1889 The Zoo was established through a gift by George V. Gress. This was a "costly and rare collection of wild animals" purchased at auction from a defunct circus at the Fulton County Courthouse. Sydney Root, President of Park Commission, reported "the collection embraced one hyena, two African lionesses, two silver lions, one black bear, two wildcats, one jaguar, one gazelle, one 'coon, one elk, one Mexican hog, two deer, one camel, one dromedary, two monkeys, two serpents..."



Zoo established, 1889

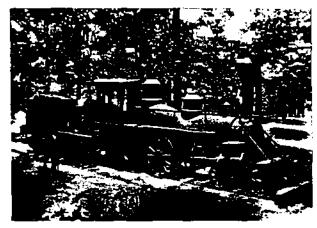
1890 Park acreage was expanded with the purchase of forty four acres to the north of the original tract, for a total of 131.5 acres.

1893 The "Battle of Atlanta" painting was purchased by Messsrs. George V. Gress and Charles Northern. "(The painting has been) neglected, regarded with indifference by many, carried from city to city by a chain of constantly changing owners, sold at auction on two occasions (at one particular auction a bid of five dollars was made); the Cyclorama of the Battle of Atlanta has now come into its own," Miss Alma Jamison was quoted by a local paper. A resolution was passed to move the painting to Grant Park (near the Augusta Avenue entrance) and "they (Messrs.Gress and Northern) be allowed to charge an admission fee of not exceeding ten cents...." 5 (This income was donated to help poor children in Atlanta.)

"Two new entrances to Grant Park are graded of which, Atlanta Avenue is a street quite as pretentious as any to be found in the city."

1898 The "Battle of Atlanta" painting was donated to the City of Atlanta by Mr. Gress.

1900 January 1st -The first day of the new century: Population of Atlanta was 89,872: forty percent black, sixty percent white, "a cold day in Atlanta, the local lakes were frozen over and fine skating was had at Ponce de Leon and Grant Park." The Atlanta Rapid Transit Company constructed rail lines to Grant Park during this year.



Train to Grant Park, early 1900s

⁴ Garrett, Atlanta and Environs, Vol.II, pg.186

⁵ Garrett, pg.103

⁶ Garrett, pg. 282

^{&#}x27; Garrett, pg. 425

From early 1903 to late 1904 John C. Olmsted became familiar with the condition and recreational possibilities of Grant Park. John C. Olmsted was quoted by the local paper as he began his work on Grant Park.

"Coming now to the largest park of the city, Grant Park, we have nothing but praise for its natural beauty and adaptability for the purposes of a park its size. We regret, however, to have to say we cannot but feel objections to much that has been done heretofore toward its improvement and fitting for use by the public. (This reference is to inappropriate structures, the monotonous landscape, and the Zoo being in the park and its intrusion of the Lake area.) The park is mostly covered with a fine, healthy growth of oak trees and a few pines... the woods are in fact identical in composition with those which cover nearly all the land about Atlanta... As this land is evidently valueless for any residential purposes except the very meanest and poorest, it is obvious that its removal from the market would be a great benefit to the surrounding upland, which is valuable for its residential purposes..." 8



Scenes of Grant Park, 1903





^{*} John C. Olimsted quote from Dr. Charles Beveridge's report



Lake Abana, early 1900s

In June 1904 the park board approved extension of Lake Abana, recommended by John C. Olmsted. A change in city administration interrupted John C. Olmsted's work, and opposed further expenditure on park construction. With one exception, Lake Abana was extended.

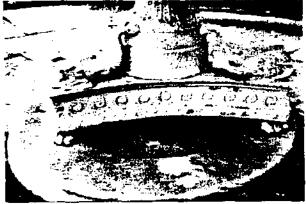
1905-1908 Park construction during this time (without the Olmsted firm's involvement or approval) included new entrances on South Boulevard, Confederate Avenue, and Ormwood Avenue which are all very steep and open. They constructed cement walks, a concrete shelter, and a dancing pavilion

which John C. Olmsted described as "conspicuous and ugly". ⁹ The park board also constructed a sewer line through the valley of the park that dried up the streams and springs.

A 1911 Sanborn maps show the extended portion of Lake Abana as the swimming pool. The skating rink (lake in the winter) locker room is shown on the land between the pool and the lake. The White City Amusement Park is located just east of the lake area. It includes a forty-foot high railway, ferris wheel, merry-go round, shooting gallery, soda fountain, moving pictures, and novelty circus.

1909-1912 John C. Olmsted returned to complete the general and planting plans for Grant Park. The park commission was ready to construct the ball field, tennis courts, and children's playground; John C. Olmsted worked on plans for these areas, even though he felt strongly these elements should be minimized in the park. In 1912 the Erskin Fountain (named for Judge John Erskin) is relocated at the Cherokee Avenue-Ormond Street Entrance of Grant Park.





Erskin Fountain, 1997

* J.C. Olimsted quote from Dr. Charles Bevendge's report

1916 The Olmsted firm's Master Plan was adopted for Grant Park by Atlanta City Council.

1915-1920's This had been a popular time period for Grant Park: trolley lines stopped at the park entrances, in the spring and summer crowds of women in long, flowing dresses and men in high hats flocked here to stroll the walking paths, visited the Cyclorama and Zoo, and boated on spacious Lake Abana in rented rowboats. Extensive stone gates were built at several entrances to Grant Park.



Cannons at Fort Walker, 1917

Gateways from the 1920s



Milledge Avenue Entrance, 1997



Milledge Avenue Entrance, 1997



Fort Walker Entrance, 1997



Ormond Street Entrance, 1997

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Milledge Avenue Entrance, 1997



Fort Walker Entrance, 1997



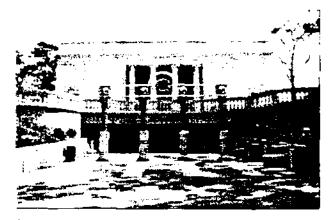
Ormond Street Entrance, 1997



Irma Twitty and Grant Park landscape, 1921

1921 A new building (of firehouse marble) was constructed to house the "Battle of Atlanta"/Cyclorama. This building was designed by Atlanta architect J.T. Downing in a competition held by the park commissioners.

1935 The Zoo collection was expanded by eighty-four animals and almost 100 birds; "The municipal zoo at Grant Park was not particularly distinguished until now, when Asa G. Candler, Jr. made a tender to the city of his valuable private collection. For some three years Candler had been assembling

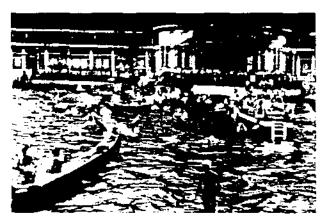


Cyclorama, 1997

choice specimens of wild animals and birds which he housed in specially built cages and quarters on his Briarcliff Road estate. The hobby was not without its drawbacks. The neighbors, with some justification, objected to a menagerie in such close proximity to their homes. Their objections became loud indeed when, from time to time, a baboon, or other specimen would escape from the zoological garden and wander over the neighborhood." Candler's hobby had become expensive (heavy taxes) and embarrassing.

1934-36 WPA funds were used to make the "Battle of Atlanta" painting three dimensional to increase the optical illusion it has today.

to Garrett, Atlanta and Environs Volume II, pg. 186



Swimming Area, 1948

1950-1960's The Grant Park Neighborhood loses its economic strength and dramatically declines. Visitors to the Zoo increased. The South Boulevard parking lot was built for Zoo users. Zoo expansion required removal of many trees in the eastern area of the Zoo.

Between 1950-1985, 3000 trees are lost from park overuse and soil compaction.¹¹

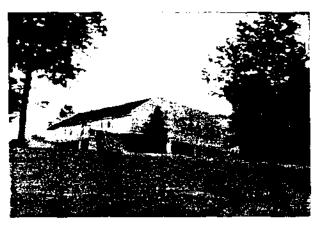
1960-1972 Lake Abana was drained due to the attitude of certain people on integration, preventing city residents of different races

from swimming together. More Zoo expansion resulted in more tree loss. The baseball field was enlarged to double its size; this grading created very steep slopes in the north end of Grant Park.

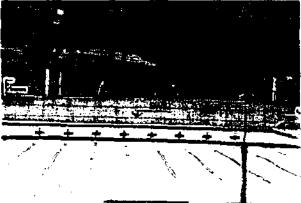


1973-1988 Addition: Overlook

1973-1988 The Cherokee Avenue parking lot was added. Major construction in the Zoo took place, with the Erskin Fountain and the Overlook being blocked off by Zoo expansions. The Recreation Center and parking lot were built near the ball field. The swimming pool and parking lot are built southeast of the ball field.



1973-1988 Addition: Rec. Center



1973-1988 Addition: Pool

Blackmon, The Atlanta Constitution, June 14 1992, pg.D8.

¹³ Blackmon, The Atlanta Constitution, June 14,1992, pg.D8

1990-1992 Two large pavilions were built for approximately \$300,000. During the early 1990's Zoo Atlanta redesigned a lot of areas and animal habitats. The main pathway through the Zoo was densely planted with many native species and resembles the 'ramble' which the Olmsted firm was known for incorporating into most of their park designs. The 'ramble' is typically a winding pathway through diverse vegetation which makes the space appear much larger than it really is.

1997 The Atlanta Jazz Festival is held at Grant Park annually attracting more than 100,000 people. The Cyclorama has 250,000 visitors annually. Zoo Atlanta annual visitation is approximately 750,000 with over 10,000 on peak days. The Zoo has constructed their Action Resource Center which will house their educational programs dealing with conservation. This will be a big attraction for school groups and the public as well. The recreational areas are used regularly by people throughout the City. Church groups, family reunions, and other large groups use the pavilion and gazebo area for picnics and gatherings. The Zoo, the Cyclorama, and the Recreation Center all request additional car parking

The popularity of all of these activities has had negative effects on the park itself and the surrounding neighborhood. Overuse continues to result in tree loss and soil compaction and erosion; The neighborhood has to deal with traffic congestion, crime, and noise from special events. As many interior roads in the park had to be closed to vehicular traffic, the residents typically use the park for walking, jogging and biking. The Grant Park Neighborhood has been working hard to revitalize itself. The neighborhood and the Grant Park are on the National Register of Historic Places.



Near Pavilions and Concert Area, 1997



Today's view from Fort Walker





Family riding bikes in Grant Park

Zoo Atlanta, 1997

The greater Atlanta area is addressing serious pollution of its streams and rivers. The boom in people and construction is threatening the metro area's quality of life. Poor planning of developments is resulting in a lack of green space and a tremendous amount of storm water runoff. The water treatment facilities overflow and dump raw sewage into Atlanta's streams and rivers. More than ever parks are necessary to retain storm water and to help keep a balance of natural systems in the city.





Vegetation in Zoo Atlanta-similar to Olmstead's "ramble"

Erosion and the Cherokee Avenue parking lot



Atlanta Zoo's Action Resource Center

Grant Park Master Plan

2.0 Inventory and Analysis of Grant Park

Through historical research; site analysis by the Grant Park community and the project consultants; neighborhood workshops and meetings; and interviews with park stakeholders some important issues and opportunities are observed. These observations follow:

2.1 Spatial Organization

There are six main spatial areas in Grant Park today defined by topography, structures, and buildings. This compares to the



Advisory Committee Meeting

Olmsted firm's plan which also had six main spaces, but only defined by topography and vegetation. Today's six spatial areas include the Fort Walker Site, the Concert/Picnic Area, the Recreation Area, the Gazebo Area, the Zoo/Cyclorama Area and the Landscape Areas. John C. Olmsted envisioned six main areas: North Field, Middle Field, South Field, Concert Grove, the Boundary Planting and the Lake Area. A noticeable contrast between today's park space and the Olmsted firm's plan is the lack of under-story vegetation today to separate these different areas. One example of this is the Boundary Planting that John C. Olmsted designed; the park edges were to be densely planted with trees and masses of both large deciduous and evergreen shrubs with smaller shrubs enclosing them. There are no boundary plantings today, in fact the boundaries are very open with little vegetation at all. Another major difference is that the few structures allowed in the Olmsted firm's plan did not separate spaces, but rather were integrated into the land and vegetation as much as possible. See Map 3: Olmsted Firm Preliminary Plan 1904 and Map 4: Spatial Organization.

The Fort Walker Site located in the southeast corner is the highest point in the park. Today this area is characterized by rolling terrain and very old hardwood forest with very little under-story vegetation. There is a view of downtown Atlanta which may soon be blocked by the hardwood trees planted. The Olmsted firm preserved this historical site and emphasized the view of downtown Atlanta from this historic promontory.

The Concert/Picnic Area (Olmsted firm's Middle Field Area) located near the center of the park is also the major drainage basin of this site. This area is currently used for large group events and concerts. The vegetation is mostly open lawn with some large oaks along the edges and includes large and small pavilions of various ages. The two large pavilions and one small pavilion along the eastern ridge were constructed during 1990-1992. The older wooden pavilion and rock grill with a structure are located under the mature oak trees. These elements and the nearby low stone walls were probably constructed in the 1930's. The Olmsted firm on the other hand designed this area as a clearing in the woodlands with a wetland planting along the existing stream. They suggested some scattered plantings to break up the openness of the clearing and they included a walking trail along the stream.

The Recreation Area (Olmsted firm's North Field Area) located in the northern end of the park currently includes a recreation center, tennis courts, basketball courts, a swimming pool, a playground, and several parking lots. This area is an open grassy active recreational zone. There are some scattered trees which define the ball field area. The Olmsted firm's design for this area was also for a ball field area, but only 1/3 the size of this one with much gentler side slopes. The clearing for the ball field was surrounded by a dense woodland in John C. Olmsted's plan.

The Gazebo Area (Olmsted firm's Concert Grove) is a grassy summit near the center of the park with scattered oak trees and a circular road around the base which defines the area. On top of the summit sits a circular gazebo with several large picnic tables. The gazebo is wooden with a granite foundation. It appears to date from the mid 1920's based on its similarity in materials to major stone gateway features in the park built in 1925-1926. The Olmsted firm had designed this summit as a clearing in the woodland with a small bandstand.

Although the Zoo/Cyclorama Area (Olmsted's South Field and Lake Abana Area) is not included in the scope of this project, it will be addressed in relation to the rest of the park as it is the largest of the areas (forty acres), and thus has a great impact on Grant Park. Today the Zoo is a separate entity from the park surrounded by a large fence and landscaping. Previously this was the South Field and Lake Abana Area which John C. Olmsted regarded to be the most beautiful area in the entire park. The South Field was a clearing in the woodland designed for passive recreation. The Lake Abana Area included a long narrow lake separated from the Zoo by carriage drives and walking paths. John C. Olmsted redesigned the Zoo into a formal linear layout and placed it alongside Lake Abana, which was also linear. The lake was used to retain storm water and also for boating. During the early to mid 1900's this area was the most visited by the park users.

