4.0 Landmark Guidelines

4.1 Stream Restoration

Streams and lakes have historically been an important influence in the character of Grant Park's land-scape. During the early 1900's springs throughout the park fed streams running through the major valleys in the park and these flowed to the southwestern corner of the park to create Lake Albana.



Historic stream channels and lakes in Grant Park, are illustrated on this topographic map from the 1890's. (Photo provided by Atlanta History Center)



View of stream flowing through Grant Park during March 1903. (Photo taken by J.C.Olmsted)

These streams and lakes served two important functions: (1) Drainage channels for stormwater and (2) Recreation areas for park users- the streams had walking paths along their edges and the lake provided for swimming and boating activities.

Today most of the historic streams have been piped underground and the channels filled with soil. There are many drainage ditches which carry stormwater runoff to the storm/sewer system resulting in an overload of stormwater in the sewer system. Approximately 99% of the water in the system is stormwater.

There is one stream in the park still above ground. It is fed by a pipe and flows approximately 300 feet to the center of the park, where it enters the storm/sewer system. Historic records indicate that the stream is likely supplied by a natural spring near the swimming pool area.

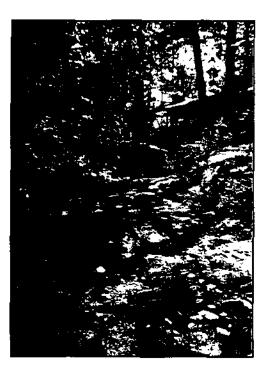
It is recommended that all stormwater be maintained as surface water. The major drainage channels should be restored using one or more of the stream restoration techniques outlined in this section. Areas with minimal erosion should be stabilized using vegetative methods. Areas with major stabilization issues should have appropriate bioengineering techniques implemented.

4.1.1 Stream Channels/Dry Creeks

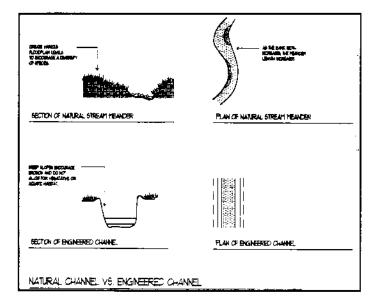
It is recommended to return the drainage channels to the natural streams in existence in the early 1900's. Retaining the stormwater on site may also return the several springs that existed at Grant Park before the underground sewer system was installed.



This stream flows year-round through Grant Park. The slopes should be graded so they are less steep and stabilized with jute matting and vegetation.



View of a natural stream in the Atlanta area which is the desired character for the stream restoration at Grant Park.



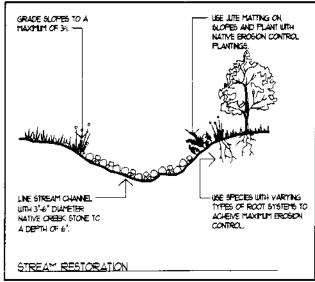
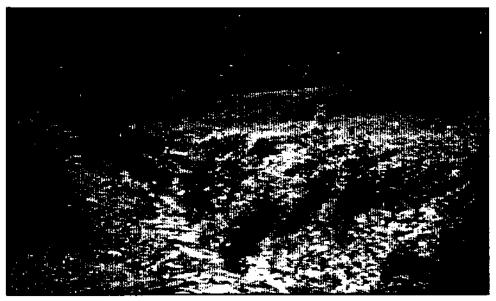


Illustration showing a Natural Stream Channel versus an Engineered Stream Channel.

Illustration of a Stream Channel Restoration.

Stream channels should be stabilized using a combination of methods. The drainage channel receiving the main water force should be lined with creek stone. The creek stone reduces sediment flow in the water and reduces crosion along the slopes. Slope gradient and vegetation also play an important role in stream stabilization.



View of a drainage ditch which should be re-graded and stabilized with bioengineering techniques. The channel should be lined with native creek stone.

Some of the historic drainage channels were not natural streams, but instead had an engineered character and were lined with local granite stone. This type of drainage channel should be used to maintain the above-ground stormwater system especially in areas with minimal space to accommodate natural stream channels. This system should be considered in the Zoo area since much of this area has an impermeable surface. The drainage channel should be treated as a landscape feature with an important educational message. "Daylighting" stormwater systems reduces the amount of water going to overloaded water treatment facilities.



View of a rock-lined drainage channel from the early days of Grant Park.

 Use fiber matting and native plantings to control erosion in areas where slopes cannot be changed without disturbing tree roots.



Restore granite lined channels with water.

View of the Constitution Springs drainage channel which should be restored with the spring water that currently enters the storm/sewer system.

Stone gutters should be used for water to cross secondary pedestrian paths in order to maintain a visual connection of streams through the park which underground pipes do not.



Existing Condition



Proposed Improvement

View of proposed stone gutters to accommodate stormwater which intersects secondary pedestrian paths. This system allows for a visual connection of water through the park which underground pipes do not.

4.1.2 Bioengineering Systems

Bioengineering is using natural materials and systems to stabilize slopes and improve water quality. Compared with typical engineering practices these systems require less maintenance and cost less at installation. Following are several bioengineering techniques proposed for situations in Grant Park.

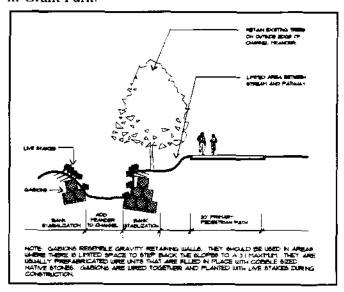


Illustration of Gabions being used for Stream Restoration.

Gabions resemble gravity retaining walls and use a combination of soil, plant roots and stone to stabilize steep slopes. Prefabricated wire units are filled in place with cobble size stone. Gabions can be constructed in many different sizes and shapes although most are rectangular. They are wired together and sometimes planted with live plant stakes which will take root in the structure and create a living wall system.



Concrete spillways on gentle slopes without constant water runoff like this one should be replaced with fiber matting and/or erosion control vegetation.

Mattress gabions are rug-shaped, six-inch thick wire structures filled with small cobble stone. These are used on slopes with minimal sheet flow of water. The mattresses are easily vegetated using live stakes of woody material.



View of a concrete spillway along the stream in Grant Park. The concrete should be replaced with bioengineering techniques such as the mattress gabion designed for sheet flow of water down slopes.

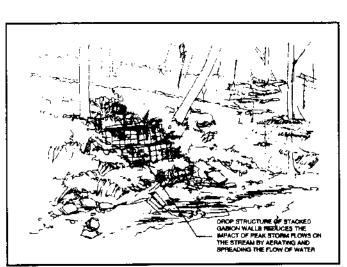
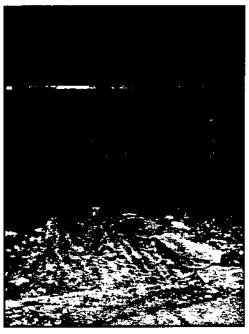


Illustration of the Crescent Flow Spreader which improves water quality by aerating the water and reducing impact of peak storm flows on the stream slope



Concrete spillways on steep slopes should be replaced with gabions and vegetation.

The crescent flow spreader is a terraced stack of gabions which are crescent shaped and curve back into the slope to create a 'natural' stepped structure for water exiting a culvert to flow down as it enters the stream channel. The crescent flow spreader will improve water quality by slowing and acrating water. This technique should be used for large amounts of stormwater exiting culverts and flowing directly into stream areas.

In areas where culverts drop large amounts of water into a stream a *plunge pool* serves to prevent scouring of the stream channel. A plunge pool is a pool located where the stormwater exits the culvert and is deep and wide enough to

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accommodate amounts of water from large storms. The pool is lined with stone and should be deep enough to accommodate sediment which will be deposited from the stormwater.

