

IIIC. PATHWAYS: THE NON-MOTORIZED ACCESS SYSTEM FOR PEDESTRIANS, BICYCLES AND HORSES

1. Overview

The "pathway" system is the movement framework of the Reston Open Space system. All the recreation facilities - swimming/tennis/fields/tot lots/multipurpose courts/nature study areas - provided by RLC, RHOA, Fairfax County and other in the Reston area - should have access provided by a comprehensive pathway system. The existing pathways have been costly to develop, and no open space improvement is more broadly used; however, the current paved pathway "system" used by strollers, walkers, joggers, bikers, cycle commuters (serious bicyclists), and the more limited soft/natural surface hiking and horse trail "system" does not yet fulfill its potential.

There are several reasons for this condition. One is that in spite of good intentions and considerable expense, there is no overall concept for all the pathway elements - this is no truly Comprehensive Plan. There are many agencies and individuals involved in the process, and no one has exerted effective dominion or coordination. The Regional Park Authority's major east-west trail system - the W&OD Regional Trail Park (one of the premier bike trail systems in the United States) - runs thru Reston. A County Trails Plan (coordinated to some extent by the County's Office of Comprehensive Planning) deals with some, but not all, of the county trails users and systems. There are county facilities, in particular County Park Authority facilities, with trails for pedestrians and horses. There are "pathways" maintained by RHOA as well as some by clusters. The County Public Facilities Manual requires developers to provide some elements of a comprehensive pedestrian movement system, and discourages others; the County Trails Plan requires pathways that will never be used, and allows obvious needs to go unanswered. Some links are put in at the request of community groups and adjacent residents; other are deleted for the same reason.

In part the lack of a comprehensive approach to the pathway system is due to a change in pedestrian circulation philosophies since Reston was initially planned and construction started. The initial concept was a pedestrian movement system that was completely separate from roadways. It would be made up of 8 ft. lighted pathways, crossing roadways with underpasses and bridges.

In Reston, as in Columbia and other planned communities, underpasses were prescribed early in the development cycle. Later it has been found that they were used very little. While the underpass under North Shore Drive at Hickory cluster is a tour de force of urban design and a significant

achievement, topography and road widths in many areas make most others little more than clammy culverts.

Second, the pathways were initially designed to wander thru the residential clusters. While pathways are very popular, they are not popular "in my back (or front) yard, thank you".

As the cost of construction, asphalt and electricity escalated, so did an 8 ft. lighted pathway system. Issues of safety and security, discussed by the Fairfax County Police with the Task Force early in our studies, also tend to make the earlier concept of pathways through the middle of wooded valleys less desirable.

The optimum system is now felt to be the one being implemented in North Reston; however, that leaves South and Central Reston with part of the old system and no clear direction as to how to utilize these parts and pieces to fashion a complete new system.

One systematic problem that exists, especially in Central and South Reston, is lack of linkages between cul-de-sacs. This is especially a problem in lake front clusters where linkages between cul-de-sacs would be a viable option to a lake front pathway.

An unfortunate situation with respect to the continuity of certain sections of the pedestrian pathway system has to do with construction timing. For example, occasionally it may appear that only a portion of a pathway has been built, resulting in an incomplete or disconnected system. The reason for this is that it may not always be feasible to build a given length of pathway across a number of different parcels at one time since adjoining parcels may be sold or developed at different times. Moreover, even a single builder may develop a parcel over several separate phases.

Although it would seem desirable to build a longer section of pathway at one time in order to provide for a more "complete" system, this pathway invariably would be disrupted to accommodate required entrance cuts, grading, utilities, roads and other site construction activity.

Signage - or some alternative way of finding ones way around on the pathways - is a significant problem. This is an issue that has been addressed by the Pathways Task Force. A comprehensive approach to the trail system would provide a basis, a point of departure for an effective signage and guidance system.

What is lacking is a general Master Plan - a guiding philosophy for the provision of a comprehensive pathway system.

2. Components

Reston's pathway system is made up of the following components:

- a. 8' asphalt "major" pathways
- b. 4' and 6' asphalt "minor" pathways/cluster connectors
- c. 4' concrete sidewalks
- d. wood chip trails from 3' to 5' in width
- e. natural surface (dirt) trails from 2' to 8' in width

These components, if tied together into a comprehensible system, would provide an important and useful system.