The Landscape Areas connect the activity areas and recreational facilities and suffer from heavy soil compaction and erosion. The interesting topography and large oaks which dominated the landscape in 1893 mostly still remain, although the land has been severely graded for the baseball field and some of the streams have been filled with the addition of the sewer system.

The recreation areas and high use areas (Zoo, Cyclorama, and concert area) create a lot of vehicular traffic in the park, and also require buildings and structures which disrupt the views of the landscape. These active use spaces are somewhat incompatible with the original design and purpose of this park which is of a natural landscape and passive activity use. The first and foremost important element of any Olmsted firm park was a space large enough to permit the enjoyment of broad expanses of the natural landscape. John C. Olmsted made a classic statement of this idea a few months before beginning work on another city park:

"My notion is that whatever grounds a great city may need for other public purposes, for parades, for athletic sports, for fireworks, for museums of art or science, such as botanic gardens, it also needs a large ground scientifically and artistically prepared to provide contemplation of natural scenery, especially sequestered and limitless natural scenery." ¹³

2.2 Periods of Development

The history of Grant Park can be divided into several periods based upon major events, design, and site use. The main historical periods of Grant Park include: Period 1: The Civil War Period, Period 2: The Original Park Development Period, Period 3: The Olmsted Period, Period 4: The Gateway Development Period, and Period 5: The Contemporary Period. Period 3, The Olmsted Period is considered the most important period in the park's history.

Although this park is important as a historic site its architectural elements and landmarks have been neglected and are in poor condition. The Olmsted firm's plan of a circulatory route, pedestrian/vehicular separation, and natural landscape have been severely changed—some were never implemented. The historic landscape of rolling pastoral hills, valleys and streams has been severely graded, trees lost and streams piped and placed underground. The general mood has shifted from a natural landscape to an active recreation center. As much as important features have deteriorated, many do still exist and if they are to be preserved it must be accomplished before more are lost. There is an opportunity to educate the public on the history of Grant Park. Signage is needed to interpret the following historic resources: Fort Walker, the Civil War fortifications, the springs from 1895, the granite bridge from the early 1900's, the Olmsted firm's influence in the design of the park, the stone gateway features from the 1920's, and the evolution of both the Cyclorama and the Zoo.

¹³ John C. Olmsted quote from Dr. Charles Beveridge's report

Period 1: The Civil War Period (1863-1865)

This period has important historical significance as Fort Walker Southeastern Salient of Atlanta's inner line of fortifications which was erected during the Summer and Fall of 1863 at today's corner of Boulevard and Atlanta Avenue.

The 1903 Existing Features Plan shows the footprint of Fort Walker (on the highest summit in the park) stationed with four cannons and fortification lines (rifle pits) extending east from the northwest corner of Fort Walker to the boundaries of the Zoo where they stop. Also shown are fortification lines along the eastern and southern edges of the ball field (the other area in Grant Park with a high elevation). The Olmsted 1904 Master Plan does show these fortification lines preserved as well as Fort Walker, but does not show the lines which extend out from Fort Walker to the Zoo.

Although the condition of the Fort Walker site is good there are no visible remains of the fortification lines found today. It is apparent that these lines were impacted by ball field construction, Zoo buildings and animal habitat construction. Fort Walker earthworks are still intact as well as the form of a battery with some rock paving (with earth joints) on top. The top of the Fort Walker battery is ten feet higher than the adjacent grade. There are several issues concerning the preservation of this historic site: (1) the removal of the four cannons, (two cannons are inside of the Cyclorama and one at City Hall East) (2) the erosion from foot travel up the steep sides of the trenches, (3) the young trees coming up on the sides of the earthworks, (4) the exotic ornamental grasses planted on top of the earthworks, and (5) the recently built playground which intrudes on the northern edge of the earthworks. As this site is the only remaining portion of Atlanta's fortification it is recommended that the playground be relocated and this site be preserved with historically appropriate materials and interpreted with informational signage. For complete archeologist report see Appendix C.

Period 2: The Original Park Development Period (1883-1903)

Map 5: 1903 Existing Features Plan has been used to determine the landscape and park development of this period. The landscape of this period is of ridges and valleys, with several streams feeding into the major stream along the western edge of the park. There were many trees in the park typical of the Atlanta area at this time (pines and hardwoods), with several clearings. The ball field area of today was a large swale during this period, with a small tennis court on the higher ground close to where it is today. The two summits at Grant Park were the Concert area (now the Gazebo area) and the Fort Walker area, from which there were good views.

Grant Park Master Plan 17

The beginning of this period was the first park construction and the park commission of six people were in charge of this development in Grant Park. This period shows development of a road system throughout the park which the Olmsted Firm adjusted and redesigned, but which is partially remaining today. Some walking paths were developed mostly along the lake and stream areas and into the Zoo area. There were six springs which fed the streams. An oval shaped formal garden was established where today's swimming pool is located. The Cyclorama was located in its original circular building at the Augusta Entrance. A refreshment stand was located at the northern end of the lake. This area is documented in the local paper as a very popular place to visit.

The beginning of Grant Park is well documented by Franklin M. Garrett; he says the area was being used as a park soon after Colonel Grant's offer. And he quotes the Mayor of 1885, "The L.P. Grant Park becomes more and more a source of pride and satisfaction to our citizens....A place of recreation like this is of inestimable value to our hard-working and industrious population....nothing promotes more both the moral and the mental health than such a place." 14

A granite bridge from this period near the Zoo entrance still exists, although it is no longer an integral part of the circulation system as it was in the early 1900's; the route over the bridge today dead-ends into the Cherokee Avenue parking lot. Unfortunately the springs and streams from this time period have dried up because of the storm water system installed. Storm water is no longer allowed to infiltrate and restore the ground water supply because it is collected and piped out of the park. This period is important because it shows how the people valued the park as a natural landscape; they used the existing natural features (springs, streams, woodlands) as recreational resources.

Period 3: The Olmsted Period (1904-1912)

Historic L.P. Grant Park: Intrusive Non-recreational Uses By Charles Beveridge

In L.P. Grant Park, John C. Olmsted encountered a situation where non-recreational uses were already making significant demands on park space. The Cyclorama portraying the Battle of Atlanta had been placed near the principal park entrance in a circular building one hundred feet in diameter. There was talk of placing it in a larger structure directly in front of the main entrance to the park. Olmsted recommended that it be moved to a more appropriate site outside the park, and urged that in the meantime it be lowered ten or more feet into the ground so as to intrude less into the park landscape. [to Joel Hurt, March 24, 1903; JCO to Dan Carey, April 7, 1910]

⁴⁴ John C. Oimsted quote from Dr. Charles Bevendge's report

Although Olmsted felt that the small Zoo already established in the park was an inappropriate use of the space, he concluded—much to the disappointment of the chairman of the park commission, Joel Hurt—that public support for the Zoo was too strong to make it feasible to move it. Accordingly, Olmsted proposed to integrate the Zoo buildings into the lower part of the valley by creating a more orderly arrangement, removing the decorative flower beds, and planning a wide esplanade on each side of the buildings. He greatly regretted the loss of the "most beautiful part of the park" to these buildings, and was concerned by the way that crowds gathering by the Zoo interfered with visitors' enjoyment of adjoining Lake Abana. He hoped that all but the largest Zoo building and all the greenhouses and maintenance structures could soon be sited in less conspicuous locations. He would later propose that, if the Zoo must remain in the park, a better site for it would be on the high tableland in the northeast section of the park. This would be a more desirable place for quiet livestock—since, as he observed, animals "which make such loud noises as to be disagreeable" to the surrounding neighborhood should not be kept in the park.

Vegetation and Landscape Effect

The scenery of the park, Olmsted discovered, was monotonous and less naturalistic than was desirable in an urban park. He said of Lake Abana that its construction had involved "such a conspicuous quality of stiffness that the beauty of the water itself is almost neutralized by the ugliness and unsuitableness of the shores." He proposed to make the shores and islands more natural in form and urged expansion of the lake toward the south boundary of the park in order to make it more suitable for boating. This, one of the few recommendations of his that were carried out, involved almost doubling the length of the lake. At the same time, he urged that the unsightly ditch that carried storm water from the brook past the lake be replaced by a wooden flume at the bottom of the lake. (In June, 1904, the park board approved the extension of the lake). [William B. Armstrong to Olmsted Brothers, June 11, 1904]

In the rest of the park, Olmsted found the vegetation to be very monotonous. Most of the trees were oaks, with a scattering of pines, which made the landscape very similar to other second-and third-growth woods in the Atlanta region. Moreover, the tree branches had been trimmed to a height of fifteen or twenty feet, which made the woods even more uniform and monotonous in appearance (as is evident in the numerous photographs by which he recorded the park in 1904). A greater variety of trees should be introduced, he advised, and in some places open glades should be cleared as a way of relieving the monotony of unvaried woodland. (On his Preliminary Plan of 1904, Olmsted proposed clearing three open areas that he named "South Field," "Middle Field," and "North Field.")

In certain areas, small trees, shrubs and ground cover were needed—"at places where they will serve to screen one drive from another or the bounding street from the interior views, or one walk from another, or to form a background to a little glade or to deepen and intensify the secluded effect appropriate to a little valley." Olmsted was aware of the problem of policing the park where undergrowth was thick, but some enrichment of the vegetation, and creation of discrete spaces within the park, was required in the interest of scenic enjoyment. Accordingly, he directed that "In general masses of shrubbery should be used very sparingly owing to difficulty

of policing, but preference should be given to very dwarf bushes and vines and to scattered tall bushes and little trees." [Report of visit, April 2, 1904] Shrubs and groundcover were also needed on the steep banks of the drives and at other places subject to erosion. He pointed out that "It is very noticeable at some portions of the brook where the undergrowth has not been cleared away or where shrubs have been planted and allowed to grow, and where there are therefore more natural and wild and intricate effects, that the local scenery is far more attractive than in those similar localities where there is nothing but clean turf on both sides of the brook and in all directions from it." He noted especially the attractiveness of wild cane (probably native bamboo) in the brook area.

See Olmsted Firm's Plant List in Appendix B.

Circulation System

A further concern, and one to which Olmsted devoted much thought in 1904, was the circulation system. For one thing, he carefully studied the location and shape of carriage entrances. Three entrances that he redesigned are still in place today—those at Sydney Street and South Boulevard, at Sydney near the northwest corner of the park, and at Berne Street and South Boulevard. The elegant entry he planned at Augusta Avenue has been obliterated by the new entrance and parking lot, while the entrances he planned on South Boulevard at Ormwood Avenue and Fort Walker were different from those existing today. The new entrance he proposed at the southwest corner of the park was to connect to the circuit drive he was planning; today that entrance leads to the park maintenance buildings.

John C. Ohmsted anticipated that in time entrance structures of some pretension would be constructed, although he warned that they must not be built unless in connection with a fence or wall that would surround the whole park. He also urged that the entrance structures be visible primarily from outside the park, and that they intrude as little as possible on the interior park scenery. He also wanted several of them to be gate lodges that contained toilet facilities. That is, they should provide essential services related to park use, and not be simply decorative features.

Equally important was the system of carriage drives and pedestrian paths. Overall, this circulation system as it existed lacked the elegant flow of line, the continuous, easy curves, that were such an essential and distinctive part of the Olmsted firm's park plans. Olmsted redrew the lines of the existing drives to secure this elegance. He also proposed to remove two drives, one close inside of the circuit drive along South Boulevard in the Fort Walker area, and the other in the northeast part of the park, which ran through his "North Field." In both cases, he pointed out, there were two drives that were too close to each other, creating an unnecessary duplication and spoiling the landscape views of both. Olmsted also tried to find some way to do away with the drive that cuts across the park on a steep grade from the Berne Street area; but he could find no way to achieve sufficiently moderate grades. Most important, he planned a coherent circuit drive that encircled the park and provided a continuous landscape experience for visitors in carriages. By 1910 he had come to view construction of a "complete circuit drive" as the single most important project to be carried out at that point. (Today a complete circuit route is needed for pedestrians.) [JCO to James F. Dawson, Jan. 7, 1910] Even in the most difficult area, the space

between the south end of the proposed extension of the lake and the steep bank below Atlanta Avenue, he left room for a drive that provided access along the west bank of the lake, thus enriching the landscape experience of the whole circuit drive. A comparison of the drive as it appears on the topographical map of 1903 and the circuit drive in Olmsted's plans of 1904 and 1912 reveals many places where his drive had gradual curves that made for a much pleasanter tour of the park than did the pre-existing park drive.

The plans that John C. Olmsted drew up also called for an almost complete reworking of the pedestrian path system. In three areas—(1) the banks of the lake, (2) the brook valley north of it, and (3) along the line from the lake past Siloam Spring to the Berne Street-South Boulevardthe two path systems coincided to some extent. But Olmsted added many more paths, particularly in the northern and southeastern sections of the park. He was also careful to provide paths that ran close to the carriage drives. Pedestrians should have their own circulation system, he observed, in order to avoid the danger and sense of danger that resulted when they were forced to walk on the drives. Again, a separate path system with easy grades and curves was an essential part of any park plan executed by the Olmsted firm. Such separation of ways had been a feature of Olmsted parks since New York's Central Park in 1858. That design provided complete separation of cross-park traffic from the internal circulation system, and created systems of carriage drives, pedestrian paths, and bridle paths that were totally separate from each other. It was in this light that John C. Olmsted declared of the situation he found in Grant Park that "It is entirely unsuitable and distinctly uncivilized to appear to compel people to walk on the drives." [to Joel Hurt, March 24, 1903] The Grant Park plan contains more paths than was usual in an Olmsted plan; this seems to have been due in part to the number of destination points, particularly the springs, and also because John C. Olmsted provided numerous "crosscut" routes. Whether any of the paths he planned were constructed is unclear; in any case, none of them survive today.

In addition, Olmsted redesigned the formal flower garden near Berne Street. He also commented on the importance of Fort Walker; he recommended that the view of the state capitol from that area be kept open (some recently planted hardwood trees are encroaching on this view today); he even suggested that a vista tower, masked by evergreen trees, be constructed to provide a panoramic view from that place (this tower was never designed or added).

The following maps clearly show John C. Olmsted's circulation layout as well as where he emphasized needed plantings. See Map 6: Historical Analysis of 1903 and 1912 for a comparison of the 1903 existing circulation to John C Olmsted's proposal for circulation. Then see Map 7: Historical Analysis of 1912 and 1997 for a comparison of today's circulation to John C. Olmsted's proposal; also notice the difference in park use activities, and the emphasis John C. Olmsted placed on the boundary plantings and stream plantings.