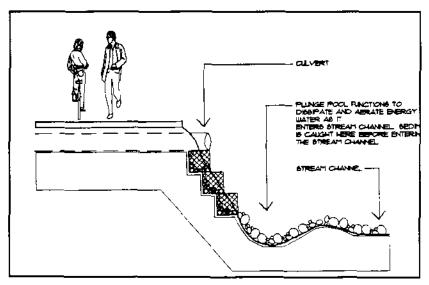


Illustration of a Plunge Pool Section

Following are various bioengineering techniques recommended to stabilize the slopes of stream channels. These systems use a combination of natural materials to secure stream channels and slopes. Materials native to the area should be used when choosing stone type and vegetation. Many of these systems use live cuttings of woody species which can be gathered from forested streambanks near the site. The native willows (Salix species) are readily available growers or by collecting cuttings (be observant not to negatively impact the area from which you cut by overcutting or by harvesting entire plants). The willows will quickly establish from cuttings. Cornus and Itea species should also be used, especially in shadier locations.

The *fiber log* is a log shaped roll of usually coconut fiber stakes placed into the stream channel and vegetated with plants. It should be used along streambanks that recieve intense amounts of stormwater and are suseptible to erosion.

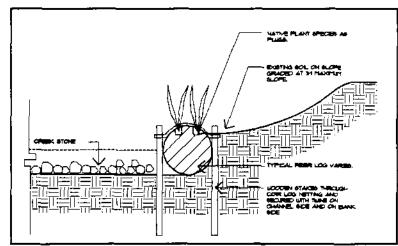
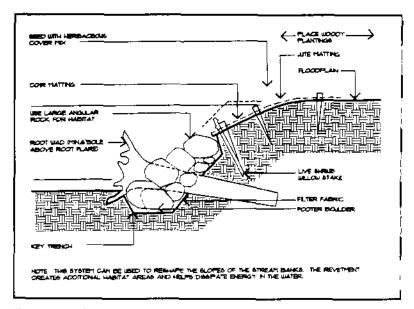


Illustration of a Fiber Log Used to Stabilize Stream Channel

A revetment is a tree trunk or root ball inserted into a stream bank and extended into the channel. Generally the lower part of the tree trunk is used. The revetment creates additional habitat areas and helps dissipate energy in the water. However, the adjacent stream banks may need protection from the water's transferred energy.



llustration of a Rock/Root Wad Revetment

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 into mature shrubs that, over time, stabilize the soils and restore the riparian zone habitats. Live stakes can be used in combination with brushmattresses if additional stabilization is required. The Brush mattress is a woven layer of branches in which the live stakes are planted into.

Joint planting is installation of live willow stakes between existing rocks along the stream bank. It is intended to increase the effectiveness of the rock system by forming a living root mat under the rock and to improve the environmental function and aesthetics of the rocked bank. The rock should be loosely placed no deeper than two feet.

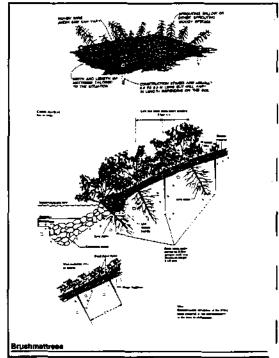


Illustration of Live Stakes used with Brushmattress to stabilize slopes.

Fascines are live branches placed into ditches and buried at a shallow depth. This method offers the advantage that most, if not all, of the embedded stems which are in contact with the soil have a chance to take root.

4.1.3 Wetland Retention

Storm water retention should be provided through the construction of wetland areas. Wetlands are located in the floodplain adjacent to the stream channels and store surplus storm water to prevent flooding. Wetland vegetation is adapted to the fluctuating water conditions. Many species remove contaminants from storm water, such as the petroleum products which enter the streams from parking lot areas.

Wetlands are comprised of varying water depths which attract different plant species. Create these varying water depths to accommodate a diversity of plant and aquatic species.

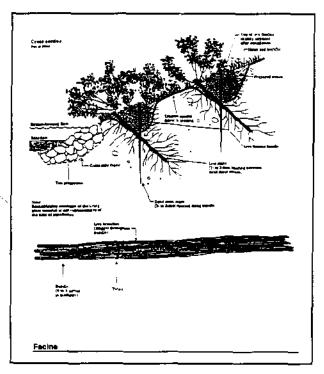


Illustration of fascines used to stabilize slopes.

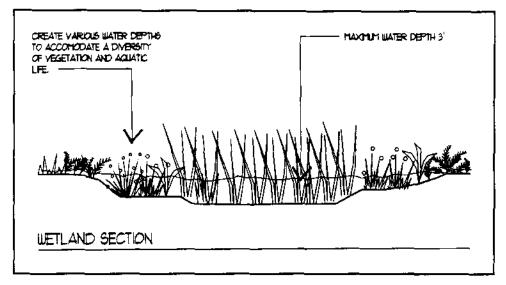


Illustration of Wetland section showing proposed varying water depths.

Existing wetland species- Bald Cypress and Iris.



Existing Condition

This area was part of the stream system in Grant Park in the early 1900's. Today the area is usually wet, soggy and unusable.



Plant group of similar species.

Use stone to define edges in mowed areas.

Boundary planting .

Proposed Improvement

Create wetland zones to detain stormwater runoff and allow it to recharge the groundwater supply. Use native wetland species which will tolerate flood conditions and reduce pollutants from the stormwater.

4.1.4 Vegetation

Native plant species which typically grow in stream and wetland zones serve several functions: (1) to provide stabilization of stream slopes using varying root systems and (2) to provide habitat for particular aquatic species. These plant species can acclimate to the diverse water levels and low oxygen levels in the soil. The stream zone is divided into several different riparian buffer plant zones. Following is a discussion on the different riparian buffer plant zones:

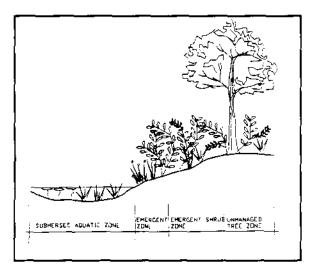


Illustration of riparian buffer plant zones typically found along stream channels.

The Submersed Aquatic Zone is normally submerged and corresponds to base flow in streams and to the annual low-water level in lakes, reservoirs and ponds. Submersed plants and a few floating-leaved plants typically grow in this zone. Submersed aquatics have stems and leaves that grow beneath the surface of the water. They are usually restricted to habitats that have permanent standing or flowing water.

The Emergent Zone is inundated during much of the growing season, and the dominant vegetation is a mixture of grasses, sedges, rushes, and emergent herbaceous plants.

The Emergent/Shrub Zone is inundated during periods of average high water and normally contains a mixture of grasses, sedges, rushes, herbaceous emergents, shrubs, and a few of the more water tolerant trees.

Unmanaged Tree Zone is occassionally inundated during periods of high water and the dominant species typically found in this zone are trees, shrubs, ferns and vines.

The height of trees and shrubs should be considered in planning the riparian planting. Tall trees should be selected to provide stream shading which will moderate and stabilize water temperatures. Small shrubs and trees should be used in areas where streambank stabilization is required and where open views are desired.

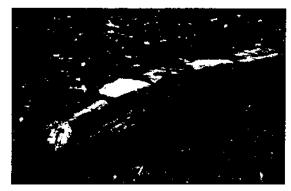
Locate plant species in appropriate hydrologic zones. Water tolerance is the approximate proportion of the growing season (mid March thru October) that a plant can tolerate saturated or shallowly inundated soil. Saturation refers to flooding to the surface of the soil, whereas inundation is flooding above the soil surface. During flood events, plants are totally inundated for short periods of time. Prolonged inundation can result in loss of vigor or death of the plant. On the following pages are lists of plant species which should be used for the stream and wetland zones.

4.1.5 Culvert Headwalls

Many of the headwalls at Grant Park are in poor condition and should be rebuilt using appropriate materials and design. Historic walls in the park are constructed of local block granite in rectangular shapes with flush mortar joints. These walls should serve as models when rebuilding the headwalls in the park. For the stream restoration areas, a natural stack-stone headwall would be appropriate. The stone used for the headwall should be the same as the creek stone in the channel.



