

**ENVIRONMENTAL ASSESSMENT**

**HERON BAY DEVELOPMENT**

**Badin Lake (Narrows Reservoir)  
Montgomery County, North Carolina**

for

**Waterfront Properties  
Denton, North Carolina**



by

**Environmental Services, Inc.  
1100 Wake Forest Road, Suite 200  
Raleigh, North Carolina 27604**

**February 1996**

## EXECUTIVE SUMMARY

The Heron Bay development is a low-density, moderately priced, planned residential resort proposed for the north shore of Badin Lake (Narrows Reservoir). The 260-acre development is planned for 269 homes (119 on waterfront lots). The development fronts approximately 3 miles of lake shoreline. All landowners will have access to the lake through 55 individual piers, nine shared piers, three cluster piers, one community pier, a single boat ramp and launching area, and a swimming beach. The estimated total area covered by these proposed shoreline recreational use facilities is 1.2 acre. Planning for pier locations is based on precedence established in prior pier approvals granted by Yadkin, Inc.. Heron Bay proposes to coordinate with Yadkin, Inc. in the construction of erosion control structures where needed and the removal or relocation of aquatic obstructions to minimize safety hazards.

Land use in the development property will change from silvicultural, which imposes periodic, heavy disturbances on the landscape, to residential, which will provide long-term stability after a brief period of construction. Plant community impacts will be incurred primarily by dry-mesic oak-hickory forest. Impacts will be minimized to the extent needed to accommodate new facilities (roads, houses, driveways, shoreline structures). No unique natural communities are expected to be impacted as a result of proposed development.

Water resources impacts will be limited to stream crossings by access roads (approximately 0.05 acre) and shoreline and aquatic areas sited for recreational use facilities (approximately 1.2 acre in total, 0.4 acre to be filled and 0.8 acre to be shaded). A vegetated buffer will remain adjacent to the lake shoreline and tributaries.

Approximately 2.6 acres of water willow (*Justicia americana*) beds exist off the Heron Bay shoreline. The proposed development will directly impact approximately 0.42 acre of the willow beds, 0.16 acre (6 percent) by proposed piers and the boat ramp and 0.26 acre (10 percent) by the sand beach. Existing piers, bulkheads, and boat ramps through or adjacent to willow beds on the lake are examples that water willow recovers from construction to grow adjacent to and even underneath these structures.

A check of U.S. Fish and Wildlife Service and N.C. Natural Heritage Program lists of protected species found that the only federally-protected species documented from the vicinity of the development property is the bald eagle (*Haliaeetus leucocephalus*), which is listed as Threatened. There is no documentation of eagles nesting on the lake, but eagles regularly feed below Narrows Dam and have been observed flying over the lake. The developers of Heron Bay took part in the planning of Yadkin, Inc.'s *Bald Eagle Management Plan for Narrows Reservoir* and intend to comply with the stated management strategies of that plan. No adverse impact to the bald eagle or other protected or rare species is expected as a result of the proposed development.

Boat carrying capacity studies have been used to recommend standard carrying capacities for recreational lakes. Badin Lake boat use survey data available for selected days from 1990, 1992, 1993, and 1994 indicate that only rarely does the boat usage of the lake exceed 50 percent of the projected carrying capacity. A majority of the time, boat usage is less than 30 percent of projected carrying capacity. The proposed development is projected to increase boat usage of Badin Lake by only 4 percent.

The developers of Heron Bay look forward to cooperating with regulatory entities to minimize adverse environmental impacts during all phases of the establishment and maintenance of this proposed residential community. Heron Bay recognizes federal, state, local, and Yadkin, Inc. regulations and directives concerning development in this area. This Environmental Assessment report addresses issues of concern to this development and regulatory entities. The results of the discussion of these issues will assist Heron Bay in developing a residential community that blends with the existing environment while providing access to that environment.

## TABLE OF CONTENTS

	<u>Page</u>
EXECUTIVE SUMMARY	
LISTS OF FIGURES AND TABLES .....	ii
I. INTRODUCTION .....	1
General Description .....	1
Project Need .....	1
Reservoir Access and Shoreline Impact .....	4
Required Permits .....	6
Shoreline Development Restrictions .....	10
II. EXISTING ENVIRONMENT .....	11
Physical Resources .....	11
Land Use .....	11
Topography .....	11
Water Resources and Section 404 Jurisdictional Areas .....	12
Shoreline Physiography .....	13
Biological Resources .....	16
Plant Communities .....	16
Terrestrial .....	
Aquatic .....	
Wildlife .....	17
Terrestrial .....	
Aquatic .....	
Protected and Rare Species .....	21
Cultural Resources .....	23
Lake Use .....	24
III. ALTERNATIVES .....	27
IV. ENVIRONMENTAL CONSEQUENCES .....	29
Land Use .....	29
Water Resources and Section 404 Jurisdictional Areas .....	29
Shoreline Impacts .....	30
Biotic Impacts .....	31
Plant Communities .....	31
Wildlife .....	32
Lake Oriented Recreation .....	34
V. AVOIDABLE IMPACTS AND MITIGATION .....	36
VI. APPLICANT INFORMATION .....	37
VII. REFERENCES .....	42
APPENDICES	



## LIST OF FIGURES

	<u>Page</u>
Figure 1. Project location . . . . .	2
Figure 2. Lot configuration . . . . .	3
Figure 3. Drainages within the development area . . . . .	14
Figure 4. Distribution of water willow beds . . . . .	18
Figure 5. Water willow at lake drawdown . . . . .	20
Figure 6. Water willow adjacent to shoreline structures . . . . .	33

## LIST OF TABLES

	<u>Page</u>
Table 1. Type and number of shoreline recreational use facilities proposed for the five waterfront phases . . . . .	5
Table 2. Approximate areas covered by shoreline recreational use facilities proposed for the five waterfront phases . . . . .	5
Table 3. Lot locations of proposed shoreline recreational use facilities . . . . .	7
Table 4. Water depths off of selected development lots . . . . .	15
Table 5. Water willow band widths off of development lots where willow occurs . . . . .	19
Table 6. Boat use on Badin Lake . . . . .	26

## **I. INTRODUCTION**

### **General Description**

The Heron Bay development (Heron Bay) is a low density, planned residential resort proposed for the north shore of Badin Lake in Montgomery County, North Carolina (Figure 1). Heron Bay is located approximately 8 miles northeast of Albemarle and 10 miles south of Denton, adjacent to and west of the Old North State Club at Uwharrie Point. The development will consist of residential, single family homes on 119 waterfront lots and 150 interior lots with water access. A total of 269 homes are proposed on approximately 260 acres. Heron Bay is being developed on a phased basis, with six phases currently planned. Figure 2 indicates the present planned lot configuration within the six phases.

At the time of document preparation, negotiations exist for Heron Bay to purchase an additional 100 acres, located west of Phase VI and south of the Badin Shores development on the north shore of Badin Lake. This property is currently owned by the Old North State Club at Uwharrie Point. If purchased, this property would be planned as Phase VII and would add approximately 95 lots to the development (40 waterfront and 55 interior).

### **Project Need**

Heron Bay has been planned to offer the general public a low density community of single family homesites with an upscale amenity package where all homeowners will have access to Badin Lake at moderate prices. This project will serve the needs of those interested in a location for a first home, a second home, or a retirement home on Badin Lake. Plans for Heron Bay feature large homesites and development amenities such as boating, fishing, a clubhouse, a swimming beach, community boat ramp and launching areas, community day slips, community boat storage, underground power and telephone, and a secure neighborhood environment. All homes will be supplied with water for normal, domestic use from individual, privately drilled wells. Sewage disposal will be accommodated through the use of individual septic fields.

Permanent common open space is planned to be an integral part of the development and may include median strips, recreational areas and facilities, easements, community boat slips, community boat storage, and community piers. A clubhouse is planned for construction on Lot #60. A sand swimming beach will be located in the vicinity of the clubhouse. A 2- to 3-acre boat storage area will be protected by a fence for both security of the contents and safety of residents.

Heron Bay has been planned to appeal to the broad, upper-middle income public, while providing a first class community. The intention is to moderate prices so as to best serve the public's need to access Badin Lake. Though much of the Heron Bay development land is zoned



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Project Location  
Heron Bay Development  
Montgomery County, NC

Figure: 1

Project: ER95027

Date: January 1996



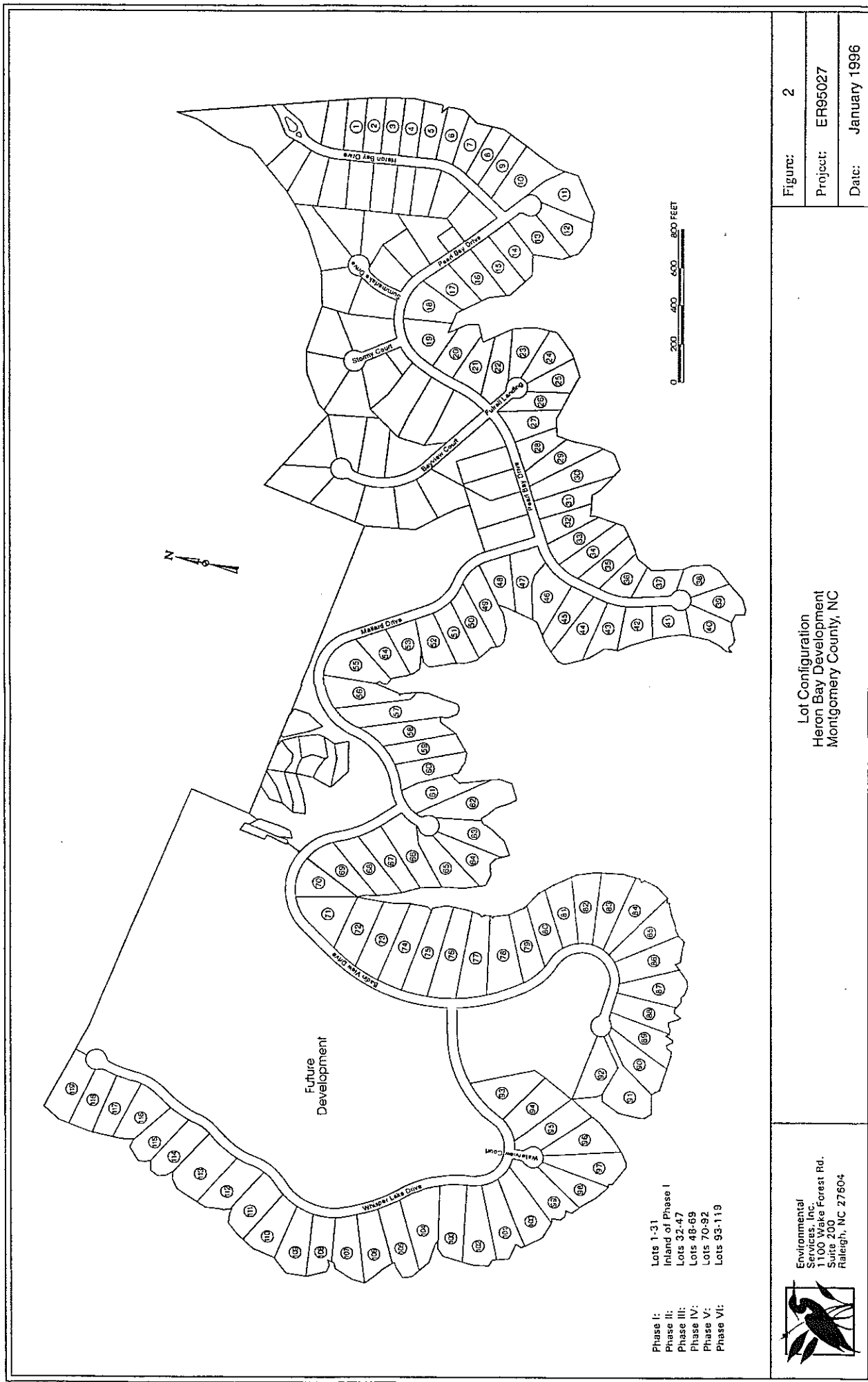



Figure: 2  
 Project: ER95027  
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Lot Configuration  
 Heron Bay Development  
 Montgomery County, NC



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- Lots 1-31
- Inland of Phase I
- Lots 32-47
- Phase II:
- Phase III:
- Phase IV:
- Phase V:
- Phase VI:
- Lots 48-69
- Lots 70-92
- Lots 93-119

Table 1. Type and number of shoreline recreational use facilities proposed for construction in the five waterfront phases of Heron Bay. Each shared pier provides two boat slips. Each cluster pier provides 10 boat moorings. This plan provides 105 new permanent boat slips and eight community day slips for Heron Bay residents.

Phase	Individual Piers	Shared Piers	Cluster Piers	Boat Ramp	Sand Beach
I	8	1	2	1	--
III	8	4	--	--	--
IV	7	2	1	--	1
V	12	--	1	--	--
VI	20	2	--	--	--
Total	55	9	4	1	1

Table 2. Approximate areas in square feet (sq ft) covered by shoreline recreational use facilities proposed for construction in the five waterfront phases of Heron Bay. Specific measurements of facilities will be dependent on site conditions; so, for the purposes of this assessment, a standard size has been determined for each facility type (individual and shared piers = 540 sq ft each, cluster and community piers = 700 sq ft each, boat ramp = 960 sq ft each, and the sand beach = 16,000 sq ft).

Phase	Individual Piers	Shared Piers	Cluster Piers	Boat Ramp	Sand Beach
I	4320	540	1400	960	--
III	4320	2160	--	--	--
IV	3780	1080	700	--	16,000
V	6480	--	700	--	--
VI	10,800	1080	--	--	--
Total	29,700	4860	2800	960	16,000

Table 2 indicates the approximate areas expected to be covered by the proposed shoreline recreational use facilities. The estimated total area covered by these facilities is 54,320 sq ft (1.2 acre). In order to minimize adverse impacts to the lake bed and the aquatic ecosystem, Heron Bay proposes constructing piers of sufficient length to reach minimum water depths and reduce the need for dredging.

Table 3 indicates proposed lot locations for the various types of development area shoreline recreational use facilities. Planning for pier locations is based on precedence established in prior pier approvals granted by Yadkin, Inc. (see letter for Crystal Bay dated 15 July 1994 in Appendix B). Minimization of risk to public health and safety was the primary factor in determining the swimming beach location. Lot #60 is centrally located within the development and offers a broad shoreline with a gently sloping lake bed.

Yadkin, Inc. issued a conditional approval for proposed private and public recreational facilities at Heron Bay, Phase I on 26 October 1994 (see document approved 26 Oct 1994, Appendix B). On 14 Sept 1995, Yadkin, Inc. rescinded the 26 Oct 1994 conditional approval (see letter dated 14 Sept 1995 in Appendix C) after a N.C. Wildlife Resources Commission review of the project determined that "pier construction and dredging in the reservoir as indicated would adversely impact fisheries resources and irrevocable harm wildlife habitat in the area" (see letter dated 14 Sept 1995 in Appendix C).

There are many locations along the Heron Bay shoreline where surface runoff and/or wave action are causing moderate to severe erosion. This process creates a continuing decrease in individual lot areas, results in a decrease in local water quality, and reduces the stability of the lake benthos for aquatic life. Lot owners will work with Yadkin, Inc. to obtain permits for the installation of rip-rap or retaining walls for use in erosion control.

The shoreline throughout the development area is characterized by fallen trees that are partially submerged and extend above the shoreline (lap trees). Lot owners will work with Yadkin, Inc. to obtain permits for the removal of lap trees, downed trees, or damaged trees where necessary for reasons of safety or to clear construction sites.

### **Required Permits**

#### **Section 404 Permit Areas (wetlands and waters of the U.S.)**

Section 404 of the Clean Water Act (CWA) requires regulation of discharges into "waters of the United States" (including wetlands). Although the principal administrative agency of the CWA is the Environmental Protection Agency (EPA), the U.S. Army Corps of Engineers (COE) has major responsibility for implementation, permitting, and enforcement of provisions of the CWA. The COE regulatory program is defined in 33 CFR 320-330.

Table 3. Lot locations for the various types of shoreline structures proposed for the five waterfront phases of Heron Bay. Shared piers will be located on the boundary of the sharing lots. Cluster piers and the community pier will be located on the boundary between two lots and will provide slips for the lots indicated.

Phase	Individual Piers	Shared Piers	Cluster Piers	Community Pier	Boat Ramp	Swimming Beach	Acreage Impact
I	12, 13, 23-25, 29-31	26/27	#1, located 13/14; slips for 6-10, 14-17, and 22	located 27/28; slips for 1-5, 28, 4 community slips	26/27	--	0.17
III	37-44	33/34, 35/36, 45/46, 47/48	—	—	--	--	0.15
IV	49, 52, 57, 61-64	50/51, 58/59	#2, located 59/60 slips for 53-56 and 65-68, 2 community slips	—	--	60	0.49
V	80-91	--	#3, located 79/80 slips for 72-79 2 community slips	—	--	--	0.16
VI	96-115	116/117, 118,119	--	—	--	--	0.27

The COE Wilmington District has currently issued a General Permit, Action ID No. 198200030 "to authorize maintenance, repair, and construction activities in lakes and reservoirs, in the state of North Carolina, owned, operated, and/or regulated by public utility companies under license from the Federal Energy Regulatory Commission (FERC) and all lakes or reservoirs in the state of North Carolina owned and operated by the Tennessee Valley Authority (TVA)". Activities within these waters are regulated by the party licensed by FERC, in this case, Yadkin, Inc.. Activities that can be authorized by this general permit include construction of boat piers, boat houses, and boat ramps; installation of bulkheads and rip-rap for shoreline stabilization and erosion control; and excavation of boat basins and channels. Heron Bay development on Badin Lake will qualify for this general permit, while impacts to wetland areas (see Water Resources and Section 404 Jurisdictional Areas in the Environmental Consequences section) are expected to be permitted under Nationwide Permit #26 (33 CFR 330) based on the type (above headwaters systems) and amount (less than 1.0 acre) of areas proposed to be impacted.

#### **Section 401 Water Quality Certification**

The N.C. Division of Environmental Management (DEM) is responsible for comprehensive planning and management of the state's air, surface water, and groundwater resources. Any activity which may result in a discharge to waters of the United States and requires a federal permit must obtain a certification that such discharge will be in compliance with applicable state water quality standards.

#### **Burning Permit**

The N.C. Division of Forest Resources (DFR) issues a permit for starting a fire in a woodland or within 500 ft of a woodland. Any large-scale burning of debris collected during lot clearing will require a burning permit.

#### **Well Construction Permit**

The DEM Groundwater Section is responsible for permitting construction of a well system or addition to a well system with a combined system capacity of 100,000 gallons per day or greater. This permit will probably not be necessary for individual domestic water supply wells.

#### **Local-Waste Not Discharged to Surface Waters**

A permit is required for any project involving the construction, alteration, or extension and/or operation of any sewer system, treatment works, or disposal system which does not discharge to surface waters, including septic tank systems. The Montgomery County Health Department, Environmental Health Section has permitted 121 lots in the Heron Bay development for on-site waste water treatment and disposal systems in Phases I through V (see letter in Appendix D).



### **Sedimentation Control Plan**

An approved erosion and sedimentation control plan is required for any land-disturbing activity which uncovers one or more contiguous acres of land. The plan must be approved prior to the commencement of the land-disturbing activity. The plan must be submitted to the field office of the Land Quality Regional Supervisor 30 days prior to project initiation. Land disturbing activities include any use of the land by residential developments that results in a change in the natural cover or topography and that may cause or contribute to sedimentation. Control measures must be planned to provide protection from the calculated peak rate of runoff from a 10-year frequency storm.

Heron Bay has developed erosion and sedimentation control plans for Phases I, III, IV, and V, and the temporary access road to Phase VI. These plans have been approved by the N.C. Department of Environment, Health, and Natural Resources. A copy of the Certificate of Plan Approval for each of five phases is included in Appendix E.

### **Archaeological and Historical Preservation**

The N.C. Department of Cultural Resources, Division of Archives and History (DAH) has authority to perform an environmental review of all permit applications to determine if issuance will affect significant terrestrial or submerged archaeological, historical, or architectural resources. Cultural resource issues are discussed in the Cultural Resources section later in this report.

### **Surface Water Supply Watershed Protection**

The DEM operates a cooperative program of water supply watershed management and protection that is administered by the local government, in this case, Montgomery County, in accordance with requirements established by the Environmental Management Commission (NCDNRCD 1994).

The County's basic development requirements call for a vegetative buffer with minimum width of 30 ft from the banks of all perennial streams or other waters. Where possible, the buffer shall be natural vegetation. No new development is allowed in the required buffer except for water-dependent structures and public projects (road crossings, boat ramps, piers, and greenways). All activities should minimize built-upon surface area, direct runoff away from surface waters, and maximize the use of Best Management Practices. In the Heron Bay development area, a maximum density of one dwelling unit per 0.5 acre and 24 percent built-upon area is permitted. This density requirement applies only to projects that require a Sediment and Erosion Control Plan (projects that have 1 acre or more of land-disturbing activity). Heron Bay has an approved plan and proposal densities are below recommended threshold limits.

### **County Residential Planned Developments Requirements**

The developer is required to submit the following information to the County Planning Board:

1) a site plan indicating the tentative location of buildings, uses permitted, land to be preserved as permanent common open space, parking and loading spaces, and any other special features; 2) a draft of the proposed protective covenants; 3) a draft of any proposed incorporation agreement and draft of bylaws or easement declarations concerning maintenance of recreational and other common facilities; and 4) data on the market potential necessary to support the location, size, and type of planned development (NCDNRCD 1994). This information has been provided to the County planning board. The *Declaration of Restrictive Covenants of Heron Bay Subdivision* is included in Appendix F. The *Declaration of Covenants, Conditions, and Restrictions of Heron Bay Subdivision* is included in Appendix G.

### **Shoreline Developer Restrictions**

As owner of the land under Badin Lake and licensee for the hydro power reservoir (licensed as Project No. 2197-NC by the FERC), Yadkin, Inc. is responsible for public safety and the environmental integrity on the lake and within the buffer strip between the shoreline and the adjacent property owners. The buffer strip extends from normal flood pool (at the 541 ft contour, Yadkin, Inc. datum) through 4 ft of elevation, however far inland that may extend. Yadkin, Inc. permits private recreational use facilities (piers, launch ramps, lighting and wiring, erosion control devices, and excavations) and structural alterations to the lake and buffer strip by license only. Yadkin, Inc.'s current recreational use facilities specifications were revised and approved 27 May 1993 (Appendix A). The Heron Bay development intends to comply with conditional approvals and Yadkin, Inc. specifications with approved variances.

## **II. EXISTING ENVIRONMENT**

An onsite review to assess the project site and environs was conducted on 20-21 and 26 November 1995. General sources referenced for background information concerning the existing environment include U.S. Geological Service (USGS) topographic maps (Badin and New London 7.5 minute quadrangles), U.S. Fish and Wildlife Service (FWS) National Wetlands Inventory maps, Natural Resources Conservation Service (NRCS, formerly the Soil Conservation Service) county soils information, a list of federal protected species from FWS, protected and rare species records compiled by the N.C. Natural Heritage Program (NHP), and local and regional planning and regulatory documents.

### **Physical Resources**

#### **Land Use**

Regional land use is rural residential, agricultural, silvicultural, National Forest land, and light industrial. Major products of the region include textiles, furniture, dairy products, beef, soybeans, and tobacco.

The development property was recently under option to the Uwharrie Point development and was formerly under private ownership and managed for silviculture. Portions of the property have been clear-cut at different times in the past. Lots #50 and #51 were timbered in 1982, Lots #56 through #58 were timbered in 1958, and the eastern portion of the development in the vicinity of Lots #1 through #10 was timbered in 1944. Pines predominate in the forest canopy of areas that are regenerating from disturbances such as timbering.

Roadways in the western portion of the development property (Figure 2) are currently under construction. Heron Bay Drive and Pearl Bay Drive have been paved and clearing has taken place in preparation for construction of Summerlake Drive, Bayview Court, and Futrell Landing. Clearing for Mallard Drive is presently underway. There is presently no lake access (boat ramp or pier) within the development property.

#### **Topography**

Topography in the development property is characterized by gently rolling hills and some steep slopes along main drainageways and streams. Elevations in the project area range from 510 feet (ft) National Geodetic Vertical Datum of 1929 (NGVD) at the Badin Lake water line to a high point of approximately 600 ft (NGVD) in the western portion of the development property. These extremes are comparable to Carolina Aluminum Company Datum (CACD) of approximately 541 ft (CACD) at the lake water line and 631 ft (CACD) at the high point.

### Water Resources and Section 404 Jurisdictional Areas

Badin Lake (or Narrows Reservoir) was created in 1917 by the Carolina Aluminum Company through construction of a dam on the "narrows" of the Yadkin River where the river flows through the Uwharrie Mountains. Badin Lake is presently one of four man-made reservoirs on this stretch of the Yadkin (the other three are Highrock, Tuckertown, and Falls) that are used for recreation and generation of hydroelectric power. These lakes are privately owned and overseen by Yadkin, Inc.. Badin Lake has an upstream drainage of approximately 4164 square miles, a surface area of 5350 acres (DEM 1989), and approximately 115 miles of shoreline.

The development property contains no named streams and is bordered to the south by Badin Lake. Badin Lake has a best usage classification of **WS-IV&B CA**. Class **WS-IV** waters are protected as water supplies which are generally in moderately to highly developed watersheds. Discharge of treated waste is granted under permits, and local programs to control non-point source and stormwater discharge of pollution are required. Class **B** uses are primary recreation, aquatic life propagation and survival, fishing, wildlife, and agriculture. "Primary recreation" refers to activities involving human body contact with water on an organized and frequent basis. The designation **CA** indicates a state critical area; in this case, the area located within 0.5 mile above and draining to the normal elevation of this reservoir where the risk to the lake associated with pollution is greater than from the remainder of the watershed (DEM 1993).