Developments During 1904-1909

The fall election of 1904 brought a new mayor to Atlanta, and he appointed a new park board opposed to further expenditure on park construction. Not until the spring of 1909 did the Olmsted firm return for a final, three-year period of involvement with Grant Park. When he visited the park again in April 1909, John C. Olmsted encountered several changes. During his absence they had added new entrances on South Boulevard, at Confederate and Ormwood avenues, that he considered "too steep and too open." They had also constructed a number of "conspicuous and ugly" cement walks. Ignoring pleas by superintendent Dan Carey that they consult with Olmsted before proceeding, the board also constructed a reinforced concrete shelter and dancing pavilion or terrace that he wished to cover with ivy as soon as possible. The board had also constructed a large sewer line through the valley of the park, solving the problem of the old unsightly overflow ditch, but in the process drying up brooks and springs in the park. Superintendent Dan Carey counteracted this by connecting city water to the spring now situated at the bottom of the swimming pool parking lot, creating "good running brook" that flowed into the main valley and supplied water needed for the lake. Carey saw no hope of supplying enough city water, however, to recreate the original brook for the full length of the main valley.

The Olmsted Firm and L.P. Grant Park, 1909-1912

The second period of the Olmsted firm's involvement apparently saw little construction of the circulation system, or carrying out of the vegetation plans, that John C. Olmsted had proposed during 1903-04. Superintendent Carey was anxious to add a baseball field, tennis courts and a field house on the upper meadow in the northeast section of the park. Olmsted drew up plans for these facilities in late 1909, and included plans for a children's sandbox play area and wading pool that apparently were not constructed. (There is no sign of them on the 1912 Olmsted plan that shows the field house, ball field, and tennis courts).

The major addition to the park's plan in the period 1909-12 was the overall plan and planting plan [plan no. 33] of February 24, 1912. James Frederick Dawson, a partner in the Olmsted firm from 1904 to 1941, played a principal role in creation of this plan. The plan indicates how the Olmsted firm based its plant palette on primarily native plant materials that were known to thrive in the area. These plant materials were not always readily available, or in sufficient amounts, from local nurseries. To solve this problem, and to reduce costs, the firm often created nurseries, collecting large numbers of the plants in the wild and then propagating them over several years. They continually proposed this approach for Grant Park, but apparently without success.

In its planting plans, the Olmsted firm then supplemented the native plants with a number of "exotics"—that is, plants not native to the region. The purpose of this was not to add a decorative element to the landscape: rather, it was to produce a richness and variety of texture, color and form that was not always possible using only native plants. Use of exotics also increased the number of plants that would thrive in difficult situations—such as deep shade, steep terrain, or especially dry or wet areas. The intent of the Olmsted firm always was to use plants that would thrive as well as natives, and not require special attention. Even when the intent was to create a kind of "subtropical" richness of foliage effect, plants were selected that were not obviously

foreign to the area, and that would be recognized as non-native only by trained horticulturists. In explaining his planting approach to Dawson, John C. Olmsted addressed the issues of planting (1) for separation of spaces within the park, (2) for border plantings, and (3) for steep hillsides that he had already discussed in previous years:

My idea in general is to plant largely in the borders individual plants that will not alarm the neighbors too much with the idea that their views into the park are to be completely blocked, but of such sorts that they will be pleased with them as omamentals & yet which will grow in 10' to 20' apart so extensively that while they will not coalesce into a solid mass yet the view in & out of park will be so obscured that houses will not be baldly in sight as at present, & so that there will be some mystery and seclusion in the park so one will not see it all at once through the tall stemmed trees as at present. This can be accomplished by scattering shade enduring large shrubs & small trees through the woods especially on steepish slopes and by planting the valleys so the tops of the small & medium trees will be level with the eyes of people passing on drives & walks. I think one of the best things will be European hombeam, but dogwoods, magnolias, yellow, black & white birches, beeches, Norway maples, white oaks & that will stand some shade can be also used. Then cover steep slopes largely with Japanese honeysuckle, English ivv & various very low growers, particularly evergreen & other ferns . . . [JCO to FJD, Jan. 7, 1910]

The plan of February 1912 was comprehensive, and carefully contrived, with many areas indicating where a number of different plants would be planted together. The existing correspondence of the Olmsted firm illustrates, however, that Atlanta had very limited funds, and very little prospect of more, to use to realize the Olmsted firm's planting concept. All correspondence ceases immediately after completion and submission of the plan, so there is no evidence by which to judge the extent that it was carried out.

Period 4: The Gateway Development Period (The 1920's)

During this period was construction of the major stone gates at the parks entrances; these are mostly made of granite block (probably a local source). The largest of these is the entrance at Milledge Avenue (north end of Cherokee Avenue); a high stone wall, inset with a tile fountain is at street level; steps wrap behind the wall and take you down to park level where there is a pool at the base of the wall; at street level stone gates form a gateway at the wall. The fountain and stone pool both need water and the fountain needs some tile restoration. The addition of modern bollards in this area is not in keeping with the historical architecture of this area and should be removed. The existing concrete planters could serve to prevent vehicular traffic from entering this area, but their spacing should encourage pedestrians and bicycles.

The Ormond Street entrance (south end of Cherokee Avenue) has curved stone gates from 1926 which are inset with a bench; the gateway leads you to the historical overlook, previously a view of the Lake Abana Area and now a view of the Zoo's Action Resource Center's heat and air equipment. This is also the location of the Erskin Fountain which was relocated here in 1912. Although the fountain is not of this time period it is an important feature of this gateway. The Erskin Fountain is a small circular fountain with a half-circular bench surrounding it—"Glorious water" is written where the water comes out. This is a beautiful entrance that has been physically and visually cut off from the park. With minimal effort the architectural elements could be restored. And at least the visual connection to the overlook could be restored by screening the equipment area and opening up interesting views into the Zoo.

There are two other stone gateway entrances. The Fort Walker entrance (corner of Boulevard and Park Avenue), has two stone circular columns with plaques interpreting the site. The lights at the top of the columns are not functioning and the concrete caps show deterioration. The other gateway is the Park Avenue /Berne Street entrance; granite columns with a short wall announce this entrance near the swimming pool; during the early 1900's this was the entrance to the formal garden. The gateway features themselves appear in good condition, yet the pathways are in poor condition and are not inviting.

The circular gazebo which sits alone on the summit in the park is probably also from this period because of the similarity of materials. The gazebo has a granite foundation which is similar to the gateways; it has wooden supporting posts and a wooden roof. Through all of the changes which have taken place at Grant Park, there are still some important historic resources which exist from the Civil War Period to this period, the Gateway Development Period. See Map 8: Historic Resources Map for these historic resources which remain today.

Period 5: The Contemporary Period (1930's-1997)

Most development of the park takes place during this period, resulting in the greatest period of landscape decline. This development is documented by aerial photographs and Sanborn maps. The landscape of this period is still predominately oaks and maple trees, yet the mature trees are quickly being lost, results of over-use and soil erosion. There is still, as John C. Olmsted observed, a lack of under-story vegetation and the addition of inappropriate plantings; scattered plantings of hollies and raised beds with rows of annuals accent entrances to areas. Although, the United States Department of Agriculture has implemented a native shrub planting project which after established will greatly enhance the park landscape.

Overall the park has lost much of its natural landscape feeling; contributing factors are construction of buildings, structures, and recreational facilities as well as the roads and parking lots which have been required to access these places. This has also resulted in an even greater lack of vehicular/pedestrian separation.

Some major grading has taken place: the ball field was expanded and Lake Abana was filled destroying some of the interesting topography. The old stream beds have been filled in many areas for the storm water system, while others have continued to erode and created deep ditches in places. These stream areas are ideal areas to retain storm water and create wetlands.

Buildings, structures and architectural elements (lighting, bollards, trashcans, picnic tables, sidewalks, pavilions, playscapes) which have been added during this period have not been in keeping with the historical character of this site.

Following is an outline of changes that have taken place during the contemporary period:

1903-1936

- Roads were unpaved.
- The three fields (North Field, Middle Field, South Field) John C. Olmsted designed were intact.
- North Field was surrounded by dense woodland; there were a couple of baseball diamonds in the field and a restroom facility.
- Middle Field was a terraced lawn amphitheater with a bandstand located to the side, which John C. Olmsted designed in his 1912 plan.
- South Field had a major road constructed around it.

1936-1949

Roads were paved.

1949-1955

- Trees cleared and development of the Zoo.
- · Trees cleared east of the ball field.

1955-1960

- Major Zoo expansion to the east.
- Boulevard parking lot was built for the Zoo
- Trees cleared around the gazebo.
- Path constructed connecting the Cyclorama, Boulevard parking lot, Concert Area, and gazebo.
- Amphitheater terracing was eliminated.
- Restroom (brick one story) was built east of historic granite bridge.

1960-1972

- Lake Abana was filled.
- The Cherokee Avenue parking lot was built for the Zoo.
- Zoo has lost almost all of its trees.

- At the Zoo entrance a large lawn gathering space was created.
- A formal linear walk was constructed from the Boulevard parking lot to the Zoo entrance.
- Tree loss was substantial; the center section of Grant Park was the only area that was not overdeveloped.

1972-1988

- · The swimming pool and parking lot were built.
- The recreation center and parking lot were built.
- · Parking was added at the corner of Atlanta Avenue and Cherokee Avenue.
- Trees were planted in the South Boulevard and Cherokee Avenue parking lots.
- A path was developed connecting the center of the park to the recreation center parking lot.

1988-1997

- The two large pavilions and concrete patio were built between the Boulevard parking lot and the Concert Area.
- The Zoo has built the Action Resource Center.
- Playscapes have been built in two locations: one is west of the Pool and the other is on the Fort Walker site.
- A police station was located at the Atlanta Avenue/Cherokee Avenue corner.
- The Erskin Fountain and Overlook were closed off with chain fence.
- The PATH Foundation is planning to connect bike paths to Grant Park.

2.3 Park Use

Comparison of Historical Issues and Present Park Use

-By Charles Beveridge

The issues that confront L. P Grant Park today are strikingly similar to those defined and addressed by John C. Olmsted and his partners and staff nearly a century ago. The main issue being:

Expansion of facilities and activities into areas originally devoted to traditional park uses.

Both the Cyclorama and the Zoo have expanded into new structures and areas that have occupied the valley and lake that John C. Olmsted saw as the most beautiful area of the park and the section least desirable as a site for large buildings. The Cyclorama building now dominates the southeastern hillside of the park. While the Zoo is masterfully designed for the presentation of animal exhibits and possesses its own dense and well maintained vegetation, it does not relate well to the areas surrounding it.

This is particularly due to the fact that the Zoo extends all the way to the boundary cyclone fence, with little or no transition space to mask the fence or soften the boundary. For instance, the boundary area next to the upper parking lot brings a chain-link fence next to the only circuit path running from Fort Walker to the valley, and this path must also pass the visually intrusive service entrance gates at the southern end of the upper parking lot. In addition, the vista from Fort Walker is marred by views of Zoo structures below it. At the south end of the park the boundary fence abuts the sidewalk, with inadequate boundary planting to mitigate this problem and create a park like appearance along that edge. The Zoo's maintenance structures are highly visible near the southwest corner of the park. Along Cherokee Avenue, the overlook at Ormond Street has been handled in an exemplary manner, visually, for views toward it and the new ARC building from within the Zoo. But the view toward the Zoo is marred by the high chain link fence, and by the presence of mechanical features related to the ARC building that are close to and highly visible and audible from the overlook. The boundary treatment of the Zoo and its relation to the park and park side neighborhoods, then, is one element of the problems that arise from the presence of the Zoo in the park.

An additional problem is that of access and parking space for the Cyclorama and Zoo. The two large parking lots have obliterated what once remained of park landscape in the southern half of the park, i.e. south of Confederate Avenue and Bass Street. On busy weekends, buses and automobiles also line the entire loop drive in the valley, effectively removing that important section from full park experience. If the Zoo and Cyclorama are to function as they need to, how much of the park must be set aside and devoted to meeting their present and future needs, both for function, access and parking? How much additional space the Cyclorama and Zoo will need in the future is unclear, and requests for expansions are not impossible, or even improbable.

Closely related to this question is the issue of the use of the picnic pavilions in the upper valley of Siloam Spring. What control over and level of use is compatible with preservation of existing trees in this area, and with desirable planting treatment of the swale, used for concerts, below the pavilions? Grant Park is already required to meet many demands for intensive, regional use; reduced use of the picnic area for large gatherings and amplified musical presentations should certainly be considered. It seems particularly intrusive and inappropriate to permit concerts so close to the Zoo. This is a prime example of the long-standing tendency to concentrate too many uses in the park that conflict with one another and intrude on quiet, informal use of the park.

Other features that have been added to the park are the swimming pool and the recreation center. These have, at least, been placed on the border of the park, but both are visually intrusive and, at best, "utilitarian" in appearance—in contrast to John C. Olmsted's efforts to plan both the field house and the Zoo so as to integrate them into the function and landscape of the park. In addition, two children's play facilities have been constructed where they intrude on those small sections of the park where it is still possible to secure enjoyable experience of scenery. The playground near Fort Walker distracts from the historical character of the area, and should be moved. The same is true of the jungle gym structure south of the swimming pool. This facility, with its parking lot, should either be removed entirely from the park or sited in an area already devoted to active recreation.

ing areas are needed for proper operation. Currently there are 800 parking spaces and the buses park along the inner park road; parking buses along this road is disruptive to the park setting. The Zoo is self supporting and is highly dependent on gate receipts and feels that construction activities and intensive park use, which would reduce gate receipts, would have a detrimental effect on the Zoo. They would like to see an increase in parking spaces and bus drop-off dealt with in the Park area, not the Zoo area.

(3) Special events and Group Use

Special events are managed under the Mayor's office and are allowed to be held at Grant Park. Since the restoration of Piedmont Park more events have been held at Grant Park; the park hosts approximately two concerts per month from April through October. Attendance is normally between 20,000 and 100,000 persons per event. More appropriate venues for these large events would be Centennial Park or Lakewood Amphitheater. These events do require a permit for groups over 200 persons and are coordinated with other city agencies. Some of the more appropriate group events at the Park include annual affairs such as: family reunions, corporate picnics, church functions, art festivals, and concerts. The park also hosts school trips throughout the school year (August-June).

Other groups inclined to use the Park which are typically smaller than 200 persons, usually use the pavilion area or the concert area. These group users include: day care groups, senior citizens groups, school groups, church groups, and tour groups. Duration of stay varies from a few hours to nearly all day.

Concerning the maintenance of these areas which the large groups typically use, the Concert Area and the Pavilion Area, Mr. Waller, District Manager of the Southeast Park District, indicated that he and the district were short of the needed staffing level, and that they did not receive enough money to proactively manage problems but are forced to use a reactive approach. He also mentioned that curb jumping is a problem at the park especially during special events.

(4) Recreation Programs

There are two major recreational areas within the park:

- (1) The swimming pool is available for daily public swimming use and competition swimming.
 (2) The Recreation Center/Athletic Courts and Fields—The recreation center is used for indoor
- (2) The Recreation Center/Athletic Courts and Fields— The recreation center is used for indoor activities including: weight lifting, exercise training and basketball. The program for organized sports activities is said to be in place, but this was not observed, with the exception of some soccer games or practice. No tennis play was observed, nor was any team play of basketball observed.

Organized programs of soccer, baseball and basketball are ongoing.