This granite headwall is constructed of appropriate material. The buried culvert should be removed and the drainage channel restored to a stream channel.



View of stack stone headwall used at Iroquois Park in Louisville, Kentucky. This headwall would be appropriate in Grant Park. (Iroquois Park was also designed by the Olmsted Firm)



View of historic bridge during with culvert draining into natural stream channel. (Photo taken by John C. Olmstead)



This existing headwall should be replaced with either granite or a stacked stone structure. The slopes should be stabilized with jute matting and vegetation.

4.2 Pedestrian Circulation

4.2.1 Primary Path

The primary path should be an eighteen-foot wide asphalt paved pathway to provide a circuitous system for various forms of pedestrian traffic such as bicycles, roller skaters, strollers, joggers and walkers. Most of the primary path follows the current road system.

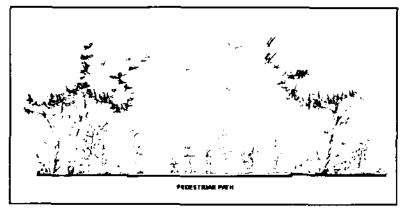


Illustration showing the desired character of the proposed Primary Pedestrian Path.

Olmsted designed carriage and pedestrian paths with long sweeping curves to enhance the park user's experience and create the visual attractiveness in the landscape. The pathway illustrated in the Master Plan should be followed to achieve the desired effect of these curves. Where possible the alignments of the carriage paths designed by Olmsted in The 1904 Master Plan have been incorporated in this Master Plan as the primary pedestrian path. The record is unclear as to how much of the system was built. The 1904 design still responds to today's topography and is appropriate to use for its functional aspects and aesthetic appearance.

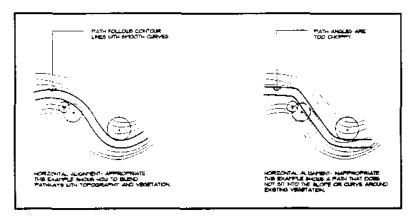


Illustration of Horizontal Alignment desired for pathways.

The prohibition of vehicular traffic from inside the park will eliminate the need for most of the vehicular barriers, regulatory signage and yellow-painted curbs which detract from the park landscape. If vehicular barriers are required in particular areas then bollards should be used as illustrated in Section 4.4.6 Bollards.

4.2.2 Secondary Paths

The secondary paths should be five to eight foot wide paths which provide access to destination points and nature walks through the landscape. Heavily traveled paths should be constructed of asphalt paving. This material is visually less intrusive than white concrete. Less traveled paths such as the nature trails should be constructed with 'Stabilizer', a product which uses natural plant extracts to bind existing path material as a hard surface. The 'Stabilizer' gives a very natural character to the path similar to the 'soil' paths of the early 1900's.



Remove all vehicular barriers and vellow paint from curbs in Grant Park.

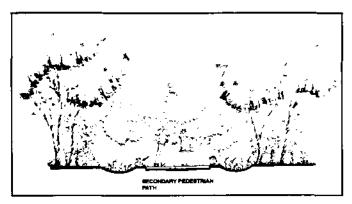
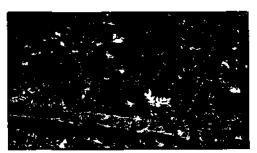


Illustration of desired character for the proposed Secondary Pedestrian Path.

Existing historic paths should be restored using material and design patterns consistent with the original path. Preserve and maintain granite edging along the paths.





View of granite edgings which should be preserved along the pathways.



View of sidewalk restoration which retained the historical character by reusing old bricks and following the existing paving pattern. (Photo taken on Park Avenue along Grant Park, summer 1998)

4.3 Vehicular Circulation

4.3.1 Parking Lots: Design

Vehicular circulation should be limited to the two existing parking lots accessed from Cherokee Avenue and Boulevard Avenue. These parking lots should be planted with large native shade trees so they will blend with the landscape.

Pedestrian circulation through these parking lots should be defined and traffic calming measures installed. Shrubs and groundcovers should be planted underneath the tree to prevent erosion on slopes and to 'green up' these areas. Avoid using species with thorns such as the Chinese and Japanese Hollies.

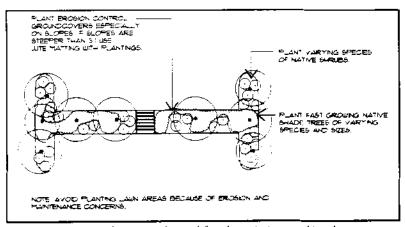


Illustration of the character desired for the existing parking lots.

Stormwater runoff from the current parking lots should be directed into the proposed wetland areas. The bioswale approach illustrated below addresses several concerns: (1) stormwater is eliminated from the overloaded sewer system, (2) erosion is controlled and (3) contaminants are filtered from the storm water before they enter the groundwater.

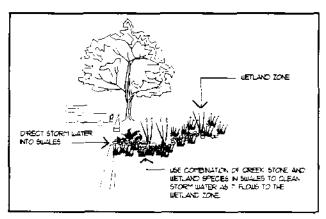


Illustration of the proposed plan for parking lots.

4.3.2 Parking Lots: Materials

When the parking lots are resurfaced, consider paving with porous asphalt. The porous paving will allow storm water to reenter the groundwater supply. The structure of the material will remove petroleum contaminants from the storm water runoff.

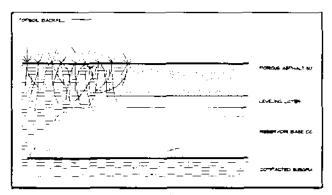


Illustration of paving detail for parking lots.

4.4 Site Furnishings

4.4.1 Retaining Walls

The existing retaining walls in Grant Park are constructed of local granite block in rectangular shapes with flush mortar joints typical for this period in the Atlanta area. The typical width was one block thic These walls were mostly used as low retaining walls between two and six feet high.

New retaining walls should be similar in design and construction materials to existing walls in the park.





View of existing granite retaining walls which should be used as models for future retaining walls in the park.

4.4.2 Fences and Enclosures

Fences and enclosures should be planted with vegetation to blend with the surrounding landscape. Decorative fencing should be used in areas which need to remain open for accessibility and security.



View of chain-link fence surrounding the Zoo perimeter. This fence should be replaced with either vegetation or a decorative style fencing



Example of an appropriate decorative style fencing.

4.4.3 Benches and Picnic Tables

Benches should be placed selectively along pathways and senic areas such as the stream and wetland zone. The placement should be random in these areas and not form a line along the pathways. Several benches should be provided at various gathering areas and vehicular drop-off areas.

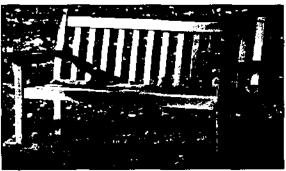
Benches should be compatible in design with the historical character of the park. The style of bench should be simple, functional and characteristic of a natural park setting. Metal benches tend to be hot in the summer and cold in the winter



View of existing bench at Grant Park which is a appropriate because of its simple, nonintrusive design and wood material.

and should be avoided. Plastic benches also absorb heat more readily than wood (becoming approximately 10 degrees warmer in the summer) and are not recomended for aesthetic reasons.





Illustrations of appropriate benches to use at Grant Park.



Swings could be used in selected areas of the park as an alternative to benches. The photograph below of couple was taken at Grant Park in 1924.



Photo of Irma Twitty and E.A. Speer at Grant Park in 1921. (Photo provided by Atlanta History Center.)

Picnic tables should be easily accessed from the parking lots. The picnic areas should be located under shade trees for protection from the elements and also to blend these areas with the natural park setting. Individual picnic tables should be sited in more remote areas of the park. The ground surrounding the picnic areas should initially be mulched with four inches of hardwood or pine bark to prevent erosion. Allow the fall leaves that cover the ground to remain in these areas.