The DEM maintains no Benthic Macroinvertebrate Ambient Network (BMAN) stations within Badin Lake (DEM 1989, 1991). This lake contains a minimum of dissolved oxygen in the deeper levels (hypolimnion) and an abundance of organic matter throughout the water column. The major inputs controlling the trophic level of Badin Lake is upstream dam release and runoff from the surrounding landscape. The N.C. Trophic State Index (NCTSI) is used for evaluating the trophic status, or level of productivity, of lakes. The index is based on measurements of phosphorus, organic nitrogen, chlorophyll, and turbidity. The present NCTSI classification for Badin Lake is **Eutrophic**. This term refers to an increased level in productivity, a simplification of biological components, and the general reduction of a living system's ability to adapt to imposed changes. This lake status has remained relatively stable since 1981 (DNRCD 1989).

Water bodies such as rivers, lakes, and streams are subject to jurisdictional consideration under the Section 404 program. "Waters of the United States" (33 CFR 328.3) are described, in part, as:

all waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; all interstate waters including interstate wetlands; and all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs,



for higher residential density, a reduction in number of houses has been planned to balance the need for housing around the lake with the need to protect the natural environment. To this end, plans call for large single family lots, maintaining a density of approximately one residential dwelling per acre. This low-density program eliminates 40 percent of the potential density previously proposed to Yadkin Inc. for this property by the Uwharrie Point development.

#### **Reservoir Access and Shoreline Impact**

Heron Bay fronts approximately 3.0 miles of shoreline on Badin Lake, divided into 119 waterfront lots. All landowners will receive access to water through piers belonging to individual landowners, piers shared by adjacent landowners, and cluster piers available to landowners with water frontage but no pier rights due to a location on shallow or narrow coves. Non-waterfront lot landowners will have access to a slip on a community pier.

Table 1 indicates the type and number of shoreline recreational use facilities that are proposed for construction in the five waterfront phases of Heron Bay. The totals include 55 individual piers, nine shared piers, three cluster piers (containing 10 slips apiece), a community pier (containing 10 slips), a boat ramp and launching area, and a swimming beach. The specific measurements of proposed facilities will be dependent on site conditions.

For the purposes of estimating impacts for this assessment, a standard size has been determined for each facility type. The standards were based on structural specifications required by Yadkin, Inc. (Appendix A) Impacts can be expected to be equal to or less than this estimate.

Individual pier	A 10 feet (ft) X 20 ft stationary platform connected to a 14 ft X 20 ft floating platform by a 6 ft X 10 ft hinged ramp for a total of 520 sq ft.
Shared pier	Same dimensions as the individual pier.
Cluster pier	10 ft X 15 ft stationary platform connected to a 14 ft X 35 ft floating platform by a 6 ft X 10 ft hinged ramp for a total of 700 sq ft.
Community pier	Same dimensions as the cluster pier.
Boat ramp	A 16 ft X 60 ft cement runway as measured from the shoreline for a total of 960 sq ft.
Beach standard	The width of the lot waterfront (160 ft) X 100 ft deep for a total of 16,000 sq ft.

prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce. By regulation, wetlands are also considered "waters of the United States". Wetlands are described as:

those areas that are inundated or saturated by ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (33 CFR 328.3(b), (1986)).

The COE requires the presence of three parameters (hydrophytic vegetation, hydric soils, and evidence of hydrology) in support of a jurisdictional determination (COE 1987).

Section 404 jurisdictional areas in and adjacent to the development area are lacustrine and palustrine in nature, as defined by Cowardin *et al.* (1979) and displayed on the NWI maps for Badin and New London USGS 7.5 minute quadrangles. Badin Lake is a lacustrine, limnetic system. The palustrine areas include small, unnamed tributaries to Badin Lake whose sources are primarily runoff and natural springs. These drains are typically bank-to-bank systems that are less than 6 ft wide. Figure 3 depicts the locations of these drainages within the development property.

### **Shoreline Physiography**

As the lake has been formed by the damming of a river valley, the existing shoreline within the Heron Bay development property consists of former ridges and slopes that are periodically transected by narrow drainages that empty into the lake. There are two relatively low, wooded peninsulas in the southeastern portion of the development area. These peninsulas are well within Yadkin, Inc.'s buffer and are not proposed for development. The remainder of the shoreline in the development area is characterized by gentle, wooded slopes in the east and steeper, wooded slopes in the west. Table 4 indicates water depths at distances of 30 ft, 40 ft, and 50 ft from the normal pool level from selected lots in the Heron Bay development. These depths were determined by Heron Bay personnel in November 1995.

Some of the steeper-sloping shorelines have developed bluff-like characteristics as a result of collapsing of the bank due to erosion. Wind-driven waves and boat wakes are the primary erosive forces causing a constant change of the shoreline contour. The shoreline throughout the development area is characterized by fallen trees that are partially submerged and extend above the shoreline (lap trees). The lap trees appear to have fallen as a result of erosive forces, weather, and natural death. The shoreline accumulates waterborne debris, including vegetation and human refuse. The refuse is composed of items such as plastic bottles, aluminum cans, wooden construction materials, and tires.

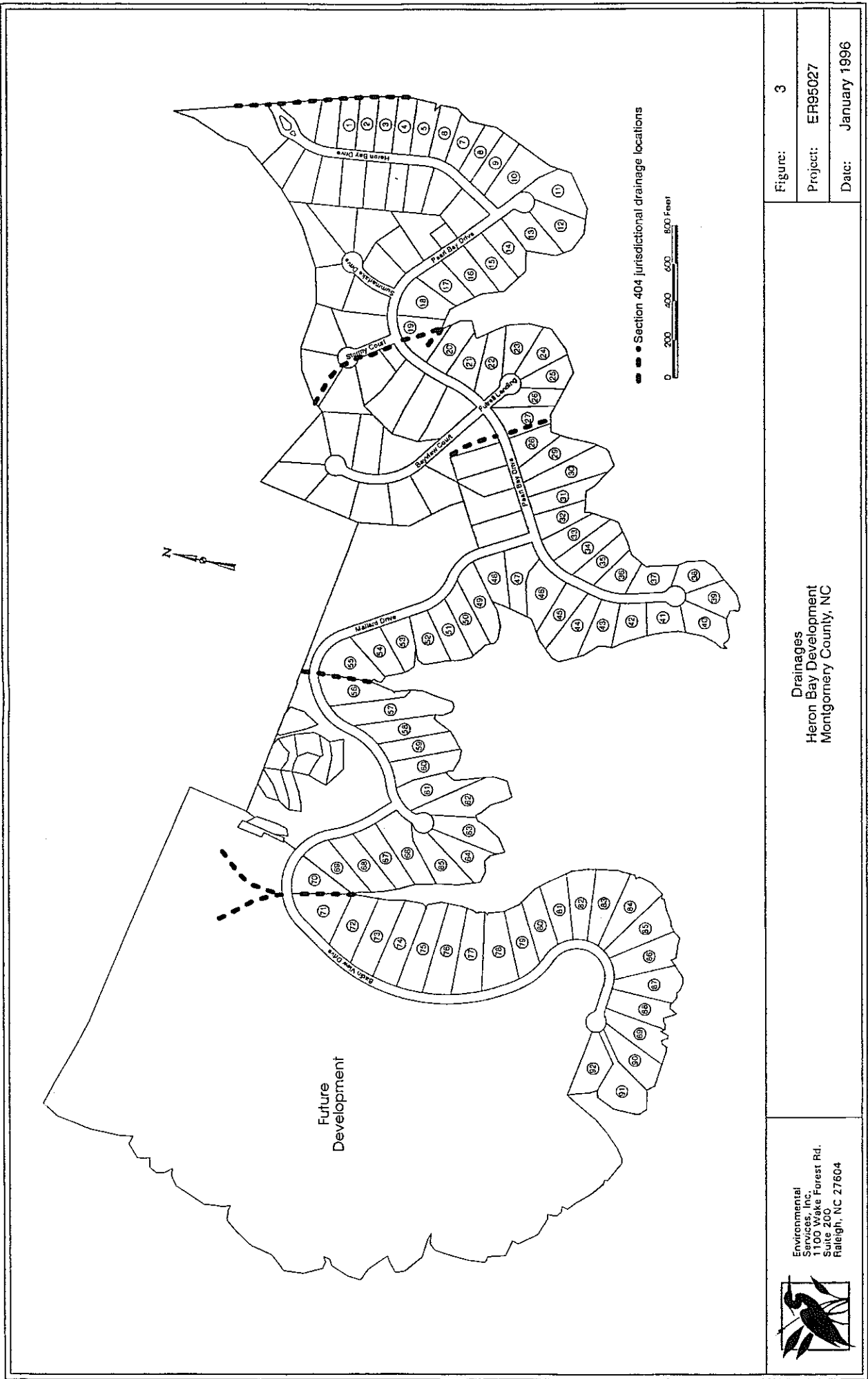


Figure: 3  
 Project: ER95027  
 Date: January 1996

Drainages  
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those areas that are inundated or saturated by ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (33 CFR 328.3(b), (1986)).

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### **Shoreline Physiography**

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Some of the steeper-sloping shorelines have developed bluff-like characteristics as a result of collapsing of the bank due to erosion. Wind-driven waves and boat wakes are the primary erosive forces causing a constant change of the shoreline contour. The shoreline throughout the development area is characterized by fallen trees that are partially submerged and extend above the shoreline (lap trees). The lap trees appear to have fallen as a result of erosive forces, weather, and natural death. The shoreline accumulates waterborne debris, including vegetation and human refuse. The refuse is composed of items such as plastic bottles, aluminum cans, wooden construction materials, and tires.

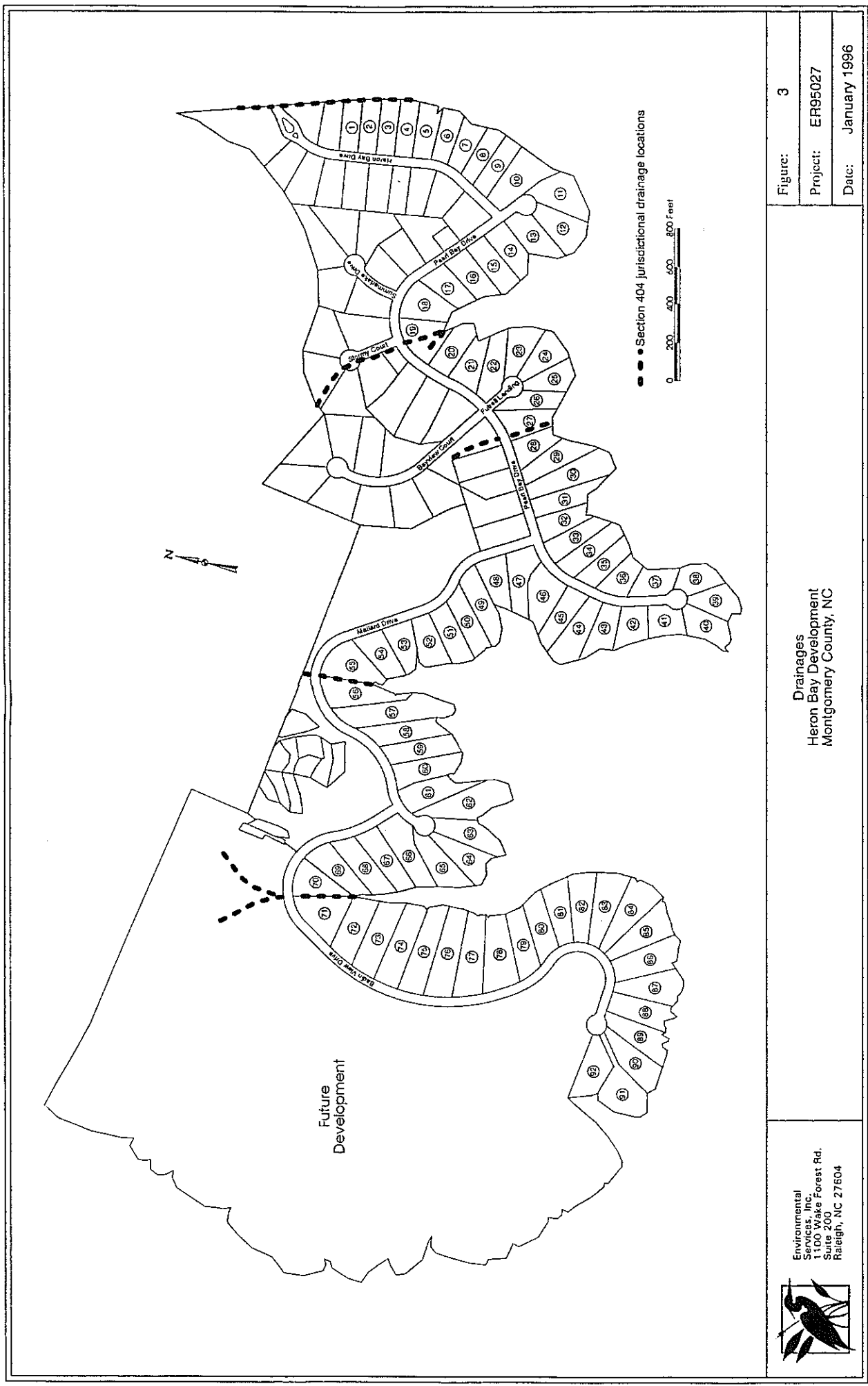


Figure:	3
Project:	ER95027
Date:	January 1996

Drainages  
Heron Bay Development  
Montgomery County, NC

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Suite 200  
Raleigh, NC 27604



Table 4. Water depths measured offshore of selected waterfront lots at Heron Bay in October 1995. Depths were measured at distances of 30, 40, and 50 feet (ft) from the normal pool level. Depth measurements are in feet.

Lot #	30 ft out	40 ft out	50 ft out	Lot #	30 ft out	40 ft out	50 ft out
12	5.1	5.9	6.7	46	6.4	7.6	8.4
13	7.0	8.0	9.0	47	5.7	6.1	6.5
14	6.4	6.6	6.8	49	8.1	9.5	10.9
15	4.3	5.9	7.2	50	5.0	5.3	6.4
23	4.4	4.6	4.8	51	9.3	10.6	11.9
24	4.7	5.3	5.7	52	6.6	7.7	8.8
25	4.1	5.8	7.5	57	7.9	7.9	8.0
26	4.7	5.2	5.7	58	8.4	9.3	10.2
27	5.3	5.6	5.9	59	4.3	5.1	5.9
28	5.6	6.9	8.2	60	4.2	5.7	7.2
29	6.0	6.1	6.2	61	6.7	7.0	7.3
30	5.0	5.6	6.2	62	6.8	8.3	9.8
31	4.4	4.7	5.0	63	5.0	6.1	7.2
32	4.8	5.1	5.4	64	7.1	8.9	10.7
33	5.3	5.8	6.3	80	14.4	21.1	23.0
34	7.9	9.6	11.3	81	11.2	17.4	23.6
35	7.5	8.1	8.7	82	12.0	13.3	14.6
36	7.3	9.2	10.1	83	13.3	19.2	25.0
37	7.3	9.2	10.1	84	5.0	6.6	8.2
38	4.0	4.2	4.8	85	4.4	5.0	5.6
39	6.5	7.1	7.7	86	4.7	6.3	7.9
40	7.7	8.6	9.5	87	7.9	11.9	15.0
41	6.8	7.6	8.4	88	8.5	12.1	15.7
42	5.0	6.3	7.6	89	20.2	24.1	25.8
43	8.0	10.0	12.1	90	24.3	30.5	33.1
44	8.6	11.1	13.6	91	21.7	35.5	37.2
45	7.8	9.5	10.7				

## Biological Resources

### **Plant Communities**

#### Terrestrial

The predominant plant community in the development property is dry-mesic oak-hickory forest (Schafale and Weakley 1990). The composition of this plant community varies depending on the amount and degree of disturbance to which the community has been subjected. Hurricane Hugo passed through the region in 1989, causing obvious and lingering damage to the forest canopy. Invasive species, primarily pines, can be observed filling the canopy openings. The canopy generally consists of a mixture of hardwood species, dominated by oaks. Relatively less disturbed areas support rock chestnut oak (*Quercus montana*), white oak (*Q. alba*), scarlet oak (*Q. coccinea*), post oak (*Q. stellata*), and mockernut hickory (*Carya tomentosa*). The understory consists of saplings of canopy species as well as sourwood (*Oxydendron arboreum*), American holly (*Ilex opaca*), flowering dogwood (*Cornus florida*), red maple (*Acer rubrum*), sweetgum (*Liquidambar styraciflua*), and eastern red cedar (*Juniperus virginiana*). Herbs include pipsissewa (*Chimaphila maculata*), muscadine grape (*Vitis rotundifolia*), greenbrier (*Smilax* spp.), and running pine (*Lycopodium flabelliforme*).

Mixed mesic hardwood forest is found on protected or north-facing slopes or in deep, shady ravines. Canopy species include American beech (*Fagus grandifolia*), northern red oak (*Q. rubra*), willow oak (*Q. phellos*), and tulip tree (*Liriodendron tulipifera*), in addition to occasional pine and species from the oak-hickory hardwood forest. American holly, red maple, wild azalea (*Rhododendron nudiflorum*), mountain laurel (*Kalmia latifolia*), and blueberry (*Vaccinium* sp.) are found in the subcanopy and shrub layer. Herbs include heartleaf (*Hexastylis* sp.), Christmas fern (*Polystichum acrostichoides*), and crane fly orchid (*Tipularia discolor*). This community is limited in extent.

Areas of pine forest are dominated by shortleaf and Virginia pines (*Pinus echinata* and *P. virginiana*), and loblolly pine (*P. taeda*) is sometimes found in these communities. Storm damage, past logging operations, and man-caused disturbances have resulted in some dense, nearly impenetrable thickets. Older, more open stands have occasional red maple and sweetgum invaders. Due to the dense cover, herbs are sparse or nonexistent.

#### Aquatic

Aquatic vegetation is not highly diversified along the lake margin. However, one species, water willow (*Justicia americana*), is well established along much of the lake margin, including the shore adjacent to Heron Bay. Other observed aquatic species include lizard's tail (*Saururus cernuus*), pickerelweed (*Pontederia cordata*), rush (*Juncus* sp.), and buttonbush (*Cephalanthus occidentalis*).

prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce. By regulation, wetlands are also considered "waters of the United States". Wetlands are described as:

those areas that are inundated or saturated by ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (33 CFR 328.3(b), (1986)).

The COE requires the presence of three parameters (hydrophytic vegetation, hydric soils, and evidence of hydrology) in support of a jurisdictional determination (COE 1987).

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A survey of water willow locations was not conducted as part of this assessment. However, Figure 4 indicates the extent of willow beds along the Badin Lake shoreline in 1992 (Ebasco 1992).

Water willow is an emergent macrophyte, usually expected to be established in water depths of less than 6 ft. However, this species occurs in water up to approximately 11 ft deep in Badin Lake. The willow appears to grow in bands adjacent to the shoreline that vary in width from less than 1 ft to over 70 ft. Table 5 indicates the widths of water willow beds (or bands) off the shoreline of the proposed development lots where the willow occurs. These measurements were made during the October 1995 lake drawdown by measuring the distance from the normal pool level (the shoreline, at 0 ft) to the closest side of the band, then across the band to the farthest side. Table 5 also indicates the estimated deepest occurrence of willow in the bands. Figure 5 depicts two views of willow beds photographed during the drawdown.

## Wildlife

### Terrestrial

The proximity of Heron Bay to both mountain and piedmont habitats and its adjacency to Uwharrie National Forest and the Yadkin/Pee Dee River system, has resulted in a variety of local food and cover resources to support wildlife. Mammals commonly occurring or expected in this region include white-tailed deer (*Odocoileus virginianus*), raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), eastern chipmunk (*Tamias striatus*), gray squirrel (*Sciurus carolinensis*), red fox (*Vulpes vulpes*), striped skunk (*Mephitis mephitis*), and small mammals such as eastern mole (*Scalopus aquaticus*) and white-footed mouse (*Peromyscus leucopus*) (Webster *et al.* 1985).

Some permanent resident bird species that occur in the proposed development area include red-tailed hawk (*Buteo jamaicensis*), Carolina chickadee (*Parus carolinensis*), brown-headed nuthatch (*Sitta pusilla*), eastern bluebird (*Sialia sialis*), pine warbler (*Dendroica pinus*), and rufous-sided towhee (*Pipilo erythrophthalmus*). Breeding migrants include red-eyed vireo (*Vireo olivaceus*), blue-gray gnatcatcher (*Polioptila caerulea*), eastern wood-pewee (*Contopus virens*), and scarlet tanager (*Piranga olivacea*). Common wintering migrants known or expected in the area include ruby-crowned kinglet (*Regulus calendula*), golden-crowned kinglet (*R. satrapa*), dark-eyed junco (*Junco hyemalis*), yellow-rumped warbler (*Dendroica coronata*), and cedar waxwing (*Bombycilla cedrorum*) (AOU 1983, Potter *et al.* 1980).

Reptiles and amphibians known to occur in the region include eastern box turtle (*Terrapene carolina*), eastern fence lizard (*Sceloporus undulatus*), southeastern five-lined skink (*Eumeces inexpectatus*), six-lined racerunner (*Cnemidophorus sexlineatus*), rat snake (*Elaphe obsoleta*),

prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce. By regulation, wetlands are also considered "waters of the United States". Wetlands are described as:

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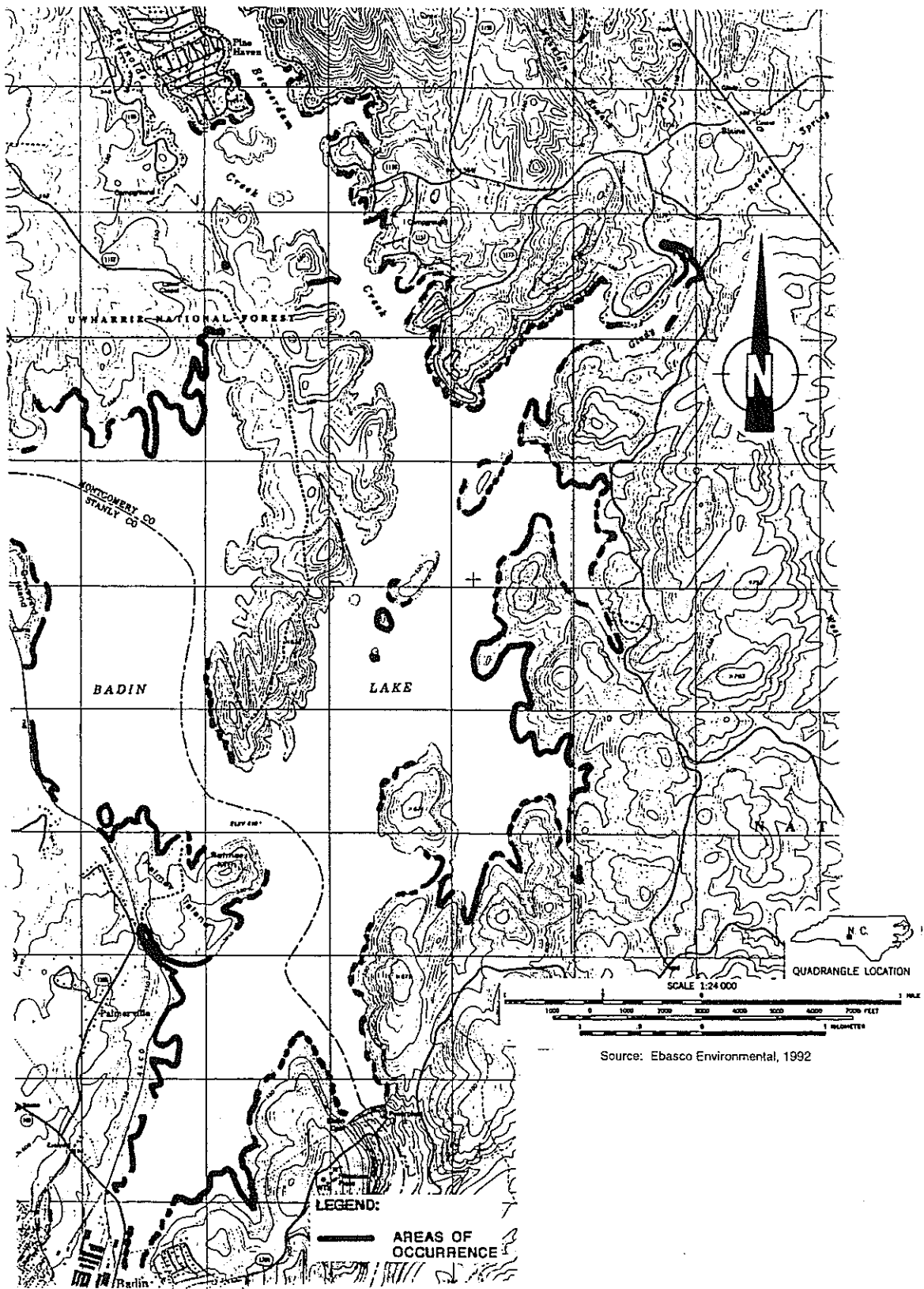
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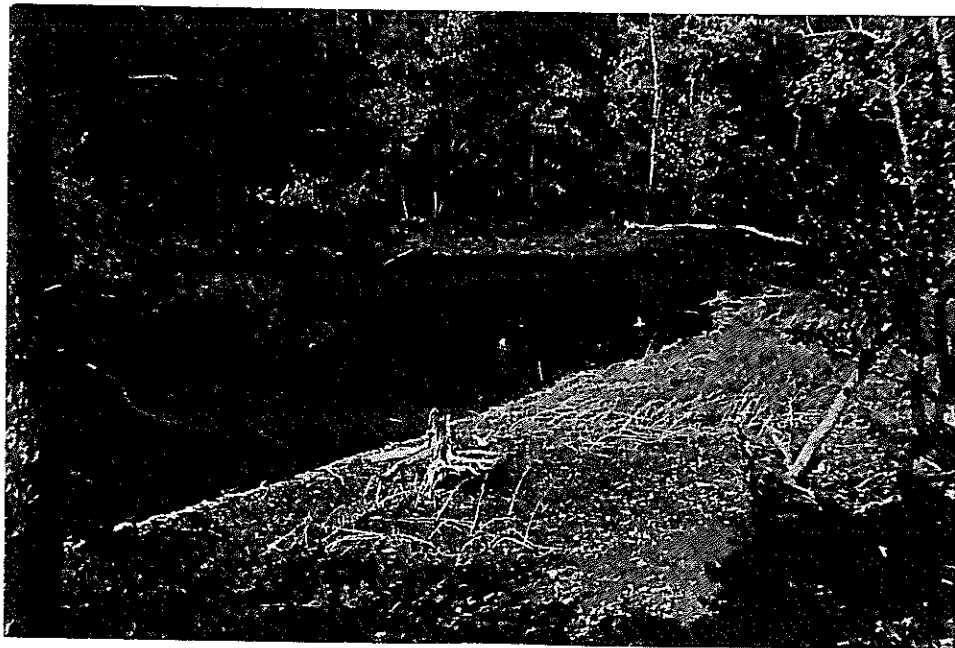
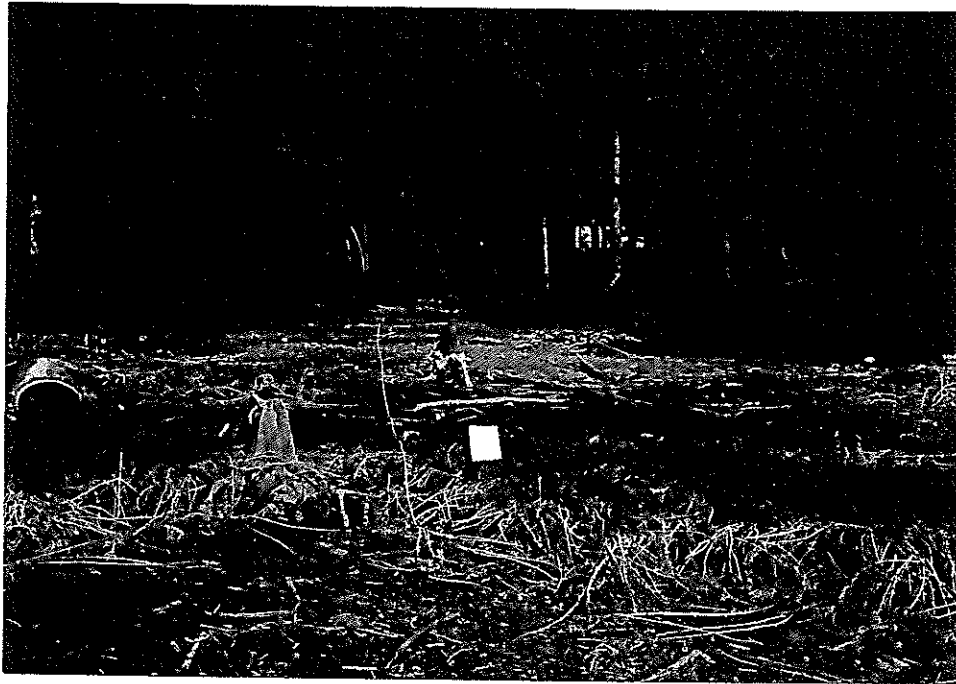
Distribution of Water Willow Beds  
Heron Bay Development  
Montgomery County, NC

Figure:	4
Project:	ER95027
Date:	January 1996



Table 5. Extent of water willow bands found offshore of waterfront lots at Heron Bay in October 1995. Willow band widths are measured in feet (ft) from the normal pool level (0 ft). Only lots where willow occurred are listed.