Recreation facilities include tennis courts, ball fields, a multi-purpose court, and a recreation center. The only comment the Center Director made which related to storm water was a need to expand the parking lot from thirty to ninety spaces. (This would increase storm water runoff.) Most of his other comments regarded needed changes or up-grades in recreation facilities.

Passive Recreational Use:

The most popular area of Grant Park for passive recreation is the northern portion of the park. The existing old park roads and walks serve as a network to connect many of the different passive areas together. This park is a very popular place for walking, jogging, walking dogs, skating, lunches, reading and relaxing. A popular visiting destination is Fort Walker which has a children's playground on the edge of the site. There are a few picnic tables located in the meadow between this area and the Boulevard parking lot.

Many of the special event groups and large group users choose Grant Park for the same reasons: Zoo Atlanta, the Cyclorama, the pavilions, the concert area, and the convenience to downtown. Visitation to all facilities is reported to be influenced by events that may occur elsewhere in the metro-Atlanta area. When special events are held at Grant Park the Zoo's and Cyclorama's visitation is reduced. Special happenings at the Zoo (new animal introduction, birth of a rare species), unusual weather conditions, special tour groups, and certain large events held in metro Atlanta may also reduce visitor use of Grant Park.

Traffic and parking are major concerns and are a major impact on the recreation activities. The park is divided into several areas, with a major traffic artery dividing the Zoo/Cyclorama area from the recreation facilities. Pedestrian traffic is forced to cross vehicular traffic near all of the high activity use areas. During heavy use periods such as Memorial day, Fourth of July and Labor day, picnickers would drive their cars over the curb to park nearer the picnic tables or large trees. Cooking out at the park is very popular; however, the hot charcoal is poured on the ground next to trees, cooking the bark on the trees.

Observed during several heavy use periods was the Boulevard parking lot only half full while the Cherokee parking lot was completely full. This is probably due to the signage at Berne Street/Boulevard directing visitors to the Cherokee parking lot.

Security personnel are stationed at both parking lots because of automobile break-ins; three persons per lot during peak summer months and two during off peak months. "Crusing" is a popular event at the Boulevard parking lot after 5:00 p.m. Even during peak use periods, the Boulevard parking lot is mostly empty. See Map 9; Park Use Analysis.

Additional concerns of Grant Park users and residents:

- This park and its size do not make it compatible as a special purpose park; the crowds of people have resulted in extreme soil compaction and erosion.
- The high use events at the park also have a negative impact on the surrounding neighborhood regarding noise, crime, and traffic congestion.
- The concerts and other large gatherings with music are disturbing to the Zoo animals.
- The parkland should not be given up for parking lot which are primarily for Zoo/Cyclorama users.
- A police station is not an appropriate use for a park. The residents feel the station has not benefited the neighborhood regarding crime prevention.
- The depressed residential area along Atlanta Avenue has been given the worst views of Grant Park—the Zoo's maintenance sheds, backs of buildings, machinery and equipment storage. In addition, a ten-foot high chain-link fence separates this neighborhood from the park with no entrance into Grant Park.
- Residents would like a jogging trail through Grant Park.
- A restroom facility is needed in the north end of the park near the recreational facilities.
- Historic view from Fort Walker of Downtown Atlanta is becoming blocked by recently planted hardwood trees.
- The view from the historical scenic overlook and the Erskin fountain has been lost to Zoo expansion, but could be restored.
- Significant views of winding paths surrounded by woodland have been lost to brightly
 painted yellow gates, maintenance areas, unattractive buildings, chain link fences and numerous school buses and automobiles driving through the park.
- This park was not designed for recreation programs. Encroachment of structured uses (recreation center, swimming pool area, basketball courts, tennis courts) and the necessary parking spaces into this pastoral landscape park has greatly reduced the aesthetic and environmental value of this park.
- The active recreation facilities serve large numbers of area residents and their use fosters
 an experience of unity in the face of diversity among neighbors. Many residents are
 opposed to any proposal to remove them.

There are many parks in the general vicinity of Grant Park that have recreational facilities. See Map 10: Recreation Resource Map. These include:

- Selina S. Butler Park: Recreation center and two tennis courts.
- Rawson Washington Park: Recreation center and basketball court
- Phoenix II Park: Ball field, two tennis courts, two basketball courts, and three pavilions
- Pittman Park: Recreation center, gym, swimming pool, two ball fields, three tennis courts, two basketball courts, and two pavilions
- · Four Corners Park: Recreation center, ball field, and basketball court
- · South Atlanta Park: Ball field, three tennis courts, basketball court, and pavilion
- · Daniel Stanton Park: Recreation center, gym, ball field, basketball court
- · Chosewood Park: Two tennis courts, and two basketball courts
- · Brownwood Park: recreation center, three tennis courts, and basketball court
- Lang-Carson Park: Recreation center, and basketball court

2.4 Circulation

Lack of a Coherent Circulation System.

By Charles Beveridge

The circulation system of the park is less coherent than when John C. Olmsted began work on it in 1903. For example, there is no adequate and direct path from the upper, eastern parking lot to the Zoo. Even in rainy weather one sees Zoo visitors with infants and strollers trudging up the muddy remnant of a path just north of the Cyclorama, as the best access route they can see for returning to the parking lot. The conversion of old carriage drives to pedestrian (and bicycle) use that has already occurred, has created a partial circuit route of the park for those wishing to enjoy its scenery. This circuit should be fully developed, as John C. Olmsted so emphatically stated. Existing old carriage drives, now for the most part reserved for pedestrian use, already form the basis for such a circuit, running from the north end of the South Boulevard parking lot around both sides of the gazebo and ending at the parking lot for the play facilities west of the pool. A wide path should be extended from that point, perhaps along the course of the original carriage drive, circling the ball fields and connecting at the northeast corner of the park with the old carriage drive that runs from that point down through the western valley. As indicated earlier, it is

also most desirable to regain for pedestrian use the valley between Grant Spring and the old stone carriage-road bridge across the brook near the Augusta Avenue entrance parking lot. It is also desirable to connect Fort Walker and the old carriage drive in that section with the loop north of the South Boulevard parking lot, as both the original park layout and the Olmsted plan provided. Creation of a safe and attractive passage across the South Boulevard parking lot might, however, require significant reconfiguring of that area.

As part of the circulation system reconfiguration, a more efficient bus drop-off and turnaround area is needed for the Zoo and Cyclorama. Parking of buses at sites outside the park may also be the most effective way of providing for bus visitation in a way that protects the park. Shuttle service from outlying lots and from MARTA stations may need to be developed if Zoo, Cyclorama and special event parking cannot be accommodated within the two existing major parking lots. Without such a comprehensive plan looking to future needs, there will be the continual danger of expansion of parking areas in the park. Reduction of the size of the present parking lots should be considered where it would create a pleasanter, more park like setting or provide needed space for access and circuit paths. In the interest of safety and landscape enjoyment, closing of the cross-drive in the middle of the park, which connects the Berne Street entrance with the western valley, should also be considered. See Map 7: Historical Analysis of Olmsted Firm Plan of 1912 to Existing Plan 1997.

Circulation Issues and Opportunities:

The existing circulation system for Grant Park was originally designed to support pedestrian and limited vehicular traffic. Public transportation/bike paths to the park are not sufficient and so transportation to Grant Park requires an excessive dependency on the automobile. (Although, the PATH Foundation is proposing bike paths to Grant Park in the next several years.) This adds to the amount of vehicular traffic, especially in the high use areas. Due to the tremendous increase in vehicular traffic over the years, the park has been forced to restrict access to areas that can not support the traffic load. The result is that many reaches of roadway originally intended to provide a circulatory route have been gated off. And now the park no longer supports vehicle and pedestrian circulation between the various park components. As there in too much automobile traffic for the park to support a vehicular circulatory route, the roads could serve as a complete bike/pedestrian route. See Map 11: Circulation Analysis.

Various surface conditions are designed to support different circulation activities; Pedestrian paths are constructed of either concrete, brick or gravel. The circulation system designed for vehicles is constructed of asphalt pavement.

In order to provide recommendation for a comprehensive circulation plan the following key issues are shown on Map 11: Circulation Map and Map 12: Americans with disabilities Act, Deficiencies Map.

- Ingress/Egress Points
- · Vehicle circulation for park patrons
- Vehicle circulation for maintenance vehicles
- Pedestrian circulation
- Handicap circulation
- Vehicle and pedestrian points of conflict
- Evaluation of parking needs
- Signage for all traffic uses

Additional concerns of Grant Park Users and Residents:

- The park's existing path system is generally not in compliance with the requirements of the Americans with Disbilities act. See Map 12: Americans with disabilities Act, Deficiencies.
- The old sidewalk that led from the Boulevard parking lot directly to the Cyclorama has been removed, but it is still the most traveled route to the Cyclorama/Zoo area.
- A more efficient bus drop-off and turnaround area is needed for the Zoo and Cyclorama. After dropping off passengers the buses park along the scenic loop drive that winds through the park setting; this is disruptive to people using the park.
- There is no bike trail to the site.
- There is no shuttle service from off site parking for high attendance activities such as the large concerts which have attracted as many as 100,000 people and Zoo goers which can include 10,000 on busy days.
- The Cyclorama/Zoo Area has 800 parking spaces and sees a need for 1500; will they continue to expand into the parkland?
- The Recreation Center has thirty parking spaces and sees a need for ninety.
- There is a constant problem with people parking in the various parking lots drinking alcohol and playing loud music; this is a safety issue for the residents of the Grant Park neighborhood.
- Many pedestrian pathways dead end into roads and parking lots; an uninterrupted pathway system is needed.
- Gated roads designed to block automobile access also block bikes and baby strollers;
 they do not encourage pedestrian access.
- Many of the roads intended for pedestrian use only are in such disrepair that they are not conducive to bikes, roller skates or even walking.
- The sidewalk from the Boulevard parking lot directly to the Cyclorama has been removed and now the people walk in the mud where the path used to be. (Cyclorama personnel are concerned about dirt being tracked into the building.)

2.5 Vegetation

Landscape Considerations and Vegetation Management

By Charles Beveridge

In this area the Olmsted firm's analysis and recommendations are applicable today. The planting plan of February 1912 should be examined as part of development of a planting scheme that addresses problems of erosion on steep slopes and in swales and streambeds. The Olmsted firm's planting approach should also be used for its advice on ways to improve the scenic quality of the park. John C. Olmsted addressed the purposes of the planting: (1) separation of spaces within the park. (2) border plantings, and (3) steep hillsides that he had discussed in previous years.

Vegetation Issues and Opportunities:

Besides addressing the issues within Grant Park the Master Plan for this park must address two serious problems the City of Atlanta is facing: (1) increase in stormwater runoff and (2) lack of greenspace within developed areas. The park vegetation can positively affect these two important issues in several ways: (1) In areas where stormwater retention is desirable native plants can be used to control erosion and to clean urban contaminants from stormwater runoff. (2) In specific areas reintroduce the plant layers typical of a woodland -- smaller trees and shrubs and then at ground level very small shrubs and groundcovers. This will result in many benefits: it will create a lush natural park setting, it will reduce erosion, it will increase wildlife habitat, and it will reduce park maintenance.

The dominant vegetation today as was noted in Olmsted's analysis is hardwood trees, mostly Oaks, Maples, Tulip Poplars, Sycamores and Basswoods, These trees are typically found in an Eastern Forest, and especially in mature forest areas with streams and sloping topography. Lacking is an understory with smaller trees, shrubs and groundcovers. The existing shrubs and smaller plants are results of recent landscaping near buildings and entrances. Most of these additions do not blend with the character of the mature forest typical at Grant Park, except for the native planting by the U.S. Department of Agriculture, which are shrubs that would naturally be growing in a woodland forest like this one.

The five dominant tree species in the park (in order of dominance) are: White Oak, Post Oak, Water Oak, Red Maple, and Southern Red Oak. (1) Water Oaks are a very strong tree that can be grown close to buildings because of their root structure. They have brilliant fall color ranging from orange-red to deep red and their acorns are a favorite for winter birds. White Oaks are typically found growing in moist well-drained woodlands with the above mentioned species as well as Hickory, Sugar Maple, and Beech. Many of the Oaks at Grant Park date to the 1800s; today they are seen growing on the edges of where the streams used to be. (2) Post Oaks have delicate yellow blossoms in the spring and acorns that attract many birds including the red cockaded woodpecker. They are typically found growing in dry uplands with Pines, Dogwoods. Sassafreas, Turkey Oaks and Hickories. Post Oaks are found growing with these species at the

park and especially on the upland slopes around the Gazebo area. (3) Water Oaks also have acoms which attract many native bird species. They are known for growing in poorly drained soils. (4) Red Maples have early spring red flowers and orange-red to deep red fall color. Typically found in woods or fields in wet or dry soils, Red Maples grow with a variety of species such as Hemlock, Riverbirch, Post Oak, and Bald Cypress. The Maple as well as the Sweetgum can withstand large amounts of urban pollution. (5) Southern Red Oaks are used extensively for nest, cover and food. They are typically found in dry uplands with Post Oak, Hickories, Pines and Beech. There are a good many on the upland slopes around the Gazebo with some Post Oak and White Oak.

Other tree species commonly seen at Grant Park are Yellow Poplar, Willow Oak, American Sycamore, Basswoods and Virginia Pine. These species are also found in their natural habitat at the park; Sycamores and Willow Oak are seen clustered near moist drainage areas; and most of the Basswoods are on the slopes upland from the old stream area. The Pines are seen in dryer upland areas in well drained soils. All of the species mentioned thus far are native to this area and serve an important role as food, nesting, and cover for indigenous wildlife. And almost as important they serve to give us a sense of place as we travel through this landscape. For a complete tree list see Appendix E.

Most of the exotic species at Grant Park have been more recent additions to areas near buildings and entrances, for example the Pear trees, Kwanzan Cherries, and Zelkovas. These are all interesting trees, but there are many native fruit trees that will flower as these do, and will also provide fruit for wildlife. See Appendix E for a list of native species.

The Oaks and Maples account for the largest percent of the tree population. There are several different species of these: there are four maple species, Norway Maple, Red Maple, Silver Maple and Sugar Maple. The Sugar and Red are highly recommended species because they are generally healthier, the Silver is a cousin and the Norway is exotic. Maples prefer a good leaf mulch under their canopy; they have a fibrous root system which is a good erosion controller. There are even more Oak species: White Oak. Post Oak. Water Oak. Willow Oak, Southern Red Oak. Scarlet Oak, Turkey Oak, Chestnut Oak, and Japanese Evergreen Oak. The Oaks and Maples both rank as some of the largest in diameter and also the healthiest of the trees at Grant Park. See Appendix E for a list of the largest species and the healthiest species.

park and especially on the upland slopes around the Gazebo area. (3) Water Oaks also have acoms which attract many native bird species. They are known for growing in poorly drained soils. (4) Red Maples have early spring red flowers and orange-red to deep red fall color. Typically found in woods or fields in wet or dry soils, Red Maples grow with a variety of species such as Hemlock, Riverbirch, Post Oak, and Bald Cypress. The Maple as well as the Sweetgum can withstand large amounts of urban pollution. (5) Southern Red Oaks are used extensively for nest, cover and food. They are typically found in dry uplands with Post Oak, Hickories, Pines and Beech. There are a good many on the upland slopes around the Gazebo with some Post Oak and White Oak.