3. A Comprehensive System for North Reston

Based on the experience in older sections of Reston and elsewhere, and based on input from concerned residents, a comprehensive system has been proposed. After reviewing Reston Land Corporation's plans for North Point Village, the Committee endorses and recommends the following for North Reston:

- o Utilization of the guiding concept of a pathway "system" relating to origins, destinations and recreational uses.
- o 8' wide asphalt pathways should be planned along one side of major roadways not having sidewalks. (In North Point Village, these would include Baron Cameron Avenue, Reston Avenue, North Village Road, Wiehle Avenue, Lake Newport Road, and Center Harbor Road.) Pathways along these roads should meander adjacent to the roadway and not be located directly against the curb. In specific locations where existing bridges, guardrails, utilities or other constraints require the pathway to be located within the right-of-way, a grass buffer strip should be provided between the pathway and the curb.
- o A major pathway should be planned within or adjacent to the Fairfax Parkway right-of-way.
- o 8' wide major pathways should be provided through major open space corridors except where topography makes it infeasible. All major activity nodes should be connected by a comprehensive system.
- o It is recommended that the developer continue the current practice of locating 4' wide sidewalks along one side of residential streets, as proposed by the new road standards adopted for North Reston.

- o Wood chip trails, although initially less costly, are less efficient in the long run than asphalt. These trails provide an acceptable means of alternative pedestrian transportation, and should be encouraged within certain locations where deemed necessary and desirable by RHOA staff.

The RHOA Pathways Task Force has endorsed this system, and the Land Use Committee is satisfied that the proposed system will be close to an optimum system.

4. Town Center

Reston Land Corporation (RLC) has developed a general concept for Town Center which was reviewed by the Committee. The details of the pathway/pedestrian circulation system have not been developed at this time. The Committee, however, supports RLC's intent to optimize pedestrian circulation and provide linkings between Town Center and the surrounding pathway system including the W&OD Trail.

5. The Remainder of Reston - Central and South

With the exception of a few parcels not yet developed in Central and North Reston, the substantial portion of the developer proposed pathways/walkways yet to be built will occur in Town Center and North Reston. That leaves Central Reston and South Reston in need of a system plan and commitment to implementation.

The major task ahead will be to develop a Comprehensive Plan for pathways and implement it in Central and South Reston. As noted above, in spite of good intentions and considerable expensive construction, there is not yet a pathway system. The Committee determined that pathways in Central and South Reston were akin to the King's new clothes. Many have been frustrated by getting lost, for instance in the stream valley below Hunters Woods Village Center. Even more have been frustrated by finding there is no path from here to there. Many have taken to goat trails thru the woods, trespassing thru private yards or walking down the edge of streets. But to date no one has said "with all due respect to the effort to date and the good intentions expressed by all concerned, we are still a long way from a pathway system."

At the outset of the Committee's efforts, one member, after having biked or walked every path segment shown on the RHOA pathways map, observed that: if the swimming pools in Reston had been designed and implemented with the same level of comprehensive thought as the non-motorized circulation system, there would be water in only one end of most pools and no gate in the fences. This is a statement with which not all committee members concur. It does illustrate a

problem which the Committee has determined to be the outstanding long term open space need in Reston.

6. Recommendations

Within the short time available and the Committee's limited charge, it has proven beyond the Committee's capacity to become effectively involved in the issue of pathway/non-vehicular movement systems. There are many jurisdictions, many turfs. Those at RHOA who have advisory/staff responsibility do not have the policy mandate nor a comprehensive plan to deal with the pathway system in an effective way. The Land Use Committee has chosen to recommend the steps which should be undertaken to deal with the pathway issue.

It is the Committee's position that RHOA must take the lead, but whoever takes on the task of making a pathway system out of the existing parts must be willing to negotiate with the Regional Park Authority, with Fairfax County (Environmental Management and Comprehensive Planning), with Fairfax County Park Authority and with the full spectrum of users - both public and private.

They must:

1. undertake a comprehensive survey of what exists - no current map is completely accurate;
2. identify origins and destinations for major non-vehicular movements inside, into, from and thru Reston;
3. identify the potential users and determine their numbers and their needs.
 - people on foot - those who stroll, walk, jog and run.
 - bikers - recreational bikers, kids on bikes, serious bikers, commuters on bikes.
 - those who use the system to study nature/ride horses, etc.
4. create a plan which makes use of all the resources and meets the majority needs, and
5. be responsible for coordination and implementation of the system.

One way to start the process of developing a plan would be to take the existing trails "plans" and from these plus new elements, fashion a series of north/south connections - perhaps parallel to Reston Avenue, the Fairfax Parkway, Wiehle-Soapstone and one thru Lake Fairfax Park/South Lakes

areas - and a series of east-west connections - perhaps fashioned from the systems along and between Lawyers, Glade and South Lakes (the east/west stream valleys) and along Sunrise Valley, the W&OD, a system from Lake Anne to Lake Fairfax, and along Baron Cameron. These two systems of major connectors should be 8 ft. asphalt paths. Next, all the origins and destinations of significance should be connected to this grid. Next, an overlay of connectors should be added to create a series of "recreational loops." Some of these may have special purposes such as the existing jogger's circuits. The special needs of some users such as equestrians should be recognized in these connections. Every cluster, every street should have a connection that allows residents to "go for a walk/or a ride" since this is the most frequent use of the pathway system.