Lot #	Beginning and End of Band	Band Width(s)	Est. Deepest Occurrence
12	29-43	14	6
13/14	0-44	44	8
15	15-23	8	3
24	26-34	8	5
26	0-70	70	6
27	51-64	13	7
28	30-35	5	6
29	0-23, 51-65	23, 14	7
30	45-75	30	7
32	29-48	19	5
34	0-20	20	6
36	45-75	12, 8	7
37	29-48	7	9
38	28-46	18	5
40	44-65	21	10
41	36-59	23	9
42	37-55	18	8
43	0-32	32	8
44	29-43	14	11
45	13-19	6	5
47	0-30	30	6
49	0-12	12	5
50	0-15	15	3
51	15-30	15	9
52	8-20	12	5
58	20-55	35	10
59	0-70	70	7
60	0-70	70	9



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Water Willow at Lake Drawdown  
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Montgomery County, NC

Figure: 5

Project: ER95027

Date: January 1996

*et al.* 1980). Primary habitat consists of mature to over-mature southern pine forests dominated by loblolly, long-leaf (*Pinus palustris*), slash (*P. elliotii*), and pond pines (*P. serotina*) (Thompson and Baker 1971). Nest cavities are constructed in the heartwood of living pines, generally older than 70 years, that have been infected with red-heart disease. Nest cavity trees tend to occur in clusters, which are referred to as colonies (FWS 1985). The woodpecker drills holes into the bark around the cavity entrance, resulting in a shiny, resinous buildup around the entrance that allows for easy detection of active nest trees. Pine flatwoods or pine-dominated savannas which have been maintained by frequent fires serve as ideal nesting and foraging sites for this woodpecker. Development of a thick understory may result in abandonment of cavity trees. There are no records for this species in the area (NHP), and habitat for this species is lacking.

**Eastern Cougar** - The eastern cougar is a large, long-tailed cat that measures from 7 to 9 ft long, including the tail, and weighs 150 to 200 pounds. It is primarily tan above and whitish underneath with black on the muzzle and tip of the tail. The cougar prefers large tracts of undisturbed habitat that support white-tailed deer, its primary prey. The cougar once occurred from Canada south to Patagonia, and throughout the state of North Carolina. The species is now primarily limited to remote regions of the Americas. The cougar is assumed to be extirpated in North Carolina, but sporadic sightings continue to be reported from the mountains and remote regions in the coastal plain (Lee 1987). No adverse impacts to the eastern cougar are expected as a result of proposed development.

**Schweinitz's Sunflower** - Schweinitz's sunflower is an erect, unbranched, rhizomatous, perennial herb that grows to approximately 6 ft in height. The stem may be purple, is usually pubescent, but occasionally nearly glabrous. Leaves are sessile, opposite on the lower stem but alternate above. Leaf shapes are lanceolate and average 5 to 10 times as long as wide. The leaves are rather thick and stiff, with a few small serrations. The upper leaf surface is rough and the lower surface is usually pubescent with soft white hairs. Schweinitz's sunflower blooms from late August to frost; the yellow flower heads are about 0.6 inches in diameter. The current range of this species is within 60 miles of Charlotte, North Carolina. This species occurs on upland, interstream flats or gentle slopes, in soils that are thin or clayey in texture. The species needs open areas protected from shade or excessive competition, reminiscent of Piedmont prairies. Disturbances such as fire maintenance or regular mowing, help sustain preferred habitat (FWS 1994). Habitat for this species occurs within the region, but no records exist documenting this species within or near the Heron Bay development (NHP documents). No adverse impacts to Schweinitz's sunflower are expected as a result this project.

**Bald Eagle** - The bald eagle was down-listed from Endangered to Threatened by the USFWS during 1995 due to the apparent recovery of the population. This species occurs throughout

North America, primarily in association with large lakes and coastal bays and sounds where food is plentiful. Mature eagles (usually 4 to 6 years and older) are identified by a white tail and head, dark brown to black body and wings (wingspread to 6 ft), and yellow eyes, bill, and feet. Juveniles are generally chocolate-brown and sometimes have whitish mottling on their tail, belly, and wing linings. As the birds mature they become lighter in color and the mottling increases until they acquire their adult plumage pattern. Large trees (predominately pine or cypress), either living or dead, which are close to feeding grounds, are usually selected as nest sites. Eagles are opportunistic hunters and scavengers, feeding on a wide variety of aquatic-dependent organisms including fish, snakes, small mammals and large water birds. Their primary sources of food are fish taken from ospreys and carrion (Potter *et al.* 1980).

A bald eagle management plan for Badin Lake was prepared by Yadkin, Inc. in 1995. Mr. Gary Allen of Waterfront Properties/KEJ Marketing Co., Inc., developer of Heron Bay, participated in the preparation of the management plan as a member of the Citizen Review Committee. The Center for Conservation Biology (CCB, College of William and Mary) assisted with the management plan and found no suitable or potentially suitable bald eagle roosting or nesting habitat on Badin Lake; however, there are areas of suitable or potentially suitable bald eagle perch habitat (Yadkin, Inc. 1995, Map 5.2). These sites are currently being evaluated by the Center for Conservation Biology (CCB) staff for eagle suitability in the face of existing or proposed residential development and/or heavy recreational use. Eagles have been observed feeding below Narrows Dam, approximately 3.6 miles south of the development property. Within the lake, most sightings of this species have been made from the large peninsula north of Narrows Dam and from two large islands on the western shore. Nesting and roosting habitat for the bald eagle is not present in the vicinity of the proposed Heron Bay development, and no nests are known from the surrounding region (NHP documents). No adverse impacts to the bald eagle are expected as a result of proposed development.

### **Cultural Resources**

Archaeological evidence indicates that this region has been continually occupied by humans for at least 10,000 years. Members of the Sapona, Saura, and Catawba tribes inhabited the area prior to the arrival of European settlers. The region was settled by English, Welsh, Scotch-Irish, and German immigrants in the late middle 1700's.

The term "cultural resources" refers to prehistoric or historic archaeological sites, structures or artifact deposits over 50 years old. "Significant" cultural resources are those sites that are eligible or potentially eligible for inclusion in the *National Register of Historic Places*. Evaluations of site significance are made with reference to the eligibility criteria of the National Register (36 CFR 60) and in consultation with the North Carolina State Historic Preservation Officer (SHPO).

In order to interpret the potential occurrence of significant cultural resources within the Heron Bay development property, a background study was conducted at the Office of State Archaeology (OSA). At the OSA, the locations of previously recorded sites in the vicinity of the Heron Bay development property were investigated, and reports of archaeological surveys in the area were consulted. The documentation indicates that the Heron Bay development property represents a high probability zone for containing archaeological sites, both prehistoric and historic. The location of the property adjacent to the Yadkin River would have made the area a desirable place for human settlement and/or utilization of natural resources.

Over a thousand archaeological sites have been recorded throughout Montgomery County in numerous environmental and topographic settings. A 1991 survey of the Uwharrie Point property, which is located immediately east of the Heron Bay development, recorded 16 sites. These sites include nine historic and seven prehistoric sites, one of which is within the Heron Bay development property. This site (31 Mr 861) is a small prehistoric site that was judged to be ineligible for the National Register and to not warrant additional work. Of the 15 sites within the Uwharrie Point property, one prehistoric stone quarry and one historic tar kiln were recommended for additional work to determine National Register status.

### **Lake Use**

Badin Lake is a popular recreation site for such water-based activities as fishing, cruising, jetskiing, water skiing, sailing, and swimming. Lake access points presently include 10 boat launch areas, four marinas, three public swimming areas, and two private swimming areas, none of which occur within the Heron Bay development property. Boat launch sites have been identified through commercially available maps of the Badin Lake area and Uwharrie Point boat count data (courtesy Mr. Chip Connor, Old North State Club at Uwharrie Point).

Boat carrying capacities have been determined for recreational lakes by at least two studies: *Guidelines for Understanding and Determining Optimum Recreation Carrying Capacity* (URDC 1977) and *Recreational Carrying Capacity Handbook* (URDC 1980). These studies take into consideration factors such as tolerance of aquatic life, multiple use of water area, lake depth, water circulation, and shoreline configuration. The former source recommends a standard carrying capacity of 9 acres per boat and the latter source recommends a standard carrying capacity of 8-9 acres per boat. Badin Lake provides approximately 5350 acres of open water for recreational boating. A standard of one boat per 9 acres of open water translates to a carrying capacity of 594 recreational boats for Badin Lake.

Yadkin, Inc. currently has over 1000 recreational use facilities under license on Badin Lake (pers. comm., Julia Larson, Yadkin, Inc., 4 Jan 1996). An accurate determination of the number of boats permanently kept on the lake cannot be made from this information as the licensed facilities vary in size from individual piers to large marinas. It is also not uncommon

for owners of individual piers to use more than one boat on the lake. Yadkin, Inc. plans to conduct an in-depth study of boat numbers and use on Badin Lake during the summer of 1996 (pers. comm., Pat Shaver, Yadkin, Inc., 5 Jan 1995).

Badin Lake boat-use survey data are available for one day in 1990, a combination of three days in 1992, 13 days in 1993, and five days in 1994. This information is presented in Table 6. The 1990 data were collected by Yadkin, Inc.. The 1992 data were collected by Ebasco Environmental as part of the *Uwharrie Point Development Agency Consultation Report* (1992). The 1993 and 1994 data were collected by the Old North State Club at Uwharrie Point.

The highest number of boats using the lake were observed on holiday weekends and the lowest number were observed on weekdays. An Independence Day weekend (1 July 1990) had the highest boat use recorded (411 boats, which comprises 69 percent of the lake carrying capacity). This was the only survey day where greater than 50 percent of the carrying capacity was reached. On 17 of the 21 survey days, boat use on Badin Lake did not exceed 30 percent of capacity.

The 1990 and 1992 data indicate that 16 percent of the boats docked on the lake are expected to be active during peak use times (weekends and holidays). If empty boat trailers at boat launch areas can be used as an indication of number of boats on the lake that are not from lake docks, then trailered boats account for well over half of the total boat use on the lake. On over a third of the survey days (8), more empty trailers were found at boat launch areas than boats using the lake.

Table 6. Boat use information collected on Badin Lake. Data from 1990 were collected by Yadkin, Inc., 1992 data were collected by Ebasco Environmental, Inc., and 1993 and 1994 data were collected by Old North State Club at Uwharrie Point. The lake carrying capacity is considered to be 9 acres per boat, or 594 boats for Badin Lake.

Date	No. Boats on Lake	% Lake Capacity	Boats at Docks	% Total on Lake	Empty Trailers	% Total on Lake
1 July 90	411	69	859	16	245	60
Jul-Aug 92	271	46	986	10	157	58
29 May 93	152	26	--	--	--	--
6 Jun 93	161	27	--	--	--	--
15 Jun 93*	47	8	--	--	52	?
19 Jun 93	164	28	--	--	145	88
26 Jun 93	128	22	--	--	157	?
4 Jul 93	125	21	--	--	--	--
10 Jul 93	104	18	--	--	131	?
17 Jul 93	102	17	--	--	151	?
22 Jul 93*	28	5	--	--	26	93
24 Jul 93	129	22	--	--	126	98
31 Jul 93	145	26	--	--	135	93
15 Aug 93	112	19	--	--	114	?
28 Aug 93	113	19	--	--	113	100
6 Sept 93	225	38	--	--	170	76
28 May 94	199	34	--	--	162	81
5 Jun 94	127	21	--	--	128	?
10 Jul 94	167	28	--	--	115	69
13 Aug 94	145	24	--	--	173	?
20 Aug 94	114	19	--	--	134	?

\*Weekdays, all other dates are weekend days.

### **III. ALTERNATIVES**

The western piedmont of North Carolina is becoming progressively more industrialized and urbanized. The Heron Bay development property is strategically located within a 1 hour drive of Charlotte, Concord, Kannapolis, Salisbury, Lexington, Thomasville, High Point, Greensboro, and Winston-Salem. Charlotte, North Carolina's largest and fastest-growing city, is attempting to become a world-class city, as evidenced by the establishment of corporate headquarters and professional sports teams. Economic growth will stimulate a larger population, resulting in increased pressure on regional natural resources. Under the circumstances, controlled development, tempered with an outlook to the future, is essential to maintaining an acceptable balance between environmental resources and social growth.

#### **No Build**

A no build alternative on the part of Heron Bay would make the development property available for other uses, most likely timber production or development by another company; it is not likely that the property will be allowed to remain undisturbed. As a silvicultural operation, the site's natural resources would be severely disturbed approximately every 30 years. The structure and complexity of the plant community would be reduced and wildlife populations would become less diverse and more oriented to disturbance-tolerant species. Erosion due to large-scale soil disturbances associated with a logging operation would potentially exacerbate the already eutrophic condition of Badin Lake. If not used for silvicultural purposes, this property would most likely be developed for residential housing, either by individual landowners or as another subdivision, who's willingness to coordinate with Yadkin, Inc. could differ from that of Heron Bay.

#### **Project without Shoreline Alterations**

Heron Bay is planned as a development that will be integrated into the existing environment, not as a replacement for the natural system. All setback limits and development specifications recommended by involved resource agencies and Yadkin, Inc., will be observed. Minimal clearing will be carried out in residential yards in preparation for construction. Lot sizes for this development are substantially larger than those proposed by the previous owner/developer. No domesticated animals will be allowed to roam freely within the development area. A series of protective neighborhood covenants (Appendices F and G) have been generated by the present developer and will be adhered to by Heron Bay residents.

The lake is a natural source of recreation to the public and is presently used by the adjacent, local, and regional populace. Development along the lake shoreline without individual access to the water (such as piers and boat ramps) is nonetheless going to increase recreational use of the lake. Boaters who own near-lake housing will inevitably drive their boats to the shoreline, disturbing the lake bed, aquatic plants, and submerged debris in the process.



Landowners may find it more convenient to launch smaller boats (jet skis, john boats, sailboats, etc.) from the shoreline than to utilize existing boat ramps. Walking trails and paths will inevitably be worn down to and along the shoreline. Fishing boats will operate close to shore to find the shallow snags and shaded depressions which serve as fishery habitat. And swimmers and waders will create trails through the near-shore lake bed to reach deeper waters.

### **Project with Shoreline Alterations**

Heron Bay's preferred alternative is to develop an upscale, residential development that blends with the existing environment while providing landowners access to that environment, including the lake. Substantially modifying the environment would be detrimental to the very purpose of Heron Bay.

Provisions for lake access points to landowners is expected to minimize cumulative adverse impacts to the lake from the development. Stable entry and docking facilities, built to standard specifications, will minimize and control the number of areas receiving direct traffic from boaters. Extension of piers beyond the willow bands should reduce the frequency of boat traffic into the beds. Periodic piers along the shoreline will also discourage boaters and skiers from roaming into the shallow waters that support willow beds and submerged woody debris. Heron Bay proposes to construct piers of sufficient length to reach minimum water depths to reduce the need for dredging. Established walkways to piers will lessen the tendency of people to create footpaths through the lake shore vegetation buffer. The convenience of a nearby boat ramp will reduce the tendency to launch small boats from the shoreline. The development of a swimming beach with a cleared lake bed will not only reduce the impacts due to scattered swimming along the lake shore, but will also provide a margin of safety for swimmers from injury due to contact with underwater stumps and sunken refuse.

## **IV. ENVIRONMENTAL CONSEQUENCES**

### **Land Use**

Construction of the proposed residential development will result in a short-term disturbance followed by long-term stability in terms of area land use. Construction of roadways, laying of utility lines, installation of drinking water wells and septic fields, and clearing of home sites are the primary short-term disturbances involved with the development. Since a goal of Heron Bay is to integrate a residential community into the existing natural environment, minimum tree removal will take place on lots, primarily associated with building locations. Understory and shrub vegetation is expected to be thinned, and ground cover will either be left natural or supplemented with grasses to stabilize the topsoil. The vegetation that exists within the county's buffer from the banks of perennial streams and Badin lake and within Yadkin, Inc.'s buffer of 4 ft above the normal flood pool will most likely be left natural, with minimal alterations. Prior to the initiation of construction of roads, the Heron Bay development property was leased for the purpose of deer hunting. This practice was discontinued in 1994 and will remain so as development continues.

### **Water Resources and Section 404 Jurisdictional Areas**

Adverse impacts to water resources will be minimized to the greatest extent possible. The total lacustrine area that may be affected by land-based proposed aquatic amenities is 1.2 acre. The total palustrine area that may be affected by development is approximately 0.05 acre. Lacustrine impacts will consist of the placement of fill material or shading. Impacts involving fill material occur with the construction of the sand beach and the boat ramp and, to a minimal extent, construction of piers. Proposed construction within the five waterfront phases of Heron Bay may place fill on approximately 0.04 acre of lacustrine areas. Shading will occur primarily due to construction of piers, and will impact approximately 1.16 acre of lacustrine areas. Fill due to the piers will be from the insertion of pilings, which will impact a minimal area, and will cause only a short-term environmental disturbance during installation.

Six palustrine, bank-to-bank drainages occur within the development property (Figure 3). The first is a 3-ft wide, ditched drainage that is crossed by Heron Bay Drive at the development entrance. The drainage crosses beneath the existing facility through an approximately 60-ft long pipe. The second drainage appears to be spring fed, is approximately 6 ft wide, and lies partially within the footprint of Stormy Court. Approximately 170 ft of this drainage will be relocated less than 50 ft to the west side of the paved road, where it will continue adjacent to Stony Court, through a 60-ft pipe under Pearl Bay Drive, and across Lot #19 to the lake. The third drainage also appears to be spring fed, is approximately 4 ft wide, and arises below Pearl Bay Drive and flows adjacent to the western boundary of Lot #19 to join the second drainage at the lake. The fourth drainage is approximately 3 ft wide and flows parallel to and west of Bayview Court and Futrell Landing. The drainage crosses beneath the existing Pearl

Bay Drive facility through an approximately 60-ft long pipe. Below Pearl Bay Drive the drainage widens to 5 ft and crosses Lot #27 to enter the lake at the boundary of Lots #27 and #28. The fifth drainage is 2 ft wide and will flow under Mallard Drive through an approximately 60-ft pipe and constitute the boundary between Lots #55 and #56 down to the lake. The sixth drainage is formed by two 2-ft arms that join just above the proposed footprint of Badin View Drive. This 3-ft drainage will then flow through a 60-ft pipe under Badin View Drive and down the Lots #70/71 border to the lake. The total area proposed to be filled due the installation of piping for roadways is approximately 0.05 acre. Impacts are expected to be eligible for permitting under Nationwide Permit #26 for headwaters and isolated waters discharges.

Water quality in the adjacent lake and perennial streams will be protected from initial development construction through the implementation of best management practices during construction. Water quality protection will be enhanced thereafter by the vegetative buffers adjacent to waterways and groundcover established in residential lots.

### **Shoreline Impacts**

Moderate to severe erosion is presently degrading shoreline stability and water quality at several locations on the Heron Bay shoreline. Erosion is most apparent in areas characterized by steep banks adjacent to deep water. The erosion is causing a loss of shoreline vegetation, both above and below the waterline, destabilization of the local lake bed, and sediment loading in the water column. Heron Bay lot owners will cooperate with Yadkin, Inc. to stabilize the shoreline where needed with either rip-rap or retaining walls at strategic locations.

As mentioned in the previous section, impacts due to recreational use structures proposed for the lake's immediate shoreline are estimated at 0.04 acre of fill and 1.16 acre of shading. A very small portion of these areas occurs on high ground adjacent to the lake, as these facilities will be primarily situated in or over the lake. Consequentially, impacts will include paths and roads to these facilities. All access points will be designed and constructed in cooperation with Yadkin, Inc. to minimize both short- and long-term environmental impacts.

The most extensive shoreline impacts proposed will occur at the site of the sand beach (lot #60) and the boat ramp and associated parking area. The shoreline conversion to sand beach will involve the removal of natural vegetation and debris, and the subsequent placement of beach sand both above and below the normal pool level. The boat ramp area will include a paved roadway connecting the ramp to a parking lot. The boat ramp area will be designed so that surface runoff will not flow directly into the lake.

A naturally-vegetated buffer will remain adjacent to the shoreline in all waterfront lots. The County requires a 30-ft buffer along all lake shorelines and tributaries. Yadkin, Inc. controls

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As mentioned in the previous section, impacts due to recreational use structures proposed for the lake's immediate shoreline are estimated at 0.4 acre of fill and 0.8 acre of shading. A very small portion of these areas occurs on high ground adjacent to the lake, as these facilities will be primarily situated in or over the lake. Consequentially, impacts will include paths and roads to these facilities. All access points will be designed and constructed in cooperation with Yadkin, Inc. to minimize both short- and long-term environmental impacts.

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A naturally-vegetated buffer will remain adjacent to the shoreline in all waterfront lots. The County requires a 30-ft buffer along all lake shorelines and tributaries. Yadkin, Inc. controls

a buffer within a 4 ft contour above the normal lake flood pool. This buffer, in conjunction with maintained ground cover within residential yards, will control surface runoff from residential areas. Septic fields will be planned and installed using best management practices to minimize the possibility of influence on the lake.

## **Biotic Impacts**

### **Plant Communities**

Impacts to plant communities, both terrestrial and aquatic, will be minimized. Within lots, removal of some trees and undergrowth will be undertaken but only to the extent needed to accommodate new facilities. Heron Bay's goal of providing a low-density housing community in a natural setting, requires the presence of much of the natural vegetation. No unique terrestrial communities will be affected in the development area and no uncommon or unique species have been documented within the development area.

Of some interest is the aquatic emergent plant community in the vicinity of the development area, primarily the water willow beds. The willow beds commonly occur in bands along the shore of Heron Bay and in numerous areas along the rest of the Badin Lake shoreline. Approximately 50 percent of the Heron Bay shoreline contains evidence of water willow. Table 5 indicates the band widths at a single point off each of the lots where bands occur. Using band widths and lot frontage distances to make an approximation, it is estimated that 2.6 acres of water willow beds existed off of Heron Bay in October 1995. Approximately 0.16 acre of willow beds will be impacted by proposed piers (6 percent of the total area of beds) and approximately 0.26 acre of willow beds will be impacted by the sand beach (10 percent of the total area of beds). As previously stated, the overriding factor in determining the swimming beach location is not the location of water willow but the maximization of safety to residents. The proposed swimming beach site is a broad, gently sloping area of shoreline offering few safety hazards.

