services as a central power plant, sprinkler plant, central union freight stations, comprehensive railroad track arrangements, concrete traffic and utility tunnels connecting all buildings, brick paved streets with water and sewage systems, sidewalks and grass parkways, and street lighting. The standardized buildings were constructed of concrete or heavy timber, with pressed-brick and terra-cotta exteriors. The CMD architect for almost all the work up to 1921 was S. Scott Joy. After 1921 the architect was A. Epstein.

It should be noted that from the earliest days, Chicago had a sewage system. The city was built upon a series of beach ridges formed throughout the Holocene by the fluctuating water levels of Glacial Lake Chicago (Lake Michigan is the current stage). Consequently, the city required an efficient sewage system from its earliest days. During the 1850s, sewer lines were laid throughout the city (Cain 1978:22) in order to prevent cholera outbreaks and to solve various sewage problems that were caused by privies and fluctuating water tables. The Bubbly Creek, a stagnant fork of the Chicago River's south branch, with its noxious stench permeated the area. Bubbly Creek was essentially an open sewer carrying offal from the slaughterhouses and packinghouses. Few or no services were available in this area.

It was due to the inhumane working and living conditions that attracted the attention of the progressive reformers. Their emphasis on open areas of "breathing spaces" led to the development of the neighborhood park. In particular, McKinley Park is the first of the South Park Commission's parks and was a model for the progressive park movement. The next series of parks, designed by the Olmstead Brothers and D.H. Burnham, as part of the South Parks Commissions designs, were partially a result of experiments in McKinley Park. Meanwhile, O.C. Simonds was also

experimenting in Quincy, Illinois parks, but with the Prairie Style, utilizing native midwest plants (Pregill 1993:446).

Rural Romantic Cemeteries

O. C. Simonds was widely known on a local level for the development of Graceland Cemetery in Chicago. Concurrent with the park movement was the Rural Romantic Cemetery movement. Prior to extensive development (occupation) many looked like large well-planted estates. Cemeteries eventually limited visiting for lot holders and townspeople to Sunday's and holidays to curtail festive usage of the cemeteries.

Country Life Movement

The architect Emilio Levy wrote "The yearning of the city man to become a country gentleman seems to be increasing more and more every year" (Architecture 1919:93). The Country Place type of the Midwest site was selected because of some magnificent view of lake, river, valley or open prairie, and was located as to make the view the principal landscape feature on the general plan of arrangement (Root 1924:2). The dominant note becomes the relationship of the house to the selected natural view. Topographic conditions or space confined cultivated space or gardens close to the house complex. The spatial organization of the estate was divided into separate areas such as an entrance way, lawns, gardens and service portions. Mellody Farm is highlighted in Root's article as an example of the Country Place type.

Jensen and the Country Life Movement

Jensen's foray into residential work coincided with the Country Life Movement on a national level. The philosophical purpose of the movement was to extol the virtues of rural living as inherently superior to urban living. Liberty Hyde Bailey, the leader of the movement, envisioned a symbiotic relationship between man and environment (Pregill 1993:565). The main result of the movement, however, appeared to be a glamorization of rural living. This resulted in a return to the country for those who could afford large estates. In fact, in spite of the idealism of the movement, it became equated with the "gentleman farmer" image (Pregill 1993:565). Country places were thus developed adjacent to the cities.

Jensen pursued his private practice during the time of his unemployment from the park commission. He was dismissed because of his attitude against graft and political knavery (Newton 1971:433). In fact, his personal, political and professional integrity made him a controversial figure among landscape architects (Newton 1971:434). He was able to pursue his design philosophy in the more intimate setting of residential work. His residential work emphasized the prairie setting especially, with meadow-like clearings which receded into the surrounding trees as the principle designed space (Pregill 1993:592). Seasonal visual change is apparent in the horizontal habitat in trees such as the hawthorne (Pregill 1993:592). Formal gardens were reduced to a minimum creating a harmonious relationship with the surrounding landscape.

Jensen also rarely identified specific placement of particular plants; rather he planted masses of trees or shrubs in intricate intertwined patterns. He also typically retained control over his planting design. He was able to dictate the exact placement of plant groupings in the field. Jensen's advice to clients was often general and the advice practical to achieve the spirit he intended in the garden (Grese 1992:155). Thus, he followed the Prairie Style's three basic design principles of conservation (preservation), restoration, and repetition (Grese 1992:155). Therefore, Jensen's landscaped areas may be overgrown or not manicured but still retain a high degree of integrity.

Furthermore, the original planting design may not be retained due to natural processes rather than Jensen's artistic field decisions. Ecologically plants may have regenerated through natural preservation techniques or seed dispersion. The restoration and repetition of plant species achieved through reproduction will naturally alter the landscape. However, this natural alteration of the landscape is in the spirit of Jensen's Prairie Style designs. In fact, according to Eaton, this alteration of the young landscape indicated on original plans into the mature landscape, would not have bothered Jensen (1964:95).

It should also be noted that many Jensen designed historic landscapes are thought to be destroyed by development and/or neglect (Grese 1992). However, the issue of neglect is somewhat subjective for a Prairie

Style designed historic landscape. A natural prairie would go through processes of natural occurring burning and regeneration. As such, a Jensen designed historic landscape would only mature and regenerate in the spirit of the original design. The regeneration of plant material obviously supersedes the exact placement of plants. Hardier plants may supplant weaker plants.