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Grant Park Master Plan 35A

Current vegetative issues in Grant Park are:

- There has been a large loss of mature trees in the Park, this is shown on Map 13: Tree Analysis of 1903, 1950, and 1997.
- Lack of under-story vegetation-including small trees, shrubs and groundcovers resulting in soil erosion and a lack of separation of spaces in the park. John C. Olmsted greatly emphasized the idea of separation of spaces within the park using vegetation. See Map 14: Erosion Map
- Inappropriate selection of plant materials –i.e. many Japanese hollies, exotic grasses, and annual flower beds. These species are not compatible with a naturalistic park nor with the Olmsted firm's planting design which highly criticized the use of showy flowering plantings which would not blend with the surrounding landscape
- Today there are approximately forty-five acres which require regular mowing.
- Lack of park boundary vegetation has resulted in (1) unsightly views from the neighborhood into the park of parking lots, maintenance buildings, and park structures and buildings and (2) the views from within the park are of the neighborhood houses and busy perimeter roads bordering the park; the sense of secrecy and pastoral landscape are lost.
- The removal of mulch from under the trees and shrubs has resulted in extreme soil erosion and compaction.
- Night lighting of the park is detrimental to the vegetation. Plants require the evening hours as
 a resting time. Besides, the current streetlights used through out the park are in scale with a
 large highway not a residential park. Operating hours of dawn to dusk are recommended for
 the Park.

2.6 Environmental

Grant Park has two significant environmental issues which need to be addressed: (1) heavy soil compaction and erosion and (2) the need to retain storm water onsite, instead of adding to the overburdened water treatment system. Fortunately this site lends itself to correcting these problems with proper grading and planting; these 'problems' can become attractive areas in the park landscape.

Current environmental issues concerning Grant Park:

- Grant Park is park of the Entrenchment watershed and as a green space has a responsibility to
 retain its storm water on site. Currently the park is adding a tremendous amount of water to
 the local water treatment facility. Ninety-nine percent of this water is storm water which
 could remain on site to replenish the ground water supply. The water treatment facilities
 which receive over full capacity amounts of water, overflow and release sewage into the
 nearby creeks.
- The incredible amount of non-porous surfaces (twenty acres out of ninety acres) has contributed to an increase of storm water runoff as well as compromised the scenic quality of this park; parking lots, Zoo expansion, pavilions and plaza, Zoo/Cyclorama plaza area, basketball and tennis courts, recreation center, police sub-station all contribute to an increase in storm water runoff.
- Many streams have been filled and piped underground to accommodate the sewer/storm water system. This has resulted in a loss of groundwater and has also caused the six springs and the streams from 1900 to dry up. Because the existing infrastructure is in poor condition throughout most of the site, this presents an opportunity to retain storm water on site. The existing streams beds which are in poor condition—trash dumping is typical—can be restored and viewed as a resource.
- Damage to automobiles has been caused by flooding from a severe rain in the circular employee parking area in front of the Zoo and Cyclorama.
- The lake was lost to Zoo expansion. This was an important place for the retention of storm water in the past and was also considered the most scenic area of the park.
- Significant environmental damage due to overused areas such as picnic areas, the concert area, the ball field area and the terraced slopes in the parking lots. Results are stress on vegetation and heavy soil compaction and erosion. (See Map 14: Erosion Map)
- Park users are continually dumping hot charcoals at the base of trees. This is killing many of these trees. Charcoal collection and recycling efforts have not worked in the past.
- Park maintenance people use gas powered leaf blowers- the results are air pollution (urban
 pollutants are blown into the air) and also the noise pollution they create is annoying to park
 users.
- Park and maintenance vehicles were observed driving off-road through planting beds and under tree canopies. These actions stress and eventually kill trees and other vegetation.
- Curb jumping by park users especially at large events is causing the same problems as mentioned above.

The swimming pool is leaking chlorine into the groundwater.

2.7 Signage

The park lacks an adequate system of signage; regulatory signage is overdone while historic and interpretive signage is lacking. Historic and interpretive signs are necessary to maximize the park experience. For example, a person visiting the Cyclorama has no idea that the Fort Walker Civil War site is just behind them. Important resources which need signage are: (1) Fort Walker, (2) the historic architectural features, including the stone gateways, (3) the Olmsted firm's role in Grant Park, (4) the history of the Cyclorama and Zoo relating to Grant Park, and (5) Grant Park's history.

2.8 Security

The public perception of certain areas of the park as being unsafe is mostly due to the lack of people using the park, except during high use events. Because popular places are usually safe places, creating a park which will be more attractive and more regularly used by the residents will be a good way to reduce crime. Another safety issue is the accessibility of automobiles into the park. Residents have complained about the activities in the cars which take place in the park and especially the Boulevard parking lot. This parking lot has also been the location of several automobile break-ins. Opening the park at night would require security and adequate lighting; the necessary lighting is harmful to the trees and annoying to the residents in the area.

2.9 Summary of Issues and Opportunities

We have the unique opportunity to use writings, studies and plans by the Olmsted firm for Grant Park. Some important features that were typical of parks 100 years ago have been lost in our parks today: (1) the loss of passive recreation areas (we typically structure our spaces for a defined activity), (2) a separation of pedestrian and vehicular circulation, (3) the loss of the natural landscape, and (4) the loss of scenic views. We find the issues which confronted the Olmsted firm in 1904 are still very relevant today and these issues and opportunities will be the basis for the Master Plan. See Map 15: General Analysis.

Park Use

Expansion of facilities and activities into areas originally devoted to traditional parkland causes several problems: (1) The landscape is lost to buildings and parking lots. (2) The historic resources are comprised by overuse. (3) The noise, the pollution and the traffic congestion caused by the large groups of people conflict with the park setting which was designed to give people a calm and soothing place to go. There is a general consensus from the area residents to eliminate the large concerts. Although the Zoo and Cyclorama are easily integrated into a natural park setting, they will remain in the park and should enhance their

boundaries as much as possible for the park users. A better solution must also be found for bus and vehicular access to the Zoo/Cyclorama entrance as the existing route is conflicting with the pedestrian users in the Park.

Circulation

The large number of vehicles in the park are a major concern for park users and especially Grant Park residents. The lack of alternative transportation methods to the park increases the vehicles in the park landscape and increases the need for parking lots. This is emphasized during high use events where traffic congestion spills into the surrounding neighborhood. Vehicular/pedestrian conflicts often occur in the park and especially in the high use areas. A circulation system is needed where the pedestrian is priority and totally separate from the vehicular circulation. Residents would like to see vehicles eliminated from the interior of the park for safety reasons and for aesthetic reasons. Buses need a drop off area and parking area for the Zoo/Cyclorama entrance which will not interfere with the park area.

Vegetation

There is deterioration of the mature trees resulting from over-use of areas and improper maintenance. The landscape is very monotonous; mostly large hardwood trees with large expanses of turf; there is a general lack of under-story trees, lack of shrubs and lack of groundcovers. These layers of vegetation are important for several reasons: (1) separation of spaces within the park, (2) separation of the noise and business of the city from the park, (3) erosion prevention, and (4) wildlife habitat. We have the opportunity to create a truly naturalistic landscape with native plantings which will clean storm water, reduce erosion, attract wildlife, and create a sense of place.

Environmental

Significant soil compaction and erosion damage has resulted from over-use of areas such as the picnic areas, the concert area and the ball field area. We have a responsibility to retain storm water on site and this presents an opportunity to restore the streams which existed in the early 1900's. We also have the opportunity to design a landscape which becomes more sustainable with time and reduces the need for mowing and other maintenance tasks requiring the use of chemicals and fossil fuels.

Signage

The park lacks an adequate system of signage; regulatory signage is overdone while historic and interpretive signage is lacking. This is a good educational opportunity to tell of an interesting history that took place at Grant Park.

Security

Park safety can be increased by attracting more residents to use the park throughout the day. The more people using a space the safer it usually is. Eliminating the cars from the interior of the park will reduce the unwanted loitering, drinking, and loud car radios.

2.10 Infrastructure: Storm & Sanitary Sewer and Erosion

By Chuck Boehm

Storm Sewer and Sanitary Sewer surveys

The drainage and sewerage features of Grant Park have been surveyed, and the results are presented on Table 2.11. During the work 27,000 lineal feet of sewer pipe and 205 structures were surveyed. Of the 205 structures, ten exhibited structural deficiencies, seventy-one were filled with debris, and eight were filled with water. This represents deficiencies in approximately forty-five percent of the structures inventoried.

Erosion Mapping

Extensive erosion is present throughout the park. This erosion is cyclical with many of the drainage and maintenance issues within the park. As catch basins and inlets become clogged, or as curbing (intended to contain and route stormwater) is damaged, stormwater creates new flow paths. As these flow paths are created, the runoff picks up sediment and transports it to the next inlet or low area where the sediment settles out. Erosion areas are presented on Map 14: Erosion Map.

Model Analysis

Understanding how storm water facilities will perform during rain events is essential to the development of an effective storm water management program. The objective of this hydrologic analysis is to identify present drainage patterns and develop peak discharge rates for each storm event to establish the quantity of storm water presently in the drainage system. These results are then compared to the existing system capacity to identify deficiencies.

The total area of the drainage basin for Grant Park is approximately 294 acres. The drainage basin comprises the park (approximately 130 acres, including Zoo Atlanta) and urban areas outside the park that contain sanitary sewer drainage or are hydraulically connected to the sewer system within the park boundary. Although the pipes within the Zoo were not modeled, storm water flows from the Zoo area were accounted for in the model. The drainage basin for Grant Park was further divided into eighty-two subcatchments. The storm sewer network is represented in the model as a series of links and nodes which are shown on Map16: Storm/Sewer Model Map. The links represent conduits (i.e., ditches and pipes), and the nodes represent junctions (i.e., manholes).

Model results for the ten year, twenty-four hour event are shown on Map 17: Storm Sewer Capacity Results for the Ten-year. TwentyFour Hour Storm Event Map. This map shows that during this storm event, twelve nodes will carry a surcharge. Approximately 4,600 lineal feet of pipe (seventeen percent) will be at seventy five to one hundred percent of capacity, and approximately 4,400 lineal feet of pipe (sixteen percent) will be at over 100 percent of capacity. The remaining 18,000 feet of pipe (sixty seven percent) will have excess capacity.

See Appendix D for full Infrastructure Report.

Results of all cases are analyzed in the following table (Table 2.11):

Storm Event	# of Surcharge d Nodes	75% to 100% Lineal Feet/ Percentage	>100% Lineal Feet/ Percentage	<75% Lineal Feet/ Percentage
2-year, 24-hour	7	2,500/9%	2,500/9%	22,000/81%
5-year, 24-hour	9	3,900/14%	4,200/16%	18,900/70%
10-year, 24-hour	12	4,600/17%	4,400/16%	18,000/67%
25-year, 24-hour	17	4,200/16%	5,100/19%	17,700/66%
50-year, 24-hour	23	4,800/18%	6,700/25%	15,500/57%
100-year, 24-hour	25	4,900/18%	6,100/25%	15,400/57%

3.0 THE MASTER PLAN

3.1 Introduction to the Master Plan

The writings, studies and plans the Olmsted Brothers firm created for Grant Park, along with observations and input from various city departments and many neighborhood residents, have been used to create this Master Plan for Grant Park. There is a great desire to restore this park to the original Master Plan designed by the Olmsted Brothers firm almost 100 years ago. The issues which confronted the Olmsted Brothers firm in 1904 are still true and relevant today; their observations and design are the basis for the Master Plan.

Some important features which were typical of parks a century ago are very much needed in our public spaces today: (1) Natural landscapes which can help reduce the amount of storm water burdening our water treatment facilities, and even more importantly to provide a place for our children to experience the plants, the animals, the smells, the magic of nature; (2) Community gathering areas for neighbors to exchange ideas and stories and to get to know each other; (3) Separation of pedestrian and vehicular circulation which not only improves the pastoral character of the park but also gives children a safe place to play; and (4) Scenic views which can greatly enhance a park user's experience.

3.2 Recommended Treatments

Due to the historic nature of Grant Park, an approach has been developed as to how to treat the various areas for preservation. Grant Park retains important historical significance for several reasons: (1) The Grant Park neighborhood is on the National Register for Historic Places; (2) Fort Walker, site of a Civil War fortification, has the only intact entrenchments remaining in the City of Atlanta; and (3) Grant Park was designed by the Olmsted Brothers firm. The Treatment Plan (Map 19: Recommended Treatment Plan) applies established preservation standards from The Secretary of the Interiors Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes to each area of Grant Park and will guide the future development of the park. The three treatments typically used to approach a cultural landscape are: restoration, rehabilitation and reconstruction. It is important to understand the definition of these three terms.

Restoration is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period.

Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alteration, and addition while preserving those portions or features which convey its historical, cultural, or architectural values.

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Reconstruction is defined as the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

A goal is to achieve the maximum restoration and preservation possible for this park, considering the limits of current needs and budget. Areas are prioritized according to the following issues: (1) historical features remaining; (2) features which did exist but were partially removed or destroyed; and (3) areas which were designed by the Olmsted Brothers firm, but which may or may not have been implemented and are important to the historical character of the park as a whole.

The areas which are the most intact and hold a considerable amount of historic significance are Fort Walker, the Erskin Fountain/Ormond Street overlook, and the gateways from the 1920s. These areas are recommended for restoration.

The streams which existed in the early 1900s are partially remaining, and with some regrading could be used again as the park's drainage system. It is recommended that these stream areas be rehabilitated.

The remainder of the park should be *reconstructed*, aiming to recreate as much as possible the Olmstedian pathways, vegetation and general character. Portions of these features, including most of the entrances and the carriage paths, can still be found in the park.

The Treatment Plan (Map 19: Recommended Treatment) provides the parameters for the Master Plan, and the details are described in the remainder of the report.

3.3 Pedestrian Circulation

Issues:

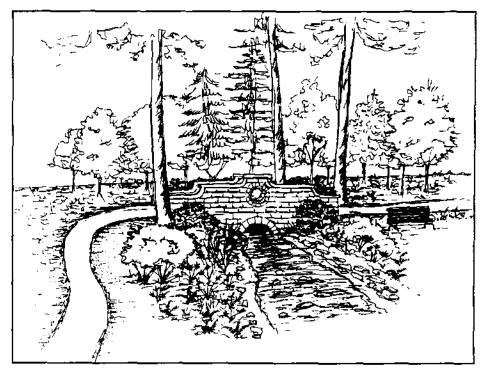
The Olmsted Brothers firm designed a complete circuit route for people to travel through to enjoy the park landscape. Paths wound through forest areas which opened into grassy field areas and then continued up gently sloping hills for a view of the surrounding landscape. Views were an important feature of the park experience and so were given much thought in the development of pedestrian and vehicular circulation systems through the park. Vegetation and topography were used to separate these path systems.