The importance of water willow to the ecology of the area is not as a direct food source, but as a provider of cover and as a substrate for the growth of periphyton (primarily algae and diatoms). The willow beds are probably not used as breeding sites for fish as most fish species found in the lake spawn in shallow bowl-like depressions constructed in open water. However, after hatching, fry will seek shelter in willow beds which will then serve as a nursery area. The periphyton attracts grazers, which serve as food for young fish (pers. comm., L. Crowder, Duke University, 12 Dec 1995). However, studies have indicated that large, woody debris or snags provide a similar, if not as important effect (Benke *et al.* 1985). Congregations of small fish in willow beds or among snags consequently attract predatory fish such as largemouth bass.

The density of aquatic vegetation has been found to affect the behavior of both predatory and prey fish. The number prey fish captures has been found to decrease with an increase in stem densities (Savino and Stein 1982). Predation was more successful at lower stem densities. High stem densities are believed to inhibit behaviors associated with visual contact with prey. Recent work suggests that intermediate structural complexity within a habitat produces optimum conditions for the growth of predatory species (gamefish) populations because it ensures a long-term supply of prey (pers. comm., L. Crowder, Duke Univ, 12 Dec 1995).

Construction of piers through willow beds may create openings in dense beds that could actually be of benefit to gamefish predators by opening lanes through the beds for hunting. Water willow can presently be observed growing adjacent to shoreline structures and up to and underneath piers on Badin Lake (Figure 6). Some of these structures are subject to high usage, constant wave action, and other human-caused disturbances. Construction of stationary pier platforms well above the water surface will maximize the amount of light reaching the water surface to allow for continued water willow growth. Lewis (1980) found that reduced light levels did not inhibit willow growth below the willow bed canopy.

The disturbance in willow beds caused by pier construction may result in fragmentation of some plant stems or stolons. Vegetative reproduction is the principle method of water willow reproduction, and these stem fragments will become available to float to other locations and potentially establish new colonies (Penfound 1940; Lewis 1980). This mode of reproduction makes it reasonable to assume that the willow beds have the potential to recover and quickly recolonize areas disturbed during construction.

As part of the initial Uwharrie Point environmental study, Mr. John Boaz (Fish and Wildlife Associates) was hired to study the possibility of transplanting water willow into new locations in Badin Lake. He transplanted willow from Lake Tillery and established study plots before his study was cancelled. He has not been back to check on the status of the plots. He was, however, subsequently contacted by parties in Alabama interested in transplanting willow into reservoirs. Water willow has since been transplanted successfully in several other reservoirs using Mr. Boaz's Badin Lake methodology (pers. comm., John Boaz, Fish and Wildlife Associates, 27 November 1995).

### **Wildlife**

No uncommon or unique animals are known to occur in areas proposed for development. The Heron Bay development is not expected to result in adverse impacts to wildlife. Short-term displacement of local wildlife populations may occur during initial construction of roads, housing, and shoreline facilities. However, the existing forest composition and wetlands are not expected to be substantially altered, most local species are expected to move back into

## **IV. ENVIRONMENTAL CONSEQUENCES**

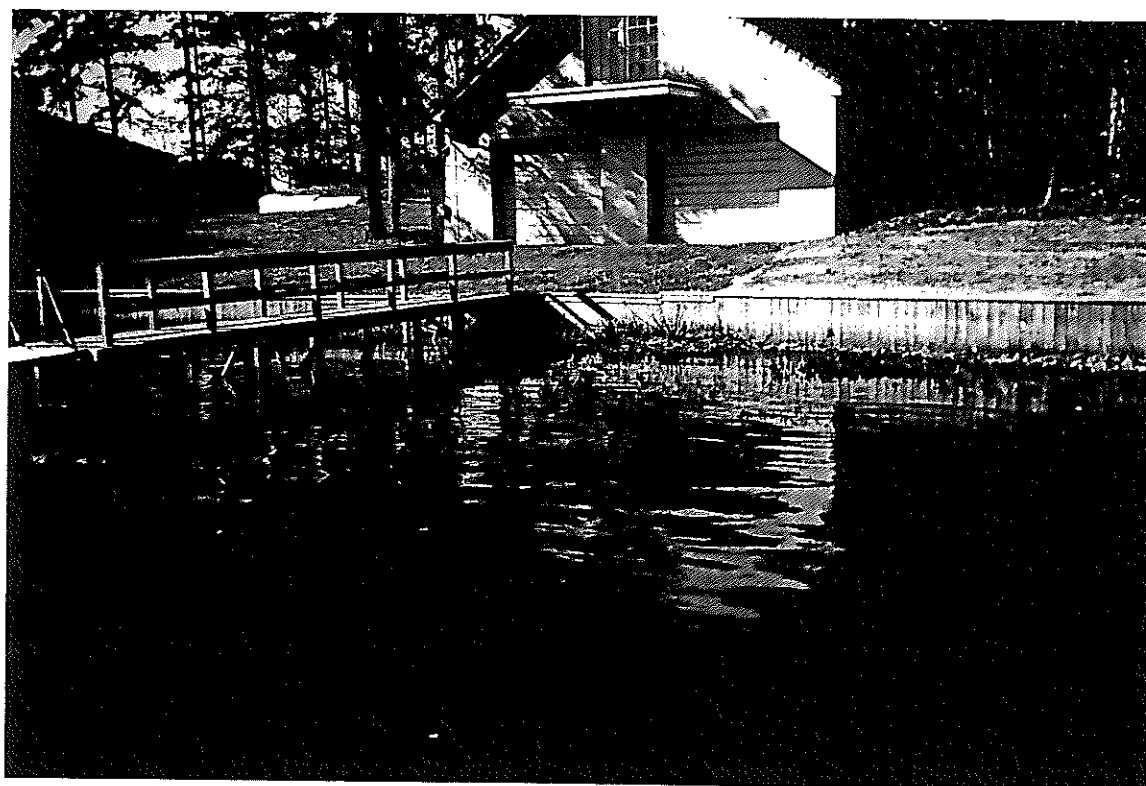
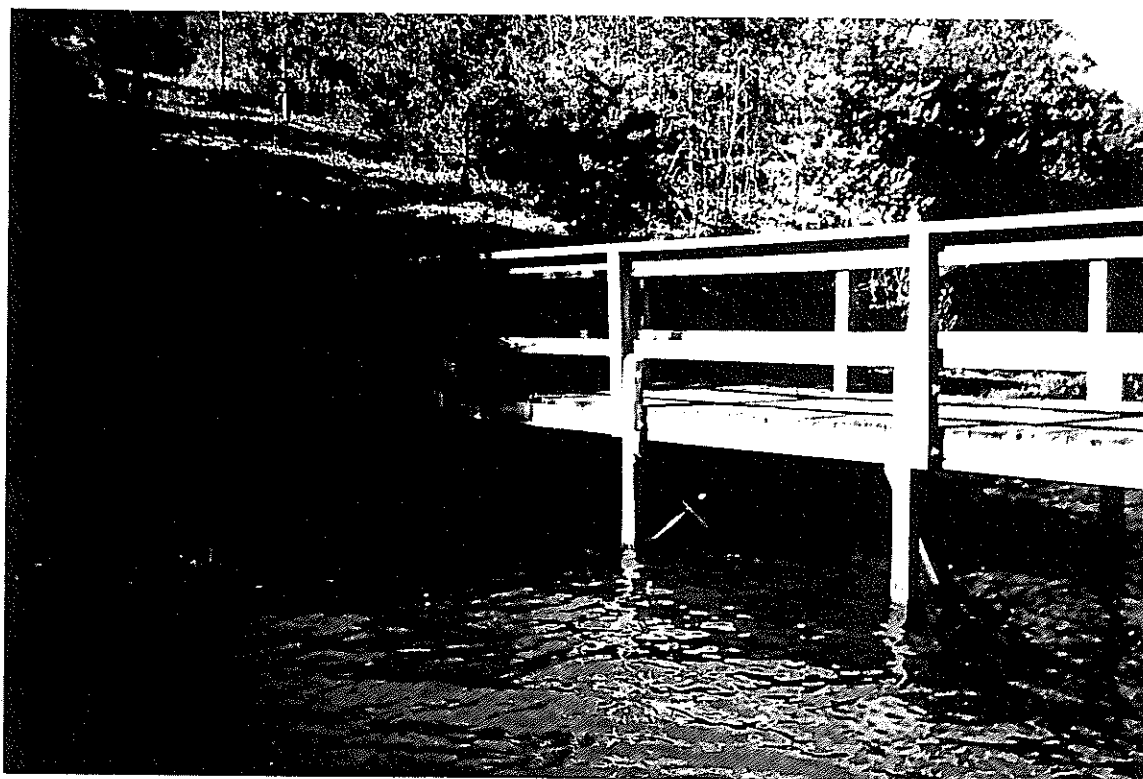
### **Land Use**

Construction of the proposed residential development will result in a short-term disturbance followed by long-term stability in terms of area land use. Construction of roadways, laying of utility lines, installation of drinking water wells and septic fields, and clearing of home sites are the primary short-term disturbances involved with the development. Since a goal of Heron Bay is to integrate a residential community into the existing natural environment, minimum tree removal will take place on lots, primarily associated with building locations. Understory and shrub vegetation is expected to be thinned, and ground cover will either be left natural or supplemented with grasses to stabilize the topsoil. The vegetation that exists within the county's buffer from the banks of perennial streams and Badin lake and within Yadkin, Inc.'s buffer of 4 ft above the normal flood pool will most likely be left natural, with minimal alterations. Prior to the initiation of construction of roads, the Heron Bay development property was leased for the purpose of deer hunting. This practice was discontinued in 1994 and will remain so as development continues.

### **Water Resources and Section 404 Jurisdictional Areas**

Adverse impacts to water resources will be minimized to the greatest extent possible. The total lacustrine area that may be affected by land-based proposed aquatic amenities is 1.2 acre. The total palustrine area that may be affected by development is approximately 0.05 acre. Lacustrine impacts will consist of the placement of fill material or shading. Impacts involving fill material occur with the construction of the sand beach and the boat ramp and, to a minimal extent, construction of piers. Proposed construction within the five waterfront phases of Heron Bay may place fill on approximately 0.04 acre of lacustrine areas. Shading will occur primarily due to construction of piers, and will impact approximately 1.16 acre of lacustrine areas. Fill due to the piers will be from the insertion of pilings, which will impact a minimal area, and will cause only a short-term environmental disturbance during installation.

Six palustrine, bank-to-bank drainages occur within the development property (Figure 3). The first is a 3-ft wide, ditched drainage that is crossed by Heron Bay Drive at the development entrance. The drainage crosses beneath the existing facility through an approximately 60-ft long pipe. The second drainage appears to be spring fed, is approximately 6 ft wide, and lies partially within the footprint of Stormy Court. Approximately 170 ft of this drainage will be relocated less than 50 ft to the west side of the paved road, where it will continue adjacent to Stony Court, through a 60-ft pipe under Pearl Bay Drive, and across Lot #19 to the lake. The third drainage also appears to be spring fed, is approximately 4 ft wide, and arises below Pearl Bay Drive and flows adjacent to the western boundary of Lot #19 to join the second drainage at the lake. The fourth drainage is approximately 3 ft wide and flows parallel to and west of Bayview Court and Futrell Landing. The drainage crosses beneath the existing Pearl



Environmental  
Services, Inc.  
1100 Wake Forest Rd.  
Suite 200  
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Water Willow Adjacent to Shoreline Structures  
Heron Bay Development  
Montgomery County, NC

Figure: 6

Project: ER95027

Date: January 1996



the area. Adjacent developed areas display abundant signs of mammals such as Virginia opossum, raccoon, striped skunk, and white-tailed deer, indicating that adequate food and cover remain in the area for their continued survival. The presence of water-related bird life such as great blue heron, belted kingfisher, mallard, ruddy duck, pied-billed grebe, and common loon adjacent to waterfront developments with boating activity on Badin Lake suggests that these birds have habituated to disturbances. In fact, existing piers and boat houses appear to be preferred feeding and resting sites for herons and kingfishers, and preferred resting areas for gulls. The presence of numerous artificial owls on shoreline facilities indicates that waterbirds have habituated to these structures to the point that they are a nuisance.

As with terrestrial animals, construction of shoreline facilities will initially displace aquatic fish and wildlife, but these animals are expected to return after the environment stabilizes. Piers will provide additional structure and shading in the near-shore areas and are not expected to detract from the fish environment. The area disturbed by piers will be small relative to the area of the existing water willow beds. Construction of piers may also create openings in willow beds that could be beneficial to predatory gamefish by providing avenues for game fish to enter the beds in search of prey species. Only lap trees and submerged trees and stumps that present a safety hazard to recreational users of the lake will be removed. In these cases, lot owners will work with Yadkin, Inc. to perform mitigative steps to maintain a proportionate amount of structure within the lake margins.

The impact of pier construction is expected to be minimized through construction occurring over an extended period of time. Many of the Heron Bay lots are being purchased as future second homes. No pier construction will be allowed before a house is under roof, so it will be a matter of years before 100 percent of the planned piers are installed.

#### **Lake Oriented Recreation**

The five waterfront phases proposed by Heron Bay will add 68 piers of various sizes to the lake, accounting for approximately 113 new boat slips. Research indicates that, conservatively, 19 percent of these boats can be expected to be active on the lake on maximum use days (summer weekends and holidays). According to this information, the proposed Heron Bay development will increase lake boat usage by only 21 boats of all types at peak times of activity. Even with this increase, boat use on Badin Lake is expected to remain well below the optimum carrying capacity of 594 recreational boats.

The sports fishery on Badin Lake is not expected to be adversely impacted by the Heron Bay development. As stated before, the lanes provided through willow beds and increased structural diversity provided by construction of shoreline recreational facilities may actually enhance the sports fishery. The amount of submerged structure offshore of the Heron Bay development will remain the same or increase due to the development. Although the cove

areas adjacent to Heron Bay are not proposed to receive shoreline structures, these areas will be lost to waterfowl hunters due to the conversion of the adjacent land to residential use.

## **V. AVOIDABLE IMPACTS AND MITIGATION**

The developers of Heron Bay have maintained a constant and open line of communication with Yadkin, Inc. and pertinent regulatory agencies concerning development goals and procedures and communications will continue. Heron Bay has accepted and intends to implement Yadkin, Inc. directives and resource agency regulations, with approved variances, concerning development in the Badin Lake region.

Heron Bay will minimize impacts to wetland drainages and the lake while providing residents with recreation access to Badin Lake. Road crossings of wetland drainages will be perpendicular when practicable. The placement of all shoreline recreational use structures has been coordinated with Yadkin, Inc.. Any reduction in submerged aquatic habitat structure (removal of stumps or lap trees) will be mitigated prior to construction, with either in-kind replacement or the installation of other structures such as fish attractors, as agreed to by Yadkin, Inc. and Heron Bay. Impacts to emergent and submerged aquatic vegetation will be avoided when possible and minimized when necessary. Encroaching recreational use facilities such as piers will be designed in such a manner to minimize the surface area ultimately shaded by the facilities.

Alterations to the terrestrial plant communities will be minimized as much as possible. Canopy trees will only be removed from the footprints of proposed structures. Residential yards will maintain a vegetated ground cover emphasizing natural vegetation. A naturally vegetated shoreline buffer width, as required by Montgomery County and Yadkin, Inc., will remain adjacent to Badin Lake and wetland drainages. Heron Bay will encourage residents to enhance the local wildlife habitat through the use of plantings that provide food and cover.

No protected or rare plant or animal species are expected to be adversely impacted by the proposed development. The Heron Bay development will participate in the environmental education of residents and encourage their participation in programs or organizations that deal with local environmental concerns. Wood duck nest boxes will be maintained in sheltered coves within the development area. The developers of Heron Bay will continue to volunteer time and energies to environmental issues affecting the region such as the Citizens Review Committee for the bald eagle management plan.

## **VI. APPLICANT INFORMATION**

### **Waterfront Properties, KEJ Marketing Co., Inc.**

Waterfront Properties, KEJ Marketing Co., Inc. was organized as a development company originally specializing in small acreage tracts. Waterfront Properties, KEJ Marketing Co. has now ventured out to include a number of waterfront communities in North Carolina. At present, property is being developed on Badin Lake, High Rock Lake, Panther Creek, and Lake Lookout.

Additional services provided by Waterfront Properties, KEJ Marketing Co., have been research and location of properties that have necessary characteristics for profitable development; the negotiation and financial structuring of acquisitions for such development companies; and the further consulting, planning, and implementation of a development plan that complies with policies of existing local, state, and federal regulatory bodies.

The sunbelt has gained recognition by the U.S. Chamber of Commerce, industry, and the world as the number one growth area in America for the balance of the Twentieth Century. More importantly, the southeastern sunbelt is the last region of beautiful, fertile, truly accessible, inexpensive raw land. Our greatest challenge is to expand to meet the market rapidly, while adhering adamantly to the formulas that provide us with successful, profitable projects.

The management team is headed by Rita A. Collins (President), William G. Allen (Vice President), and Maxine Turner (Assistant Secretary). Waterfront Properties, KEJ Marketing Co. uses a variety of outside contractors to provide management as well as the development work itself.

### **Environmental Services, Inc.**

Environmental Services, Inc. (ESI) is an ecological consulting firm specializing in the preparation of environmental assessments, wetland analyses, protected species studies, permitting, mitigation, and cultural resource assessments. We also offer assistance with hazardous and toxic materials, asbestos abatement, underground storage tank removal, preparation of Phase I environmental audits for real estate transactions, industrial hygiene services (air and noise analysis, OSHA compliance monitoring and training, etc.), and soil testing.

ESI has approximately 70 professionals in five regional offices including Jacksonville and Jupiter, Florida, Savannah and Atlanta, Georgia, and Raleigh, North Carolina. By maintaining a multi-disciplinary staff, we strive to provide flexibility and expertise to meet various client needs.

The following individuals have been involved in the preparation and review of this document:

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## GERALD RAY MCCRAIN

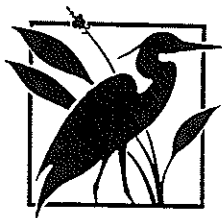
- Title:* Vice President and Raleigh North Carolina Branch Manager
- Academic Background:* **Ph.D.** Resource Management (Minor: Interdisciplinary/Public Policy). N.C. State University. 1990.  
**M.S.** Botany (Minor: Ecology). N.C. State University. 1975.  
**B.S.** Botany. N.C. State University. 1972.
- ESI Responsibilities:* Responsible for all phases of project development and management in the Raleigh ESI office. Specialities include wetland jurisdictional concerns, preparation of environmental assessments, permitting, mitigation planning, environmental policy.
- Prior Experience:* 1984-1989. N.C. Department of Transportation, Planning and Environmental Branch. Raleigh, N.C. Mitigation and Permits Specialist.
- 1978-1982. Virgin Islands Department of Conservation and Cultural Affairs, Division of Coastal Zone Management. St. Thomas, U.S. V.I. Environmental Specialist. V.I. Bureau of Fish and Wildlife. Fisheries Biologist.
- 1975-1977. Bluebeards Castle Hotel. St. Thomas, U.S.V.I. Director of Grounds and Gardens and Principal Horticulturalist.
- Professional Affiliations:* Certified Environmental Professional (#90033764)  
Society of Wetland Scientists  
Association of State Wetland Managers  
Ecological Society of America  
Sigma Xi Scientific Honor Society  
Editorial Review Board - International Journal of Pharmacognosy  
U.S. Coast Guard Masters License (#609595)  
Professional Association of Diving Instructors (Instructor #8458)
- Project Experience:*  
(Sample)  
Project Mgr, N.C. Global TransPark, Raleigh, NC  
Project Mgr, SCDOT Black River Mitigation Bank, SC  
Project Mgr, NCDOT and SCDOT wetland mitigation studies  
Project Mgr, Highway planning studies (300+), Southeast  
Project Mgr, Landfill planning studies, NC and SC  
Project Mgr, Environmental Impact Statements, various projects, USVI





## ALEXANDER PARKER SMITH

- Title:* Senior Scientist, Raleigh North Carolina Branch
- Academic Background:* **M.S.** Marine Biology (Coastal Ecology Track)  
University of North Carolina at Wilmington, Wilmington, NC  
**B.S.** Biology  
Davidson College, Davidson, NC
- ESI Responsibilities:* 1993-present. Project management. Specialties include wetlands delineations and environmental permitting, wetlands functional assessments, natural systems assessments, environmental assessments, mitigation planning, protected species surveys, wildlife surveys,
- Prior Experience:* 1988-1993. CZR, Incorporated, Technical Staff, Wilmington, NC. Wetlands delineator, fish and wildlife populations surveyor, wetlands mitigation design and implementation, and office boat captain.
1988. UNC-Wilmington. Conducted field surveys of coastal NC for colonially-nesting waterbirds. Developed a US Army Corps of Engineers computer database for the present and historical breeding status of colonial waterbirds.
1987. U.S. Fish and Wildlife Service. Field technician, Alaska Maritime National Wildlife Refuge, Bering Sea Unit. Monitored breeding biology of cliff-nesting seabirds in the Pribilof Islands.
- Professional Affiliations:* National Association of Environmental Professionals  
Sigma Xi Scientific Research Society  
American Ornithologists Union  
Wilson Ornithological Society  
Society of Wetland Scientists
- Project Experience:* Cumberland,  
Project Mgr, NC 24 realignment wetlands delineation (40 miles), Sampson, and Duplin Counties, NC  
Project Mgr, US 117 realignment wetlands functional assessment, Wayne and Wilson Counties, NC  
Project Mgr, NC State Parks environmental assessments, 18 parks  
Project Mgr, US 301 Bypass mitigation plan, Florence, SC  
Project Mgr, Red-cockaded Woodpecker survey, Wayne Co, NC



## EDWARD C. SWAB

*Title:*

Senior Scientist

*Academic Background:*

M.S. Botany (Minor in Ecology). North Carolina State University, NC. 1990.

B.A. Chemistry (Minor in Physics). Clarion State College, PA. 1965

*ESI Responsibilities:*

Responsible for plant community classification, field assessments and site inventories, habitat evaluations, and endangered species surveys. Field work also includes wetland delineations and evaluations, mitigation planning and environmental assessments.

*Prior Experience:*

1993- present. North Carolina Natural Heritage Program, Consulting Biologist.

Fall, 1993. North Carolina State University, Visiting Instructor for Aquatic Plant Identification course.

1990. Consultant for Title II grant for Secondary Education Enhancement: *Vegetation Studies in North Carolina*.

1988-1990. North Carolina State University. Herbarium Assistant Curator during the masters degree program.

1968-1967. Pennsylvania Liquor Control Board, Analytical Chemist.

1965-1967. U.S. Army. Vietnam veteran. Honorable Discharge.

*Professional Affiliations:*

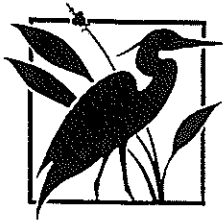
Society of Wetland Scientists  
Association of Southeastern Biologists  
Southern Appalachian Botanical Society  
Botanical Society of America  
North Carolina Academy of Science

*Project Experience:*  
(Sample)

Plant Community Classification, Neuse River to Knightdale Greenway Corridor Study.

Environmental Assessments: North Carolina Global TransPark, NC, US 117/301, NC and Garner Festival Centre, NC.

Wetlands Evaluations: Summerville Bypass, SC, US 301 Bypass, SC, and SC 38, SC.



## GREG CHARLES SMITH

*Title:*

Senior Archaeologist

*Academic Background:*

**Ph.D.** Anthropology. University of Florida, Gainesville. 1991.  
**M.A.** Anthropology. University of Florida, Gainesville. 1986.  
**B.A.** Interdisciplinary Social Sciences/ Anthropology. Florida State University, Tallahassee. 1978.

*ESI Responsibilities:*

Responsible for all phases of project archaeology and management in the ESI offices. Projects conducted include cultural assessments on military installations, public utility corridors, highway construction projects, and large tract development.

*Prior Experience:*

1987-1991. University of Florida. Graduate Teaching Assistant for Anthropology. Dissertation Assistant.

1986. Florida Museum of Natural History, Archaeology. Graduate Research Assistant. Thesis research in Haiti.

1978-1983. Archaeological Consultant.

*Professional Affiliations:*

Society of Professional Archaeologists  
Society of Historical Archaeology  
Florida Archaeological Council  
Society of Georgia Archaeology

*Project Experience:*  
*(Sample)*

Project Archaeologist, Morrow Mountain, NC  
Project Archaeologist, Six State Parks, North Carolina Coastal Plain  
Project Archaeologist, Proposed Person County Landfill, NC  
Project Archaeologist, Survey of Hutchinson Island Interchange, Chatham County, Georgia  
Project Archaeologist, Survey of The Grove Tract, St. Johns County, Florida

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**YADKIN, INC. SPECIFICATIONS  
FOR PRIVATE RECREATIONAL USE FACILITIES  
HIGH ROCK AND NARROWS RESERVOIRS  
REVISED: May 27, 1993**

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Yadkin, Inc. owns the land under both High Rock and Narrows Reservoirs and administers a buffer strip between the shoreline and the adjacent property owners on Narrows Reservoir and along numerous stretches of shoreline on High Rock Lake. Yadkin, Inc., as the federal licensee for both hydro power reservoirs, licensed as Project Number 2197-NC by the Federal Energy Regulatory Commission, has a stewardship responsibility to provide safe and quality recreation on the reservoirs, while maintaining the environmental integrity and wildlife habitat of the region. These specifications are an attempt to provide for the safety of all recreation users while balancing these often conflicting needs.