Finally, it would be desirable to create a number of special purpose/destination trails. One in particular which the Committee recommends would be through South Reston's most spectacular natural and scenic areas. It would start at the Nature Center entrance parking area, traverse thru the South Nature Center, then down the Snakeden Valley (between Glade Drive and Lawyers Road) including the new link planned east of Lake Audubon Dam and connect to the W&OD.

From a point to the west of the first junction with the W&OD, the trail would loop thru South Lakes' streets and clusters (not now served by pathways), thru open space near the South Lakes Village Center and Thoreau dam, then past both lakes (to the extent possible) and back via the North Nature Center to the place of origin. This major trail loop would be made - up to the maximum extent possible - of

existing pathway elements. It would be made up of natural surface as well as paved sections.

This proposal by the Committee is one example of the scope of the fresh approach recommended for improvement of Reston's pathway system.

IIID. EQUESTRIAN FACILITIES PROGRAM

1. Introduction

Members of the committee's equestrian activities subcommittee studied and discussed with other residents the need for various types of equestrian facilities in Reston and concluded that an integrated system of equestrian facilities was desirable. Elements of this system include 1) a central teaching facility, 2) several satellite barns, and 3) an expanded trails network linking these elements with each other and with existing Fairfax County trails and parks.

2. Central Teaching Facility

The central teaching facility and core of Reston's equestrian program should be the Reston Avenue barn proposed in section IIIB of this report. The barn would serve as a physical focus for such activities as horse shows and trail rides in addition to providing a location for an equestrian education program. It would also serve as an organizational focus for residents who are interested in forming riding groups or who wish to keep informed about equestrian activities.

3. Satellite Barns

With horse shows, educational programs and other activities centered at the proposed barn, equestrian interest (which was diverted to numerous other facilities after the collapse of the old stable) will be likely to be refocused at the new barn, and interest in horse-related activities will increase. Consequently, demand for space at the Triple Crown Road pony barn could become greater than it currently is. For the first time in several years there have been regular vacancies at the facility which for a number of years had a waiting list. To accommodate this demand, the committee recommended acceptance of the Stuart Road barn as an additional RHOA-owned co-op facility with additional co-op barns planned as need is indicated. Due to declining interest in the barn use the facility will be torn down. The subcommittee investigated the feasibility of pony barns at the Polo Club Village and on Buckthorn Lane. Both of these locations were deemed unfeasible by the subcommittee.

4. Expanded Trails Network

The committee recognized the need for development of a natural surface trails system which would link the Reston bridle trail system to the various Reston horse facilities, the W&OD, and the network of Park Authority and county trails which surround Reston. In order to facilitate development of such a system, the committee recommends close coordination between Fairfax County, Reston Land Corporation and the County and Regional Park Authorities trails planners

in any future trails planning, particularly in as yet undeveloped areas such as parts of North Reston. It is essential that rights-of-way for these trails be located, dedicated and marked before the onset of development which might preclude their establishment. Continued maintenance of existing bridle trails is encouraged.

IIIE. DISTRIBUTION OF OPEN SPACE FACILITIES

1. Background

As the committee began considering alternative uses for the three parcels it had been specifically charged to look at, the members realized that to make the best use of these parcels it was necessary to see what other open spaces were in the vicinity and what facilities they contained. The committee divided Reston into three sections: north, central and south. The north section encompassed the developing portion of Reston north of Baron Cameron Avenue; the central part was the area between Baron Cameron Avenue and the Dulles Access Road; the southern section included everything south of the Dulles Access Road.

2. Inventory

Table IIIA is a summary of the open space facilities and their general locations. The information was taken from the RHOA Pathway and Facilities Map and was supplemented by the Reston Fields Council, Fairfax County Department of Recreation staff and Land Use Committee members. The facilities in the north section will develop as the need for them arises in accordance with other development of this area. The committee noted that Reston Land Corporation plans for this area include a major open space/park/ recreation area west of Reston Avenue, as well as swimming pools, tennis courts, totlots and other "Reston amenities". These will be constructed as development proceeds in this area.

The central section included the future town center site. Part of the development proposal for this Reston focal point is a "town green" concept. Realization of this design element will provide a significant open space in this part of Reston. Committee members also recognize the significance of Lake Anne Village Center as community open space. This "urban" park draws large numbers of people who enjoy feeding the ducks, window shopping, or just sitting on the quay enjoying the sunshine, the lake and their companions.

With respect to the southern section, the committee noted that except for Polo Club Village, this part of Reston is almost fully developed. Therefore, available open space is virtually set with few options remaining for creating more. In addition to those facilities listed on Table IIIA-1, south Reston has an 18-hole public golf course and two lakes. While general lake access is limited, RHOA does have a public boat launch facility on Lake Audubon and completion of the South Lakes Village Center should make enjoyment of Lake Thoreau available to more Restonians.