View of existing concrete picnic tables at Grant Park. The flourescent green paint should be removed

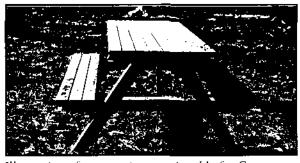
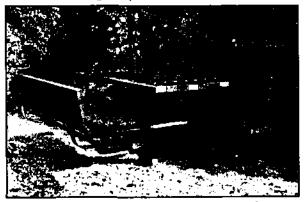
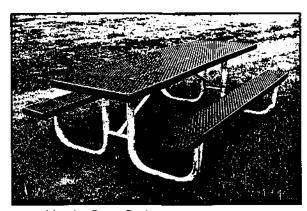


Illustration of appropriate picnic table for Grant Park.





llustrations of inappropriate picnic tables for Grant Park.

4.4.4 Trash Receptacles

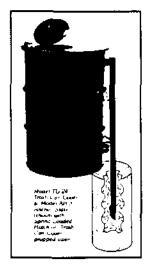
The trash receptacles at Grant Park should be replaced with more appropriate ones. Trash receptacles should be compatible in design with the historical character of the park They should be sited near vegetation so they blend with the landscape. The chains should be removed because they give the park an appearance of negligence.

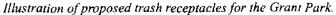


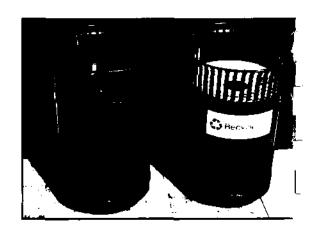


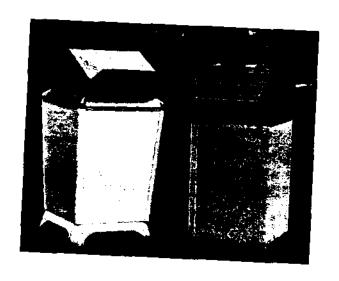


View of existing trash receptacles in Grant Park which should be replaced with appropriate ones.











llustration of trash receptacles not recommended for use in Grant Park.

4.4.5 Lighting

The perimeter sidewalks of Grant Park and the two parking lots should be furnished with appropriate street lights. The street light used should be of a pedestrian scale and of appropriate material for a historical park.

The current highway cobra lights are not in scale or of appropriate design for the park. These lights are designed for highways and major roads.



View of inappropriate highway cohra light fixture in Grant Park.



Photo of a recommended light fixture for the park.

Since it is recommended to close the park at dark, lighting within the park is not necessary. This decision was based on lack of security in the park at night. If in the future security is provided, the primary pedestrian pathway should be furnished with the street lights suggested for the perimeter of the park.

4.4.6 Bollards

Since vehicular traffic is prohibited from the interior of Grant Park bollards will only be necessary along the perimeter of the park at the entrance of primary pedestrian paths. The bollards should be spaced to prevent automobile access, and to encourage bicycle and pedestrian access.

There have been several styles of bollards installed at Grant Park. The older granite bollards are an appropriate bollard to repeat. When using existing models for a design it is important to follow proportion, scale, material, and color as closely as possible. The more recent granite bollards installed at Grant Park do not follow the proportion of the historical bollards.



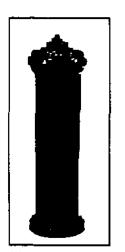
View of existing granite bollards at Grant Park.

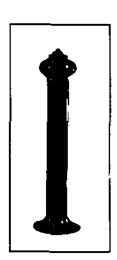
The bollards used should be of materials such as granite or metal. The colors should blend with the other elements in the park such as the local gray granite or black metal which was commonly used in the early 1900's. Avoid plastic materials and bright colors. Bollard styles that would be appropriate are illustrated below.





Illustration of inappropriate bollard that should not be used at Grant Park.





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Illustrations of appropriate bollards for the park.

Barrier-gates should be avoided except for closing the two parking lots at night if this is required. Use metal painted black and avoid yellow or yellow/black striped gates. These areas are well lit and visibility of black gates should not be an issue.

4.4.7 Bike Racks

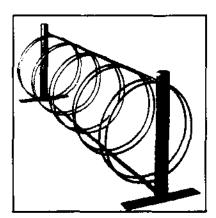
Bike racks should be provided along the perimeter of Grant Park at several major entrances and within the park at destination points such as the North Field, Plaza, Gazebo, and recreation facilities. Most of these locations will only require a rack which can accommodate four to six bicycles. The bike rack locations should be placed in cooperation with the City's future plans for bike paths connecting with Grant Park.

Bike racks should be placed along the primary pedestrian path in locations which will not interfere with traffic flow. Avoid locations which will be intrusive to the aesthetics of the park and destination features; for example, do not place a bike rack on top of the Fort Walker site or along the scenic path leading up to the gazebo.

Bike racks should be of a black metal material with a simple and aesthetically pleasing design.



View of existing bike rack in the plaza area. This style is appropriate, especially painted black.



View of an appropriate bike rack which could be used at the park.

4.4.8 Signage

Minimize signage throughout the park, especially the regulatory signage. Avoid negative signs. Educational interpretive signage should selectively be added to important sites such as Fort Walker, the entrenchment lines, the historic streams, the historic bridge, and the historic gazebo. Keep directional signs simple. Do not over design signs. Consider placement of signs-blend them with surrounding vegetation while maintaining visibility.

Signs will be viewed by pedestrians and cyclists. Design should reflect this function in its size, height, color and placement. These elements should complement the historical and natural character of Grant Park and be subtle in all regards. The signs should be consistent in materials and character throughout the park, although not necessarily matching.

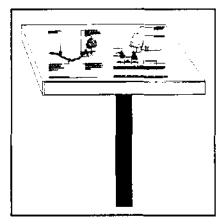
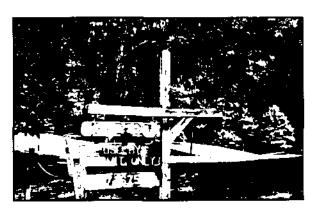


Illustration of proposed educational signage that will not block views and detract from the natural character of the park.



Illustration of appropriate signage for Grant Park,

Most of the existing signage in the park is obtrusive and not visually pleasing. The signs are too big. Most signs have a 1970's style instead of a more historic character.





View of existing signage in the park. The overdone signage detracts from the park's natural character.

4.4.9 Bridges

Bridges should be used for pedestrian paths crossing the stream and wetland areas. Bridges will eliminate the need for culverts which transport water under these pathways. Bridges will serve to maintain the visual connection of the streams.

There are several historic bridges from the early 1900's documented by J.C. Olmsted. They are of simple timber construction. These should be used as models for proposed bridges.





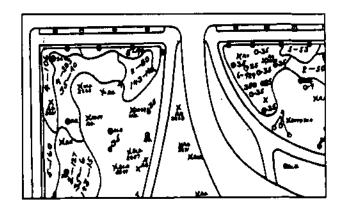


Photographs of bridges at Grant Park during the early 1900's. (Photos taken by J.C. Olmsted)

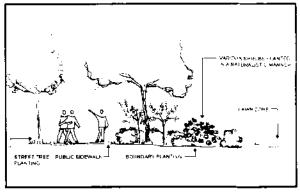
4.5 Vegetation

4.5.1 Boundary Planting Zone

The Boundary Planting Zone should be a mixture of various size shrubs and occasional trees to separate the park from the surrounding neighborhood. It should define access into the park and frame views from and into the park. It should combine naturalistic plants with similar textures, varying flowering and fruiting habits, to create structure year-round along the perimeter of the park.



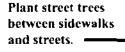
View of Olmsted's planting plan illustrating various plant species being used with smaller species wrapping around larger species to create a naturalistic planting area. Each number keys to a list of shrubs for that particular area.



Recommended character for the Boundary Planting Zone at Grant Park. The boundary planting zone is proposed for areas adjacent to buildings and structures and along the perimeter of the park.



Existing Condition



Replace highway cobra lights with Pedestrian scaled light fixtures.

Use tree grates to allow for more root space.

Plant Olmsteadian boundary planting to separate sidewalks from parking lots.



Proposed Improvement

Existing Condition/Proposed Improvement. View of Cherokee Avenue parking lot with proposed boundary planting and streetscape improvements.