It is unclear how familiar Jensen was with the scientific literature during his lifetime. However, his professional associations included Henry Cowles, Professor of Plant Ecology at the University of Chicago (Grese 1992:121). Cowles was aware of prairie burning but never referenced or acknowledged burning as part of a prairie management process (Poulson personal communication 1996). John Curtis' review of the mid to late 1800s indicates that burning by native americans was utilized extensively (Curtis 1959:296-305). J. E. Weaver also indicated that the accumulated natural debris was removed by the occurrence of fires resulting from lightning or planned burning by native americans (Weaver 1968:80). It is clear that the references cited by Curtis and Weaver were available during Jensen or Cowles' careers. However, Curtis was one of the pioneers of prairie restoration management and the first mention of burning as a management tool was in a 1948 paper (Curtis 1948).

Jensen and Simonds followed the axiom as stated by H. Hudson Holly, "...the fewer roads...the better" (1878:129). The concept of roads within the Prairie Style also emphasized certain views. Holly stated, "...a winding road with the trees so disposed as to lose certain views, and catch them again from another direction, presents the idea of different scenes" (1878:130). The practicality of a road that runs around the house is also discussed. This provides the tradespeople the convenience of separate entrances from the main house and subsequent ease of off-loading goods without marring lawns (1878:130).

Lake Forest, the Country Life Movement and Mellody Farm

The development of Lake Forest as a suburb of Chicago reflects the development of the Country Life Movement. Although, building began prior to 1900, the period between 1900 through 1909 was an active building period in Lake Forest (NPS 1975:4). Lake Forest had become famous as an ideal location for homes of Chicago businessmen. Mellody Farm is transected by the

Chicago, Milwaukee, St. Paul and Pacific Railroad (the Skokie). This was an attractive travel alternative to the Chicago and Northwestern Railroad to the east of Mellody Farm. The attractiveness of the Skokie represents the western expansion of Lake Forest. The automobile also provided easy access from Chicago to the northern suburbs.

Social and Political Climate: Armour and Insull in Context

The progressiveness of the times and subsequent social reform movement was influential on the details of estate planning. Architects were aware of the social implications of design. For instance, Hudson discusses the impact of the railroad on estate planning:

The prejudices of railroads is that the poorest part of town is seen. An axiom in political economy that the construction of railways from large cities through rural districts, not only increases the population and industry of such districts, but also must act as the most effective agents of social reform. The natural overflow from the city into the country necessarily carries with it an element of refinement and culture (1878:131).

Jonathan Ogden Armour was a progressive reformer active on the local and national scene. He was the son of a meatpacker, Philip Danforth Armour. In 1904, J.O. Armour began purchasing land in the area that is now known as Newell's Reserve. One of the purchases included a parcel of land owned by the above mentioned Martin Melody and wife. Subsequently, he named his estate Mellody Farm apparently adding the extra "L" to distinguish his estate from the previous owner (Henchliff 1982:53).

Although not generally considered a successful manager, Armour defended the meatpacking business against the muckrakers. Upton Sinclair's novel, The Jungle, features the Armour Company under a fictitious name as the chief villain (Hinchcliff 1983). Despite his poor management skills, upon his retirement, the Armour company was the largest meat-packing firm in the world.

J. O. Armour is significant in American history as a commercial meatpacker giant. His father, Philip Danforth Armour, was an American entrepreneur and

innovator whose extensive Armour and Company enterprises helped make Chicago the meatpacking capital of the world. He originated new slaughtering techniques, the use of waste products, and sale of canned meat. J. O. Armour assumed leadership of the company from his father. J. O. was a representative of the progressives who formulated far-reaching programs for upgrading America's nutritional standards and eliminating chronic waste of huge quantities of food (Platt 1991:221). Armour advocated a policy to "Diversify, Fertilize, Motorize and Specialize" in an article published in the popular magazine, the Saturday Evening Post (Saturday Evening Post, 14 July 1917). The domestic reformers' programs, concerning the need to raise the nutritional value of food and improve freshness, was an opportunity to illustrate the problem (Platt 1991).

Samuel Insull, the subsequent owner of the estate, was also a local and national reformer. The British born American public utilities magnate came to the United States in 1881. Prior to this, he worked with one of Thomas A. Edison's representatives in London. He came to the United States to become Edison's private secretary. Upon the establishment of the Edison General Electric Company in New York, Insull became a vice president. He later became a president of the Chicago Edison Company. By 1907, all of Chicago's electricity was provided by Insull's firm, now the Commonwealth Edison Company. Use of central power stations expanded his power system to most of Illinois, and parts of neighboring states, by 1917. His use of central power plants in Chicago is apparent in the growth of the CMD. The systems grew rapidly during the 1920's as a result of the central power stations and the formation of holding companies. Insull's promotion of the holding companies, in tandem with circumstances related to the Depression, caused the collapse of his top companies. These companies went into receivership in 1932. Insull fled to Europe but returned to Chicago in 1934. He stood trial three times for fraud, violation of federal bankruptcy laws, and embezzlement. He was acquitted all three times.