3. Observations

In the course of its study the committee uncovered a number of concerns specifically relating to the distribution of open space facilities in Reston. These concerns influenced their choice of options for the three parcel it was charged to study. However, members felt that the findings were important enough to the over-all utilization and design of Reston's open spaces to warrant their inclusion in this report. The rest of this section lists these findings.

1. RHOA facilities are used unevenly. In other words some totlots and fields are over-used, characterized by protruding rocks, non-existent grass, and no mulch. Other areas looked as though no one ever used them.
2. The heavily populated, high density area in south Reston bounded roughly by Reston Avenue, South Lakes Drive, Soapstone Drive and Lawyers Road, has no 10 foot high basketball courts and no significant playing fields.
3. There are few significant natural spaces in Central Reston.
4. The heavy use of the Temporary Road picnic pavilion suggests a need for at least one other such facility.

4. Recommendations

Based upon its findings, the committee has the following recommendations with regard to this facet of its study.

1. RHOA facilities which are under-utilized should be
(a) moved to an alternative site or
(b) made more attractive by adding amenities, such as multipurpose courts, picnic tables and trash receptacles, small pavilions, and so forth.
2. The county proposal for South Lakes Park should be supported, except that the Reston Fields Council proposal for two fields instead of the overlay fields should be incorporated into the plans.
3. The county and ~~Hunters Woods School~~ PTO, ¹⁰⁻¹¹ should be encouraged and supported in any efforts to improve the playground facilities at ~~this~~ schools. This recommendation and the previous one address the perceived need for larger, open play areas in this part of Reston.

4. RCA and RHOA should support and encourage Reston Land Corporation's proposal for a large park/recreation area in north Reston.
5. In addition to the picnic pavilion proposed for the Baron Cameron Park site, RHOA should construct a picnic pavilion with accompanying rest room facilities for the former stable site.
6. RHOA's work with the commercial/industrial enterprises along Sunset Hills Road and Sunrise Valley Drive to encourage re-forestation of portions of their properties should continue. These businesses should also be encouraged to provide other open space amenities for their employees. This effort could include joint ventures to provide one or more small picnic pavilions or mini-parks.

TABLE III E-1

DISTRIBUTION OF RHOA OPEN SPACE FACILITIES°

FACILITIES	NORTH	CENTRAL	SOUTH
Basketball/Multipurpose Courts	-	8	7
Ballfields & Playmeadows	5	7	13
Totlots - RHOA	-	5	18
totlots - Cluster	-	32	45
Picnic Areas	-	3	5
Pavilions	-	1	1*
Restrooms	-	2	2
Nature Areas	-	0	1
Golf Courses	-	0	1
Pools	-	6	8
Tennis Courts Sites	-	4	5
Garden Plot Sites	-	3	1
Community Rooms	1	1	2

°These are RHOA areas only. For the locations of county facilities within Reston, refer to Section IIIA.

*This is a small picnic area.

IV. COMMITTEE RECOMMENDATIONS

A. NORTH NATURE CENTER AREA

1. Background

The North Nature Center Area on Glade Drive has been the focus of a number of discussions and the subject of several studies and planning efforts. In particular, the Committee is cognizant of the April 11, 1981 Charrette, the public forum by the RHOA Council that followed the Charrette, the report by the Natural Area's Task Force dated May 18, 1982 and the results of the townwide opinion survey on open space needs. There has been concern expressed about the intensity of potential uses and a concern on the part of Reston Land Corporation that the site be used by all Reston residents - either through RHOA or some other organization - and not left as a neglected parcel of land. The position of the adjacent neighbors and some concerned residents interpretation of the community wide survey has been to favor "low intensity" uses. The position of Reston Land Corporation has been that prior to turning the site over to the Reston Home Owners Association, a specific plan must be agreed to which provides for public use and benefit from the site.

From input that it received, the Land Use Committee determined that the view of adjacent neighbors and other concerned persons with the site, had evolved in the time since the initial planning Charrette. They now stated that they recognized the need for managing the forest resource and for the provision of facilities to support interpretive use of the site. The facilities and use in the north Nature Center area would facilitate RHOA staff presence and management on the site. The following sections outline the committee's recommendations on the North Nature Center's site.

2. Forest management

Intensive forest management should be undertaken on the site. Because of the volume of pedestrian traffic thru the area, the abuse of the area - building tree houses and underground forts - digging up native plant material, cutting firewood and other vandalism, and the impact of forest fires and erosion, forest management will be necessary. Forest management may include the reintroduction of native plant and tree species, and in other ways, helping nature to heal the impact of trespassing and vandalism. An active use program (education/nature study/passive outdoor recreation) on the site will assist in vandalism control and forest management by bringing RHOA staff, volunteers and others into the site on a regular basis.