**PIERS - LAUNCH RAMPS - LIGHTING - EROSION CONTROL - EXCAVATION**

**I. RECREATIONAL FACILITIES SPECIFICATIONS**

Yadkin, Inc. permits adjoining property owners on High Rock and Narrows Reservoirs to develop and maintain private recreational use facilities on those reservoirs by license only. Failure to comply with these specifications in the development of recreational facilities, the shoreline buffer, or the reservoir on either High Rock or Narrows Reservoir will result in revocation or denial of any recreational facility license. Such revocation or denial will require removal of any structures built and/or a return of the land area to its original state. Recreational use facilities are defined as piers, launch ramps, lighting and wiring, erosion control devices and materials, and excavation. These standards apply to all parcels on High Rock and Narrows Reservoirs per the following requirements:

- A. Existing piers and launch ramps licensed in subdivisions developed prior to May 1, 1987 are grandfathered in terms of lot width only, however, a minimum lot width of 100 feet is required for all parcels where no pier or launch ramp license was issued as of May 1, 1993.
- B. Subdivisions that were developed after May 1, 1987 come under the pier development specifications, revised in 1987. The specifications require each lot to have a minimum of 200 to 400 feet of lot width for each pier, dependent upon water depth. In specific cases where a developer has chosen to develop lots less than 200 feet, but more than the required 100 feet in lot width minimum, Yadkin, Inc. has entered into a prior agreement with the subdivider as to which lots will share a pier to meet the minimum lot width requirements. No more than four lots may share any one pier. Information as to Yadkin Inc.'s agreement regarding shared piers should have been made known to lot owners in question prior to the sale of those lots. Furthermore, in order for any lot owners to have any rights and obligations regarding a shared pier all lot owners must execute and deliver a special license contract, prior to construction of the shared pier. (For additional information see separate document: Shared Pier Specifications.)
- C. For the purpose of this document all adjoining lots used for a single residence or under a single ownership are considered to be one lot.

**II. THE LICENSING PROCESS**

All new construction of and any addition, remodeling or repair work with respect to any recreational use facility must be approved in writing by Yadkin, Inc. prior to any site preparation and construction. Yadkin, Inc. evaluates every application on its own merit prior to issuing a "Construction Permit" for the work requested. The Construction Permit is valid for ninety days, after which time the applicant will have to reapply. The following process must be followed prior to any work:

- A. An initial onsite meeting between the property owner and a Yadkin, Inc. representative is the first step in the licensing process and **is mandatory**.
- B. A Construction Permit may be issued during the on-site visit. However, the evaluation of the proposed work may also require review by other local, state or federal agencies, including but not limited to: the respective county building permit office or planning office, North Carolina Wildlife Resources Commission, North Carolina Division of Cultural Resources, U.S. Fish & Wildlife Service and U.S. Army Corps of Engineers. Piers and all electrical installations require a building permit from the jurisdiction within which the lot is located prior to initiation of any work on the site. Additionally, the applicant must obtain a Construction

from Yadkin, Inc. prior to submitting pier construction or electrical installation plans to the respective county building department.

- C. Upon receipt of notice from the applicant that the recreational use facility has been constructed, or in the case of a pier or electrical installation notice from the respective county inspections department that the pier has been inspected and meets the North Carolina Building Code, a Yadkin, Inc. representative will complete a final inspection to ensure that all Yadkin, Inc. construction requirements have been met. If all Yadkin, Inc. specifications have been met a license contract will be issued.
- D. The applicant can arrange the initial onsite meeting with a Yadkin, Inc. representative by providing Yadkin, Inc., the following information in writing: Name, Address, Telephone, Development Name, Section, Lot Number, Tax Map, and Parcel Number mailed to: Yadkin, Inc., Post Office Box 576, Badin, North Carolina 28009. Upon receipt of this information a Yadkin, Inc. representative will call the applicant to arrange a meeting time. Appointments may also be made by telephone (704/422-5680). Please leave a message which contains name, phone number, lot location and license number if previously assigned and a Yadkin, Inc. representative will return the call.
- E. The application fee for a license is \$35.00 with an annual relicensing fee of \$20.00 per license year, the license year runs from May 01 through April 30.

### **III. SHORELINE AND BUFFER AREA SPECIFICATIONS**

On Narrows Reservoir and in numerous places on High Rock Reservoir, Yadkin, Inc. owns or administers a buffer area or strip between the shoreline at normal full pool and the adjacent property owner. The normal full pool on High Rock Reservoir is the 655 contour Yadkin, Inc. datum and on Narrows Reservoir is the 541 contour Yadkin, Inc. datum. These contours establish the legal boundaries of the hydro power project and may not be changed or altered in any way. The following specifications relate to development within the buffer area:

- A. The removal of trees and limbs from the buffer area, whether or not standing, requires a permit from Yadkin, Inc. Yadkin, Inc. will only permit removal of trees, on a case by case basis where a leaning tree is creating a safety hazard or where there has been disease, lightening or insect damage. Down trees and limbs and trees leaning into the reservoir create fish and wildlife habitat and therefore cannot be removed without a permit from Yadkin, Inc.
- B. The construction of a path or walkway through the buffer strip is permitted only where trees need not be moved to develop such path or walkway. If a tree or trees must be removed in the development of a walkway to a pier or in construction or use of a launch ramp, the Yadkin, Inc. representative may authorize removal of such tree(s) as a part of the Construction Permit. Any walkways developed across this buffer must lie on the ground and may be constructed of pressure treated wood materials, brick or decorative concrete paving blocks. The Yadkin, Inc. Recreation Inspector can discuss options during the on-site meeting.
- C. Connecting of canals above the 655 foot contour Yadkin, Inc. datum on High Rock Reservoir and 541 foot contour Yadkin, Inc. datum on Narrows Reservoir to main reservoir is prohibited.

### **IV. PIER SPECIFICATIONS**

The following specifications are required for all new pier construction, and any addition, remodeling or repair work to any existing pier on High Rock and Narrows Reservoirs.

- A. In order to apply for an initial pier permit, every lot must have a minimum of one hundred feet (100') of lot width parallel to the reservoir shoreline or adjacent to Yadkin, Inc.'s reservoir buffer, regardless of whether the application is for a single ownership or shared pier. (Note: Piers licensed prior to April 1, 1993, on lots which do not meet the one hundred foot (100') minimum lot width requirement are grandfathered.)
  - 1. The pier must have access to a minimum water depth as measured from the shoreline at maximum normal pool elevation (655 foot contour Yadkin, Inc. datum on High Rock Reservoir and the 541 foot contour Yadkin, Inc. datum on Narrows Reservoir). If the proposed pier cannot meet the following depth requirements, the pier will not be permitted. The following "frontage to depth" requirements apply:
    - a. For subdivisions developed prior to May 1, 1987, eight feet (8') water depth achieved within sixty-four feet (64') as measured from the shoreline at normal full pool is required.
    - b. For subdivisions developed during or after May 1, 1987 the following standards apply:
      - Eight feet (8') water depth achieved within thirty feet (30') requires a minimum of 200 feet of frontage.
      - Eight feet (8') water depth achieved from thirty feet (30') to forty feet (40') requires a minimum of



300 feet of frontage.

- Eight feet (8') water depth achieved from forty feet (40') to sixty-four feet (64') requires a minimum of 400 feet of frontage.

2. Neither dredging (when water covers the site) nor excavation (when water does not cover the site) will be permitted to achieve minimum depth requirements. Both High Rock and Narrows Reservoirs were developed with definite life spans and no dredging or excavation will be permitted to extend that life span.
3. No piers will be permitted in any cove with a width of less than 100 feet (100') which width is to be measured in front of the applicant's lot in a vertical line extending from one shoreline at normal pool elevation to the opposite shoreline.
4. Yadkin, Inc. will not permit piers that interfere with navigation, ingress or egress to adjoining properties, or in any manner present a safety hazard.
5. When issues regarding safety, environmental or wildlife conservation concerns arise, Yadkin, Inc. will request an evaluation of the situation by the North Carolina Wildlife Resources Commission and other appropriate regulatory authorities. This evaluation will be considered when Yadkin, Inc. makes the determination as to whether or not a pier will be allowed or where a pier may be located on a specific site.

• A dwelling must exist or be under construction on the lot.

• The placement of piers is subject to the approval of Yadkin, Inc. Yadkin, Inc. will permit piers to be located according to the following requirements and taking into account, at Yadkin Inc.'s sole discretion, the appropriate components of safety, environmental, and wildlife conservation measures. Piers shall be situated near the center of the lot and may not encroach across any projected side property lines.

• The pier must be built above the 655 foot contour Yadkin, Inc. datum on High Rock Reservoir and the 541 foot contour Yadkin, Inc. datum on Narrows Reservoir.

• The pier must be constructed so that there is a floating platform (docking facility) at the water end of the structure that actually floats on the water and can accommodate changes in water levels on the reservoir. (Note: All stationary piers licensed prior to May 1, 1987 are grandfathered until 2005 or the date upon which Yadkin, Inc. determines that the structure has become unsafe at which time the pier must be removed or brought into compliance. Such stationary pier may be transferred or repaired until 2000, after which time repairs or transfers will not be approved.)

All piers must meet the North Carolina State Building Code Standards (Volume I and Volume I-B) and any additional requirements set by any other appropriate regulatory authority and Yadkin, Inc., including those set forth below. See Diagram A below illustrating possible pier configuration. The maximum dimension indicated comply with the maximum length or width allowed below, however, the actual lengths and designs are flexible within the square footage requirements for the floating dock platform. Yadkin, Inc.'s requirements may exceed the North Carolina State Building Code Standards.

1. Piers can only be constructed of pressure treated preservative lumber and pilings, grade marked by the American Wood Preservers' Bureau. Aluminum and wood combinations may be used for the ramps. The poles for the floating dock platform may be of galvanized steel or aluminum. Materials NOT permitted include:

- Creosote material whether pressure or dipped-treated,
- Used utility poles and railroad ties, and
- Concrete, masonry, and/or metal construction, other than that specified above.

2. Flotation devices shall only be constructed of plastic encased billets and floats. Materials NOT permitted include:

- Unprotected Styrofoam and
- Metal barrels or similar metal floatation devices.

3. Guardrails (hand rails) are to be installed on all stationary and walkway ramp sections of the pier to North Carolina Building Code Standards, and Yadkin, Inc. specifications as described below and illustrated in the Diagram of Guardrail and Reflector Installation below:

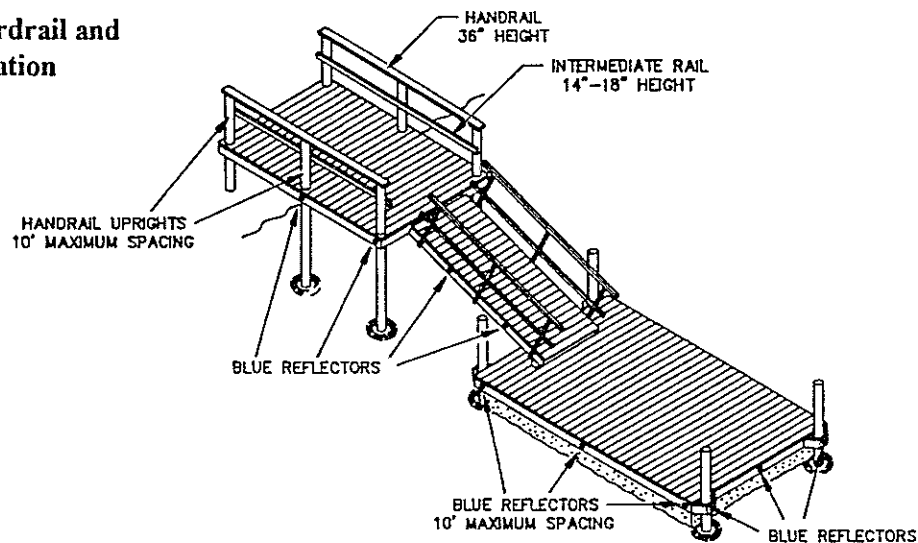
- a. "Guardrail System Design and Construction" Section 1207.2.2 North Carolina Building Code  
"Guardrail systems shall be designed and constructed for a concentrated load of 200 LB applied at any point and in any direction at the top of the guardrail." Section 1207.2.2.1

- b. "Guardrails" Section 1121 North Carolina Building Code  
Section 6. "For one and two family dwellings, only one intermediate rail between 14 and 18 inches above floor level shall be required between the top 36 inches high guardrail and the floor level of boat docks, piers, landings, decks on beach fronts and dune walkovers, providing the floor or deck level is not more than 6 feet above the mean high water level or average grade of the

for docking a boat."

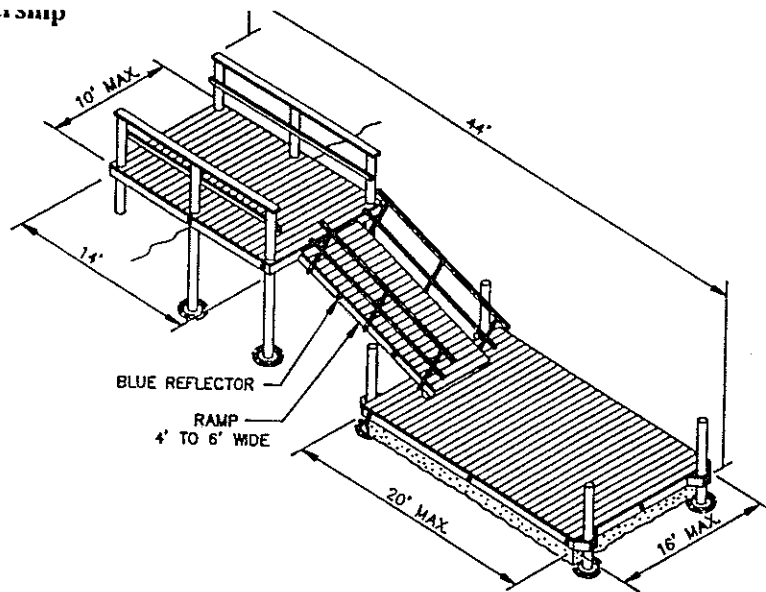
- c. The guardrail uprights must be positioned a maximum of every ten (10) feet.
  - d. Rope or cables are NOT acceptable for use as handrails. Handrails must be constructed to support 200 pounds of pressure as indicated in the North Carolina Building Code, Section 1207.2.2.1, above.
  - e. When a seat or bench is built along one side of the stationary section of the pier, the seat of the bench should be eighteen inches (18") above the surface of the pier, with a railing or back to the bench thirty-six inches (36") above the surface of the pier, with uprights or the guardrail supports every ten feet (10').
  - f. On existing stationary piers and the stationary sections of new piers openings on the sides of the pier necessary to allow for access to boats or the water may only be three feet (3') in width.
4. Blue colored reflectors, a minimum of two inches (2") in diameter are to be placed at ten foot (10') intervals along the water end and sides of all piers, please see the diagram below.

**Diagram of Guardrail and Reflector Installation**



5. Pier Dimensions (see Diagram A below):
- a. The first twelve to twenty-eight feet (12' - 28') from shoreline may be of stationary construction. The remainder of the pier must be able to float and move with the rise and fall of the reservoir's water level.
    - 1) The stationary section shall have a maximum permitted width of ten feet (10') and a minimum width requirement of six feet (6').
    - 2) The walkway ramp shall have a maximum permitted width of six feet (6') and a minimum width requirement of four feet (4'). The walkway ramp may be connected from the stationary pier to the floating dock either by hinge or roller. The roller is illustrated in Diagram A below.
    - 3) For stability of the floating docks, it is recommended that the floating dock be supported with poles or legs in each corner of the pier. If poles are used, a roller must be used on the floating dock end of the walkway, so that the walkway can move as the floating dock moves up and down as the reservoir levels change. Stops should be placed on the underwater section of the poles to ensure that the floating dock stays level and that the walkway ramp will not roll off the dock. The poles for the floating dock platform may be of galvanized steel or aluminum and must meet the requirements of section F. 1 above.
  - b. A single property owner pier must meet the following requirements:
    - 1) Overall maximum length of a pier is forty-four feet (44'), or twenty-five percent (25%) of the width of the cove measured from shoreline at normal pool elevation, whichever is less.
    - 2) The floating dock platform may not exceed a maximum size of 280 square feet. 16.7 x 16.7
    - 3) A hydraulic lift may be provided on a case by case basis. The lift may only extend above the pier decking the distance required to remove a boat out of the water or ten feet (10'), whichever is less. The area dimensions of the floating dock may not exceed 448 square feet of platform area. The design, construction materials and specifications must meet the manufacturers recommendations and be approved by Yadkin Inc.'s Resource Management Administrator prior to issuance of the Construction Permit.

## Diagram A. Single Ownership Pier Design



- G. Sides and Roofs have not been permitted on new piers since 1982 and 1988, respectively. All existing piers with siding must remove the siding by March 31, 1995. All existing piers with roofs may transfer the license or repair the pier roof until March 31, 2000, unless the entire structure becomes unsafe, at which time the pier must be removed or brought into compliance. After March 31, 2000 the structure must be brought into compliance at the time of transfer of the license, the date the roof becomes unsafe or March 31, 2005, whichever occur first. Roofing materials may be of the following types:
1. Fiberglass panels must meet a minimum weight of eight (8) ounces per square yard and be fastened according to manufacturers recommendations.
  2. Shingles must be self sealing and meet a minimum weight of 225 pounds per square per manufacturers specifications with fifteen (15) pound asphalt felt under the shingles.
  3. Materials **NOT** permitted include: tin, aluminum or other metal materials.
- H. Temporary covers or awnings may be provided on the stationary section of all piers within the following requirements:
1. The structure is temporary in nature and consists of poles (plastic or metal) and canvas type covering.
  2. The structure may not exceed ten (10) feet in height above the level of the pier floor.

## V. BOAT HOUSES

Yadkin, Inc. recommends that boat houses constructed on the applicants property be located at least 25 feet (25') from the shoreline for environmental, watershed and safety considerations. Individual jurisdictions may have setback requirements greater than 25 feet (25') and proposed boat houses must meet the setback regulations for the jurisdiction within which the boat house is located. All boat house construction must meet the North Carolina Building Code and any other requirements of the jurisdiction within which it is located as well as those of any other appropriate regulatory authority. Those property owners who build a boat house are **NOT** eligible for a pier, but may seek a license for a launch ramp facility (see Launch Ramp Dock Facilities below.) Yadkin, Inc. strongly recommends that applicants apply for and receive a launch ramp Construction Permit prior to building a boat house to make sure that the applicant qualifies for a launch ramp.

## VI. LAUNCH RAMP SPECIFICATIONS

These specifications are applicable for new launch ramps and the renovation or remodeling of existing launch ramps. New launch ramps may only be constructed on those lots with no existing pier. New launch ramps will only be permitted on a case by case basis. Approval is subject to the review of the North Carolina Wildlife Resources Commission, other appropriate regulatory authorities, and Yadkin, Inc.

### A. The Ramp

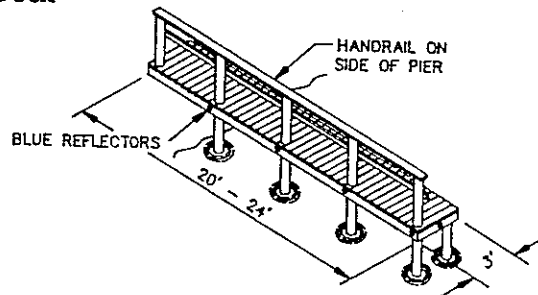
1. A property owner who desires to have a launch ramp is not eligible for a pier, other than the launch ramp dock facility described below.
2. Only concrete launch ramps are permitted along the reservoir bottom. All other launch ramps facilities or

2. Only concrete launch ramps are permitted along the reservoir bottom. All other launch ramps facilities or materials such as metal tracks, etc., are prohibited. However, guide tracks may be embedded in the concrete ramp, such that no open areas between the tracks and the reservoir bottom exist.
3. The ramp should have a compacted gravel base and should be of a depth to withstand the weight of the boats for at least a ten year period of time.
4. Ramps may not exceed sixteen feet (16') in width and sixty feet (60') in length measured from the shoreline at the 655 foot contour Yadkin, Inc. datum on High Rock Reservoir and the 541 foot contour Yadkin, Inc. datum on Narrows Reservoir.
5. Ramps should be located a minimum of 20 feet (20') from the projected side lot line.
6. Minimal excavation may be permitted for development of a launch ramp on a case by case basis when absolutely necessary for the proper operation of the launch ramp and when such excavation does not create any safety, environmental or wildlife conservation concerns. Excavation plans must be submitted to Yadkin, Inc.'s Resource Management Administrator, and approved prior to the issuance of a Construction Permit for the launch ramp.

#### B. Launch Ramp Dock Facilities

The launch ramp dock facilities must meet all the requirements of the above Pier Specifications. The dock may no be longer than twenty-four feet (24') in length and must be three feet (3') in width. Handrails are required along the side of the dock away from the ramp and blue reflectors must be positioned on the water end and both sides of the dock at ten foot (10') intervals. Please see Diagram of Launch Ramp Dock below.

Diagram of Launch Ramp Dock



### VII. LIGHTING OR ELECTRICAL INSTALLATION SPECIFICATIONS

All electric installations must meet or exceed minimum National Electrical Code (N.E.C.) Standards for Wet Locations, Marinas and Boatyards (Article 555) and any additional requirements set by appropriate regulatory authorities and by Yadkin, Inc., including those listed below. Yadkin, Inc.'s requirements may exceed the N.E.C. Standards. North Carolina State Law requires that a licensed electrician perform the installation and all work must be approved and inspected by the respective County Inspection Department. All breakers, cables, cords and receptacles must be sited to accommodate all service needs and should be located in a single breaker unit.

- A. The Service Pole must be set above the 655 foot contour Yadkin, Inc. datum on High Rock Reservoir and the 541 foot contour, Yadkin, Inc. datum on Narrows Reservoir. The minimum pole size is four inches (4") square or four inches (4") diameter, eight feet (8') in height and anchored three feet (3') in the ground. Only preservative treated wooden posts grade-marked by the American Wood Preservers' Bureau are permitted.
- B. Installation of wiring from any recreational facility across Yadkin, Inc. property to the shoreline service pole must be underground and follow access path. No overhead wiring is permitted.
- C. The shoreline breaker box must be no less than five feet (5') above the 655 foot contour Yadkin, Inc. datum on High Rock Reservoir and 541 foot contour Yadkin, Inc. datum on Narrows Reservoir.
- D. The Receptacle height should be as follows:
  1. Boat dock - a minimum three feet (3') above the deck on floating dock, five feet (5') on stationary dock.
  2. Service pole - a minimum five feet (5') above 655 foot contour Yadkin, Inc. datum on High Rock Reservoir and 541 foot contour Yadkin, Inc. datum on Narrows Reservoir.
- E. All lighting on poles on land must be at least twelve feet (12') above ground and any lights located on poles mounted on docks must be over eight feet (8') above the dock.
  1. Fixtures and lights used must be approved for wet locations. Lights must be mounted such that they are within the outer perimeter of the boat dock.
  2. All lighting must be aimed downward and cannot reflect onto adjacent properties.

## VIII. EROSION CONTROL SPECIFICATIONS

For erosion control Yadkin, Inc. will permit the utilization of rip rap along shorelines on High Rock and Narrows Reservoirs utilizing the standards as outlined below. The retaining wall standards, outlined below, are only applicable for renovation or remodeling of existing retaining walls. New retaining walls will be permitted by the Resource Management Administrator for Yadkin, Inc. on a case by case basis when the applicant has proven that rip rap will not control an existing erosion problem. Further, the applicant must show that the retaining wall will not create any present or future environmental, wildlife conservation or safety problems.

### **A. Rip Rap Specifications**

1. The use of rip rap must follow and not alter the 655 foot contour Yadkin, Inc. datum on High Rock Reservoir or the 541 foot contour Yadkin, Inc. datum on Narrows Reservoir.
2. The rip rap should be of a size and design such that it will remain in place during the normal raising and lowering of the reservoirs.
3. A soil filter cloth barrier must be installed between the shoreline and the rip rap material.

### **B. Retaining Wall Specifications**

All retaining walls must meet the North Carolina State Building Code Standards (Volume I and Volume I-B) and any additional requirements set by other appropriate regulatory authorities and by Yadkin, Inc. including those listed below. Yadkin, Inc.'s requirements may exceed the North Carolina State Building Code Standards.