Insull was among the first electric utility magnates to compete successfully against the natural ice business (Platt 1991:223). His 1909 statistical analysis of group patterns of energy use revealed that ice cream makers had one of the highest load factors-the ratio of average use to maximum use. The demand for

refrigeration peaked as the need for artificial lighting declined, proportionately, during the summer months. By affording ice makers special low rates to use their equipment during the evening, Insull built and diversified the utility's off peak load. Prior to the war, Insull monopolized the market in Chicago; 20 percent of the 2.1 million tons of ice was manufactured by electric power, 26 by steam engine, and 54 by natural means (Platt 1991:223). The war itself tipped the scales of economic competition against natural ice and steam power in favor of artificial refrigeration and central stations service. The soaring labor costs and freight rates combined to deliver the final deathblow to ice harvesting (Platt 1991). By 1922, central stations service supplied the electricity to make 70 percent of the ice utilized in Chicago. Insull monopolized the electric market.

The conversion of some meat packers, including J. O. Armour, from self-contained systems to purchased power boosted the food industry to the top of the list of large energy consumers. This switch indicated a new direction in the technology of food processing and the eating habits of city dwellers. Armour pointed out that the food problem was not of supply, but of distribution (Platt 1991:224). His suggestion to end the cycle of glut and famine was that "the cold storage plant and various preserving processes must be amplified until they represent a great reservoir (Platt 1991:224 quoting J. O. Armour)". New refrigeration technology fostered rapid expansion of cold-storage facilities. Electric energy helped to bring quantities of fresher food to urban markets at prices that broader segments of the population could afford (Platt 1991:224). The Armour Company established distributing plants in Europe and began importing business after refrigeration was introduced.

Relationships of Progressive Reformers

The tightly knit social and professional community is illustrated by whom knew whom. For instance, D.H. Burnham met his acquaintance Samuel Insull on the train from New York City to Chicago in June 1903. Upon their arrival, they took Insull's automobile to Evanston (Hines 1979:239). One of Burnham's obituary's notes that he was widely known in social and professional circles. In fact, Philip Danforth Armour is noted in the obituary as praising his plan for the beautification of Chicago's lakefront (Hines 1979: 362). Jens

Jensen's private clients included some of the most successful and powerful businessmen in America, such as Samuel Insull, Henry Ford, Harold Flosheim and Julius Rosenwald (HABS document for The Clearing). As previously stated, Jensen and Simonds were members of the Cliff Dwellers and it is quite probable that Heun, Insull and Armour as prominent men of the community were also members. Finally, Jensen, Simonds, Armour and Insull all maintained reputations as progressive social reformers and were probably well aware of each other.

Demise of the Country Place Era

Samuel Insull, as the subsequent owner, wanted to convert the estate into a golf club. Editorial comment in The Architect sarcastically bemoans the demise of the great estates. The majority of the estates were purchased by consortiums of promoters to "...form the inevitable golf club...The grounds, having been kept up with meticulous care for many years, are in many cases good golf courses to start with...so will the architects keep on getting jobs of converting Elizabethan manses into light, airy country clubs with cross-ventilation and a perfect view of the first tee." (The Architect 1924). Insull's time period represents the beginning of the acceleration of the great estates subdivision into smaller parcels. The demise of Mellody Farm in particular, into smaller parcels is exemplified by the list of original and subsequent owners (nb. the list is not exhaustive, a title search was conducted only for the Newell's Reserve Parcel). The demise of the Country Place Era also coincided with the 1929 Wall Street crash. The 1933 economic revolution brought revision of tax policies and as a result of the new taxation, the size and number of large domestic establishments in town and country waned (Newton 1971:445).

PART II. ARCHITECTURAL INFORMATION

A. General Statement

1. Architectural character:

a. Structures: The gate lodge, gates and garage are of architectural merit based on the integrity of the structures and their relationship to the designed historic landscape. The gate complex is an important example of Heun's design and subsequent transition from

his Prairie Style to Georgian revivalist style. However, the prairie influence is detected in the lowness of the buildings and the wide eaves. The structure's interrelationship with the designed historic landscape is subordinate. In other words, Jensen and Heun highlight the natural setting of the environment and the gate complex plays a minimal role within the overall site. Jensen's design intent for Mellody Farm may be extrapolated from the following quote,

What comparison is there between the creating of a building, which fits into a narrow and limited space, and the creating of large pastoral meadows where the horizon is the boundary, ever changing in light and shadow with the clouds above with the light of the early morn, at eve when the rays of the setting sun cast their reflection upon the earth, in the silvery moonlight, and in the changing colors of spring and summer and fall and winter? Such are the keys to landscaping (Eaton 1964:84 quoting Jensen The Clearing 1956:19).