3. An Entrance Feature and Parking Facility

Neither the South nor the proposed North Nature Center area has any off-street parking. Although on street parking is permitted on Glade Drive at this time, it could be terminated by VDH&T as traffic increases. An entrance or "arrival point" is needed for the the Nature Center so that visitors are aware of it and have an official "front door" entry point instead of various marked and unmarked paths.

This entrance should be attractive and well-landscaped and should contain a small parking area. It should be designed for 20 cars and have an asphalt all-weather surface for ease of maintenance, safety, and long-term cost benefit. The parking area should be built on the southern edge of the North Nature Center, with a strong visual and physical connection between it and the South Nature Center provided by a marked pedestrian crosswalk across Glade Drive, landscaping and signage. This parking area could be located parallel to the roadway and would provide safe, visible, convenient access for all visitors without intruding into either the North or South Nature Center and negatively affecting adjacent residences. A secure bike rack, telephone, bulletin board/information kiosk, drinking fountain and a memorial sun dial could be suitable for this area also. (See sketch)

To further identify and promote the uniqueness of the site, entrance features should be placed at each entrance to the Nature Center from a major pathway. These features should clearly identify the uniqueness and intended purpose of the site so as to develop appreciation and respect for the site. The entrance features should be prominent enough to instill curiosity about the site from people on the pathways and create a sense of arrival. The entrance features should reflect the natural beauty of the site and remain in harmony with the environment.

4. An Outdoor Gathering Place/Inclement Weather Shelter

In order to make effective use of the natural features and interpretive facilities (pathways and teaching stations) in the north Nature Center and in the adjacent south Nature Center site, there should be constructed outdoor seating for at least 30 persons - a school classroom group would be a convenient maximum number to plan for. Shelter should be provided in the event of sudden inclement weather as well as secure storage of 50 to 100 sq. ft. and a staging area for educational programs undertaken in the Nature Center. The gathering place/shelter should be located near the parking on Glade Drive in the most ecologically resilient and least diverse area. The gathering place/shelter and the parking should be designed in harmony with the site to minimize impact on the natural flora and fauna.

5. Pedestrian Circulation

The large number of barren, eroding "goat" paths bear evidence of the volume of pedestrian traffic now using the site and adjacent open space. This problem is exacerbated by the fact that the major north-south pathway shown on RHOA pathway maps east of, and parallel to, Soapstone Drive wanders thru parking lots, walkways (with steps) and lead walks of Soapstone Cluster. Some residents of Soapstone Cluster prefer to have this major pathway between the houses and Soapstone Drive rather than through the North Nature Center. An investigation by RHOA staff and interested residents resulted in a recommendation not to run a new path along Soapstone Drive. With completion of the planned pathway and bridge at the end of Lake Audubon and paved paths to the east, north and south of the Center, paths in the center should provide circulation for those enjoying the Nature Centers and to improve north - west to south - east movement. (See attached schematic facility and circulation plan).

The primary "development" within the North Nature Center site should be accommodation of pedestrian travel to and in the Center. The needs of those who have made the trails - primarily north of Soapstone Cluster are addressed by the committee's pathway proposal. In general, paths should be asphalt, natural or wood chip surface depending on their function. This applies to existing dirt pathways as well as those laid out for interpretive use. Adjacent to the paths there should be developed teaching stations and educational exhibits for students, RHOA summer camp and other potential users of the site.

6. Nature Center Building

There should be no building or museum within the north Nature Center if the area is managed by RHOA so that the adjacent Glade Room is available. If a museum/enclosed meeting room/lecture area is later needed, that could be added to the Glade Room. This addition could function as a full-time natural "museum" display area and teaching space.