The Olmsted Brothers firm designed more pedestrian paths in Grant Park than typical of their other parks for two reasons: (1) to access the numerous destination points throughout this park; and (2) to maintain the "separation of ways" - separation between carriage and pedestrian traffic. Historic research suggests that many of these pedestrian paths were never installed, but because much of the carriage drive circuit was installed, and sections are presently used for pedestrian-only circulation, there is already a foundation for a complete pedestrian circuit path.

The historic bridge from the early Grant Park is currently bypassed by the path system. The bridge needs to be incorporated into the pedestrian route and the stream needs to be restored.

Design Intent:

Develop a pedestrian pathway which will form a circuit through Grant Park and carry out the design intent of the Olmsted Brothers firm's original



Historic bridge dates from early Grant Park. This sketch depicts the bridge reconnected to the pedestrian path and with the landscape and stream restored.

plans. This path should also incorporate today's needs and at the same time retain a character appropriate for this historic park. The following goals should be met:

- Follow the alignment of the Olmsted Brothers firm's original carriage system, adjusted to access today's destination points.
- Separate the pedestrian and vehicular systems.
- Accommodate bicycles as well as walkers, joggers and strollers.
- Comply with the American with Disabilities Act (ADA). (Path grades should not exceed five percent slope.)
- Use materials which are in keeping with the historic character, yet are also long-term and low maintenance.
- Site and construct pathways to blend with their natural surroundings.
- Use pathways to prevent erosion and direct visitors to park features.

Recommendations:

The design, where possible, will follow the Olmsted Brothers firm's original plans (Map 22: Long Term Master Plan: Appendix J) to achieve the following:

 Restore "separation of ways"- eliminate all vehicular traffic from the interior of the park with the exception of the two existing parking lots off Boulevard Avenue and Cherokee Avenue.

- Convert old carriage routes to a pedestrian/bike path bypassing parking lots to form a
 primary circuit path (eighteen feet wide minimum) through the entire park. The
 primary path is recommended to be asphalt paving because it is not as visually intrusive as concrete paving.
- Reconstruct secondary paths (five to eight feet wide) to follow Olmsted's walking paths along streams and interesting landscape areas and to access destination points. Prohibit bikes and roller blades from these secondary paths. Use Stabilizer, a product which binds together crushed stone, to retain the natural character; this material is rough and will also deter roller bladers. Not all of Olmsted's pathways should be reconstructed for two reasons: (1) the old carriage path will accomodate pedestrians; and (2) today's pathways will need to be constructed of a hard surface for maintenance purposes and numerous concrete or asphalt paths would be disruptive to the landscape.
- Primary path will continue around the perimeter of the Zoo to connect features such as Fort Walker, the Erskin Fountain/Ormond Street Overlook and Atlanta Avenue with the rest of the park land.
- Remove non-Olmstedian paths which use steps or which exceed a five percent slope.
- Construct pedestrian crosswalks in the two parking lots.
- · Reuse all granite curbing and replace other curbing with granite curbing.

3.4 Other Forms of Circulation

Issues:

Olmsted designed Grant Park to accommodate both carriages and pedestrians. A wide carriage route was proposed as a circuit drive winding through the park. Bicycles also used this carriage route. Separate from this route was a pedestrian path system, a narrower circuit path winding through the park.

Today the many cars and buses in the park have become a nuisance as well as a safety issue for park users. Alternative transportation methods must be addressed as a way to reduce the numerous vehicles in the park.

A greenway trail for bicycles and pedestrians has been developed for the City of Atlanta and will connect with Grant Park along its eastern edge at the corner of Park Avenue and Berne Street. From Grant Park the greenway will run north through Cabbage Town and branch off in several directions, one route connecting to the Freedom Trail and others continuing to north Atlanta. The south bound trail from Grant Park will lead to Dekalb County as well as the airport. The path system in the park should link to this greater bikeway system.

Design Intent:

• Eliminate vehicular traffic from the park. Design to accommodate and encourage alternative transportation forms, such as shuttle buses.

- Accommodate park users with bikes, roller skates, roller blades, baby strollers, and wheelchairs in a manner which complements the historic and natural integrity of Grant Park.
- Improve the vehicular access to the Zoo and Cyclorama in a manner which lessens disruption to the surrounding parkland.

Recommendations:

Limit all vehicular traffic except to the two parking lots: Cherokee Avenue and Boulevard Avenue. Fully utilize the two large existing parking lots by redesigning and re-striping them. Construct pedestrian crossings in both of these parking lots. Realizing that future parking dilemmas cannot be solved with these two parking lots, design drop-off locations for both buses and automobiles to encourage fewer vehicles actually parking at Grant Park.

Various methods are used to accommodate bike traffic and these were explored during the master planning process. One typical manner is to paint stripes along the major pedestrian route to separate bike traffic. This would be distracting and inappropriate for the historic and natural character of Grant Park. Rather the primary pedestrian path will be designed wide enough, at least eighteen feet, to accommodate the various users: roller skaters, cyclists, baby strollers, joggers, walkers, and dog owners. Park users desiring a quiet walk can use the secondary paths, which will prohibit cyclists and roller skaters.

Construct bus shelters to accommodate public transportation users. These shelters should be compatible with the historic character of the park.

Use an off-site parking area for overflow parking. (Select a site which has already been paved and will not cause an intrusion on surrounding residential areas.) Coordinate this parking area with a shuttle service. Several potential parking sites have been identified (Map 22: Long Term Master Plan: Appendix J).

3.5 Park Use

Issues:

The issue confronting almost all urban parklands- that is the expansion of facilities and activities into areas originally devoted to natural parkland- is of great concern at historic Grant Park. The Olmsted Firm strongly felt that museums, zoos, restaurants, and recreational facilities, although necessary for a healthy community, were not appropriate in the parks. Olmsted discussed the detrimental impacts which could be expected from these facilities. Specifically noting that although Gress Zoo (now Zoo Atlanta) and the Cyclorama were small, they would desire more space in the future. This expansion, coming from several directions today, has eliminated at least sixty acres of the natural parkland.

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The two playscapes are both in locations which interfere with some of the best scenic views in Grant Park, especially the one located on the Fort Walker site. The other detracts from the view from the gazebo.

Design Intent:

- Restore Grant Park to its original intent a natural pastoral landscape accommodating
 passive recreation, accommodating present use of the park, and enhancing the park
 experience for all visitors.
- Create a plaza area at the Zoo/Cyclorama to serve as a meeting place for all park users and a transition from the Zoo/Cyclorama area to the parkland.
- Create a buffer between the active areas and the passive parkland. Do this in keeping with the historic and natural character of the park.

Recommendations:

- Keep, maintain and improve (not expand) use of existing recreation center, swimming pool, ballfields, tennis and basketball area.
- Allow for small stage productions at the Milledge Avenue fountain which faces a lawn area in the park. The existing terrain lends itself to a natual amphitheater and should be graded in a subtle manner to facilitate this use.
- Reconstruct Olmsted's boundary planting along the Zoo perimeter to buffer this active
 area from the parkland. Focal areas and especially gated drives that cannot be vegetated
 should be replaced with a more decorative fence than the current chain link.
- Relocate both playscapes to the following spaces: (1) woodlands planned for the perimeter of the baseball field in the north end of the park; and (2) small clearing planned west of Boulevard Avenue parking lot. The playscapes should not be placed in the middle of a lawn but on the edge of vegetated areas. These locations are suggested as they will not detract from important views or historic features. Two playscapes maximum are recommended for Grant Park. Playscapes added should be constructed out of lumber and in keeping with the historic character- no bright plastic prefab structures should be allowed. All play structures should be sited in low areas and along vegetated areas so they will blend with the landscape and not be focal points.
- Retain pavilion area for large gatherings and reunions; landscape these pavilions with Olmsted's boundary planting so as to blend these large pavilions with the surrounding landscape.
- A Plaza area should replace the Cyclorama employee parking lot and serve as the main entrance and meeting place for all park visitors. The plaza should be an open area to accommodate large groups. Benches should be provided in several locations: (1) entrances of the Zoo and Cyclorama; (2) near the vehicular drop-off; (3) near the wetland area; and (4) scattered throughout the plaza under the trees. The paving should be porous to allow hardwood trees to be planted thoroughout the plaza area. All plantings in the plaza should be compatible with the other vegetation. (No annual flower beds or specialty)

- plantings.)
- Today's concert area (Olmsted's Middle Field area) should be restored to a stream area. Small concerts can be held in the Gazebo area. Large concerts should be held outside Grant Park at special event locations such as Lakewood Amphitheater, Chastain Park or Centennial Park.
- Encourage environmental education programming. Bird walks and nature walks could be held for the park users (especially children) by a park ranger or Zoo wildlife specialist.
- Seating and picnic tables should be placed throughout the park to encourage visitors
 to stop and enjoy the surroundings. Picnic tables should be sited and constructed in
 areas so as not to disrupt the views through the park.

3.6 Fort Walker

Issues:

The Fort Walker site and entrenchments were recognized by the Olmsted firm as an important historic resource from the Civil War. It was preserved and incorporated into their Master Plan. Olmsted suggested constructing an observation tower near the Fort Walker site to view the area. A forty foot high tower was constructed here in the 1960s and removed in the mid-1980s likely because of liability issues.

Today there are several inappropriate additions and important issues relating to this site:

- Playscape was constructed on the Fort Walker site.
- Ornamental grasses were installed on the entrenchments.
- Recently planted hardwood trees are beginning to block the historical view of downtown Atlanta.
- Erosion is prevalent on the slopes of the entrenchments.
- There is a lack of connection between Fort Walker to the rest of the park, especially to the Cyclorama.

Design Intent:

Restore the Fort Walker site and emphasize through interpretation its importance as a historical and educational resource.

Recommendations:

- Remove the playscape from this area.
- Remove all ornamental exotic grasses from this site.
- Plant the entrenchment slopes with native grasses (three feet high) to discourage visitor access, control erosion, and emphasize the form of the entrenchments.
- Plant the surrounding area with a lawn grass to highlight the native grass and to allow for visitor access.
- Plant certain areas with Olmsted's boundary planting especially to screen the Zoo from Fort Walker.
- Connect Fort Walker to the park's primary circuitous path system.
- Replace the hardwood trees blocking the view of downtown Atlanta with lower growing species, which would preserve the view, yet buffer the Zoo's maintenance area.

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3.7 Gateways

Issues:

Most of the carriage road entrances that Olmsted designed were constructed and are intact today. These entrances are located near the major surrounding roads and serve to allow visitor access from all directions into the park. Although Olmsted didn't design the stone gateway features at these entrances, he realized they would probably occur and suggested they not be too monumental and that they be landscaped to soften their edges.

The stone gateway features are an important addition from the 1920s period. Major issues concerning these gateways are as follows:

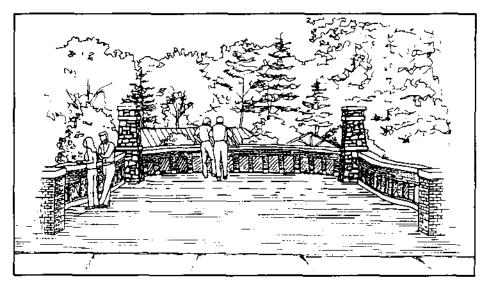
- The Augusta Entrance, which was the major park entrance in the Olmsted design, unfortunately has been replaced with a parking lot to service the Zoo and Cyclorama.
- · Many gateway features are in need of maintenance and repair.
- Although Olmsted discouraged the use of flower beds and specialty plantings, these have been installed at most gateways, and are inappropriate.
- The modern bollard's style and scale are not in keeping with the historic character of the park.
- Gateway at Park Avenue has been painted with bright yellow paint that is inappropriate.
- The Ormond Street Gateway is cut off from the park with chain link fencing and views toward the heating and air conditioning units at the Action Resource Center (ARC) of Zoo Atlanta.
- Gateway at Park Avenue/Berne Street has heavily eroded sidewalks leading through the gate.

Design Intent:

Restore the gateway features and their historic character.

Recommendations:

- Remove all raised bed structures at these entrances.
- Replace flower beds and specialty plants with recommended species for the rest of the park placed in a naturalistic manner. Many of these areas should be replaced with Olmsted's boundary planting.
- Restore the overlook and view into the park from Ormond Entrance. Remove chainlink fence, buffer view of maintenance area/HAVC equipment AT ARC building, use decorative fencing in combination with vegetation to block access to Zoo as needed.
- Replace modern bollards with appropriate ones.
- Maintain all gateway features- restore the fountains to working condition, repair broken tiles, and repoint granite features.
- Remove bright yellow paint from the Park Avenue Entrance.



The Ormond Street Gateway should be restored to its original function as an overlook of the park. Measures should be taken to secure the Zoo in the restoration of this feature.

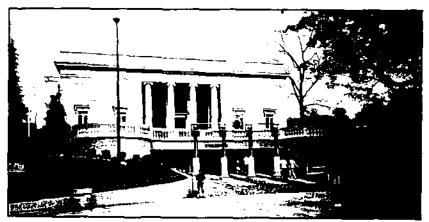
3.8 Vegetation/Plant Communities

Issues:

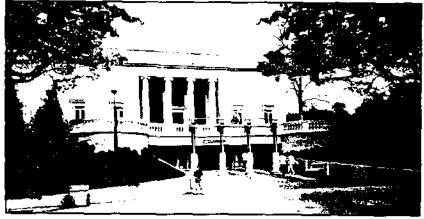
Olmsted's planting plan was designed to overcome several issues: (1) separation of spaces within the park as well as separation from the surrounding houses and streets; (2) diversity of the monotonous landscape; (3) prevention of erosion; and (4) creation of a pastoral landscape for people to enjoy. The plantings Olmsted proposed were to contain a rich variety of species that would produce a feeling of lushness and intricacy. Olmsted used mostly native species or native-looking species. Research suggests these planting plans were never installed. Yet as we face these identical issues today, these almost century old plans and ideas are relevant in solving today's problems.

Today's hardwood trees dominate the landscape and there are few shrubs and groundcovers. The landscape is monotonous without a middle and lower layer of plantings to create enclosures that would contrast with the openness of the field zones.

Oaks and maple trees account for the largest percentage of the tree population; these species both rank as some of the healthiest and largest trees in Grant Park. Other common tree species include Yellow Poplar, Willow Oak, American Sycamore, Basswood and Virginia Pine. As these are species which would be found naturally on this site, we have a good upper canopy representation of a typical southeastern Piedmont forest. Since we have a good foundation of mature hardwood trees, planting efforts should focus on understory trees, shrubs and ground layer plantings, which Olmsted had recommended to achieve a lush park setting.



Before



After

Using Olmsted's boundary planting as he suggested for smoothing the edges of buildings and structures would certainly improve this plaza at the Cyclorama and Zoo entrance.