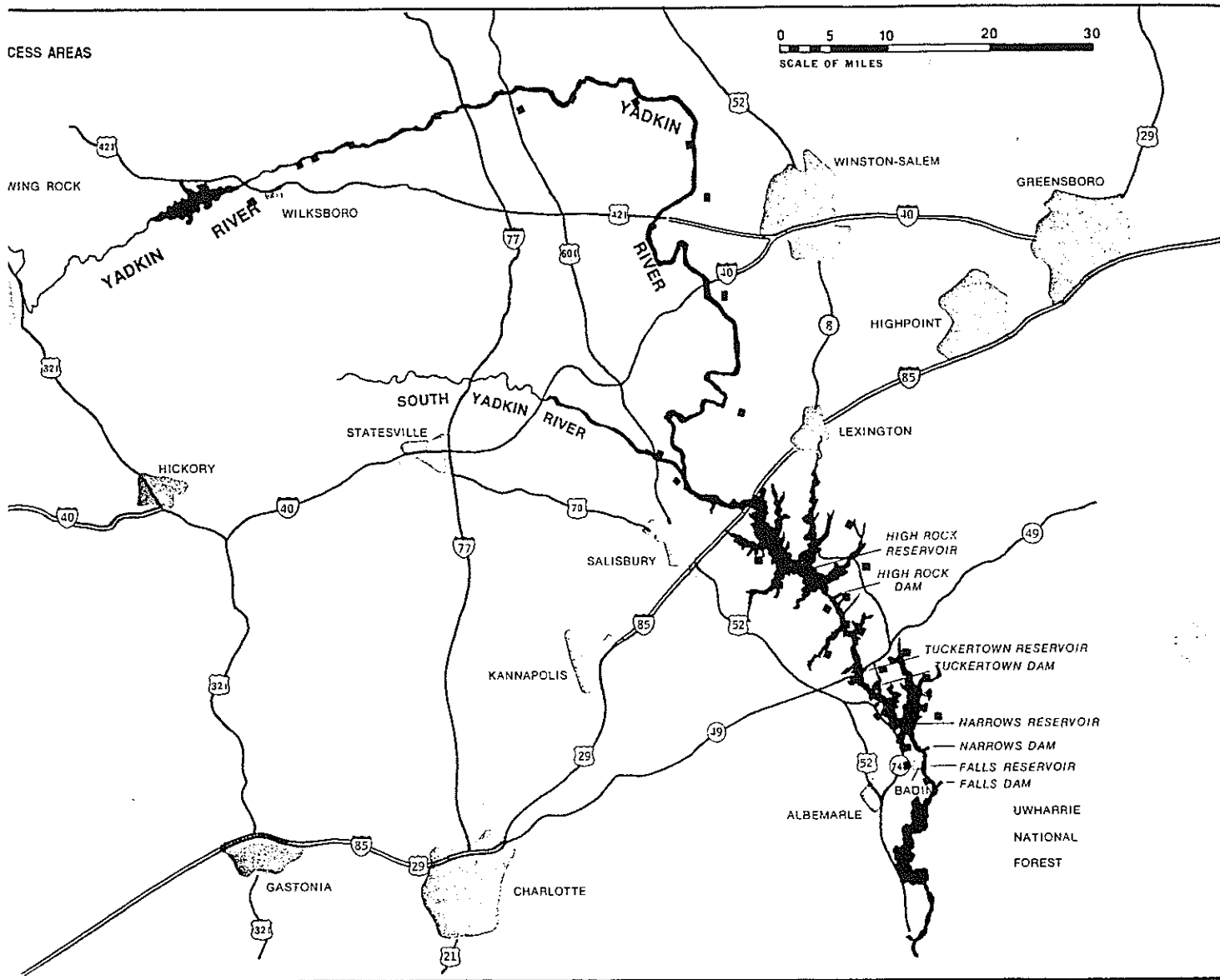
1. The retaining wall must follow and not alter the 655 foot contour Yadkin, Inc. datum on High Rock Reservoir or the 541 foot contour Yadkin, Inc. datum on Narrows Reservoir.
2. The retaining wall should be of a size and design such that it will remain in place during the normal raising and lowering of the reservoirs.
3. A soil filter cloth barrier must be installed between the shoreline and the retaining wall material.
4. Retaining walls may be constructed of preservative treated wood and pilings grade marked by the American Wood Preservers' Bureau or rip rap materials. Materials NOT permitted include:
  - Creosote material whether pressure or dipped-treated,
  - Used utility poles and railroad ties, and
  - Concrete, masonry, and/or metal construction.

## IX. EXCAVATION SPECIFICATIONS - AREAS LESS THAN ONE QUARTER ACRE IN SIZE

Excavation when water does not cover the site will not ordinarily be permitted. Dredging when water covers the site is never permitted. Excavation will be permitted by Yadkin, Inc.'s Resource Management Administrator on a case by case basis when the applicant has shown that the excavation will not create present or future environmental, wildlife conservation, or safety problems. Yadkin, Inc. will consult with the North Carolina Resources Commission and other appropriate regulatory authorities regarding the impact that such excavation will have on safety, environmental concerns or wildlife conservation in the area. The applicant when submitting the excavation plan must also demonstrate that:

- the proposed site is not located in area of river deposition,
  - the depth needed to be removed does not exceed 3 feet,
  - the excavation is necessary for access to recreation facilities licensed prior to May 1, 1993, and
  - the proposed area to be excavated does not exceed one quarter (1/4) acre in volume.
- A. The excavation must not alter in any way the reservoir shoreline which is the 655 foot contour Yadkin, Inc. datum on High Rock Reservoir and the 541 foot contour Yadkin, Inc. datum on Narrows Reservoir.
  - B. A grade slope of 5 to 1 is the maximum allowed. All grading must allow for the complete drainage of the excavated area when the reservoir waters recede during draw down periods.
  - C. All displaced earth must be moved out of the reservoir and placed above the 655 contour Yadkin, Inc. datum on High Rock Lake and 541 foot contour Yadkin, Inc. datum on Narrows Reservoir, in such a manner that the fill will not erode back into the reservoir.
  - D. All excavation must be done immediately in front of applicant's property.

# THE YADKIN RIVER SYSTEM



## THE DAMS OF THE YADKIN

STATISTICS	1 Date Completed	2 Head (High Water) and Length of Dams	3 Area of Reservoirs at Full Elevation	4 Generating Capacity	5 Shoreline
FALLS	1919	54 ft.— 748 ft.	204	29,500 KW	NONE (Run of River)
NARROWS	1917	177 ft.—1654 ft.	5,353	96,500 KW	115 Miles
TUCKERTOWN	1962	55 ft.—1215 ft.	2,560	42,000 KW	75 Miles
HIGH ROCK	• 1927	59 ft.— 935 ft.	15,980	33,000 KW	360 Miles

## APPENDIX B

### YADKIN, INC. PIER APPROVAL CORRESPONDENCE



Yadkin, Inc.  
Post Office Box 576  
Badin, North Carolina 28009-0576  
314-422-1477

**YADKIN, INC. SUBDIVISION REVIEW CONDITIONAL APPROVAL FORM  
FOR PRIVATE AND PUBLIC RECREATIONAL FACILITIES  
HIGH ROCK AND NARROWS RESERVOIRS  
REVISED: March 1, 1994**

**SUBDIVISION:** Crystal Bay Subdivision, Lots 1 through 28, High Rock Reservoir  
**DEVELOPER:** KEJ Marketing, Inc., P.O. Box 729, Mathews, North Carolina 28105  
**Contact Person:** Ms. Sandra Steed, Steed Properties  
**Address:** P. O. Box 133, Denton, NC 27239  
**Phone:** 704-869-2345

**CONDITIONAL APPROVAL DATE:** July 15, 1994

**AUTHORIZED SIGNATURE:**

  
Julia L. Larson, Resource Management Administrator

Yadkin, Inc., federal licensee for both High Rock and Narrows Reservoirs, licensed as Project Number 2197-NC by the Federal Energy Regulatory Commission, permits adjoining property owners on the Reservoirs to develop and maintain private and public recreational use facilities on those reservoirs by license only. Yadkin, Inc. by this approval process determines what private and public recreation facilities may be developed in the future for a proposed development. By conducting this review at time of subdivision approval by the governing jurisdiction within which the proposed development is located, the developer may more accurately determine the price and marketing strategy for lots within the development.

The developer and potential property owners must understand that this is "conditional" approval only, as individual piers may not be applied for until a house is under roof on a lot. Conditions and circumstances are constantly changing on the reservoirs and overcrowding on peak weekends and during the peak recreation season is becoming a concern. Yadkin, Inc. may change its Private Recreational Use Facilities Specifications from time to time to address the changing conditions and circumstances on the Reservoirs. Thus, the approvals given in this document are tied to the individual lots being "eligible" for individual pier development under Yadkin, Inc. Specifications in effect at the time an individual pier application is made and include the following:

- The proposed lots have the minimum lot widths required for individual pier construction,
- The proposed lots have the minimum water depths required for individual pier construction,
- At the time of review an individual pier, built to Yadkin, Inc. Specifications, on the proposed lot must not interfere with navigation, ingress or egress to adjoining properties or in any manner present a safety hazard,
- At the time of review an individual pier on the proposed lot must not raise any issues relating to environmental or wildlife conservation concerns, and
- No piers are proposed in coves with less than 100 feet (100') of width.

If, at some point in time in the future, Yadkin, Inc. determines that, because of safety and/or environmental concerns, no additional individual piers may be built on High Rock Reservoir, the reservoir adjacent to this proposed development, the conditional approval for any individual piers not built by that time will be null and void. Further, Yadkin reserves the right to modify the "Specifications for Private Recreational Use Facilities"



from time to time in response to changing conditions on the reservoirs, changes in local building codes or to address safety and/or environmental concerns.

Thus, Conditional Approval is granted for Crystal Bay Subdivision, with the following lots meeting the "eligibility" requirements for piers:

**Single Ownership Piers (2 piers) – lots 1D and 16 are eligible.**

**Shared Piers (8 piers) -- lots 1B & 1C, lots 2 & 3, lots 4 & 5, lots 6 & 7, lots 8 & 9, lots 10 & 11, lots 12 & 13, lots 14 & 15 and lots 17 & 18.**

**Cluster Pier (1 pier, 10 slips) – the following lots are eligible for a slip in the proposed cluster pier, lots 19, 20, 21, 22, 23, 24, 25, 26, 27 & 28.**

**Access Ramp Dock and Slips (1 dock, 4 slips) – the following lots are eligible for one slip each in the proposed access ramp dock, lots 1A & 1. The two remaining slips are for community day use only, which is defined as the loading and unloading of passengers and supplies.**

**Boat Access Facility consisting of a boat launch ramp and parking area (boat storage area) for the subdivision is to be provided. The launch ramp is proposed between lots 1A & 1B. Boat and trailer parking will be provided across Crystal Bay Drive from the access ramp and will consist of approximately one acre of parking lot. The parking lot is proposed to have a gravel surface and will be fenced.**

### **Development Requirements**

It is the developers responsibility that each of these four items be achieved:

1. Deed restrictions must be developed and included with the deeds to property owners who are eligible for a single ownership pier, a shared pier or a slip at either the cluster pier or access ramp dock. The restrictions must state that this declaration and vesting of rights to the property owners relating to proposed or existing piers, docks, boat access ramps or disturbance of the shoreline buffer is and shall always be subject to the terms, conditions and provisions of Yadkin Incorporated and to all rights retained by Yadkin Incorporated. In the case of shared piers, the cluster pier and the access ramp dock, the restrictions must address which lots share a pier, conditions for construction, maintenance and use of the pier and payment schedules regarding maintenance and repair of the facility. Shared pier payment schedules should be specified for reimbursement of a portion of the pier construction costs at such time as the second property owner is eligible for access to the pier and wishes to exercise this access. No property owner may access a slip or pier without first receiving a license from Yadkin, Inc.
2. The boat launch access facility construction permit must be applied for within one year of the date of this approval and the developer must notify Yadkin, Inc., in writing, when the facilities have been completed or this approval will be null and void. The plans for such facility must be developed and submitted to

Yadkin for approval prior to any site preparation or construction. Please note the facility construction permit is valid for six (6) months, at which time the permit expires.

3. The Cluster Pier can be oriented such that the individual slips are perpendicular to the shoreline or the structure may extend into the reservoir such that the slips are parallel to the shoreline. The orientation such that the slips are perpendicular to the shoreline is preferred but not required. Yadkin, Inc. will work with the developer on design and must receive a construction permit prior to filing for a county building permit for the cluster pier. Due to safety concerns the cluster pier will be required to meet the North Carolina Building Code Requirements for a commercial pier and the design must be developed and signed by either an architect or engineer. Deed restrictions of those lots that are assigned to the Cluster Pier must address which lots share the cluster pier and how costs are to be shared for maintenance and repair.
4. The developer understands that potential property owners must be informed that no piers may be built, nor slips accessed on any of the lots within Crystal Bay until such time as a house is under roof on their lot. In terms of shared piers, the adjacent lot owner or pier sharer does not have any rights to the pier until such time as that property owner also has a house under roof and has received a license from Yadkin, Inc. At such time as construction has been initiated on a home, the property owner may then contact Yadkin, Inc. and request an on-site meeting to discuss pier location and construction. In a shared pier situation, the second property owner must prove that they have a house under roof and meet the financial conditions of the deed restrictions prior to Yadkin, Inc. issuing a license permitting the property owner access to the existing pier.

#### **Individual Pier and Shoreline Development Requirements:**

It is the developers responsibility to ensure that all potential and existing property owners be aware of the following development limitations.

1. Each pier will be required to meet all construction and location specifications existing at the time of application for an individual pier. Both a construction permit from Yadkin, Inc. and a county building permit is required before a property owner may initiate any ground preparation or construction for a pier.
2. No pier within the subdivision will be permitted to extend more than forty-four feet (44') into the Reservoir, measured at normal full pool.
3. No individual boat ramps or boathouses will be permitted in the Subdivision.
4. Shoreline stabilization measures must meet the specifications existing at time of application for such measures and the property owner must contact Yadkin, Inc. prior to any work or construction being initiated. Surge stone will be the only material allowed for use in shoreline stabilization, unless a severe erosion problem occurs. Should a severe erosion problem arise within the subdivision, Yadkin will work with the individual property owner on a shoreline stabilization plan. The use of untreated wood, concrete or other materials will not be permitted under any circumstances.
5. No trees may be removed anywhere from the Shoreline Buffer without prior written permission from Yadkin, Inc.



**YADKIN, INC. SUBDIVISION REVIEW CC  
FOR PRIVATE AND PUBLIC RECREATIONAL FACILITIES  
HIGH ROCK AND NARROWS RESERVOIRS  
LAST REVISED: March 1, 1994**

**SUBDIVISION:** Heron Bay Subdivision, Phase I, Narrows Reservoir  
**DEVELOPER:** KEJ Marketing, Inc., P.O. Box 729, Mathews, North Carolina 28105  
**Contact Person:** Ms. Sandra Steed, Steed Properties  
**Address:** P. O. Box 133, Denton, NC 27239  
**Phone:** 704-869-2345

**CONDITIONAL APPROVAL DATE:** October 26, 1994

**AUTHORIZED SIGNATURE:**

Julia L. Larson  
Julia L. Larson, Resource Management Administrator

Yadkin, Inc., federal licensee for both High Rock and Narrows Reservoirs, licensed as Project Number 2197-NC by the Federal Energy Regulatory Commission, permits adjoining property owners on the Reservoirs to develop and maintain private and public recreational use facilities on those reservoirs by license only. Yadkin, Inc. by this approval process determines what private and public recreation facilities may be developed in the future for a proposed development. By conducting this review at time of subdivision approval by the governing jurisdiction within which the proposed development is located, the developer may more accurately determine the price and marketing strategy for lots within the development.

The developer and potential property owners must understand that this is "conditional" approval only, as individual piers may not be applied for until a house is under roof on a lot. Conditions and circumstances are constantly changing on the reservoirs and overcrowding on peak weekends and during the peak recreation season is becoming a concern. Yadkin, Inc. may change its Private Recreational Use Facilities Specifications from time to time to address the changing conditions and circumstances on the Reservoirs. Thus, the approvals given in this document are tied to the individual lots being "eligible" for individual pier development under Yadkin, Inc. Specifications in effect at the time an individual pier application is made and include the following:

- The proposed lots have the minimum lot widths required for individual pier construction,
- The proposed lots have the minimum water depths required for individual pier construction,
- At the time of review an individual pier, built to Yadkin, Inc. Specifications, on the proposed lot must not interfere with navigation, ingress or egress to adjoining properties or in any manner present a safety hazard,
- At the time of review an individual pier on the proposed lot must not raise any issues relating to environmental or wildlife conservation concerns, and
- No piers are proposed in coves with less than 100 feet (100') of width.

If, at some point in time in the future, Yadkin, Inc. determines that, because of safety and/or environmental concerns, no additional individual piers may be built on Narrows Reservoir, the reservoir adjacent to this proposed development, the conditional approval for any individual piers not built by that time will be null and void. Further, Yadkin reserves the right to modify the "Specifications for Private Recreational Use Facilities" from time to time in response to changing conditions on the reservoirs, changes in local building codes or to

Post-It® Fax Note	7671	Date	10/27/94
To	Sandra Steed	From	Julia Larson
Co./Dept.		Co.	
Phone #		Phone #	
Fax #	704-869-5678	Fax #	

Yadkin for approval prior to any site preparation or construction. Please note the facility construction permit is valid for six (6) months, at which time the permit expires.

3. The Cluster Pier can be oriented such that the individual slips are perpendicular to the shoreline or the structure may extend into the reservoir such that the slips are parallel to the shoreline. The orientation such that the slips are perpendicular to the shoreline is preferred but not required. Yadkin, Inc. will work with the developer on design and must receive a construction permit prior to filing for a county building permit for the cluster pier. Due to safety concerns the cluster pier will be required to meet the North Carolina Building Code Requirements for a commercial pier and the design must be developed and signed by either an architect or engineer. Deed restrictions of those lots that are assigned to the Cluster Pier must address which lots share the cluster pier and how costs are to be shared for maintenance and repair.
4. The developer understands that potential property owners must be informed that no piers may be built, nor slips accessed on any of the lots within Crystal Bay until such time as a house is under roof on their lot. In terms of shared piers, the adjacent lot owner or pier sharer does not have any rights to the pier until such time as that property owner also has a house under roof and has received a license from Yadkin, Inc. At such time as construction has been initiated on a home, the property owner may then contact Yadkin, Inc. and request an on-site meeting to discuss pier location and construction. In a shared pier situation, the second property owner must prove that they have a house under roof and meet the financial conditions of the deed restrictions prior to Yadkin, Inc. issuing a license permitting the property owner access to the existing pier.

#### **Individual Pier and Shoreline Development Requirements:**

It is the developers responsibility to ensure that all potential and existing property owners be aware of the following development limitations.

1. Each pier will be required to meet all construction and location specifications existing at the time of application for an individual pier. Both a construction permit from Yadkin, Inc. and a county building permit is required before a property owner may initiate any ground preparation or construction for a pier.
  2. No pier within the subdivision will be permitted to extend more than forty-four feet (44') into the Reservoir, measured at normal full pool.
  3. No individual boat ramps or boathouses will be permitted in the Subdivision.
  4. Shoreline stabilization measures must meet the specifications existing at time of application for such measures and the property owner must contact Yadkin, Inc. prior to any work or construction being initiated. Surge stone will be the only material allowed for use in shoreline stabilization, unless a severe erosion problem occurs. Should a severe erosion problem arise within the subdivision, Yadkin will work with the individual property owner on a shoreline stabilization plan. The use of untreated wood, concrete or other materials will not be permitted under any circumstances.
  5. No trees may be removed anywhere from the Shoreline Buffer without prior written permission from Yadkin, Inc.
-

Thus, Conditional Approval is granted for Heron Bay Subdivision, Phase I lots meeting the "eligibility" requirements for piers:

Single Ownership Piers (9 piers). The following lots are eligible:

lots 12, 13, 23, 24, 25, 29, 30 and 31.

Shared Piers (piers). Lots 26 & 27 are the only lots eligible for a shared pier.

Cluster Pier 1. The following lots have been requested by the applicant for a slip in the proposed cluster pier that will access between lots 13 and 14 and will run parallel to the bank, depending upon water depths and input from the North Carolina Wildlife Resources Commission, the cluster pier will definitely extend from lot 14 north, however it may need to extend to the south:

lots 6, 7, 8, 9, & 10, 14, 15, 16, 17, & 22.

Cluster Pier 2. The following lots and four day slips have been requested by the applicant for a slip in the proposed cluster pier that will access between lots 27 & 28 along with the boat ramp:

lots 1, 2, 3, 4, 5, 23, and four day use slips. Day use slips are considered community day use only slips for the purpose of loading and unloading of passengers and supplies. [Note: If the boat ramp is not built here - the day use slips will also be moved to the new boat ramp site and Cluster Pier 2 will then have six slips.]

Access Ramp Dock and Slips (1 dock, 4 slips) - the following lots are eligible for one slip each in the proposed access ramp dock, lots 1A & 1. The two remaining slips are for

Boat Access Facility consisting of a boat launch ramp and parking area (boat storage area) for the subdivision is to be provided. The launch ramp is proposed between lots 27 & 28. Boat and trailer parking is to be provided near the access ramp. [Note, if a more desirable location for a boat launch ramp is located in Phase II, Yackin will consider that location as serving for the launch ramp for both Phases I and II, if this ramp has not been constructed and if so requested by the applicant.]

Pier Length and Dredging. Dredging will be permitted to obtain an acceptable water depth, if necessary, of eight feet (8') within sixty-four feet (64') from normal full pool (maximum pier length seventy-four feet (74')) for the following lots:

Lots 12, 13, 23, 24, 25, 29, 30, 31 and the shared pier at lots 26 & 27.

Dredging for the Boat Ramp and Two Cluster Piers. Dredging will be permitted to obtain an acceptable water depth of a minimum of eight feet (8') within distances

necessary to make the boat ramp and two cluster piers functional. Plans for the boat ramp and cluster piers, along with a dredging plan must be submitted to Yadkin for approval prior to any work being initiated on these. The North Carolina Wildlife Resources Commission will be asked to provide input into the approval process.

### Development Requirements

It is the developers responsibility that each of these five items be achieved:

1. Deed restrictions must be developed and included with the deeds to property owners who are eligible for a single ownership pier, a shared pier or a slip at either the of the cluster piers. The restrictions must state that this declaration and vesting of rights to the property owners relating to proposed or existing piers, docks, boat access ramps or disturbance of the shoreline buffer is and shall always be subject to the terms, conditions and provisions of Yadkin Inc. and to all rights retained by Yadkin Inc. In the case of shared piers and cluster piers the restrictions must address which lots share a pier, conditions for construction, maintenance and use of the pier and payment schedules regarding maintenance and repair of the facility. Shared pier payment schedules should be specified for reimbursement of a portion of the pier construction costs at such time as the second property owner is eligible for access to the pier and wishes to exercise this access. No property owner may access a slip or pier without first receiving a license from Yadkin, Inc.
2. If dredging must be undertaken to achieve a desirable water depth for piers, the developer will complete the dredging within one year of the date of this decision. The developer must give notice to the potential property owner that the area had to be dredged to obtain an acceptable water depth and that it is the property owner's responsibility to maintain adequate water depth for their pier. Failure to do so could result in the property owner's license being revoked by Yadkin, Inc. All dredged material must be moved out of the reservoir and placed above the 341 foot contour Yadkin, Inc. datum in such a manner that the fill will not erode back into the reservoir. The developer will work with both Yadkin and the North Carolina Wildlife Resources Commission in planning the dredging operations including the amount of material to be dredged and location for depositing dredged material.
3. The boat launch access facility construction permit must be applied for within one year of the date of this approval and the developer must notify Yadkin, Inc., in writing, when the facilities have been completed or this approval will be null and void. The plans for such facility must be developed and submitted to Yadkin for approval prior to any site preparation or construction. Please note the facility construction permit is valid for six (6) months, at which time the permit expires.
4. Cluster Pier 1 must be oriented such that the individual slips are perpendicular to the shoreline and Cluster Pier 2 must be oriented such that the individual slips are parallel to the shoreline. Yadkin, Inc. will work with the developer on design and must receive a Yadkin construction permit prior to filing for a county building permit for the cluster pier. Due to safety concerns the cluster pier will be required to meet the North Carolina Building Code Requirements for commercial piers and the design must be developed and signed by either an architect or engineer. Deed restrictions of these lots that are assigned to the Cluster Pier must address which lots share the pier and how costs are to be shared for maintenance and repair.

5. The developer understands that potential property owners must be informed that no piers may be built, nor slips accessed on any of the lots within the Heron Bay Subdivision until such time as a house is under roof on their lot. In terms of shared piers, the adjacent lot owner or pier sharer does not have any rights to the pier until such time as that property owner also has a house under roof and has received a license from Yadkin, Inc. At such time as construction has been initiated on a home, the property owner may then contact Yadkin, Inc. and request an on-site meeting to discuss pier location and construction. In a shared pier situation, the second property owner must prove that they have a house under roof and have met the financial conditions of the deed restrictions prior to Yadkin, Inc. issuing a license permitting the property owner access to the existing pier.

#### **Individual Pier and Shoreline Development Requirements:**

It is the developers responsibility to ensure that all potential and existing property owners be aware of the following development limitations.

1. Each pier will be required to meet all construction and location specifications existing at the time of application for an individual pier. Both a construction permit from Yadkin, Inc. and a county building permit is required before a property owner may initiate any ground preparation or construction for a pier.
  2. No individual pier within the Heron Bay Subdivision will be permitted to extend more than the maximum pier length specified in the Maximum Pier Length & Dredging Chart on Page 5 of this decision and in no case more than seventy-four feet (74') into the Reservoir, measured at normal full pool.
  3. No individual boat ramps or boathouses will be permitted in the Heron Bay Subdivision.
  4. Shoreline stabilization measures must meet the specifications existing at time of application for such measures and the property owner must contact Yadkin, Inc. prior to any work or construction being initiated. Surge stone will be the only material allowed for use in shoreline stabilization, unless a severe erosion problem occurs. Should a severe erosion problem arise within the subdivision, Yadkin will work with the individual property owner or the Homeowners Association on a shoreline stabilization plan. The use of untreated wood, concrete or other similar materials will not be permitted.
  5. No trees or brush may be removed nor the shore disturbed in any way within the Shoreline Buffer without prior written permission from Yadkin, Inc.
-

Subdivision Review Conditional Approval Form  
Heron Bay, Phase I  
Page 5 of 4

Maximum Private Pier Length & Dredging Chart - Heron Bay Subdivision, Phase I

Lot Number	Max. Pier Length	Distance to get 8'	Depth 50 feet	Depth 70 feet	Dredge	Pier Location on Lot
1	not eligible	did not	4'3"	5'0"		No piers in cove - Slip on Cluster 2
2	not eligible	did not	4'3"	5'0"		No piers in cove - Slip on Cluster 2
3	not eligible	did not	4'3"	5'0"		No piers in cove - Slip on Cluster 2
4	not eligible	did not	4'3"	5'0"		No piers in cove - Slip on Cluster 2
5	not eligible	did not	4'4"	5'0"		No piers in cove - Slip on Cluster 2
6	not eligible	did not	4'4"	5'0"		No piers in cove - Slip on Cluster 1
7	not eligible	did not	4'7"	5'8"		No piers in cove - Slip on Cluster 1
8	not eligible	did not	4'7"	5'8"		No piers in cove - Slip on Cluster 1
9	not eligible	>90'	5'9"	7'5"		No piers in cove - Slip on Cluster 1
10	not eligible	>90'	5'9"	7'5"		No piers in cove - Slip on Cluster 1
11	not eligible	did not	3'6"	3'9"		Shallow - no pier permitted
12	74'	>90'	5'6"	7'2"		Closer North End of Lot
13	74'	>90'	5'6"	7'2"		Closer South End of Lot
14		did not	5'4"	6'0"		Slip on Cluster 1
15		did not	5'4"	6'0"		Slip on Cluster 1
16	not eligible	did not				No piers in cove - Slip on Cluster 1
17	not eligible	did not				No piers in cove - Slip on Cluster 1
18	not eligible	did not				Cove less than 100' width
19	not eligible	did not				Cove less than 100' width
20	not eligible	did not				Cove less than 100' width
21	not eligible	did not				Cove less than 100' width
22	not eligible	did not				No piers in cove - Slip Cluster 1
23	74'	did not	5'8"	6'8"	X	
24	74'	did not	4'10"	6'4"	X	
25	74'	did not	3'11"	4'10"	X	
26 & 27	74'	did not	4'1"	5'1"	X	
28		did not	5'5"	6'0"		Slip on Cluster 2
29	74'	did not	4'9"	5'9"	X	Closer to Lot 30
30	74'	did not	4'9"	5'5"	X	
31	74'	did not	4'1"	4'11"	X	



APPENDIX C

YADKIN, INC. LETTER RESCINDING PIER APPROVAL FOR HERON BAY, PHASE I  
AND  
NCWRC BADIN LAKE DEVELOPMENT RECOMMENDATIONS LETTER



Yadkin, Inc.  
Post Office Box 576  
Badin, North Carolina 28009-0576  
704/422-5633

September 14, 1995

Mr. Randy Allen  
KEJ Marketing, Inc.  
7009 Whitmarsh Court  
Charlotte, North Carolina 28210

Dear Mr. Allen:

You were notified recently of the impending draw down of the water level of Yadkin, Inc.'s Narrows Reservoir (Badin Lake). The draw down will occur during the three day period, October 2, 3, and 4, 1995. Dredging and excavation from the reservoir during this period will be prohibited.