It should be noted that the relationship between the Prairie Style landscape and Arthur Heun is not clear. For example, Heun designed the deer shelter and Yeomans designed the "Lolita Pavilion" within the pond area. The deer shelter was built and the "Lolita Pavilion" idea appears not to have been executed in the pond area. Eaton notes of Jensen's landscapes that, "No grottoes, gazebos, or pergolas adorn (or clutter) his landscapes" (1964:89). Heun obviously exerted some influence in the pond and oak savanna execution with the construction of the deer shelter. Jensen's attitude toward architecture in general is apparent. He contended that architecture and landscaping were entirely different arts. He preferred to work with "...submissive architects who would not in any way interfere with his cherished control of all design beyond the walls of the house itself. For this reason he liked to work with Arthur Heun...(a) pliable personality..." (Eaton 1964:110). The Newell's Reserve Parcel follows this tenet; the connection of the gate complex and the landscape is not close; the meadow flows up to the gate complex.

b. Landscape: The formal entrance road, gate complex, oak savanna and pond are of architectural merit based on the integrity of the designed historic landscape. The landscape is an important example of Jens Jensen,

Arthur Heun and Ossian Cole Simond's Prairie Style landscape design. The aforementioned characteristic features are classic examples of the organization of the country place. The strong horizontal lines, masses of trees and curvilinear roads are the basic design elements of the Prairie Style landscape. Jensen also rarely identified specific placement of particular plants, rather he planned masses of trees or shrubs in intricate intertwined patterns (SEE Sheet No. 7 of 8 and IL-L-1995-1-42). Newell's Reserve exemplifies his sensitive talent for ground levels and planting masses and textures. His landscape designs were also known for ecological soundness and is illustrated by the continued viability of the pond.

c. Bridge: The bridge is of architectural and engineering merit based on the relationship of the structure to the landscape. Specifically, Claude Bragdon notes that the function of the engineer was to discover and develop the requirements of bridge construction from an economic, efficiency, and endurance standpoint. The function of the architect was to dramatize or embellish without compromising efficiency or endurance. The architect could utilize the economic benefits of cement and not compromise esthetics (1923:3-4). Thus, concrete bridges were in vogue during the period of significance.

2. Condition of Fabric:

a. Structures: The gate lodge, garage, and gates are in excellent to good condition.

b. Landscape: Good.

c. Bridge: The bridge is fair to poor condition.

3. Summary Description:

a. Structures: The gate lodge, gates, garage exteriors and the bridge are in good condition. The retaining walls have sustained some cracking in the mortar exterior. Additionally, the retaining wall on the north facade of the gate lodge sustained heavy damage from construction activity.

Two doors appear to be missing on the west side interior of the garage. The doorway to the garage is a double door, an interior of screen and exterior of wood. The arched split doors slide back into the

interior of the garage.

b. Landscape: The Newell's Reserve Parcel (as well as the entire Armour Estate) retains a high degree of integrity in its location, setting and design. The characteristic features of the designed historic landscape are identified below, as established by the National Register Bulletin Number 18. The Armour Estate landscape is a good representation of the estate designed historic landscape, period, method of design and construction, and relates to the development and philosophy of landscape design.

The major characteristic feature is the Prairie Style landscape itself. The interrelationship between the Prairie Style landscape and other characteristic features of the estate need to be discussed. In order to facilitate the discussion of characteristic features and their interrelationships, the entire estate grounds are divided into six smaller geographic boundaries. The smaller geographic boundaries are not property boundaries, but are chosen on the basis of natural or manmade physical boundaries. Smaller geographic boundaries, rather than the entire estate's boundaries also facilitated the discussion of integrity. Therefore, although the entire estate designed historic landscape was deemed significant, only certain geographically bound areas retained integrity (SEE Final Report: A Determination of Eligibility for Newell's Reserve).

There are two significant characteristic features consistent throughout the six areas. These two features are the designed historic landscape itself and the road system that connects the entire estate to itself and the outside community.

The landscape itself is characteristic of the Prairie Style landscape architecture. The horizontal lines, openness and flatness of the Midwest are apparent in the landscape design of the entrance to the Armour Estate. Jensen designed the large expanse of land or meadow without any structures or flora to emphasize the Prairie Style. The meadow is typical of Jensen's facility in handling large tree bounded spaces. Current tree planting includes box elders, burr oaks, shag hickory, elm, crab apple and hawthorne.

Trees frame the formal entrance from Telegraph Road (currently Waukegan Road). Heun designed this portion

of the historic landscape as part of his gate complex.

The main drive, or entrance road to the estate, does not directly lead to the Armour house itself. Instead, the road circumscribes the meadow. Scattered oak and hickory trees lead the traveler through the open space and the large oak savanna helps break up the space. Masses of crab apple trees are scattered throughout the meadow. The circumscription of the road gives the illusion of a much larger expanse of land. Meeker states "They made a long drive in from Telegraph Road bordered by rows of young elms, which had to be buttressed by wires to withstand the fierce Midwestern winds. (1955:94). Jensen typically utilized gravel as fabric for his roads (Eaton 1964:224).

The pond area and oak savanna is also a characteristic feature of the designed landscape. The pond area on Newell's Reserve was a wetlands area that existed prior to the landscape design. Jensen documented this in a series of pre-landscape design photographs in 1909 (Morton Arboretum). In fact, the planning stages for the pond portion of the project area spanned from 1909-1919. Jensen's involvement on the Armour Estate dates much earlier than the National Register nomination indicated. Jensen typically utilized small pools of water with arbors of trees to play with spatial relationships (dense-open and dark-shade open areas).