ENTRANCE

- SIGNAGE
- BENCHES
- LANDSCAPING
- INFORMATION
- BIKE RACK

NATURE STUDY
PAVILION

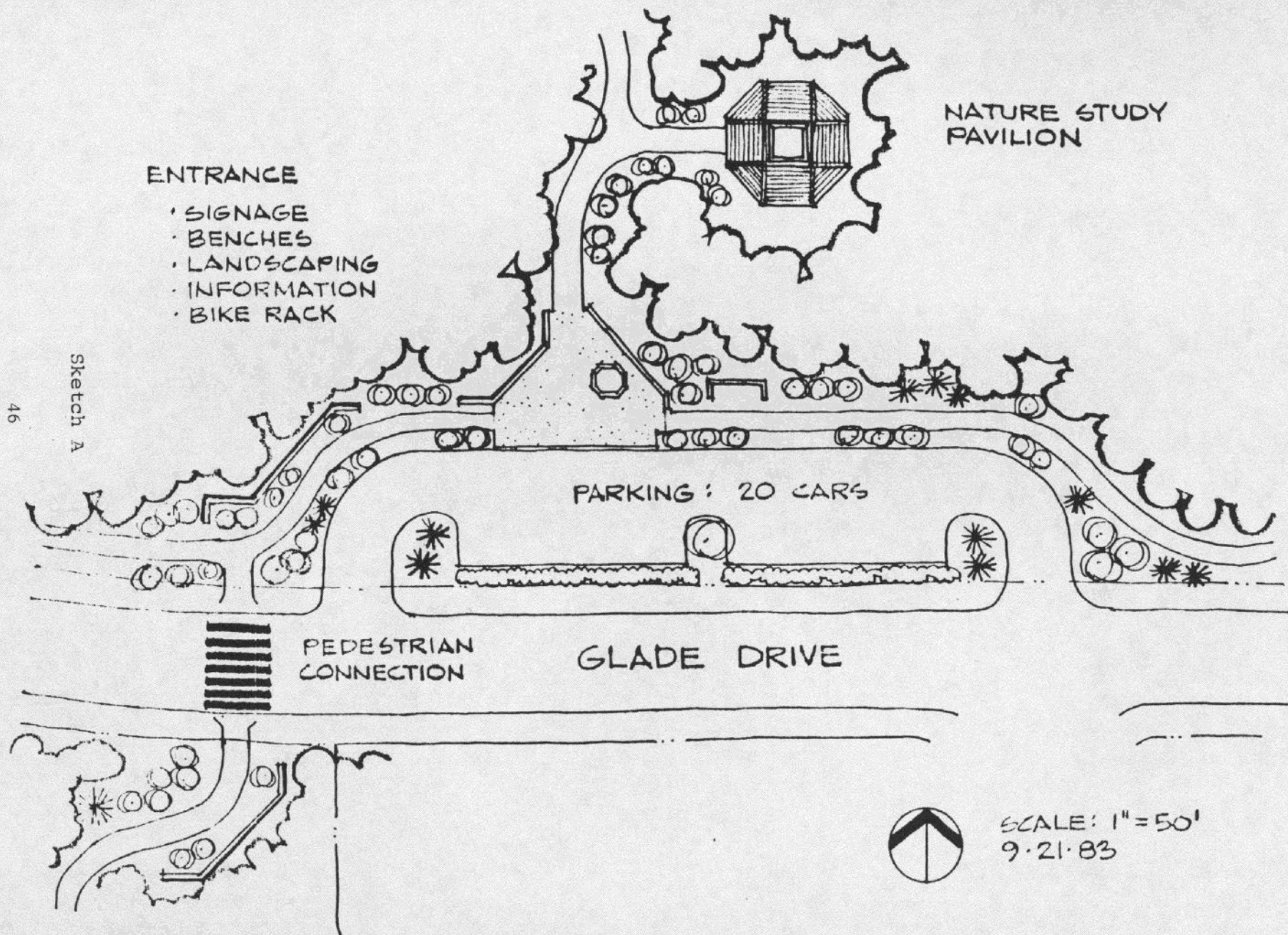
PARKING: 20 CARS

PEDESTRIAN
CONNECTION

GLADE DRIVE