By instrument dated October 26, 1994, Yadkin, Inc. granted KEJ Marketing, Inc. a conditional permit to construct several piers at Heron Bay Subdivision, Phase I, and to dredge the reservoir to accommodate those piers. In the interim, biologists of the North Carolina Wildlife Resources Commission have reviewed the shoreline and have notified Yadkin, Inc. that pier construction and dredging in the reservoir as indicated in the permit would adversely impact fisheries resources and irrevocably harm wildlife habitat in the area.

Under these circumstances, Yadkin, Inc. rescinds the conditional permit of October 26, 1994, relating to your Heron Bay Subdivision. Please be reminded that no construction or dredging will be permitted in the reservoir.

Your cooperation will be greatly appreciated.

Yours truly,

NORMAN L. PIERSON  
Vice President  
Property & Relicensing

cc: J. E. Adams - Yadkin, Inc. - Badin Works  
R. A. Cole, Robco, Inc.  
J. L. Larson - Badin Works  
P. B. Shaver - Badin Works

bc: M. W. Laun - Pittsburgh  
H. C. Dobbs, Jr. - Dobbs & Beaver, Albemarle, NC



⊠ North Carolina Wildlife Resources Commission ⊠

512 N. Salisbury Street, Raleigh, North Carolina 27604-1188, 919-733-3391  
Charles R. Fullwood, Executive Director

October 12, 1995

Mr. Norm Pierson, Vice President  
Yadkin, Inc.  
P.O. Box 576  
Badin, N.C. 28009-0576

Subject: Recommendations to Help Mitigate Impacts of Development  
to Fish and Wildlife Resources and Recreational  
Opportunities on Badin Lake

Dear Mr. Pierson:

Please consider this correspondence North Carolina Wildlife Resources Commission's official recommendations concerning the management of the shoreline and near-shore, shallow water areas of Badin Lake to protect fish and wildlife habitat and associated recreational activities on the lake. The recommendations that you previously received from Mr. Wayne Chapman, District Fisheries Biologist and Mr. Ken Knight, District Wildlife Biologist are incorporated into these comprehensive recommendations.

Development along the shoreline of Badin Lake has the potential to adversely impact fish and wildlife habitats directly and cumulatively. Our primary concerns are as follows:

1. the destruction of aquatic emergent vegetation such as water willow (*Decodon verticillatus*), pickerel weed (*Pontederia cordata*) and arrowleaf (*Peltandra* spp.);
2. the removal of tree laps that provide essential cover for fish and waterfowl and perch sites for herons, egrets and songbirds;
3. the destruction of overhanging shoreline trees used as perch sites by bald eagles, ospreys, herons, egrets, kingfishers and songbirds;

Yadkin, Inc/Badin Lake

2

October 12, 1995

4. the dredging (deepening) of shallow water areas, especially cove sites, that provide feeding areas for fish, waterfowl, and wading birds;
5. the removal of aquatic habitat (tree laps, stumps, rocks, and plant beds) that support numerous fish species, which provide recreational fishing and essential food for herons, egrets, several species of waterfowl, bald eagles, mink, otter and reptiles;
6. the conversion of the shoreline habitat from an undisturbed, diverse, natural forest to a highly fragmented habitat comprised of lawns and open forest with little understory;
7. the loss of public recreational opportunities for waterfowl hunting, fishing and wildlife observation.

Badin Lake is experiencing a significant amount of development that has a high probability of affecting fish and wildlife resources and public recreational opportunities in the area. Although the development of an individual home site is not likely to significantly impact Badin Lake, the cumulative direct and indirect impacts from numerous single home sites and the large scale on-going residential developments and marinas could be severe.

Property owners adjacent to the Yadkin, Inc. property have a tendency to clear most or all vegetation between houses and the waterfront. The loss of this riparian vegetation directly affects many species of terrestrial wildlife that use the forested habitat, on aquatic wildlife species that use shoreline trees and on fish species that use the cover of overhanging trees and shrubs. The loss of shoreline vegetation also removes the source material for tree laps (trees that have fallen into the lake). Tree laps provide essential cover for bass, bluegill, crappie and catfish; and thus, excellent fishing sites. Additionally, tree laps provide cover for waterfowl, perch sites for birds and basking sites for aquatic reptiles.

Removal of trees and shrubs also makes shorelines more susceptible to erosion and sloughing. Shoreline erosion often results in requests for retaining walls and riprap which cause further destruction of shoreline habitat, destruction of fisheries habitat, and loss of recreational opportunities.

The construction of piers and boat slips can lead to similar but more severe impacts.

Construction of piers is often accompanied by the clearing of shoreline vegetation, the removal of woody debris from the water and the dredging of shallow areas. Dredging destroys highly productive, shallow water areas that provide essential habitats for fish and other animals that are dependent on shallow water. In addition, the turbidity associated with dredging can

Yadkin Inc/Badin Lake

3

October 12, 1995

adversely affect aquatic organisms. However, the greatest potential impact from pier construction is the destruction of emergent aquatic vegetation.

Emergent weedbeds, especially water willow, provide essential nursery habitat for fish and wood ducks. Additionally, these emergent weed beds are valuable resting and feeding areas for numerous species such as: largemouth bass, bluegill, Canada geese, mink, raccoon, beaver, river otter, muskrat and a variety of frogs, reptiles, ducks, wading birds and songbirds. Emergent weed beds remain relatively stable in areas with suitable substrate and water depth; however, this essential habitat is almost always lost if the substrate is disturbed or water depth is increased. Previous attempts to establish water willow beds have been unsuccessful.

Badin Lake has long been a wintering area for migratory waterfowl and a popular lake with waterfowl hunters. The wood duck is the primary species which breeds locally and it prefers more secluded coves for nesting. Twenty-nine wood duck nesting boxes are maintained currently in Badin Lake. Wood ducks produced 289 eggs in these boxes during the 1995 season.

Badin Lake is a focal area of an on-going bald eagle study. Although the bald eagle has been federally down-listed from endangered to threatened, the bald eagle population in North Carolina has not increased as quickly as it has in nearby states. Yadkin, Inc. has taken the lead in efforts to identify the important components of bald eagle habitat within the Yadkin/Pee Dee lakes area. While no eagle nests have been found at Badin Lake, the lake does provide significant resting and feeding habitat within the Yadkin/Pee Dee Basin. The loss of trees adjacent to Badin Lake that are used as feeding and resting perches could have an adversely affect the bald eagle population using the lake.

To help mitigate the aforementioned adverse impacts and to protect the significant fish and wildlife resources and recreational opportunities associated with Badin Lake, we recommend that Yadkin, Inc. develop and implement a comprehensive shoreline management plan. This plan should include the following restrictions:

1. Construction of docks, boat slips, boat landings, and other in-water structures should be prohibited within 50 feet of aquatic emergent vegetation beds.
2. The established Yadkin, Inc. criteria for siting docks and boat slips should be strictly enforced.
3. Dredging associated with private use of the lake should be prohibited.

Yadkin Inc/Badin Lake

4

October 12, 1995

4. The placement of riprap or retaining walls along the shoreline associated with private use should be prohibited.
5. The removal of vegetation on Yadkin, Inc. property by adjacent landowners should be prohibited.
6. Soil disturbing activities and the operation of heavy equipment (e.g., bulldozers, backhoes and skidders) by adjacent landowners should be prohibited on Yadkin, Inc. property;
7. Unnecessary removal of woody debris from the lake should be prohibited and a policy of no net loss of aquatic cover should be enforced. Where removal of tree tops is unavoidable, up-front mitigation should be required at a ratio of 2:1 (i.e., two trees should be implanted for each one removed). Created cover should 1) provide similar function, 2) be of similar size, 3) be of similar composition and 4) be placed as near to the cover that will be removed as possible. Shoreline trees should not be used to construct the mitigation structures. Our fisheries biologists will be available to provide technical advice.
8. In conjunction with our fisheries biologists, the significant littoral zone habitat features (e.g., fallen trees, large stumps, large boulders, and plant beds) should be inventoried and mapped. Priority should be given to those areas most threatened by development. In addition, a video record should be produced to provide visual documentation of existing habitat features.
9. In conjunction with our fisheries biologists, the quantity of natural and artificial fish cover should be evaluated to determine where additional cover is needed.

We appreciate the efforts of Yadkin, Inc. to protect the valuable fish and wildlife habitat and public recreational opportunities of Badin Lake. We hope these recommendations will be beneficial to you in the development of a shoreline management plan. If we can provide further assistance please contact our Habitat Conservation Program Office at (919) 528-9886 or our District 6 Biologists.

Sincerely,

Franklin T. McBride, Manager  
Habitat Conservation Program

cc: Fred Harris  
Wayne Chapman  
Ken Knight

**Montgomery County Health Department  
Environmental Health Section**

217 S. Main St.  
Troy NC, 27371

Phone: (910) 572-8175  
Fax: (910) 572-8177

November 30, 1995

Environmental Services  
1318 Dale Street  
Suite 220  
Raleigh, NC 27605

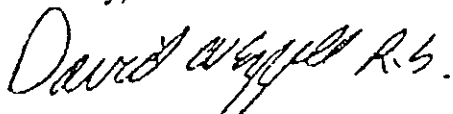
Attn: Sandy Smith

Dear Ms. Smith:

This department has conducted soil/site evaluations at Heron Bay Subdivision, located on Badin Lake. A total of 121 lots have been permitted for on-site wastewater treatment and disposal systems in Phase's 1 through 5. These lots will be served by individual private wells.

If you have any questions, please do not hesitate to call me Monday through Friday between the hours of 8:00 to 9:00 a.m. and 4:30 to 5:00 p.m. at (910) 572-8175.

Sincerely,



David W. Ezzell, R.S.  
Environmental Health Coordinator

DWE/cb

## APPENDIX E

### STATE SEDIMENT AND EROSION CONTROL APPROVAL



# CERTIFICATE OF PLAN APPROVAL



The posting of this certificate certifies that an erosion and sedimentation control plan has been approved for this project by the North Carolina Department of Environment, Health, and Natural Resources in accordance with North Carolina General Statute 113A - 57 (4) and 113A - 54 (d) (4) and North Carolina Administrative Code, Title 15A, Chapter 4B.0007 (c). This certificate must be posted at the primary entrance of the job site before construction begins and until establishment of permanent groundcover as required by North Carolina Administrative Code, Title 15A, Chapter 4B.0027(b).

HERON BAY SUBDIVISION, PHASE I

Project Name and Location

10-7-94

Date of Plan Approval

*Joseph C. Blaw*  
Regional Engineer

# CERTIFICATE OF PLAN APPROVAL



The posting of this certificate certifies that an erosion and sedimentation control plan has been approved for this project by the North Carolina Department of Environment, Health, and Natural Resources in accordance with North Carolina General Statute 113A - 57 (4) and 113A - 54 (d) (4) and North Carolina Administrative Code, Title 15A, Chapter 4B.0007 (c). This certificate must be posted at the primary entrance of the job site before construction begins and until establishment of permanent groundcover as required by North Carolina Administrative Code, Title 15A, Chapter 4B.0027(b).

HERON BAY SUBDIVISION, PHASE III

Project Name and Location

1-4-95

Date of Plan Approval

*Joseph E. Glass*  
Regional Engineer

# CERTIFICATE OF PLAN APPROVAL



The posting of this certificate certifies that an erosion and sedimentation control plan has been approved for this project by the North Carolina Department of Environment, Health, and Natural Resources in accordance with North Carolina General Statute 113A - 57 (4) and 113A - 54 (d) (4) and North Carolina Administrative Code, Title 15A, Chapter 4B.0007 (c). This certificate must be posted at the primary entrance of the job site before construction begins and until establishment of permanent groundcover as required by North Carolina Administrative Code, Title 15A, Chapter 4B.0027(b).

HERON BAY PHASE IV

Project Name and Location

9-21-95

Date of Plan Approval

*Joseph E. Glass*  
Regional Engineer

# CERTIFICATE OF PLAN APPROVAL



The posting of this certificate certifies that an erosion and sedimentation control plan has been approved for this project by the North Carolina Department of Environment, Health, and Natural Resources in accordance with North Carolina General Statute 113A - 57 (4) and 113A - 54 (d) (4) and North Carolina Administrative Code, Title 15A, Chapter 4B.0007 (c). This certificate must be posted at the primary entrance of the job site before construction begins and until establishment of permanent groundcover as required by North Carolina Administrative Code, Title 15A, Chapter 4B.0027(b).

HERON BAY, PHASE V

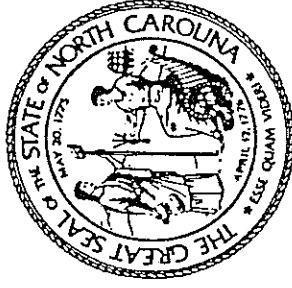
Project Name and Location

10-17-95

Date of Plan Approval

*Joseph C. Glass*  
Regional Engineer

# CERTIFICATE OF PLAN APPROVAL



The posting of this certificate certifies that an erosion and sedimentation control plan has been approved for this project by the North Carolina Department of Environment, Health, and Natural Resources in accordance with North Carolina General Statute 113A - 57 (4) and 113A - 54 (d) (4) and North Carolina Administrative Code, Title 15A, Chapter 4B.0007 (c). This certificate must be posted at the primary entrance of the job site before construction begins and until establishment of permanent groundcover as required by North Carolina Administrative Code, Title 15A, Chapter 4B.0027(b).

HERON BAY, PHASE VI - TEMPORARY ACCESS RD

Project Name and Location

11-3-95

Date of Plan Approval

*Joseph E. Blum*  
Regional Engineer

#22.00.11-  
DECLARATION OF  
RESTRICTIVE COVENANTS  
OF  
HERON BAY SUBDIVISION

THIS DECLARATION OF RESTRICTIVE COVENANTS OF HERON BAY SUBDIVISION is made this 24th day of October, 1994 by KEB Marketing Co., Inc., hereinafter referred to as "Declarant", and any and all persons, firms, or corporations hereinafter acquiring any of the within described property or any of the property hereinafter made subject to this Declaration of Restrictive Covenants of Heron Bay Subdivision, hereinafter "Restrictions."

W I T N E S S E T I I:

WHEREAS, Declarant is the owner of certain property in Montgomery County, North Carolina known as Heron Bay Subdivision; and

WHEREAS, Phase 1 of Heron Bay Subdivision is more particularly described by plat(s) hereof recorded in the following Plat Book(s) and Page(s), Cabinet C, Slides 79D, 80A and 80B of the Register of Deeds for Montgomery County to which reference is hereby made for a more complete description; and plat(s) for additional phases made a part of this subdivision will be recorded at a later date; and

WHEREAS, said lots are so situated as to comprise a neighborhood unit and it is the intent and purpose of the owner to convey the aforesaid lots to persons who will erect thereon residences to be used for family purposes, subject to the provisions hereinafter set forth; and

WHEREAS, Declarant has agreed to establish a general plan of development as herein set out to restrict the use and occupancy of the property made subject to these Restrictions, and the Declaration of Covenants, Conditions and Restrictions of Heron Bay Subdivision and Homeowners Association, hereinafter "Declaration", recorded separately in the Office of the Register of Deeds for Montgomery County for the benefit and protection of the property and for the mutual protection, welfare and benefit of the present and the future owners thereof; and

WHEREAS, Declarant desires to provide for the preservation of the values of Heron Bay Subdivision made subject to these Restrictions and the Declaration and for the preservation and maintenance of the Common Property established by the Declaration and by the supplements thereto.

NOW, THEREFORE, in accordance with the recitals which by this reference are made a substantive part hereof, Declarant declares that all of the property described herein on above said recorded plat(s) is made subject to these Restrictions and the Declaration and shall be held, sold and conveyed subject to the following easements, restrictions, covenants and conditions, which are for the purpose of protecting the value and desirability of Heron Bay Subdivision as it now exists and is hereafter expanded and that such easements, restrictions, covenants and conditions shall burden and run with said property and be binding on all parties now or hereafter owning said real property and their respective heirs, successors and assigns, having any right, title or interest in the properties now or hereafter subjected to these Restrictions and the Declaration, or any part thereof, and shall insure to the benefit of each owner thereof and their respective heirs, successors and assigns.

PROPERTY SUBJECT TO THESE RESTRICTIONS AND THE DECLARATION

AND ADDITIONS THERETO

1. Existing Property. The real property which is, and shall be held, transferred, sold, conveyed and occupied subject to these Restrictions and the Declaration, irrespective of whether there may be additions thereto as hereinafter provided, is located in Montgomery County, North Carolina, and is shown on maps recorded in Map Book(s) and Page(s) Cabinet C, Slides 79D, 80A + 80B in the Office of the Register of Deeds for Montgomery County.

2. Additions to Existing Property. Additional property may be brought within the scheme of these Restrictions and the Declaration and the jurisdiction of the Association in the following ways:

(a) Additional land within the area described in the metes and bounds description attached hereto as Schedule A and incorporated herein by reference may be annexed to the properties by Declarant and brought within the scheme of these Restrictions and the Declaration and within the jurisdiction of the Association, in future stages of development without the consent of the Association or its members; provided, however, that said annexations, if any, must occur within ten (10) years after the date of this instrument.

(b) Additional residential property and common area, consisting of not more than eight hundred (800) acres, outside of the area described in the aforementioned Schedule A may be annexed to the properties and brought within the scheme of these Restrictions and the Declaration and the jurisdiction of the Association in future stages of development without the consent of the Association or its members; provided, however, that said annexations, if any, must occur within ten (10) years after the date of this instrument.

(c) The additions authorized under subsections (a) and (b) shall be made by filing of record Supplementary Declarations of Declaration of Restrictive Covenants of the Heron Bay Subdivision and by filing of record Supplementary Declarations of Declaration of Covenants, Conditions and Restrictions of Heron Bay Subdivision and Homeowners Association, with respect to the additional properties which shall extend the scheme of these Restrictions and the Declaration and the jurisdiction of the Association to such properties and thereby subject such additions to assessments for their just share of the Association's expenses. Said Supplementary Declarations may contain such complementary additions and modification of these Restrictions and the Declaration as may be necessary to reflect only the different character and density of housing planned on the added properties and as are not inconsistent with the provisions of this Declaration. Condominiums may be permitted in a future phase if properly zoned.

#### GENERAL USE RESTRICTIONS

Declarant does hereby covenant and agree with all persons, firms or corporations hereafter acquiring title to any portion of the Property that the Property is hereby subject to these Restrictions as to the use thereof and do agree, publish and declare that the deeds hereinafter made by it to purchasers of the Property shall be made subject to the Declaration and to the following Restrictions:

1. Except as otherwise provided in these Restrictions, the lots shall be used for residential purposes only, and no structure shall be erected, placed, altered or permitted to remain on any lot other than one detached, single-family dwelling and related structures incidental to the residential use of the lot, such as garages and boat houses, which otherwise comply with these Restrictions, except that Declarant reserves the exclusive right to construct a roadway over any lot owned by it in order to grant access to other property acquired by Declarant and in such cases the remainder of any such lot not used for the roadway shall still be subject to these Restrictions. All single family lots fronting on Badin Lake, as shown by the record maps thereof shall have a minimum size of 20,000 square feet.

2. Each single-family dwelling shall have an enclosed, heated living area (exclusive of open porches, garages, and other unheated spaces) not less than One Thousand Eight Hundred (1,800) square feet on the waterfront and One Thousand Six Hundred (1,600) square feet otherwise, regardless of the number of stories. The design, location, and construction of all improvements on each lot (regardless of when such improvements are made) and the landscaping of each lot must be approved in advance by the Architectural Review Committee, hereinafter referred to as the "Committee", which Committee is established pursuant to the Declaration.

3. All improvements to the lot must comply with Montgomery County setback requirements. All structures shall be at least 10 feet from the side property line of any lot, except that they shall be at least 20 feet from the side property line abutting a street. The front setback line (facing Heron Bay Drive and Waterside Drive) shall meet or exceed Montgomery County subdivision regulations, however notwithstanding anything herein to the contrary, said front setback line shall not be closer than fifty (50) feet to any existing or newly constructed road, unless with prior written approval of the Declarant, or if Declarant so designates, by the Committee. Setback lines for fences and walls shall require written approval of the Committee. Declarant, or if Declarant so designates, the Committee, shall have the right to approve deviations from each of these setback requirements upon application of an individual lot owner if, for reasons of topography or well or septic approvals, strict compliance creates a hardship.

4. More than one lot (as shown on said plat(s)) or portions thereof, may be combined to form one or more lots by (or with the written consent of) Declarant, its successors and assigns. No lot may be subdivided by sale or otherwise, except by (or with the written consent of) Declarant, its successors and assigns. Upon combination or subdivision of lots, the building line requirements prescribed herein shall apply and the easements reserved herein shall be applicable to the rear, side and front lot lines of such lot as combined or subdivided. The resulting building site and structures erected thereon must otherwise comply with these Restrictions and the new property line of the resulting building site shall be used to compute the set-back lines as set forth herein.

5. All connections of private driveways to the Heron Bay road system, and all connections of private easements and right-of-ways to that road system shall be constructed and maintained in accordance with the rules, regulations and specifications as approved by The Architectural Review Committee on Heron Bay Homeowners Association.

6. There shall be no signs, fencing, or parking permitted within the road right-of-way.

7. No building, fence, wall, pool, outbuilding, driveway, or any other accessory feature to the dwelling or any other structure upon any lot shall be commenced, erected, placed, maintained or altered on any lot or combination of contiguous lots until the Complete Construction Plans (hereinafter "Plans") are approved in writing by the Committee or its designated agents. The Committee's refusal or approval of plans may be based upon purely aesthetic considerations, which in its sole discretion the Committee shall deem sufficient, but approval shall not unreasonably be withheld. One copy of all plans and related data shall be furnished to the Committee for its records. If no action is taken by the Committee within thirty (30) days after plans are submitted to it, the owner may proceed to build without approval.

8. Construction of new residential buildings only shall be permitted, it being the intent of this covenant to prohibit the moving of any existing building or portion thereof on a lot and remodeling or converting the same into a dwelling unit in this subdivision, excepting however, Declarant's mobile offices provided for hereinbelow.

9. With the exception of construction which is interrupted or delayed due to physical damage to the work in progress (such as damage due to fire, lightning, windstorm, hail, riot or civil commotion, explosion, or theft), any dwelling constructed upon a lot must be completed within one (1) year subsequent to commencement of construction, except with the written consent of Declarant, its successors or assigns, or, if the Declarant so designates, by the Committee. The normal period of completion time for outbuildings or other improvements shall be presumed to be four (4) months from the issue date of the building permit. In the event that completion of the dwelling, outbuildings, or other improvements on any lot is not completed within one year, and it is determined that construction progress has diminished to such an extent that completion of the dwelling, outbuildings, or other improvements is unlikely within 120 days, the Heron Bay Homeowners Association, hereinafter referred to as the "Association", will be advised of this determination. The Association shall then have the right to give notice to the owner that the owner has the obligation, within 30 days, to complete the removal of all the construction work in progress, including without limitation, the foundation and all building



improvements and all stored building materials, and fill and grade the lot so that it is restored to its natural grade level, and the Association shall have the right to undertake this work upon owner's failure to do so and charge the cost to the owner and place a lien upon the lot upon owner's failure to pay these charges.

10. No trailer, truck, van, mobile home, tent, camper, barn, garage, or other outbuilding or temporary structure parked or erected on lots in this Subdivision shall at any time be used as a residence, temporarily or permanently, nor shall any structure of a temporary character be used as a residence; provided, however, that this prohibition shall not apply to shelters used by the contractors during the construction of the main dwelling house, it being clearly understood that these temporary shelters will not be permitted to remain on any lot after completion of construction. The Committee shall have the right to approve or disapprove these temporary construction shelters or vehicles. The Committee, upon approval of a temporary construction shelter or vehicle, will issue a letter stating the length of time such shelter will be allowed to remain upon such lot and where such shelter is to be located upon such lot. Modular homes are permissible if approved by the Committee.

11. All homes constructed in Heron Bay Subdivision must be supplied with water for normal domestic use from individual privately drilled wells, or from a public utility company, if available. Each individual owner shall locate the well drilled on such owner's lot so as to comply with all the governmental regulations regulating the minimum distance between such well and septic fields proposed or approved for owner's lot and all lots adjoining such owner's lot.