The pond area can be further divided into characteristic features. The pond area or oak savanna contains areas noted as a player's green and a campfire on Jensen's planting plan, traced in February 1919. The player's green is a significant feature of a Jensen designed landscape. Jensen's design intent, according to Grese, was that he, "Delighted in creating a space for outdoor drama, or 'a player's green', as he called such places. These spaces were designed not as traditional theaters, with a developed stage and seats, but as natural settings for plays, musical offerings, or recitations. Outdoor drama provided an opportunity for people to celebrate the human presence in, and respect for, the pageantry of nature" (Grese 1992:178). The natural berm, or grading of the pond, creates spatial separation or seating for the player's green.

Finally, a path or trail meanders through the oak savanna. Although, the trail is not obvious, the plantings lead the traveler from space to space.

c. Bridge: The bridge appears to have integrity and is a characteristic feature of the designed historic landscape. The bridge leads the traveler from space to space. Specifically, the bridge leads the traveler from the Newell's Reserve Parcel into the Middle Fork Savanna. The Middle Fork Savanna represents a functional space within the overall context of the Armour Estate. As previously noted, no original plans were identified for the Middle Fork Savanna. It appears that the Middle Fork Savanna may be the area that contained the railroad station and the retaining wall to block noise from the railroad. However, it is unclear whether these features still exist.

B. Description of Exterior gate lodge and garage:

1. Overall Dimensions: The gate complex comprises approximately nine acres of the approximately seventy seven acres of the Newell's Reserve Parcel. The gate lodge is a three story building with a basement. The garage is a one story building. Pinkish stucco covers the facade on portions of each building; the remaining portions are stone. No major structural modifications were apparent. See Sheet No. 3 of 10 for detailed measurements.

2. Foundation: The foundation is granite with cement retaining walls. Cement floors line the garage and there are wood floors in the gate lodge. No major structural modifications were apparent. See Sheet No. 3 of 10 for detailed description.

3. Roof: The roof is clad with red tiles and with copper metal gutters. No major modifications were apparent. See Sheet No. 3 of 10 for detailed description.

4. Openings: No major structural modifications were apparent. See Sheet No. 3 of 10 for detailed description.

C. Description of Interior gate lodge and garage:

1. Overall Dimensions: The gate lodge interior is broken into a basement, first floor and second floor. The basement was inaccessible due to flooded conditions. The first floor consists of a dining room, living room, kitchen, porch, rear porch and pantry. The second story consists of three bedrooms and a bathroom. The layout does not appear to be modified. The bathroom is gutted and not operational. The garage interior appears to retain the original layout. However, the water closet indicated on the original garage

plans was altered and now contains only a sink. See Sheet Nos. 4 of 10, 5 of 10, and 6 of 10 for detailed measurements.

2. Walls: Gate lodge walls were plastered and painted white. Heavy structural cracking was not apparent. Water infiltration caused ceiling deterioration in portions of the gate lodge. The initial review of the interior indicated heavy renovation and no significant architectural features remained. A subsequent review of architectural drawings (K. Poulson, 1995) indicated that the interior of the gate lodge was renovated but many of the interior features were intact. Heun executed extensive and exhaustive plans of the gate lodge, including detailed profiles and elevations of the ceiling, floor moldings and cupboards. See Sheet Nos. 4 of 10, 5 of 10, and 6 of 10 for detailed description.

The interior of the garage (referenced as a "washhouse" in the Report of a Phase I Archaeological Investigation of Newell's Reserve Residential Development Project in Lake County, Illinois and Final Report: A Determination of Eligibility for Newell's Reserve) retains glazed white bricks. See Sheet Nos. 4 of 10, 5 of 10, and 6 of 10 for detailed description.

3. Openings: No major structural modifications were apparent. See Sheet Nos. 4 of 10, 5 of 10, and 6 of 10 for detailed description.

4. Floors: The floors in the gate lodge are hardwood and the garage floor is cement.

5. Lighting and heating: The heating system was modified at some point to accommodate forced air heating rather than radiator heat. The sconces on the walls are modern and no features remain to indicate a transition from gas to electric lighting.

D. Description of bridge:

1. Overall dimensions: The bridge measures 2 meters wide and 0.70 meters high. The railing measures 0.10 meters deep. The decorative cap to the railing measures 0.35 meters across and 0.10 deep. The majority of the decorative cap to the railing no longer is present. The flat piers measure 0.60 meters across, 0.30 meters deep and 0.90 meters high (deck to top). Rectilinear balustrades decorate and intersperse the flat piers. The rectilinear balustrades and the flat piers are not structurally significant.

2. Deck: The flat deck appears to be cement covered in gravel.

3. Substructure: The bridge appears to be supported by a series of cement, flat abutments that are set in the stream bed and ground surface. The overall dimensions of the abutments, deck to stream bed, were inaccessible due to wet conditions.

E. Description of formal entrance road and meadow:

1. Overall Dimensions: The road from Waukegan Road to the Middle Savanna is approximately one half mile in length. The meadow comprises approximately forty six acres of the approximately seventy seven acres of Newell's Reserve Parcel. See Sheet Nos. 1 of 10 and 2 of 10.