The recent plantings at buildings and park entrances are inappropriate selections chosen as focal plantings instead of Olmsted's more natural plantings.

The major disturbances to the trees noted were dumping of hot charcoals at tree bases by picnic users and the compaction and erosion of soil associated with large crowds, maintenance vehicles, and lack of vegetation and mulch under tree canopies.

Design Intent:

- To restore the "spirit" of the Olmsted planting plan by following the massing of shrub beds, diversity of plant heights, and the naturalistic planting style in this plan.
- For park users to experience a true Georgia landscape when they visit Grant Park;
 create a healthy sustainable landscape using natives and/or important non-invasive historical species.

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 Restore a middle and lower layer of vegetation to have a variety of spaces and to create some mystery in this landscape.

General Recommendations:

- Implement four different landscape zones to define various spaces within the park: (1) the boundary zone; (2) the wooded zone; (3) the stream zone; and (4) the lawn zone (Map 22: Long Term Master Plan: Appendix J). There will be various plant communities within each of these zones, and each type of landscape will form a winding corridor through the park. Keeping these landscapes intact as large areas instead of breaking them into smaller areas will achieve several goals: (1) creation of contrasts in the landscape; (2) reduction of the maintenance; (3) promotion of intact plant communities; and (4) establishment of protective habitats for particular wildlife.
- Use Olmsted's planting list in combination with hardy and easily maintained southeast native plant species which match in form and texture the material specified in Olmsted's plant list. Discourage the use of "invasive exotics" in the Grant Park landscape.
- Combine species that would naturally be found growing together to recreate native plant communities.
- Use a combination of erosion control shrubs and groundcovers on the steeply sloped areas and areas too shady for lawn.
- Use wetland species in the stream areas that will be beneficial in the reduction of contaminants in the storm water.
- In the parking lot islands use a combination of trees, shrubs and groundcovers to reduce erosion and soften the impact of the parking areas.
- Delineate the line between lawn and natural areas.
- Locate plant material so as not to compromise security of park users. Note that in
 other urban areas where Olmsted plantings have been restored, many in high crime
 neighborhoods, crime has diminished. This is attributed to higher usage of the parks;
 especially important is neighborhood usage and the presence of gardeners and park
 rangers.
- For boundary planting areas, if large plants are too expensive, a seed mixture of native flowers and grasses of appropriate height similar to the meadow plantings is recommended.
- Use species that will naturally reproduce without taking over to create some interesting natural distribution patterns and keep plant costs down.

General Maintenance Recommendations:

- Specifically hire gardeners and park rangers to maintain this park. Their roles would include education as well as maintenance and installation.
- Consider neighborhood groups for litter pickup and other tasks which would not interfere with gardener duties.
- Prune shrubs and trees only for removal of dead limbs or to alleviate interference with pathways.
- Retain all lawn clippings, natural debris from pathways, and leaves and sticks in natural areas as mulch to reduce weed growth, prevent erosion, and attract wildlife.
- Do not use weed trimmers to manicure grass from the base of trees, as this kills the cambium layer of the tree and will eventually kill the tree. Reduce the need for weed trimmers by turning former lawn areas with trees into woodland/forest areas and mulch heavily to prevent weeds.
- If a certain plant species require continuous pesticide care, replace it with a species which does not.
- To eliminate weeds, mulch heavily (six inches) the natural areas and planting beds. Avoid the use of herbicides.

Certain plant species are typically found growing together in particular types of micro-climates and environments. These plants work together as a sustainable system. For example, the pines in a new woodland serve to shade young hardwood saplings, and eventually the hardwood trees will shade out the pines to make room for understory trees and woodland shrubs. These groups of plants are referred to as plant communities. Plant communities serve to give a landscape it distinctive character and also to provide the associated wildlife with food, shelter and nesting habitat.

There are many different plant communities and many plant associations within these plant communities. Following are various communities identified at Grant Park and lists of particular plant species associated with these communities. These plant communities will make up the six different landscape zones: boundary, wooded, meadow, stream, wetland and lawn. These should form the basis for the planting plan.

Note: The plant species typical for each plant community are listed. Companion plants for certain plant species are noted. Botanical names are listed in the Appendix of this report and should be referenced for any planting plans.

3.8.1 The Boundary Zone

Olmsted designed what he referred to as the boundary planting along the perimeter of the park and surrounding all buildings and structures within the park. The character of the boundary planting was a layering of small trees overhanging masses of shrubs of various heights but similar textures, and groundcovers spreading around the base of the larger plants. Olmsted's goal was to evoke a natural landscape feeling. This planting also served to soften edges of buildings and structures and to separate the park user from the intense use of the surrounding roads and residential areas.

The boundary plantings are suggested for these same reasons today. Priority planting areas for Olmsted's boundary planting are: (1) the perimeter of the park, especially the major entrances; (2) the boundary between Zoo Atlanta and the park; and (3) around all structures within the park, such as the restrooms, the Cyclorama, and the playscapes. As funding or a Zoo partnership opportunity becomes available, the boundary planting should be used to landscape the two parking lots to ensure a visual separation of these from the parkland.

Following is Olmsted's planting list for the boundary planting:

Note: This is a list of native and important historic plants imported from Olmsted's complete plant list. (Not listed from Olmsted's plantings are invasive exotic species.) Plant species are listed by botanical names followed by common names. Recommended in the column to the far right are suggested native species to replace particular exotic species.

LARGE HARDWOOD TREES

Crateagus species

Carpinus caroliniana Fagus americanus

Fraxinus americanus Quercus alba Quercus coccinea

Quercus rubra

Cupressus lawsoniana

Tilia americana

Tsuga caroliniana

Hawthorn

American Hornbeam

American Beech American Ash

White Oak Scarlet Oak Red Oak

Pond Cypress

Basswood

Carolina Hemlock

Taxodium distichum

LARGE EVERGREEN TREES

Gordonia lasianthus

Ilex opaca

Magnolia fraseri

Loblolly-bay

American Holly

Fraser Magnolia

Magnolia glauca

Magnolia grandiflora Magnolia macrophylla

Osmanthus fragrans Prunus caroliniana Tsuga canadensis

Sweetbay

Southern magnolia Great-leaved Magnolia

Tea Olive

Cherry Laurel Eastern Hemlock

FLOWERING TREES

Aralia pentaphylla

Cercis canadensis

Cornus Florida Crataegus crus-galli Crataegus punctata Cyrilla racemiflora Malus floribunda Prunus triloba

Devil walking stick

Redbud Tree

Flowering Dogwood Cockspur Thorn Dotted Hawthorn American Cyrilla Flowering Crabappie

American Plum

Aralia spinosa

Prunus americanus

FLOWER/FRUIT SHRUBS

Aesculus parviflora

Hydrangea otaska Hydrangea quercifolia

Hypericum moserianum

Lindera Benzoin Philadelphus inodorus Punica granatum Rhododendron vaseyi

Rosa lucida

Rubus vulgaris

Symphoricarpos orbiculatus

Viburnum cassinoides

Viburnum dentatum Viburnum lentago Viburnum prunifolium Bottlebrush Buckeye

Wild Hydrangea

Oak-leaf Hydrangea

Golden St. Johnswort

Spicebush Mockorange Pomegranate Carolina Azalea

Swamp Rose

Running Bramble Indian Currant

Withrod

Arrowwood Sheep Berry Black Haw

Hydrangea arborescens

Hypericum frondosum

Rosa palustris or R.carolina

Rubus dumeforium

Leucothoe axillaris

EVERGREEN SHRUBS

Bambusa species

Ceanothus x delilianus

Ilex glabra

Rhodo.calendulaceum

Rhododendron catawbiense Rhododendron maximum

Glory de Versailles'

Inkberry

Flame Azalea

Catawba Rhododen. Rosebay Rhododen.

GROUNDCOVERS

Adiantum pedatum L. Campanula Persicaefolia

Dryopteris marginalis Iris pseudacorus

Leucothoe catesbaei

Osmunda regalis Polystichum acrostichoides Rosa wichuraiana

Xanthorrhiza simplicissima

Maidenhair fern

Bellflower

Marginal Wood Fern Yellow Flag Iris

Doghobble

Royal Fern Christmas fern Memorial Rose

Yellow Root

3.8.2 Wooded Zone

The Wooded Zone is comprised of three different plant communities: (1) The Woodlands. (2) The Forest, and (3) The Rich Forest. Topography, drainage and vegetation will determine which of these plant communities should be installed in the various areas within the Wooded Zone.

The Woodlands

Woodlands are characterized by pine species and some of the faster-growing hardwood species. Sunlight will usually reach the ground layer and many flowering herbs can be found in the wooded zone. The woodland is a young stage in the eastern forest succession; typically clearing has occurred for timber harvest and when left unmown the old field eventually becomes a woodland. Woodlands occur at various elevations, but not usually bottomland as this land is too wet to allow for easy clearing. A pine straw ground covering is usually typical instead of the leaf mulch found in the forest. Along the edge of the woodland taller native grasses and flowering herbs will be found.

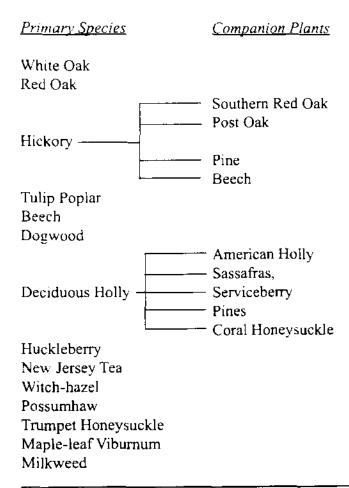
The area surrounding the ball field is characterized by scattered immature trees, no shrub layer, high topography, and dry soils. This is an ideal area to expedite the succession of old-growth

The woody species are mostly deciduous with scattered evergreen specimens. As the woods are sunny in early spring this is the season when most of the ephemerals are in bloom. Yellows, blues, and purples are common colors of an early spring forest. Later in the summer the colors change to warm tones such as oranges, reds and golds. Leaf drop from the previous fall has provided plants with a good leaf mulch to protect them from drought and winter temperatures. A combination of this leaf mulch and the various root depths of plants will help prevent erosion.

Forest should be established in the areas of mature hardwoods along the upland slopes of the park. This landscape should be planted more densely with vegetation than the woodland, and with some areas denser than others, so there is a feeling of walking through different rooms with various ceiling and wall heights. These areas are likely to encompass some of the steeper slopes where erosion is prevalent. Combining erosion control trees, shrubs, and groundcovers will help hold the soil as these various plants have different root systems.

The Forest will have walking trails for exploring with occasional benches for good views and resting places.

Plant species recommended to plant in the Forest:



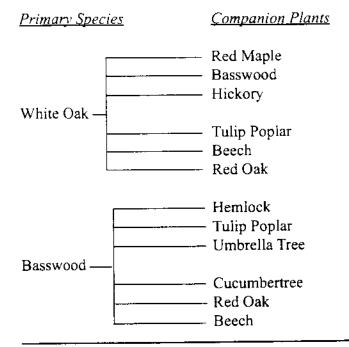
Wild Red Columbine
Aster
Wild Indigo
Wild Geranium
Hepatica
Goldenrod
Southern Shield Fern
Christmas Fern

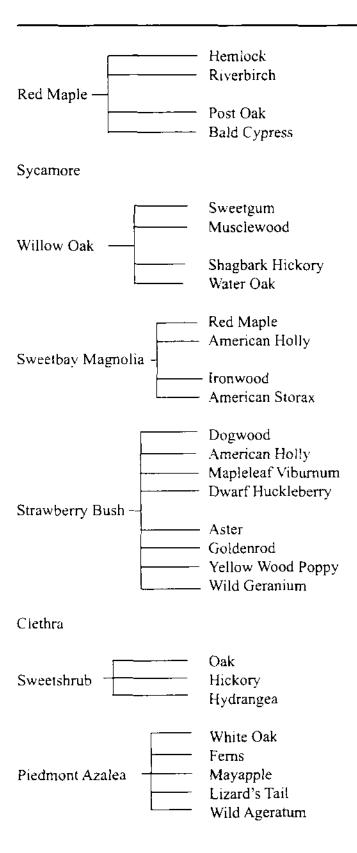
The Rich Forest

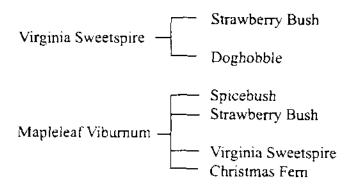
The Rich Forest occurs in areas of low topography where there is an abundance of moisture. As the Rich Forest and the Forest are somewhat similar and generally adjacent to each other, certain plant species, especially trees, will be found in both habitats and this repetition of species will create a subtle transition in the landscape's character instead of an abrupt change. Typically many spreading ground covers and ferns are found in this lush landscape as well as many forest creatures.

The Rich Forest will wind along near the proposed restored stream areas. Most of the secondary pathway will go through this plant community. Having large masses of ferns and flowering plants along this path will transform these areas.

Species recommended to plant in the Rich Forest:



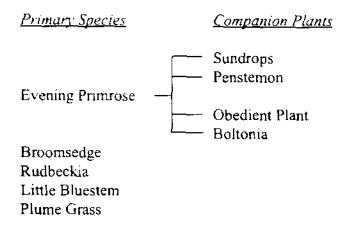


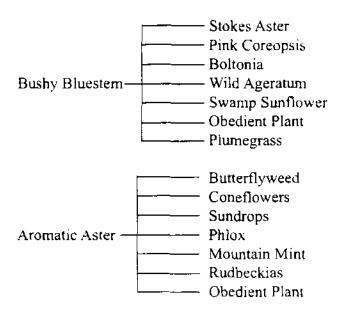


3.8.3 Meadow Zone

The Meadow is characterized by native grasses and wildflowers, which make good companion plants for several reasons. First, the grasses are clumping in habit and prevent weed invasion of the wildflowers. Secondly, the different root systems do not compete as the grasses tend to grow down deep and leave the shallow soil space for the wildflowers. This combination of root systems works well to prevent soil erosion and to maximize growing space. In the southeast region the Meadow is usually about three feet high, with wildflowers accounting for five to fifteen percent of the plant species. This plant community is maintained by an annual burn or mowing to prevent tree species from establishing. A burn will encourage domaint seeds of particular plants to germinate and should be considered where possible. The Meadow provides constant changes as various plants bloom and go to seed. Even in the winter this is an impressive landscape; the grasses are brilliant bronze and golds with varying textures and interesting seed heads. Plant species in the Meadow will bring an interesting landscape, which is attractive to many birds and butterflies, close to park users in the lawn areas.