The plantings currently in the Zoo visitor areas are similar to Olmstead's Boundary Planting and should serve as a model for the proposed Boundary Planting Zone. A subtle mixture of layers and heights in these plantings emulate Olmstead's naturalistic planting style.

Use the boundary planting adjacent to all structures, buildings and parking lots within the park to blend these areas with the natural parkland. Avoid a typical foundation planting look by mixing a variety of trees, shrubs and groundcovers in the plantings.



Existing Condition



Proposed Improvement

The Boundary Planting Zone should be used adjacent to any developed areas within the park to blend these areas with the natural parkland.

4.5.2 Wooded Zone

The Wooded Zone is subdivided into three different plant communities: (1) The Woodlands, (2) The Forest and (3) The Rich Forest. Topography, drainage and vegetation should be identified to determine which of these plant communities should be matched with the various areas proposed to be Wooded Zones as illustrated on the Master Plan.

Existing wooded areas with diverse vegetation should be preserved for their role in preventing erosion and habitat diversity. A primary focus for these areas should be to eradicate any invasive exotic plant species so they will not overtake the desirable vegetation.

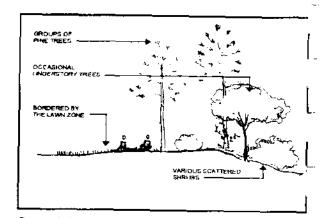


View of existing natural area in Grant Park. These landscapes should be preserved for their importance towards erosion control and habitat diversity.

The Woodlands

Woodlands should be created in existing lawn areas which are open, sunny and lacking large hardwood trees. Dominant species to include in this landscape are trees, both upper canopy and under-story, and a ground layer.

Tree species growing in woodland areas typically have a loose canopy allowing for adequate light to reach the ground layer vegetation. The woodland perennials and groundcovers typically require partial sunny conditions allowing them to be installed soon after tree planting. Shrub planting should be minimal and used primarily as accent specimens. Shrubs should buffer undesirable views and frame important views.



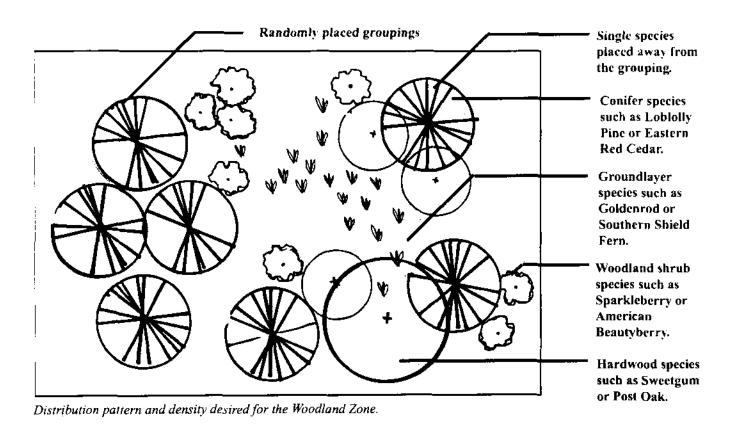
Desired character for The Woodland Zone.

The mature woodland will eventually become a forest as upper canopy trees mature and provide shade for shrub and ground layer vegetation. The groundlayer vegetation should be encouraged to change as light conditions change.

An approach to establishing a woodland plant community is outlined below:

- Define a boundary between lawn area and proposed woodland.
- Remove undesirable vegetation. Consecutive tillings (three to four-inch depth) should be used to eradicate turf or other undesirable species. Do not till in areas under tree canopies because this will damage tree roots.

- Mow all grass clippings and dump leaves into The Woodland Zone to achieve a mulch layer throughout the area. (A minimum of three inches is desirable.)
- Plant pine and fast growing hardwood saplings during the dormant season. See sketch below for tree spacing recommendations. Mark each planted tree with an eighteen-inch wooden stake to avoid damage from weed eaters.
- Create a maintenance plan: Educate maintenance staff on desirable and undesirable species likely to inhabit the site. Encourage native species which propagate on their own in these areas. Schedule periodic (depending on growth rate of undesirable species) weed eradication. Cut, dig out, or spray depending on species being eradicated. Do not mow these areas because the desirable species will be lost. Avoid broadcast herbicide spraying. Spot spray herbicide only on species which cannot be eradicated by other methods.
- The following spring and summer establish a four- to six-inch depth of mulch using grass clippings and leaves throughout the area.
- During fall allow leaves to cover grass clippings.
- During late fall plant shrubs, woodland perennials and groundcovers.
- During the dormant season plant additional tree species, especially under-story trees and specimen hardwoods.
- Continue to blow grass clippings into these areas each summer and allow leaves to remain.
- As the woodland becomes a forest community plant species listed for the forest zone.



Following is a list of species recommended to plant in the Woodland Zone:

Primary Species

Companion Plants

Shortleaf Pine

Loblolly Pine

Virginia Pine

Eastern Red Cedar

Sycamore

Blackgum

Post Oak

Sweetgum

Hickory

Sassafras

Fringetree

Dogwood

Eastern Persimmon

Serviceberry

Redbud

Sparkleberry — American Beautyberry
Pines

Dogwood

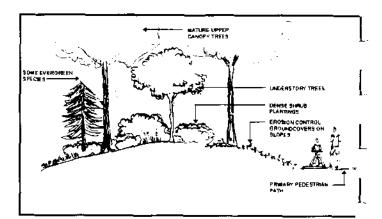
Partridge Berry Southern Shield Fern

Goldenrod

The Forest

The Forest Zone should be created in areas with an existing mature tree canopy. The Forest Zone will differ from the Rich Forest Zone in the amount of moisture available to vegetation. The Forest Zone is a drier landscape typically located along ridges and upper slopes.

The Forest Zone primarily should have understory trees and shrubs added. These plantings are necessary to separate spaces within the park. Species are selected for their attractiveness to

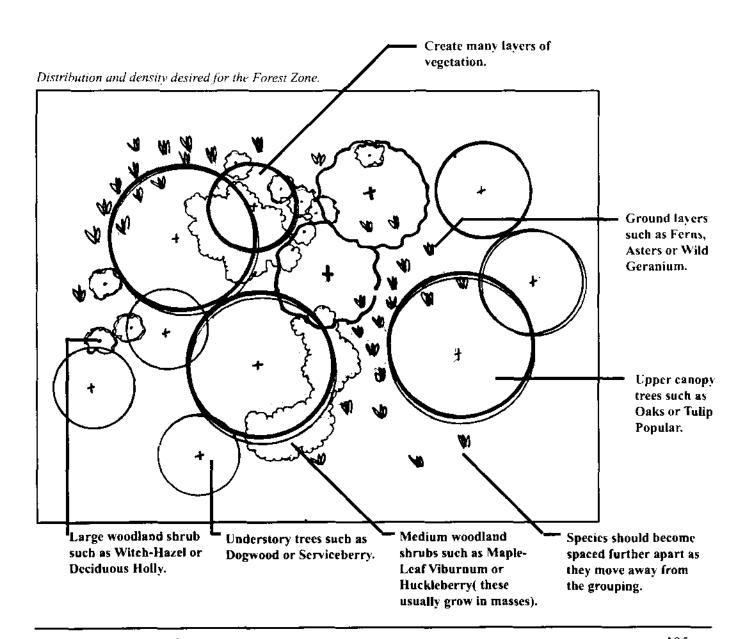


Desired character for the Forest Zone.

wildlife and low maintenance. Masses of shrubs should be located following natural distribution patterns for the particular species. Groundcovers should be used in areas susceptible to crosion.

An approach to establishing a Forest Zone is outlined below:

- Define the Forest Zone.
- Eradicate undesirable vegetation following guidelines listed in the previous section.
- Mulch with shredded pine or hardwood mulch. (A minimum of three inches is desired.) Mulch is available from local tree service companies typically at no charge.
- During the late fall plant under-story trees, shrubs and groundcovers. (Particular groundcover species should be planted in early spring.) See Illustration #: Planting Specifications.
- Allow leaves to remain as mulch on top of the shredded mulch.
- Allow hardwood saplings to grow so the forest is perpetuated. If necessary initiate the planting of hardwood saplings during the dormant season.