2. Type of Fabric: Gravel. Alfalfa and, red and white clover cover the meadow.

3. Summary Description: The current plantings along the formal entrance road are Austrian pines, probably replaced when Dutch Elm disease struck the original plantings. The pines, however, do not detract from the original design intent and still give the feeling of time and space. Alfalfa, grape, white and red clover, blue grass, cinquefoil, wild carrot, yarrow and wild strawberry form the meadow portion of Newell's Reserve Parcel. See Sheet No. 9 of 10 for detail of current planting.

F. Description of oak savanna and pond:

1. Overall Dimensions: The pond area and oak savanna comprise approximately twenty two acres of the approximately seventy seven acres of Newell's Reserve Parcel. See Sheet No. 7 of 10.

2. Condition of Fabric: Good to excellent

3. Summary Description: Burr oaks, shag bark hickory, elm, white ash and hawthorne comprise the oak savanna. The understory of the savanna includes bluegrass, goldenrod, sedges and trillium. The pond border includes, among others, sumac, dogwood, crab apple, elm, rose, ferns, dogwood, red cedar, and high bush cranberry. It should be noted that certain plantings were not appropriate for designed pond habitat. For instance, the successional marsh/pond border plants such as calamus, saggittarias, spike rush, marsh mallow, iris, lobelia, and club rush,

identified on Jensen's planting plan, might not have taken with the sharp grade (cut and fill C chosen by Jensen). It is unclear how Jensen chose the sharper grade over a flatter grade given his choice of plantings. Ecologically, successional information was known among the academic community. However, these successional plants that are not present do not detract from Jensen's prairie design intent or the current viability of the pond as an ecological habitat. See Sheet No. 10 of 10 for detail of current planting plan for the pond and oak savanna.

G. Site:

1. General Setting: The integrity of the landscape design is exemplified by the feeling of time and space as the traveler enters Newell's Reserve Parcel. It is bordered on the north and south by modern residential developments. These developments are obscured by Jensen's landscaping of horizontal lines of trees. It is bordered on the east by Waukegan Road which is obscured by the formal entrance road and gate complex. Finally, it is bordered on the west by the Middle Fork Savanna, Lake County Forest Preserve.

PART III. SOURCES OF INFORMATION

A. Architectural Drawings and Photographs

Jensen, Jens
Collection. Arm 6, 9, 10, 11. Art and Architecture library,
University of Michigan, Ann Arbor.

_____. Collection. Morton Arboretum, Lisle, Illinois.

Lake Forest Academy.
Archives. In depth review of H-004 (3 plans), H-013, S-006
(2 plans), S-005 (2 plans), S-004 (2 plans), S-007. Lake
Forest, Illinois.

Lake Forest Academy.
Archives. Review of Jonathan Ogden Armour Estate Plans for
Mellody Farm. Lake Forest, Illinois.

B. Interviews:

Chicago Historical Society. 1994 Personal Communication.
Photographs and Prints Department.

Mumford, Mrs. L.
1994 Personal Communication. Architectural Archives, The Art
Institute of Chicago.

Sniderman, Julia
1994 Personal Communication. Preservation Planning
Supervisor, Chicago Park District, Chicago, Illinois.

Wegman-French, Lysa
1996 Personal Communication. Historian. Rocky Mountain
System Support Office, National Park Service.

C. Bibliography:

Bragdon, Claude
1923 "Abstract Thoughts on Concrete Bridges" in The
Architectural Record, Volume LIII, Number 292.

Curtis, John T.
1959 The Vegetation of Wisconsin An Ordination of Plant
Communities. Madison: The University of Wisconsin Press.

_____ and M. L. Partch
1948 "Effect of Fire on the Competition Between Blue Grass
and Certain Prairie Plants in Amer. Midland Nat., 39:437-43.

Eaton, Leonard
1964. Landscape Artist in America: The Life and Work of
Jens Jensen. Chicago: The University of Chicago Press.

Encyclopedia Britannica
1994 Micropedia Ready Reference Volumes 1 and 6. Chicago:
Encyclopedia Britannica, Inc.

Grese, Robert E.
1992 Jens Jensen Maker of Natural Parks and Gardens.
Baltimore: The John Hopkins University Press.

Historic American Building Survey (HABS)
1982 Field Instructions for Measured Drawings.

Hinchliff, William
1983 "The J. Ogden Armour House- A Brief History". Lake
Forest Academy-Ferry Hall Antiques Show Catalogue.

_____. 1982 National Register of Historic Places Inventory-
Nomination Form. Illinois Historic Preservation Agency.

Holly, H. Hudson
1878 Modern Dwellings in Town and Country. New York:
Harper & Brothers, Publishers.

Illinois Highway Commission
1913 Fourth Report of the Illinois Highway Commission for
the Years 1910-1911-1912. Springfield: Illinois State
Journal Co., State Printers.

Jensen, Jens Friends of and the Bauer Latoza Studio.
Unpublished HABS documentation of The Clearing, Jens Jensen
Studio and Landscape.

Lake County Museum
1885 Unattributed map. Regional History Archives.
Wauconda, Illinois.

Lake County Recorder of Deeds. Waukegan, Illinois.