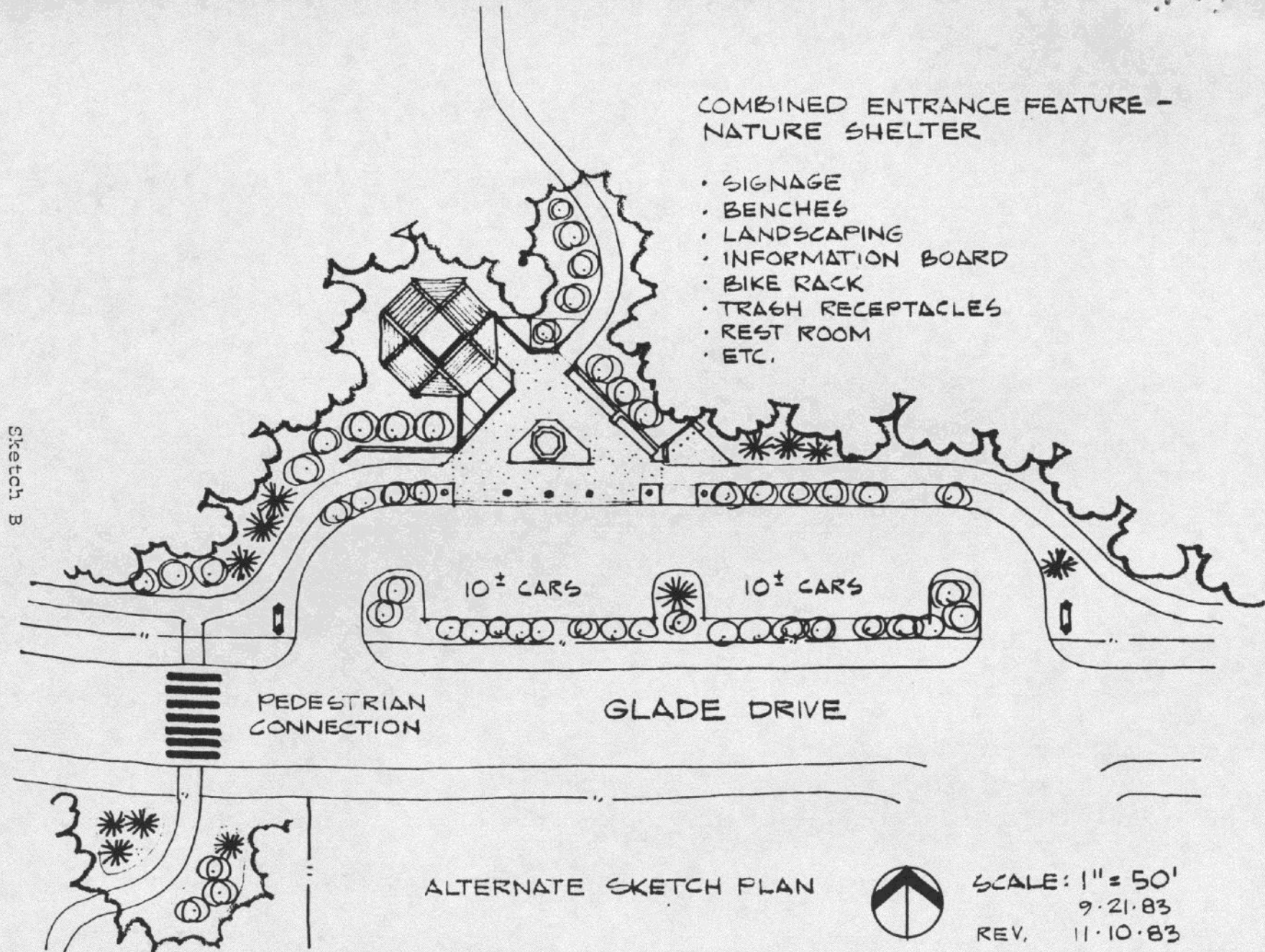


SCALE: 1" = 50'
9.21.83



COMBINED ENTRANCE FEATURE - NATURE SHELTER

- SIGNAGE
- BENCHES
- LANDSCAPING
- INFORMATION BOARD
- BIKE RACK
- TRASH RECEPTACLES
- REST ROOM
- ETC.