Following is a list of species recommended to plant in the Forest Zone:

Primary Species

Companion Plants

White Oak Red Oak

Southern Red Oak

Post Oak

Hickory

Pine

Beech

Tulip Poplar

Beech

Dogwood

American Holly

Sassafras,

Deciduous Holly

Serviceberry

Pines

Coral Honeysuckle

Huckleherry

New Jersey Tea

Witch-haze[

Possumhaw

Trumpet Honeysuckle

Maple-leaf Viburnum

Milkweed

Wild Red Columbine

Aster

Wild Indigo

Wild Geranium

Hepatica

Goldenrod

Southern Shield Fern

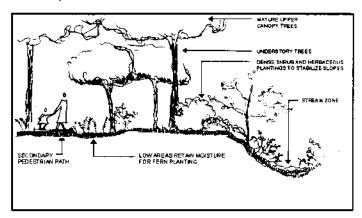
Christmas Fern

The Rich Forest Zone

The Rich Forest Zone like the Forest Zone should be allocated for areas with existing mature tree canopies. This zone will be located in areas of low topography where there is an abundance of moisture for vegetation. The stream restoration projects will primarily be located in the Rich Forest Zone.

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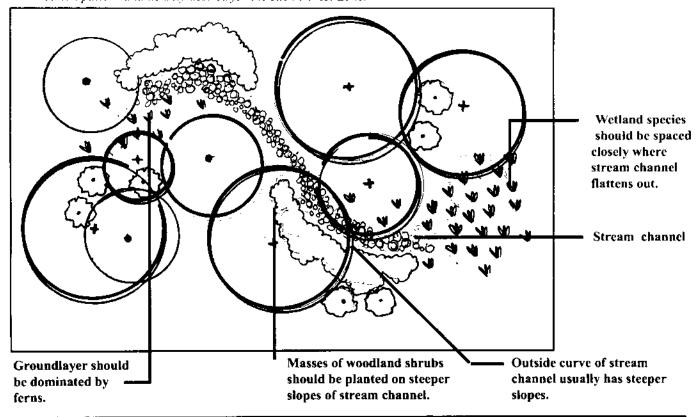
Ferns and woodland flowers combined with flowering shrubs and under-story trees should be characteristic of this planting zone. These areas will include many pedestrain paths and sitting areas; providing opportunities for close viewing. The species selected are attractive to wildlife and will naturalize. Quite a few species have a pleasant fragrance.



Desired character for the Rich Forest Zone.

The approach to establish the Rich Forest Zone should be similar to the Forest Zone. Fertilizers and mulch should be avoided in areas adjacent to the streams to prevent these materials from entering the water.

Distribution pattern and density desired for the Rich Forest Zone.



4.5.3 Meadow Zone

The Meadow Zone is recommended for the slopes along the proposed stream restoration near the existing swimming pool area. This is an open sunny landscape which needs erosion control plantings to stabilize the slopes between the existing multi-use field and proposed stream channel. The limited space between these two areas does not allow for the slope to be cut back with grading. Erosion control matting such as the jute matting in combination with native grasses and wildflowers will stabilize these slopes and maintain the openness of the landscape which is planned as a lawn zone within the surrounding wooded zone.

A mix of these species provides pollen, seeds and habitat for many bees and birds. The deep roots of native grasses provide erosion control and reduce weed competition. The recommended combination of species will provide a continuous blooming period throughout the growing season. During the winter months the grasses have showy seeds and provide food and shelter for birds. The species listed were chosen for their durability and visual interest.

The meadow should be seeded in the late fall using a ratio of 70% native grasses to 30% native wild-flowers. Soil surface should be cultivated to a depth of three inches, seeded, and mulched with a very light layer of wheat straw. Install jute matting on top of seeds and mulch to prevent erosion until vegetation is established.

Maintenance requirement is an annual burn if feasible. Otherwise annual mowing or weed eating late winter/early spring is necessary. If the grasses and wildflowers are cut too early, for example in the late fall, they fail to provide seeds and habitat for birds and other wildlife species.



Photo of a native grass and wildflower meadow which is the desired effect for The Meadow Zone.

4.5.4 Stream Zone

The Stream Zone is discussed in the Stream Restoration section of this report. See Section 4.1: Stream Restoration.

4.5.5 Lawn Zone

The lawn zones will create an open landscape to contrast with the surrounding wooded and stream zones. The lawn provides informal play areas and a connected off-path walking route through the park. There should be an obvious delineation between lawn and other landscape zones for visual clarity and to serve as a mowing guide.

These areas should be essentially clearings in the woods. It is important to keep theclearing at a comfortable scale; the islands will give picnickers and sports watchers a comfortable sitting area with a good view of the lawn activities.

Fescue grass is the preferred type of lawn for its natural character and evergreen quality, but may not be feasible due to maintenance cost. Bermuda grass could be used and is more drought tolerant, but is also more aggressive and will become a maintenance issue adjacent to natural plantings.

The establishment of lawn will require eliminating the existing vegetation. Consecutive tillings are preferred to herbicide spraying and this will eliminate most weeds except for rhizomatic species. Tilling will also help aerate the compacted soil. Organic fertilizer and lime should be added according to soil tests for each area. This additional cost will greatly help establishment of the lawn and reduce later reseeding costs. Either fescue or bermuda grass seed should be spread and lightly mulched with wheat straw. Fescue should be seeded in the late fall and bermuda in the early spring.

Maintaining the lawn area at several inches the first two years will greatly help reduce weed competition by preventing the annual weeds from growing mature seed heads. Seasonal lime and fertilizer applications should be followed to reduce disease and weed problems. Avoid using chemical fertilizers and weed sprays since these areas will be used by children.

4.5.6 Exotic Species Removal

There are several areas requiring the removal of exotic species. In particular English Ivy and Privet which have spread throughout many of the natural areas. Most of these species can be dug out by hand or with a small tractor.

If these species cannot be eradicated by mechanical methods they should be cut back to several inches. When leafs re-shoot spray only this new growth with an appropriate systemic spray. This will greatly reduce the amount of spray required since large areas will not be broadcast sprayed.



View of English Ivy which should be removed.

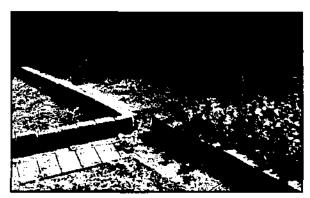
Specialty plantings of exotic species have been planted adjacent to buildings and gateway entrances. These species should also be removed.



These holly plantings in front of the restrooms should be removed and replaced with native plantings appropriate for the Forest Zone.

4.5.7 Raised Bed Plantings

All raised-bed and potted plantings should be removed from Grant Park. They require intensive maintenance and cost. They do not blend with the natural landscape. Olmsted strongly discouraged the installation of specialty plantings and specialty plantings. These areas should be returned to the natural landscape illustrated in the Master Plan.



Views of raised bed plantings which should be removed.

4.6 Buildings and Structures

The construction and expansion of buildings and structures should be avoided with the exception of two proposed entry structures and a restroom facility, if needed, in the North Field area. The parkland since its inception has been threatened by various developments. Zoo expansion, construction of recreational facilities and parking lot developments have already destroyed much of the natural parkland.

The existing historic gateways constructed in the 1920's should be restored and maintained. The existing historic picnic shelters and gazebo should be restored and maintained in their current locations.

The existing recreational facilities should be maintained, but not expanded upon. The facilities should remain in their existing locations. The surroundings of these facilities should be improved to help blend these structures and buildings with the landscape.

4.6.1 Entry Structures

There are several existing gateway entrances identified on the Master Plan. Most of these gateways only require minor restoration such as graffiti removal and repointing of mortar joints.



Existing Condition
View of existing Fort Walker Gateway Entrance which require restoration of the stone towers and improvements to the pedestrian circulation.