Lake Forest Historical Society. Archives. Lake Forest,
Illinois.

Levy, Emilio
1919 "Country Home, Far Hills, New Jersey" in Architecture
The Professional Architectural Monthly, 39(4):93.

McAlester, Virginia and Lee
1992 A Field Guide to American Houses. New York: Alfred A.
Knopf.

Meeker, Arthur
1955 Chicago With Love A Polite and Personal History. New
York: Alfred A. Knopf.

National Register of Historic Places
1992 National Register Bulletin #18: How to Evaluate and
Nominate Designed Historic Landscapes. U. S. Department of
the Interior, National Park Service, Interagency Resources
Division. Washington, D.C.

1991 National Register Bulletin #15: How to Apply the
National Register Criteria for Evaluation. U.S. Department
of the Interior, National Park Service, Interagency
Resources Division. Washington, D.C.

1981 National Register of Historic Places Inventory-
Nomination Form for J. Ogden Armour House.

1976 National Register of Historic Places Inventory-
Nomination Form for the Lake Forest Historic District.

Newton, Norman T.
1971 Design on the Land The Development of Landscape Architecture. Cambridge: The Belknap Press of Harvard University Press.

Platt, Harold L.
1991 The Electric City Energy and the Growth of the Chicago Area, 1880-1930. Chicago: The University of Chicago Press.

Pregill, Philip and Nancy Volkman
1993 Landscapes in History Design and Planning in the Western Tradition. New York: Van Nostrand.

Root, Ralph Rodney
1924 "Country Place Types of the Middle West" in The Architectural Record, 55(1):1-32.

Stewart, John J.
1978 "Landscape Archaeologist at Work" in Landscape Architecture.

Swink, Floyd and Gerould Wilhelm
1979 Plants of the Chicago Region. Lisle: The Morton Arboretum.

Weaver, J. E.
1968 Prairie Plants and Their Environment A Fifty-Year Study in the Midwest. Lincoln: University of Nebraska Press.

D. Likely Sources Not Yet Investigated:

Lake County Deed Books, Lake County Recorder of Deeds, Waukegan, Illinois. Title search for entire J. O. Armour Estate; only title search for Newell's Reserve Parcel.

Lysa Wegman-French, an Historian for the Rocky Mountain System Support Service, National Park Service performed a preliminary search for examples of HABS designed historic landscapes. The final submission of the Friends of Jens Jensen and the Bauer Latoza Studio, unpublished HABS documentation of The Clearing, Jens Jensen Studio and Landscape may be available. No drawings were identified during the initial research. Therefore, it is unclear how the site plan and landscape documentation was completed. The preliminary search for examples identified a few gardens or parks that may prove to be additional models for documentation.

Lake Forest Academy Archives. Further research on the J.O. Armour Estate, Mellody Farm, in its entirety, is warranted. The Final Report: A Determination of Eligibility for Newell's Reserve, identified other portions of the estate that meet the requirements for National Register of Historic Places eligibility.

Arthur Heun's obituary should be consulted to identify surviving family members. Family documents or oral history may help illuminate his design philosophy and/or identify other original renderings.

PART IV. GLOSSARY OF GENUS AND SPECIES/METHODOLOGICAL STATEMENT
OF PLANT IDENTIFICATION/JUSTIFICATION OF METHODOLOGY

The following glossary corresponds to the identification of genus and species indicated on Sheet Nos. 9 of 10 and 10 of 10 for the Newell's Reserve Parcel.

TA	Typha angustifolia Narrow-Leaved Cat-Tail
CS/DS	Cornus species (red orser?) Dogwood
RC/CB	Rhamnus cathartica Common buckthorn
LS	Lonicera species (maackii?) Honeysuckle
AO/GM	Alliara officinalis Garlic mustard
QM/BO	Quercus macrocarpa Burr oak
CO/SH	Carya ovata Shagbark hickory
PC/BP	Potamogeton crispus Beginner's pondweed
LS/DW	Lemna species Duckweed
CC	Calamagrostis species (canadenis?)
LS	Lythrum species

VO/HC	Virburnum opulus High bush cranberry
EA/HT	Equisetum arvense Horsetail
SI	Salix interior Sandbar willow
RM	Rosa multiflora
AC	Acornus calamus
AN/BE	Acer negundo Box elder
RS	Rosa species
JV/RC	Juniperus virginiana crebra Red cedar
SA/WW	Salix alba White willow
HA/GW	Hydrophyllum appendiculatum Great waterleaf
FA/WA	Fraxinus americana White ash
UA/AE	Ulmus americana American elm
UR/SE	Ulmus rubra Slippery elm
PM/CA	Pyrus malus Crab apple
VR/RG	Vitis riparia Riverbank grape
CS/HT	Crataegus species Hawthorne
PS/BG	Poa species Blue grass
SS/GR	Solidago species Goldenrod