Species recommended to plant in the Meadow:





3.8.4 The Stream-Zone

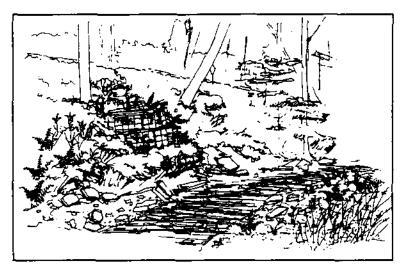
Edith Roberts and Elsa Rehmann gave a very accurate and wonderful description of the typical stream-side landscape:

Many kinds of trees, a great variety of shrubs and innumerable herbaceous plants grow along streams. The ever-present supply of water and the moisture-laden atmosphere give them an ideal environment. And, as the stream meanders between low margins, under high banks, below gentle slopes and through flat low-lying areas, the varying amounts of water in the soil influence the selection and arrangement of the vegetation. (American Plants for American Gardens, 1917)

The stream-side plant species will serve to prevent erosion along the restored stream channels and also to create an interesting landscape for meandering pathways. The stream-sides should be restored to their early 20th Century appearance. Some of these areas are eroded ditches which need only slight grading and replanting, while others that have been completely filled will need major grading and replanting.

Bioengineering methods may need to be employed to restore vegetation to the stream areas. Bioengineering is defined as using vegetative methods to solve soil erosion and stability problems. Following are some typical bioengineering methods to consider:

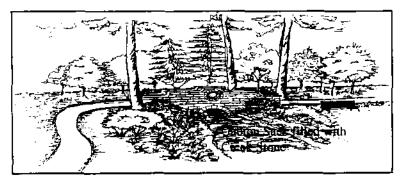
· Vegetated Gabions: Gabions resemble the gravity retaining walls. They are usually prefabri-



Restoration of steam using vegetated gabions to cleanse and slow water entering stream from culvents.

cated wire units that are filled on site with native cobble sized stones and some soil. Gabions are wired together and planted with live stakes during construction.

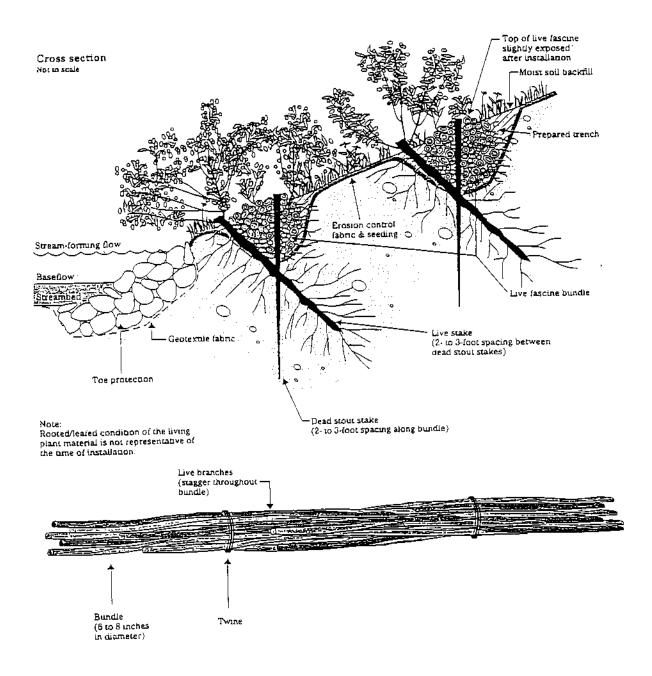
• Live Staking: Live stakes are living, woody plant cuttings capable of rooting with relative ease. The cuttings are tamped into the ground as stakes. They are intended to root and grow



Section drawing illustrating the use of a vegetated gabion with stone to hold the stream banks in place.

into mature shrubs that, over time, stabilize the soils and restore the stream-side habitat.

- Fascine: Live branches are placed into ditches and buried at shallow depths. This method offers the advantage that the embedded stems which are in contact with the soil have a chance to take root. Pegs are driven through the center, thus saving binding wire. Immediately after placing the fascines, the trenches are backfilled, leaving only short sections of the cuttings to protrude above the soil.
- Joint planting: Joint planting is a system that installs live willow stakes between stones



Restoration of stream using the Fascine Method.

placed previously along the stream bank. It is intended to increase the effectiveness of the stone system by forming a living root mat in the base upon which the stone has been placed and to improve the environmental function and aesthetics of the stone bank.

Species recommended to plant on the Stream Zone:

Primary Species Companion Plants Sycamores Elms Willows (not Weeping Willow, a European species) Ironwood Hop Hombeam Sweetgum Sweet Pepperbush Red-osier Dogwood Arrow-wood Nannyberry Virginia Sweetspire Blue Phlox Spiderwort Asters Wild Red Columbine Turtlehead Boneset --Goldenrod Stoke's Aster Wild Ageraturm Joe-Pye Weed Swamp Sunflower Boltonia

White Oak Beech

Yellow-Wood Poppy Jack in the Pulpit

Mayapple — Maple Leaf-mulch

Blue-eyed Grass Ferns, Violets

Wild Geranium

Jewelweed

Christmas Fern

3.8.5 The Wetland Zone

The Wetland landscape is typically an open landscape with tree species mainly occurring along the edges. Water depth may vary from several inches to three feet in the winter. The summer droughts will dry up the standing water in these areas and the summer rains will temporarily fill them again. This fluctuation of drainage ensures only certain plants' survival. We have chosen particular species for their ability to thrive in these conditions, as well for their attractiveness (flowers, fragrance, interesting foliage) and for their ability to clean contaminants from the storm water which will pass through these areas.

The Wetland areas will be interesting focal points in the landscape and the first step to educate the public on how to detain and clean storm water in an aesthetically pleasing manner. These areas, if designed correctly, will encourage a healthy aquatic system requiring little or no maintenance.

Species recommended to plant in the Wetland:

<u>Primary Species</u>	Companion Plants
Blue Flag Iris Yellow Flag Iris	Spiderlily
Lizard's Tail	Cinnamon Fern Sensitive Fern Tuckahoe
Pickerelweed ———————————————————————————————————	Spiderlily Lizard's Tail Fragrant Waterlily

3.8.6 The Lawn Zone

The Lawn area should be seeded with either Bermuda grass or a Fescue grass, as the native grasses would not accommodate intense foot traffic. Bermuda grass is a good, hardy spreader and withstands regular foot traffic, but it will invade adjacent plantings and woodland areas. As it has a rhizome root system it is nearly impossible to kill without continuous herbicide application. Fescue grass, although requiring more care to establish, is less invasive, has a more natural look, and will remain green through the winter.

The Lawn serves as an important off-path route through the landscape, and can facilitate more intensive recreational activity, such as informal play. It can be enhanced with the planting of spring ephemerals which will bloom before the grass will need mowing. Some flowering bulbs appropriate for this would be: crocus, daffodil, snowdrop, star flower, hyacinth and violet.

3.9 Lighting

Issues:

The Olmsted firm acknowledged that the budget of the parks could not afford night security and therefore recommended Grant Park be closed after dark. As the security issue holds true today, and because plants need a resting period from light, it seems reasonable to close the interior of the park at night.

The park is currently lit with large scale cobra highway fixtures. These lights are three or four times the height that is needed, and the style is not in keeping with the historic character of the park and neighborhood.

Design Intent:

Select and install light fixtures that would meet the City of Atlanta's performance standards and would also be in keeping with the historic character of the park and neighborhood.

Recommendations:

Remove all lighting from the interior of the park except for the lighting adjacent to structures and buildings. Replace this lighting and the lighting in the Boulevard and Cherokee parking lots with fixtures in a design appropriate to the character of the historic park, and more pedestrian in scale. Use the same design for fixtures along the perimeter sidewalks of the park. The fixtures should be located two to three feet behind the curb.

3.10 Entry structures

Issues:

Olmsted sited two entry structures, one at the Berne Street/Park Avenue entrance and the other near the Park Avenue entrance at the present tennis courts. These structures were to be set into the park vegetation so as to be less conspicuous in the pastoral landscape. A historic photograph shows a rustic wooden "waiting gate" with seating underneath in Grant Park during 1917. It is likely this is the same structure Olmsted had sited on the Planting Plan of 1912.

Olmsted specified that restroom facilities should be sited adjacent to these entry structures, so as not to be standing on their own and becoming focal points in the landscape.

Design Intent:

If entry structures are desired in the park, they should be placed at the above mentioned locations using Olmstedian materials and design.

Recommendations:

Reconstruct entry structure at the Park Avenue entrance using historic photography showing a shelter at this location. As there is no indication if this structure was designed by the Olmsted firm, confirm that this structure's design is in keeping with typical Olmstedian structures. If a restroom is desired in this area of the park, it should be incorporated with the entry structure so that it will not stand alone in the landscape.

Build an entry structure at the Park Avenue/Berne Street entry according to the structure's footprint on the 1912 Planting Plan. Refer to typical Olmstedian materials and design for the construction of this structure (Map 22: Long Term Master Plan: Appendix J).

3.11 Furnishings and Signage

Issues:

No furnishings are indicated in the Olmsted plans for Grant Park, but it is characteristic of Olmsted Parks in urban areas to have included furnishings in the design. These were typically sited near masses of shrubs or trees so as to blend with the landscape.

The existing furnishings in Grant Park are inappropriate; the materials used -- plastics, concrete and aluminum -- should be replaced with more compatible materials such as cast iron or wood. The mix match of time periods representing ranges from the 1960s to recent times do not complement the historic nature of Grant Park. The current fluorescent green picnic tables and aluminum trash receptacles chained to trees give a general message to the park user that no one cares about this park.

Regulatory signage is extremely overdone, while the historical, directional and educational signage is lacking. Most existing signs, with the exception of historical markers, need to be more aesthetically pleasing and blend with the natural landscape.

Design Intent:

Use benches, trash receptacles, signs, and bus shelters that are compatible with the Olmstedian character and the natural character intended for Grant Park. Use materials and designs from the early 1900's period. Prevent these architectural elements from disrupting the pastoral feel of the park. Keep these items to a minimum.

Recommendations:

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All architectural features should be primarily functional rather than decorative. The placing of these features through the park should be minimized to retain the natural character of the park.

Locate bus shelters where bus stops coincide with major entrances to the park. These shelters should be constructed of natural materials and based on designs from other Olmsted parks. These structures should be located so as not to interfere with the pedestrian path system or important views.

Benches should be both grouped and placed individually at places of intense use and along the pedestrian path system. Avoid placing the benches in lines along the pathways. Benches should be of simple and durable construction.

Provide bicycle racks at the major entrances for the cyclists who would prefer to experience the park on foot. Provide bicycle racks at major stopping points to avoid cyclists' riding off the primary path to view attractions. Consider the number of racks needed.

At an appropriate location have interpretive signs telling the story of Grant Park's history. The plaza should be considered for this feature. Historic photographs could be displayed as well as vegetative and wildlife information specific to Grant Park.

3.12 Infrastructure: Storm & Sanitary Sewer and Erosion

Issues:

Grant Park has undergone changes common to most urbanized areas. Open channels and natural waterways are filled in and replaced with underground sewers in an effort to reclaim the land for urbanized development. As once open, rather pervious areas are built up and paved, there are increases in the amount and chemical makeup of the storm water being discharged. When sewers reach their capacity, the water is forced to the surface, often bringing damaging consequences. In this area, storm water commingles with sanitary sewer discharges to form a combined sewer system in a majority of the underground sewers. This further complicates the problems normally encountered with storm sewer areas because we now have to consider the likelihood of sanitary sewage contamination. This has certainly been evident in the reports of overflows carrying sewage. The few open channel areas that have remained over the years are suffering the effects of poor maintenance and severe erosion.

Additional concerns stem from the lack of detailed information about the sewer system. Available mapping is mostly relational, with actual sewer locations often several feet from where anticipated. Many manholes have been covered up over time due to land disturbance activities, or as a result of erosion that has completely buried several structures and filled many others. Erosion is prevalent in locations throughout the park, and needs to be addressed in an effort to keep maintenance low, reduce water quality impacts to waterways, and create a safer and more attractive environment. Structural soundness of the inlets, manholes, and sewers needs to be

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investigated to help form the recommendations that are otherwise based on capacity needs and park use.

The Olmsted master plan recognized the importance of the springs and streams that existed at the time. They were considered to be a focal point of the master plan, and Olmsted incorporated planting plans and pathways along the edges of streams and around springs to show their importance. Sewers that were added to the park ultimately dried up most of the springs since they now had underground conduits to discharge their water, and the once grand Lake Abana was filled to make more room for the Zoo.

Design Intent:

Develop an ecosystem that becomes sustainable with time regarding storm water, vegetation, and maintenance. The drainage system should be designed to incorporate today's needs and at the same time retain a character appropriate for this historic park. The following goals should be met:

- Follow the alignment of the original drainage channels in the recreation of a surface drainage system.
- Upgrade or rehabilitate the existing underground drainage system where necessary.
- Emphasize water as an asset and not a liability.
- Develop the drainage system with sensitivity to water quality needs.
- Reduce or eliminate erosion along existing waterways and throughout the park.
- Site and construct surface drainage to blend with their natural surroundings.
- Plan for future needs and uses of the drainage system with regard to potential sewer separation and consideration potential integration with Zoo Atlanta master planning.

Recommendations:

The design where possible will achieve the following (Map 21: Infrastructure Map):

- Restore the two natural drainage channels which have been disrupted due to the addition of storm sewers and modifications to park grading.
- Rehabilitate the current open drainage channel that originates near the pool and flows westward through the park.
- Utilize plant materials that will provide protection for the drainage channels, reduce
 or eliminate erosion potential, provide proper habitat for wildlife, and be of relatively
 low maintenance.
- Rehabilitate those sewers that will remain in service through replacement, lining, or other methods.
- Develop areas along the new drainage channels for shallow (up to three feet) storm water detention for the purpose of increasing water quality and reducing the peak

- flows and volumes impacting the sewer system.
- Plan for future alignments of surface waters through Zoo Atlanta for the purpose of providing a learning resource and further increasing the water quality aspects and reducing peak flows and volumes into the sewer system.
- Utilize aeration, planting, and mulching efforts to reduce or eliminate erosion along secondary drainage alignments and throughout the park.

3.13 Cost Estimate and Phasing

The first phase of construction at Grant Park will involve the storm and sanitary sewer system. Identified pipes will be replaced and cleaned. Since the goal is to reduce the amount of water going into this system, another aspect of construction will be to restore the streams in the park and divert storm water into these areas. Bioengineering systems to clean storm water and reduce erosion will be implemented in the steam channels. Wetlands will be constructed to detain storm water along the stream channels.

This first phase of construction will be an important event for Grant Park and an essential time to gain support for the entire project. If the budget allows, a priority project would be to implement a section of Olmsted's boundary planting at one of the stone gateways.

The transition to a sustainable park management will depend on developing the expertise of the Parks Department and related city agencies as well as the education of the public. This education needs to begin before this first phase of construction. The recommendations in the master plan represent new roles and the goals can only be met if all involved are fully informed and work together as a team.

The master plan is designed to reduce maintenance cost over time. This can only happen if the installation is done properly and the establishment of maintenance is carried out properly in the beginning. Costing Data for the recommended improvements is included as Appendix L.

Grant Park Master Plan