Use Olmstedian

Boundary Planting at
entrance gateways. —

Use black iron bollards to separate pedestrian paths from the street.

Proposed Improvement

The Ormond Street Gateway Entrance needs major restoration of the Overlook and the Erskin Fountain. _ The chain-link fence should be removed. Where a barrier is required for protection of Zoo animals an appropriate decorative fencing such as black iron fencing should be used. An unobstructed view should be restored looking into a non-animal exhibit maybe be necessary for safety issues. The exotic grasses should be removed from the fountain and Boundary Zone plantings installed. The fountain should be supplied with water and maintained.



Exsiting Condition

Existing condition of Ormond Street Overlook.



Proposed Improvement
Proposed Improvement for the Ormond Street Overlook.

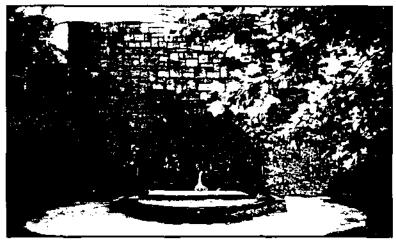


View of existing Ormond Street fountain which should be supplied with water.

The Milledge Avenue Gateway Entrance needs graffiti removed from the stone work. The fountain tiles should be restored and the fountain itself should be supplied with water.



Existing Condition



Proposed Condition

New entry structures should be limited to the two proposed on the Master Plan. The Olmsted Plans of 1912 show two entry structures. Both of these were likely simple timber structures to serve as gateway meeting places for park visitors. It is recommended to construct these structures using a simple and functional design that would blend with the historic and natural character of this park. Park structures from other Olmstedian parks could be used as models for the design.

The materials for construction of these structures should be timber, granite, iron, tin, or similar materials which were being used during the early 1900's. The proposed locations for these structures are shown or the Master Plan. The footprints illustrated on the Master Plan should be consulted for size and shape of structures.

The Boundary Zone Planting should be installed adjacent to the entry structures so they will blend with the surrounding landscape.

4.6.2 Historic Structures

The historic gazebo and picnic shelters should be preserved with their current uses and at their existing locations. As maintenance and restoration of these structures is required, original materials, colors and design should be followed.

4.6.3 Restrooms

If an additional restroom is required in the park, it should be constructed in the North field area in conjunction with the proposed entry structure. The restroom should be physically attached to the proposed entry structure. Olmsted spoke out strongly that restroom facilities should not sit alone in the park.

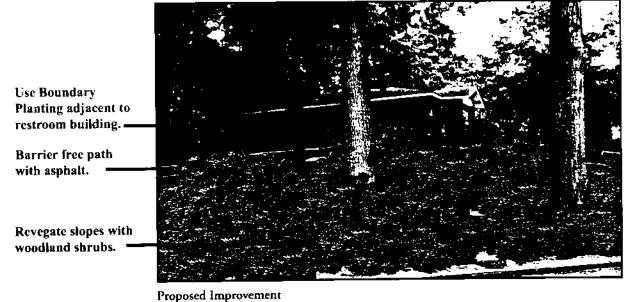
The dimensions, shape, massing, proportions, rhythm, scale/height and materials/ architectural elements should be consistent with the entry structure and the architecture in the Grant Park area.

The construction materials for the proposed restroom should be consistent with the materials proposed for the entry structure. The entry structure and restroom should appear as one structure and not two structures attached.

The existing restroom should be buffered as much as possible with Boundary Zone plantings since its architecture is not appropriate for the historical park. The brick walls should be planted with native vinc such as virginia creeper which would not harm the mortar joints. Avoid using trellises which will stand out and also create maintenance tasks.



Existing Condition View of existing restroom facility in the park. Boundary Zone plantings should be used to blend this building with the natural parkland.



4.6.4 Mechanical Services

The placement of utility boxes and other mechanical services should be accomplished without detracting from the natural character of the park. These services should be sited out of primary viewing areas and buffered with Boundary Zone plantings.



View of existing utilities which should be located in a less visible area and buffered with Boundary Zone plantings.

4.6.5 Play Structures

The two existing play structures in the park should be relocated to areas less intrusive to the natural park character. The proposed locations are illustrated on the Master Plan. The playscapes should be sited into a dark brown mulch bed instead of the visually intrusive white sand with concrete curb bed.



View of playscape at Fort Walker which should be relocated to a more appropriate site. The concrete and bright white sand should be replaced with a brown mulch.

There should be a maximum of two play structures in the park not exceeding the size of the existing structures. The structures should be constructed of natural wood material to blend with the natural character of the park. Bright plastic play structures should be avoided.

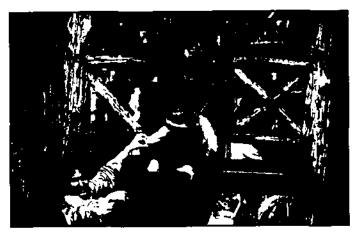


Photo of a playscape constructed with traditional materials appropriate for Grant Park. (Photo provided by The Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes)

4.7 Specific Guidelines

Specific guidelines are recommended for particular areas in the Park. These guidelines are specific to each site and should be referred to when working in these areas.

4.7.1 Fort Walker

The Fort Walker site is the only remaining section of the fortification constructed in Atlanta during the Civil War. The Cyclorama, which houses the famous Civil War mural, does not even mention the Fort Walker site in its interpretive program, even though they are located near each other in Grant Park. The Fort Walker site is an opportunity to provide education and should be included in the Civil War information at the Cyclorama.

The Fort Walker site should be returned to its original character emphasizing and preserving the entrenchments which were constructed during the Civil War. The important historical view of Atlanta from the top of these entrenchments should also be preserved. The mature canopy of trees should be preserved and perpetuated by planting young specimens in the same areas.

The play structure and concrete curbing should be removed from the top of the entrenchments. The tall exotic grasses that were planted along the top of the entrenchments should be removed.



View of Fort Walker-These inappropriate additions of play structures should be removed from this important historical site.

The slopes of the entrenchments should be planted with native grasses such as broomsedge or upland river oats to control erosion and prevent visitor access on these slopes. A lawn grass should be planted surrounding the native grass plantings to accommodate visitor access and to emphasize the topography of the entrenchments.

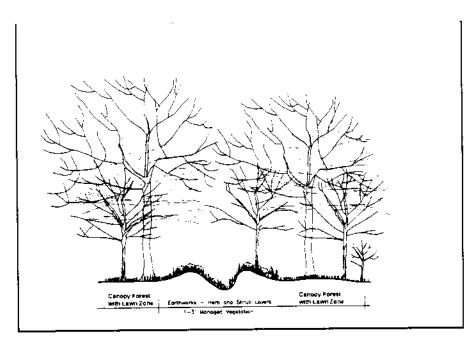
If use of Fort Walker increases and damage to earthworks results from heavy pedestrian traffic, consideration should be given to the addition of a wooden structure such as a boardwalk that would allow access. The structurestructural elements of the boardwalk should not damage the earthworks with structural elements. Such a structure would allow a visitor to stand behind the earthworks and enjoy the view without damaging the historic element. The structure should be designed to blend with the landscape and not detract from the site.



View of erosion on the slopes of Fort Walker entrenchment.
Planting native grasses on the slopes will prevent this erosion.



Existing Condition *Existing condition of Fort Walker entrenchments.*



Proposed Improvement

Proposed improvement shows how the combination of native grasses and lawn will accentuate the slopes of the entrenchment.

The hardwoods which are beginning to block the view of Atlanta should be replaced with species which will not exceed a twenty-foot height. This will require cooperation from Zoo Atlanta, since many of these trees are within the Zoo site.



The historical view of Atlanta which will soon be blocked by hardwood trees. Also some tops of trees should be pruned and replaced with small trees or large shrubs.

From the Cyclorama visitors should be directed to Fort Walker, and educational signage should be provided at the entrenchments. The signage should be nonintrusive and complement the historic character of the site.