CS	Carex species Sedge
TS	Trillium species
SF/GF	Setaria faberii Giant foxtail
VS/BV	Viola sororia Blue violet
FS/SB	Fragaria species Strawberry
PI/WQ	Parthenium integrifolium Wild quinine
IC/JW	Pinus nigra Austrian pine
HC/CW	Hydrophyllum canadense Canada waterleaf
PB/JP	Pinus banksiana Jack pine
AS/SM	Acer saccharinum Silver maple
MS	Medicago sativa Alfalfa
DC/WC	Daucus carota Wild carrot
AM/YW	Achillea millefolium Yarrow
DG/OG	Dactylis glomerata Orchard grass
TP/RC	Trifolium pratense Red clover
TR/WC	Trifolium repens White clover
PS/CQ	Potentilla species Cinquefoil

TO/WC	Thuja occidentalis White cedar
PB/JP	Pinus banksiana Jack pine
PD/CW	Populus deltoides Cottonwood
UR	Ulmus rubia Elm
RG/SM	Rhus glabra Sumac
OS/SF	Onoclea sensibilis? Sensitive fern

The following outlines the methodological statement of plant identification and the justification of methodology .

Plant identification was undertaken in consultation with Dr. Thomas Poulson, plant ecologist at the University of Illinois at Chicago. The identification was undertaken in spring 1995. Swink and Wilhelm's Plants of the Chicago Region was utilized instead of the recommended HABS Hortus Third. Swink and Wilhelm was recommended by Dr. Poulson as the appropriate identification of plants for the Chicago region.

Swink, Wilhelm and Dr. Poulson all concur that "Unfortunately, the serious identification of plants is often a difficult matter, even to the professional botanist whose training has provided him with the necessary conceptual background and tools of the trade." (Swink 1979:xxiii). The plant identification was undertaken in Spring 1995, prior to flowering and post budding. Therefore the identification of vegetative morphological features was difficult. Seasonal constraints should be considered for plant identification in future designed historic landscape documentation. In other words, the significance of the Prairie Style designed landscape is partially based upon seasons. Future plant identification might consider a four, or two tiered site plan approach (fall, winter, spring, summer or fall/winter and spring/summer).

In addition, the methodological approach to the designed historic landscape was to identify existing features and to identify features that may have been lost or degraded. Landscape archaeology uses the presence and arrangement of certain plant species as indicators of buried features and clues to original land use (Stewart 1978:140).

HABS nomenclature (HABS 1982:23-28) suggests the preferred method of keying plants on a site plan is to use the first letters of the botanical name (genus and species) and the first letters of the common name (i.e. *Cornus florida*/flowering dogwood, CF/FD). In addition, HABS standards state that in cases where there is confusion concerning the identification of the exact species of a plant, if the genus is known, it is correct to give the genus name, followed by the word species (i.e. *Cornus species*).

The Newell's Reserve Parcel glossary attempted to follow the preferred national HABS method. It should be noted that in a few cases a common name was not indicated. These cases represent a scenario where a common name was either not available, translated, or was repetitive. Additionally, a genus name followed by the word species is also utilized. However, a tentative species identification is sometimes given in the glossary (i.e. *Calamagrostis species (canadenis?)*). Another example of identification is that genus and species may be identified tentatively (i.e. *Onoclea sensibilis?* Sensitive fern). This particular example was utilized where Jensen identified only "ferns" on the planting plan for the pond, with no specific genus or species listed. The tentative identification was based on geographic region, habitat, plant association, and availability during Jensen's time period. In any case, the sense of time and place is not lost with imprecise identification. The type of fern is immaterial to the fact that ferns were identified as part of the planting plan of the pond.

Minor spelling problems were encountered with genus and species identification. Spelling modifications from Jensen's time to present ecological classifications (i.e. *saggitarias* versus *saggitarius*) were addressed.

Finally, leroxy lettering font, size, line weights and graphic techniques follow national HABS standards for site plans (HABS 1982:13-17). Original site plans were reproduced as base site plans. The placement of plantings was leroxy lettered onto the base plans. A comparison of original site plan to current site plan is, thus, possible. The plans may be overlaid on a strong light table for comparison. Triangulation or other precise mapping techniques were not used by Jensen. The justification for this is his design intent; precise planting locations were not part of his process.

PART V. METHODOLOGICAL STATEMENT OF RESEARCH

The research strategy for this Illinois HABS documentation consisted of the following approaches:

1. Preliminary investigation of the property and parent site through Report of a Phase I Archaeological Investigation of Newell's Reserve Residential Development Project in Lake County, Illinois.
2. On site investigation and generation of necessary information to complete the Final Report: A Determination of Eligibility for Newell's Reserve.
3. Verification of information gained through further research of primary and secondary sources and on-site investigations to complete the necessary documentation in compliance with the stipulations outlined in the Memorandum of Agreement Between the Department of the Army, Corps of Engineers Chicago District, and Illinois Historic Preservation Agency for the Newell's Reserve Parcel, Lake Forest, Illinois (199400692/Richard Kendler Company) Submitted to the Advisory Council on Historic Preservation, Signed and Dated January 1995.

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PART VI. PROJECT INFORMATION

This project was completed in partial compliance with the Memorandum of Agreement between the Department of the Army, Corps of Engineers Chicago District, and Illinois Historic Preservation Agency for the Newell's Reserve Parcel, Lake Forest, Illinois (199400692/Richard Kendler Company) Submitted to the Advisory Council on Historic Preservation, signed and dated January 1995.

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