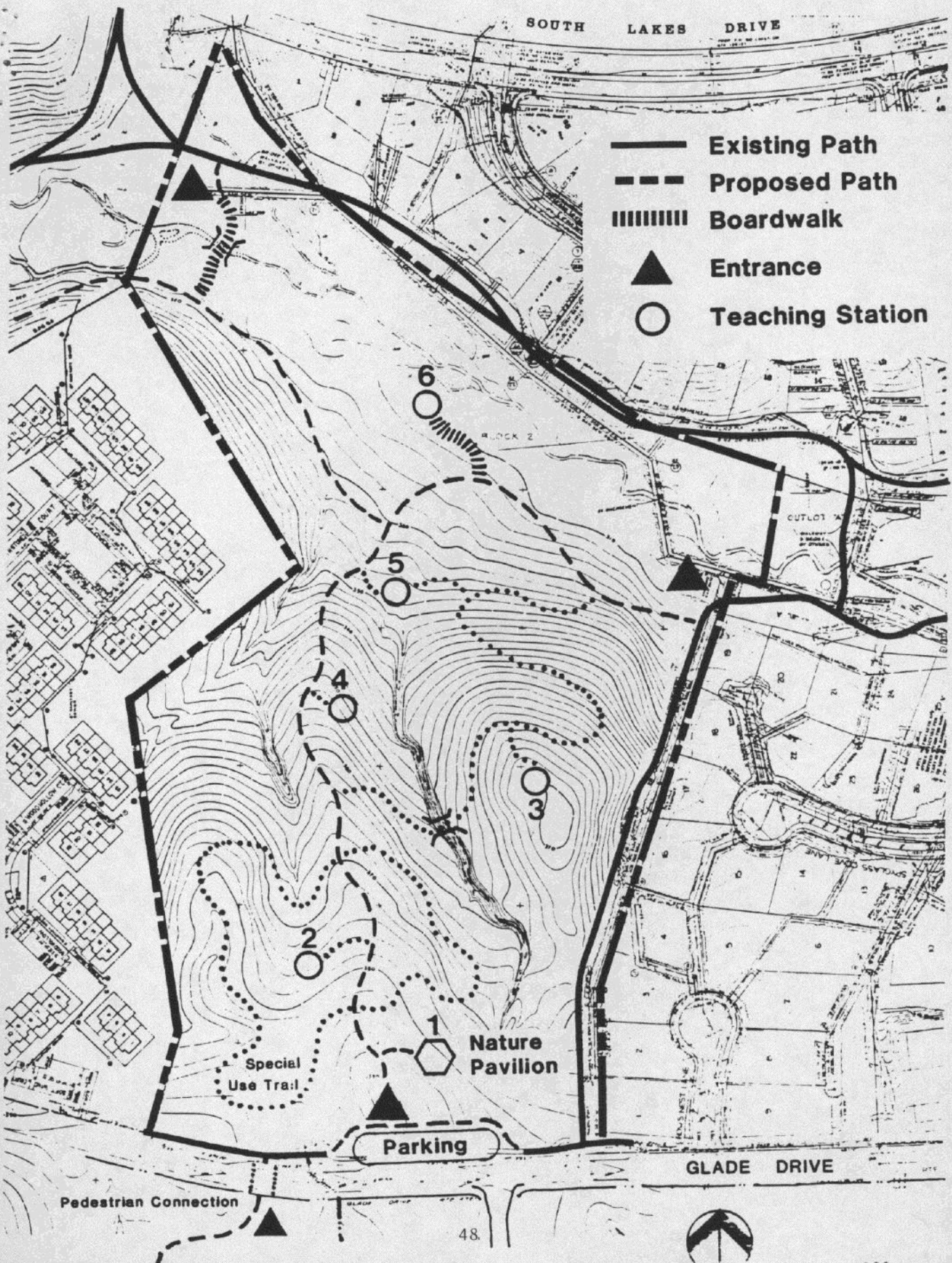
ALTERNATE SKETCH PLAN



SCALE: 1" = 50'

9.21.83

REV. 11.10.83



- Existing Path
- Proposed Path
- Boardwalk
- Entrance
- Teaching Station

7. Uses

The following uses/activity elements are appropriate for the north Nature Center:

- RHOA summer camp learning areas and other organized, special education outings
- lectures/workshops/nature study activities including indoor and outdoor lectures (indoor portion held in school facilities or at Glade Room)
- walking, jogging, biking
- small totlot/play area for adjacent residents
- outdoor gathering/shelter
- vita par cour adjacent to paved pathways
- self-guided walks and organized, naturalist-led nature walks
- nature painting and photography including a blind for bird photography
- conservation exhibits and demonstrations/observation platform/teaching stations
- special classes for developing outdoor skills
- footbridges across sensitive areas and elevated walkway over marshy areas
- council ring/campfire area

8. Utilities

Electricity need not be provided. Electricity will lead to amplified sound and to lighting not necessary for the projected RHOA use. Running water is not necessary at this time. A lockable composting toilet facility should be made part of, or immediately adjacent to, the shelter/Phoenix Anteater.

9. Other Uses

There should be no camping facilities in the north Nature Center. There is a need for a picnic shelter somewhere in south Reston similar to that provided by the Temporary Road Park in central Reston. It does not necessarily need to go in either the North or the South Nature Center. The Glade pool area could provide for more intensive use or storage facilities.

10. North Nature Center Development Costs
Preliminary Estimate (Subject to Revision)

NOTE: This cost estimate is approximate and reflects a conceptualized design for the North Nature Center developed by the Land Use Committee.

Costs may vary depending upon materials, methods and labor used. Estimated costs may be reduced substantially if the work is to be done by RHOA staff with a minimum of sub-contracted items. Volunteer effort and donated materials could also reduce the total expenditure.

Furthermore, it is anticipated that development of the North Nature Center would be phased over a period of time. Additional trails, teaching stations, bridges, etc. could be added as necessary.

<u>ITEM</u>	<u>COST</u>
1. Nature study pavilion with storage	\$ 30,000
2. Asphalt paths	40,800
Wood chip paths	23,800
Boardwalks	2,500
Wooden bridges (2)	10,000
3. Teaching stations (5) including minor clearing and signs	1,500
4. Entrance features	7,500
o paving	
o kiosk/bulletin board	
o major entrance sign (1)	
o minor entrance signs (2)	
o railroad tie wall/seating	
o bike rack	
o trash receptacles	
o benches	
o pedestrian crossing striping	
o water fountain	
o misc.	
5. Parking area including clearing, grading, paving	19,000
6. Landscaping - trees, shrubs, mulch	6,000
7. Engineering and Architectural Design fees	5,000
Sub Total	<u>\$146,200</u>
5% Contingency	<u>7,310</u>
Total	<u>\$153,510</u>