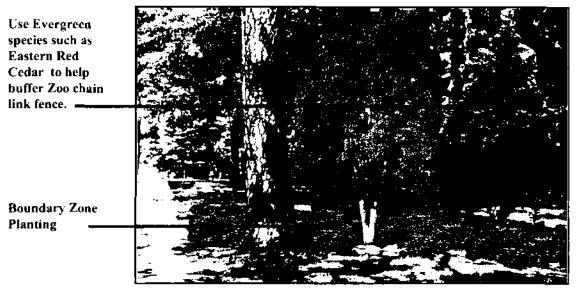
4.7.2 Zoo/Park Boundary

The Zoo has a tremendous negative impact on the natural parkland because of the buildings, storage, maintenance areas and fencing located along the perimeter of the Zoo. Coordination between the Zoo and Park is necessary to improve this boundary area. Discussions with the Zoo personnel have identified the proposed fence locations illustrated on the Master Plan. Extending the primary pedestrian path around the north end of the park can be accomplished by relocating the Zoo's fence. Establishing a Boundary Zone planting along the Zoo perimeter will help buffer this development from the natural parkland.



Existing Condition

View of the Zoo/Park Boundary along Cherokee Avenue.



Proposed ImprovementUse Olmstedian Boundary Planting along perimeter of Zoo area to give it a more parklike appearance.

In areas where the boundary planting cannot be used to cover chain-link fences because of access required, it is recommended to use appropriate decorative fencing such as the black iron fence illustrated below.



Recommended fencing for the Zoo boundary in areas where the Boundary Zone planting cannot be used for access needed.

4.7.3 Swimming Pool/Park Boundary

The swimming pool should be enhanced along its perimeter to help blend it with the surrounding parkland. The existing chain-link fence topped with rusty barb-wire should be replaced with the recommended black iron fencing mentioned in the section 4.4.2 Fences and Enclosures. The perimeter should be planted with the Boundary Zone Planting so that it will blend with the character of the park. Plants should allow for desired views into the pool area and screen the undesirable views such as the large expanses of concrete decking and pillars.

The concrete walls should be painted with fun colorful murals to help make this a more pleasing environment for the children. The proposed modifications are inexpensive and should be a priority in park construction since they will have a large impact regarding park beautification. The service drive accessing the pool should be minimized and separated from the pedestrian paths. Illustrated on the Master Plan is a one-way pull in/back out drive for service vehicles. This should be adequate for the occasional deliveries to the pool during the three months it is open. Removable bollards should be used at the Park Avenue/Berne Street Entrance to allow for vehicular access.



Existing Condition

View of Swimming Pool area as seen from the park area. The perimeter of the pool needs improvements to make this a more attractive area.

Replace barb wire fence with black decorative fence.

Use Olmsteadian boundary planting to help blend pool area with the surrounding parkland.



Proposed Improvement

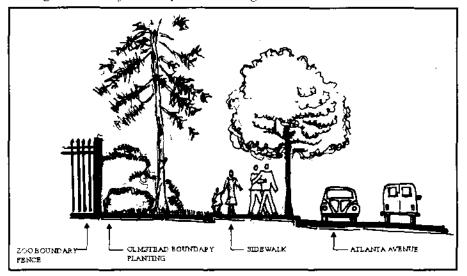
4.7.4 Atlanta Avenue/Primary Pedestrian Path/Zoo Boundary

It is essential to have a complete circuitous path for pedestrians through the park. The existing public sidewalk along Atlanta Avenue should be used to complete this path around the perimeter of the Zoo.

Widen and relocate the sidewalk several feet from Atlanta Avenue. Plant a buffer of street trees between the path and street. Plant the Boundary Zone planting between the path and Zoo boundary. These improvements will help achieve a more park-like character along Atlanta Avenue, which is currently treated as 'the backside' of the Zoo and Park.



Existing ConditionExisting conditions of the Zoo perimeter along Atlanta Avenue.



Proposed Improvement

Proposed Improvements along Atlanta Avenue to allow for continuation of the primary pedestrian path around the Zoo and a more park-like view for residents along Atlanta Avenue.

4.7.6 Amphitheater

The park area adjacent to the Milledge Avenue Gateway Entrance is used by a Shakespearean group for staging plays. It is recommended to facilitate this activity by maintaining the stormwater underground in this area and providing subtle terracing for seating along the existing slope. Construction of seating other than grass terraces should be avoided because structures would detract from the natural character of the landscape. The existing fountain could serve as the back-drop for staging the plays.

4.7.7 North Field

The North Field is the large multi-use field area adjacent to the tennis courts and basketball courts. The area is typically used for various activities such as softball, soccer, frisbee, and other active recreation.

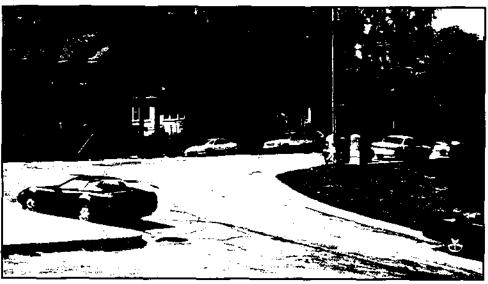
The large open field should have tree plantings added to break up the space into several smaller spaces as illustrated on the Master Plan. This will facilitate the various activities that occur simultaneously on the field. The plantings should primarily be large shade trees with lawn as the groundlayer to encourage a comfortable picnic and viewing area for the field activities. Tree spacing should be random to create a naturalistic character. Species recommended for the Woodland Zone and Forest Zone should be used for tree planting areas.



Illustration of desired character for North Field.

The eastern edge of the field has extremely steep slopes due to the large amount of fill that was added to this area. The steep slope is viewed by the primary path which wraps along the base of it. The height of the slope blocks the view to North Field and the scale is overpowering to the pedestrians path. This slope should be re-graded to create a less steep slope similar to Olmsted's original grading plans for this area. See Map 5: Olmsted's Grading Plan in the Inventory and Analysis Report.

The corner of Grant Park at Atlanta Avenue and Cherokee Avenue is very busy with vehicular traffic because the police station is located here. A pedestrian crossing is recommended for this corner to connect the Atlanta Avenue path to the Ormond Street Gateway and the rest of the park.



Existing Condition

Existing view of Atlanta Avenue and Cherokee Avenue intersection showing conflict of pedestrian path with vehicular traffic.



Pedestrian crossing using red brick paving.

Proposed Improvement

Proposed Improvement showing pedestrian crossing at this intersection.

4.7.5 Park Plaza

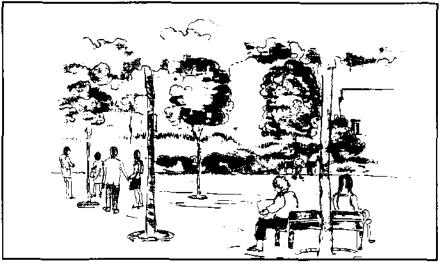
The area in common to the park land, Cyclorama entrance and Zoo entrance is currently a large open paved area. This proposed plaza space is an important space to the entire park as an orientation area/gathering zone. This area should not be incorporated into the Cyclorama or Zoo areas either physically using barriers or visually using materials similar to these areas. Visually it is essential for this space to be vegetated with mature canopy trees to transition this very developed area with the adjacent park land.

It is recommended to create a comfortable meeting space in this location for all Grant Park visitors by paving with a historical type paving and planting many native shade trees throughout the patio inset with historical black iron tree grates.



Existing Condition

Existing condition of transition space between parkland Zoo/ Cyclorama entrances.



Proposed Improvement

Proposed Improvement for a plaza area accommodating groups of park visitors.

4.7.6 Amphitheater

The park area adjacent to the Milledge Avenue Gateway Entrance is used by a Shakespearcan group for staging plays. It is recommended to facilitate this activity by maintaining the stormwater underground in this area and providing subtle terracing for seating along the existing slope. Construction of seating other than grass terraces should be avoided because structures would detract from the natural character of the landscape. The existing fountain could serve as the back-drop for staging the plays.

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Illustration of desired character for North Field.

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