12. Exposed exterior walls composed of the following materials shall be prohibited from Heron Bay Subdivision: concrete block, imitation asphalt brick siding, imitation asphalt stone siding, tar paper.

13. Declarant shall be permitted to erect one mobile office on any lot that it owns for the purpose of maintaining a sales information center and construction office.

14. No noxious or offensive trade or activity shall be carried on upon any lot, nor shall anything be done thereon which may become an annoyance or nuisance to the neighborhood. No animals or poultry of any kind may be kept or maintained on any of said lots, except a reasonable number of dogs and cats and other indoor household pets. Each owner must see to it that all of the owner's dogs are kept on the owner's property unless leashed. No dogs shall be permitted to roam the property and the Association may have strays and dogs that are not leashed and are found off their owner's lot picked up by governmental authorities. The throwing or dumping of trash, garbage, and waste materials shall not be permitted. The interference of any stream or future waterways so as to cause pollution or stagnation in these waterways is prohibited. There shall be no excavation which does not pertain to the building or construction of a home. Bottled gas containers and oil tanks shall be screened from public view. There shall be no above-ground swimming pools, unless approved by the Committee.

15. No portion or part of any lot shall be used or maintained as a dumping ground for rubbish or other refuse. Trash, garbage, or other waste shall not be kept, except in sanitary containers screened from view from all roads, all other lots, and from the Common Property provided that the Declarant, prior to the sale of such lot, may use portions of such lot as a burial pit in accordance with governmental regulations.

16. In addition to the easements that are shown on the recorded plats of Heron Bay Subdivision, easements ten (10) feet in width along the lot lines of all lots are reserved by Declarant for installation, repair, replacement and maintenance of utilities, including the right to keep said easements free and clear of all obstructions. An easement of twenty (20) feet is reserved for such purposes along the rear lines of all lots that do not adjoin other lots or properties within Heron Bay Subdivision. As between the easements reserved by these Restrictions and the easements that are located in the same areas as shown on the record maps, the easements that are greater in width shall be the easements that are in effect. Furthermore, there shall exist a 10 foot easement for the purpose of a foot path to group piers designated by plat. The easement shall be for the common use of only the lot owners grouped together for the

respective group piers.

17. Declarant reserves a temporary construction easement of twenty-five (25) feet in width along both sides and running parallel to streets or roads, which easements shall expire the earlier of twelve months after the particular road construction commences, or December 31, 1999, or upon the acceptance of such streets or roads for maintenance by governmental authority.

18. No outside clotheslines shall be permitted. No satellite dishes shall be permitted unless concealed from view from all lots and open spaces. The design of such enclosures must be approved prior to erection by the Committee. Mailboxes shall be of a design, color and choice of materials as designated by the Declarant or, if the Declarant so designates, by the Committee, and may not violate North Carolina Department of Transportation standards.

19. There shall be no junk automobiles, junk of any sort, unserviceable vehicles, or salvage stored or placed or allowed to remain on or in any portion of this Subdivision. Unless located within enclosed garages, no large boat and/or boat trailer (over 28 feet in length), travel trailer, motor home, tractor trailer truck, or any other such vehicle shall be kept or maintained or located upon any lot unless and except with prior approval of the Committee. Other boats and/or boat trailers (less than 28 feet in length) must be stored behind the building set back line. No vehicles that are disabled or under repair shall be kept upon any lot unless located within enclosed garages. Unlicensed automobiles, including antique cars, if present must be stored out of sight in a garage. Large trucks shall not be parked on a regular basis within this Subdivision. No lot shall be used for storage of building materials prior to the issuance of the building permit for the Primary Residence. Large truck shall be defined as any non-passenger vehicle larger than a pick-up truck.

20. No billboards or signs of any description shall be displayed upon any lot with the exception of those approved by the Declarant or if the Declarant designates, by the Committee, the Declarant reserves the right to place and maintain appropriate development signs at the entrance to this Subdivision. All sign colors must be brown or tan, unless otherwise approved by Declarant, or if Declarant so designates, by the Committee. Declarant also reserves the right to erect and maintain signs designating streets, boat landings, recreational areas, and any other sign that will aid in the development of Heron Bay Subdivision.

21. Except within the building site or within 20 feet of the main dwelling, no trees of any kind in excess of 6 inches in diameter at ground level may be removed from any lot without prior approval of the Committee.

22. Declarant, or its successors and assigns, will designate a right-of-way to the Association which will provide access for lot owners to a community pier, boat slips, and a boat ramp or other amenities which will be maintained by the Association. Notwithstanding anything herein to the contrary, Declarant will also deed to the Association at least one half (1/2) acre fenced for dry boat storage, or for any other use permitted in these Restrictions, for its use and maintenance. Declarant will, if permitted by Montgomery County, provide a security gate across the entrance road, Heron Bay Drive, Phase I of Heron Bay Subdivision to be maintained by the Association.

23. As provided for herein (see Section 2 of "Property Subject To These Restrictions and Declaration and Additions Thereto"), it is understood that Declarant, its successors and assigns, may develop, subdivide or sell additional tracts or parcels of land. Declarant reserves the right for its successors or assigns to connect such additional property to this Subdivision and to grant easements to use the roads and community access to Badin Lake and recreational areas of this Subdivision.

24. Definitions: Reference to "this subdivision" in this document is intended to refer only to Lots 1 through 31, Phase I of Heron Bay Subdivision and the Additions to Existing Property as provided for herein. Reference to "Association" in this document is intended to refer only to the Heron Bay Homeowners Association.

respective group piers.

17. Declarant reserves a temporary construction easement of twenty-five (25) feet in width along both sides and running parallel to streets or roads, which easements shall expire the earlier of twelve months after the particular road construction commences, or December 31, 1999, or upon the acceptance of such streets or roads for maintenance by governmental authority.

18. No outside clotheslines shall be permitted. No satellite dishes shall be permitted unless concealed from view from all lots and open spaces. The design of such enclosures must be approved prior to erection by the Committee. Mailboxes shall be of a design, color and choice of materials as designated by the Declarant or, if the Declarant so designates, by the Committee, and may not violate North Carolina Department of Transportation standards.

19. There shall be no junk automobiles, junk of any sort, unserviceable vehicles, or salvage stored or placed or allowed to remain on or in any portion of this Subdivision. Unless located within enclosed garages, no large boat and/or boat trailer (over 28 feet in length), travel trailer, motor home, tractor trailer truck, or any other such vehicle shall be kept or maintained or located upon any lot unless and except with prior approval of the Committee. Other boats and/or boat trailers (less than 28 feet in length) must be stored behind the building set back line. No vehicles that are disabled or under repair shall be kept upon any lot unless located within enclosed garages. Unlicensed automobiles, including antique cars, if present must be stored out of sight in a garage. Large trucks shall not be parked on a regular basis within this Subdivision. No lot shall be used for storage of building materials prior to the issuance of the building permit for the Primary Residence. Large truck shall be defined as any non-passenger vehicle larger than a pick-up truck.

20. No billboards or signs of any description shall be displayed upon any lot with the exception of those approved by the Declarant or if the Declarant designates, by the Committee, the Declarant reserves the right to place and maintain appropriate development signs at the entrance to this Subdivision. All sign colors must be brown or tan, unless otherwise approved by Declarant, or if Declarant so designates, by the Committee. Declarant also reserves the right to erect and maintain signs designating streets, boat landings, recreational areas, and any other sign that will aid in the development of Heron Bay Subdivision.

21. Except within the building site or within 20 feet of the main dwelling, no trees of any kind in excess of 6 inches in diameter at ground level may be removed from any lot without prior approval of the Committee.

22. Declarant, or its successors and assigns, will designate a right-of-way to the Association which will provide access for lot owners to a community pier, boat slips, and a boat ramp or other amenities which will be maintained by the Association. Notwithstanding anything herein to the contrary, Declarant will also deed to the Association at least one half (1/2) acre fenced for dry boat storage, or for any other use permitted in these Restrictions, for its use and maintenance. Declarant will, if permitted by Montgomery County, provide a security gate across the entrance road, Heron Bay Drive, Phase I of Heron Bay Subdivision to be maintained by the Association.

23. As provided for herein (see Section 2 of "Property Subject To These Restrictions and Declaration and Additions Thereto"), it is understood that Declarant, its successors and assigns, may develop, subdivide or sell additional tracts or parcels of land. Declarant reserves the right for its successors or assigns to connect such additional property to this Subdivision and to grant easements to use the roads and community access to Badin Lake and recreational areas of this Subdivision.

24. Definitions: Reference to "this subdivision" in this document is intended to refer only to Lots 1 through 31, Phase I of Heron Bay Subdivision and the Additions to Existing Property as provided for herein. Reference to "Association" in this document is intended to refer only to the Heron Bay Homeowners Association.

25. Nothing herein contained shall be construed as imposing any covenants and restrictions on any property of the owner of this Subdivision other than the Property that is subjected to these Restrictions. The Property herein described is also made subject to the Declaration of Covenants, Conditions and Restrictions of Heron Bay Subdivision and Homeowners Association recorded separately, which Declaration is incorporated herein by reference.

26. Enforcement of these Restrictions may be at law or in equity against any person or persons violating or attempting to violate any covenant, condition or restriction herein contained. In the event of enforcement of these Restrictions at law or in equity and a violation hereof is judicially determined, then the violator shall be assessed with the costs of such action, including without limitation reasonable attorneys fees.

27. The Declarant and purchasers of lots in Heron Bay Subdivision understand that the vesting of rights relating to proposed piers, docks, boat access ramps, or disturbance of the shoreline buffer is subject to the terms and conditions set out by Yadkin, Inc.

28. Declarant reserves the right to assign its rights to a successor who also assumes the Declarants responsibilities.

29. Judicial invalidation of one or more of the provisions hereof shall not adversely affect the remainder hereof which shall remain in full force and effect.

## THESE RESTRICTIONS RUN WITH THE LAND

This Declaration of Restrictive Covenants of Heron Bay Subdivision and the Declaration of Covenants, Conditions and Restrictions of Heron Bay Subdivision and Homeowners Association compose the general plan of development for the Property herein described and run with the land and shall benefit and be binding on all parties and persons (and their respective heirs, representatives, successors and assigns) claiming title to any of the Property herein described for a period of thirty (30) years from the date these Restrictions are recorded, after which time said Restrictions shall be automatically extended for successive periods of ten (10) years, unless an instrument signed by a sixty-six percent (66%) majority of the then owners of the lots or condominiums and the Declarant has been recorded agreeing to change said Restrictions in whole or in part. These Restrictions may be amended by the affirmative vote of the owners representing sixty-six percent (66%) of the lots or condominiums and the Declarant at the time of the vote.

IN WITNESS WHEREOF, the Declarant has caused this Declaration of Restrictive Covenants of Heron Bay Subdivision to be duly executed this 24th day of October, 1994.



(CORPORATE SEAL)

KIB MARKETING CO., INC.

By: Rita A. Collins  
Rita A. Collins, President

Maxine W. Turner  
Assistant Secretary

STATE OF NORTH CAROLINA )

COUNTY OF Montgomery )

I, a Notary Public of the County and State aforesaid, certify that Rita A. Collins personally came before me this day and acknowledged that she is the President of KIB Marketing Co., Inc., a North Carolina corporation, and that by authority duly given and as the act and deed of the said corporation the foregoing instrument was signed in its name by her as its President, sealed with its corporate seal and attested by Maxine W. Turner as its Assistant Secretary.

Witness my hand and seal this 24<sup>th</sup> day of October, 1994.

Jimmy L. Crosier  
Notary Public

My Commission Expires: Nov. 11, 1995



STATE OF NORTH CAROLINA  
COUNTY OF MONTGOMERY

The foregoing certificate of

Jimmy L. Crosier

is to be recorded in the Office of

## SUBDIVISION STREET DISCLOSURE STATEMENT

SUBDIVISION: Heron Bay, Phase I, County of Montgomery, State of North Carolina, consisting of all lots as shown on plat recorded in the Montgomery County Public Registry, North Carolina in Plat Book Cabinet C at Page (s) Slides 790, 800, FOB..... said recording shall hereinafter be referred to as "Recording."

The undersigned Developer and Seller does hereby certify that there are various 50-foot private road(s) shown on said Recording and that said 50-foot private road (s) are designed and are to be built to Montgomery County and State of North Carolina standards and have been approved as proposed, as it relates to stone and pavement width and depths.

The undersigned Developer and Seller further certifies that said 50 foot private road(s) aforesaid will be dedicated as private road(s) under the Montgomery County Subdivision Ordinance and that said road(s) is/are defined as a private road(s) for the purposes of maintenance as related to the County and/or State Highway Department.

The undersigned Developer certifies and represents that certified funds in an amount satisfactory to the Planner and Supervisor of Subdivision Approval for Montgomery County have been placed with Montgomery County, said sum equalling more than 100% of the projected cost of the construction of said road(s) in the judgement of the County Planner.

Until such time as said 50-foot private road(s) shall meet the minimum standards adopted by the County and/or State Highway Department for acceptance in the Highway System, the responsibility for maintenance and repair to said private road(s) shall be borne by the Heron Bay Homeowner Association.

This the 24th day of October, 1994.

DEVELOPER AND SELLER:

KEL MARKETING CO., INC.

*Christina L. Mene*  
 Christ. Secretary

By: *Rita A. Collins*  
 Rita A. Collins, President

I hereby acknowledge receipt of the above Subdivision Street Disclosure Statement, this the \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_.

BUYER: \_\_\_\_\_

BUYER: \_\_\_\_\_

Address of Buyer:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

11-2-94

3:27 PM

11-26-00

DECLARATION OF  
COVENANTS, CONDITIONS, AND RESTRICTIONS  
OF  
HERON BAY SUBDIVISION

BOOK 296 PAGE 851

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS OF HERON BAY SUBDIVISION AND HOMEOWNERS ASSOCIATION, hereinafter referred to as "Declaration" is made this 24th day of October, 1994 by KEI Marketing Company, Inc., hereinafter referred to as "Declarant", and any and all persons, firms, or corporations hereinafter acquiring any of the within described property or any of the property hereinafter made subject to this Declaration.

WITNESSETH:

WHEREAS, Declarant is the owner of certain Property in Montgomery County, North Carolina known as Heron Bay Subdivision, Phase I of which is more particularly described by plat(s) thereof recorded in the following Plat Books and Pages: Cabinet C, Slides in the Office of the Register of Deeds for Montgomery County to which reference is hereby made for more complete descriptions; and

WHEREAS, Declarant has agreed to establish a general plan of development as herein set out to restrict the use and occupancy of the Property made subject to this Declaration for the benefit of the present and the future owners thereof; and

WHEREAS, Declarant intends to subject to this Declaration additional portions of Heron Bay Subdivision for the purpose of extending the general scheme of development to such additional Property and accordingly declares that Heron Bay Subdivision may be expanded to include additional property; and

WHEREAS, Declarant desires to provide for the preservation of the values of Heron Bay Subdivision as expanded hereby and hereinafter made subject to this Declaration and for the preservation and maintenance of the Common Property established by the Declaration and by the supplements hereto.

NOW, THEREFORE, in accordance with the recitals which by this reference are made a substantive part hereof, Declarant declares that all of the property described on said recorded plats and all of the property hereinafter made subject to this Declaration by recorded supplements hereto referencing subsequently recorded plats, shall be held, sold, and conveyed subject to the following easements, restrictions, covenants, and conditions, which are for the purpose of protecting the value and desirability of Heron Bay Subdivision as it now exists and is hereafter expanded and that such easements, restrictions, covenants, and conditions shall burden and run with said real Property and their heirs, successors and assigns having any right, title, of interest in the Properties now or hereafter subjected to this Declaration or any part thereof, and shall inure to the benefit of each owner thereof and burden each owner's real Property that is subjected to this Declaration.

ARTICLE I

DEFINITIONS

"Association" shall mean and refer to Heron Bay Homeowners Association, Inc., a not for profit North Carolina corporation, its successors and assigns.

"Owner" shall mean and refer to any contract buyer and/or the record owner, whether one or more persons or entities, of a fee simple title to any lot which is a part of any of the Property made subject to this Declaration, but excluding those having such interest merely as security for the performance of an obligation, provided however, the Declarant shall not be deemed an Owner.

"Property" shall mean and refer to that certain property shown on plat(s) recorded in Plat Books and Pages: Cabinet C, Slides 79D, 80A + 80B in the Office of the Register of Deeds for Montgomery County, North Carolina and any additional property which Declarant may make a part of this Subdivision, as provided for in the Declaration of Restrictive Covenants of Heron Bay Subdivision, recorded separately. The terms "Property," "Subdivision," and "Heron Bay" are interchangeable.

"Lot" shall mean and refer to any improved or unimproved building lot shown upon any recorded subdivision plat of this Subdivision.

"Dwelling Unit" shall mean and refer to the completed single family home located upon a Lot, except as may refer to a condominium unit later developed.

"Declarant" shall mean KEJ Marketing Company, Inc. a North Carolina corporation, and its successors and assigns if such successors and assigns acquire two or more undeveloped lots from the Declarant for the purpose of development and if the rights and obligations of the Declarant hereunder are expressly assigned to and assumed by such successors and assigns.

"Common Property" shall mean all property owned by the Association for the common use and enjoyment of all or a designated class of members. Common Property includes without limitation all existing and future roads and right-of-ways and all greenways, median strips, cul-de-sac centers, planting areas, and recreational areas, and facilities, open space, walking trails, easements, boat ramps, community boat slips, and community piers that are developed on the Common Property (it being understood that this enumeration is by way of description of the type of facilities that may be developed and in no way shall bind or obligate the Declarant to provide any of the described facilities) and all entry-way, directional, and informational signs (and the areas set aside for their location) and any other property as may be purchased or provided for the common use and benefit of the Declarant, the Owners, and any member in the Association, including without limitation such Common Property as may be shown on the recorded plat(s) of the Property. The Common Property shall not be used for public commercial purposes, but may be used for enjoyment of the Association's members for fund-raising activities to support the purposes of the Association.

"Committee" shall mean the Architectural Review Committee established by the Declarant for the purpose of administering control over architectural, landscaping, and related matters, as provided in Article V of this Declaration.

## ARTICLE II

### RIGHTS AND DUTIES OF THE ASSOCIATION AND PROPERTY OWNERS ASSESSMENTS

Section 1. Owner's Easements of Enjoyment. The Declarant and, to the extent provided by this Declaration, every Owner shall have a right and easement of ingress, egress, and regress over the Common Property and over the roads within the Property, to be used in common with others, for the purpose of providing access to lot(s) owned or dwelling unit(s) owned by the owner for himself, his family, agents, licensees and invitees, and for his and their non-exclusive use and enjoyment of the Common Property, subject however to the limitations on such use and enjoyment of the Common Property as provided for in reside this Declaration. It is understood that the private roads may be used to gain access to land behind the phases in the development if the same is not developed by the Declarant. Every Owner, and the members of such Owner's family who reside with such Owner or are overnight guests of such Owner, shall have the right to use the recreational areas within the Common Property, subject however to such Owner paying when due the dues and assessments of the Association and abiding by all rules and regulations of the Association, including without limitation those governing the use of the recreational areas and the Common Property. Non-Owners shall only be entitled to use the recreational areas on such terms and conditions as the Association may select.



11-2-94

3:27 PM

11 26.00 p.d.

DECLARATION OF  
COVENANTS, CONDITIONS, AND RESTRICTIONS  
OF  
HERON BAY SUBDIVISION

BOOK 296 PAGE 851

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS OF HERON BAY SUBDIVISION AND HOMEOWNERS ASSOCIATION, hereinafter referred to as "Declaration" is made this 24th day of October, 1994 by KEI Marketing Company, Inc., hereinafter referred to as "Declarant", and any and all persons, firms, or corporations hereinafter acquiring any of the within described property or any of the property hereinafter made subject to this Declaration.

WITNESSETH:

WHEREAS, Declarant is the owner of certain Property in Montgomery County, North Carolina known as Heron Bay Subdivision, Phase I of which is more particularly described by plat(s) thereof recorded in the following Plat Books and Pages: Cabinet C, Slides in the Office of the Register of Deeds for Montgomery County to which reference is hereby made for more complete descriptions; and

WHEREAS, Declarant has agreed to establish a general plan of development as herein set out to restrict the use and occupancy of the Property made subject to this Declaration for the benefit of the present and the future owners thereof; and

WHEREAS, Declarant intends to subject to this Declaration additional portions of Heron Bay Subdivision for the purpose of extending the general scheme of development to such additional Property and accordingly declares that Heron Bay Subdivision may be expanded to include additional property; and

WHEREAS, Declarant desires to provide for the preservation of the values of Heron Bay Subdivision as expanded hereby and hereinafter made subject to this Declaration and for the preservation and maintenance of the Common Property established by the Declaration and by the supplements hereto.

NOW, THEREFORE, in accordance with the recitals which by this reference are made a substantive part hereof, Declarant declares that all of the property described on said recorded plats and all of the property hereinafter made subject to this Declaration by recorded supplements hereto referencing subsequently recorded plats, shall be held, sold, and conveyed subject to the following easements, restrictions, covenants, and conditions, which are for the purpose of protecting the value and desirability of Heron Bay Subdivision as it now exists and is hereafter expanded and that such easements, restrictions, covenants, and conditions shall burden and run with said real Property and their heirs, successors and assigns having any right, title, of interest in the Properties now or hereafter subjected to this Declaration or any part thereof, and shall inure to the benefit of each owner thereof and burden each owner's real Property that is subjected to this Declaration.

ARTICLE I

DEFINITIONS

"Association" shall mean and refer to Heron Bay Homeowners Association, Inc., a not for profit North Carolina corporation, its successors and assigns.

"Owner" shall mean and refer to any contract buyer and/or the record owner, whether one or more persons or entities, of a fee simple title to any lot which is a part of any of the Property made subject to this Declaration, but excluding those having such interest merely as security for the performance of an obligation, provided however, the Declarant shall not be deemed an Owner.

Section 2. Annual Assessments.

(a) The Association shall have the duty to repair, replace, and maintain all recreational areas and improvements located thereon, and all streets, roads, road right-of-ways, and other Common Property. The Association shall have the right, from time to time, to establish a reasonable assessment, which assessment shall be paid by each Owner in such periodic installments as the Association may determine, to be used to pay: (1) the operating and administrative expenses of the Association; (2) the costs of maintenance, upkeep, replacement and repair of all recreational areas, and improvements located thereon, and all streets, roads, road right-of-ways, and other Common Property; and (3) other expenses necessary or useful to maintain and operate the Association and the recreational facilities (including, without limitation, the procuring, maintenance and paying the costs of insurance related to the Common Property and of surety and other bonds related to the management of the Common Property and the Association). It is understood (by way of example and without limitation) that the assessment funds shall be used for such matters concerning Common Property as the following: maintenance, repair and replacement of improvements within the recreational areas, the seeding and re-seeding road right-of-ways and Common Areas, erosion control, repairing of road shoulders, surfacing, patching and resurfacing of parking lot and road pavement, placement of gravel, and planting and maintenance of shrubs, trees and seasonal flowers.

(b) The annual assessments may also be used by the Association for the purpose of adding to the recreational facilities.

(c) The annual assessment payable by each Owner shall be \$195.00 per lot per calendar year. The annual assessment shall be due and payable on January 31 of each year, commencing January 31, 1996, provided the board of directors may elect to permit payment in such installments and at such times as it shall determine. This assessment shall be deferred as to any lot purchased by a builder with the intent to build a house for resale to the public at large. This assessment will be payable as to any lot purchased by a builder who purchases a lot for the purpose of building a custom home under contract with the ultimate residents. This assessment will be prorated on a calendar year basis from the date title to each lot for which an assessment is payable is transferred to the Owner.

(d) The annual assessment may be increased or decreased by the board of directors of the Association without a vote of the membership to an amount not more than ten percent (10%) in excess of the annual assessment for the previous year. A majority vote of each class of voting members of the Association must approve an increase or decrease in the yearly assessment if the increase or decrease exceeds the assessment for the previous year by more than ten percent (10%).

(e) Annually the board of directors of the Association shall have determined and shall have given written notice to each Owner of the annual assessment affixed against each owner for the immediately succeeding calendar year.

Section 3. Special Assessments.

(a) In addition to the assessments specified hereinabove, the Association may levy special assessments for the purpose of supplementing the annual assessment if the same are inadequate to pay the reasonable maintenance expenses and operating costs of the Association as described in Section 2 hereof, provided that any such special assessments shall have the assent of a majority of each class of the voting members of the Association at a duly called meeting.

(b) For Owners of Lots 6 through 10, 14 through 17 and 22 of Phase I of Heron Bay Subdivision there will be an annual special assessment of \$50.00 per lot for the purpose of reasonable maintenance expenses and operating costs of a group pier with a cluster of boat slips for the exclusive benefit of the Owners of Lots 6 through 10 and their families, agents, licensees and invitees and for their exclusive use and enjoyment. (See Article III, Section 5.) The operation, funding and maintenance of this group pier and this cluster of boat slips shall not be the responsibility of the Association.

Section 4. Removal of Obstructions and Unsightly Growth, Debris, and Materials.

(a) The Association may remove any obstructions of any nature located within road right-of-ways or other Common Property (including but not limited to trees, shrubs and mailboxes) which, in the opinion of the Association, either might produce a hazard or might interfere with the ability or willingness of the State of North Carolina (or agency or department thereof) to take over the responsibility for maintenance of the roads.

(b) The Association shall have the right, in its sole discretion, to charge back the actual cost to it of removing obstructions against the Owner who directly, or through his agents, contractors or invitees caused or permitted the obstruction to be placed in the road right-of-way or other Common Property, and such Owner shall indemnify and save the Association harmless from all liability, claims, damages and expense imposed upon the Association, at law or in equity, caused by or resulting from the placement of the obstruction in the road right-of-ways or other Common Property. In the event the Owner responsible for such charge or liability as aforesaid fails and refuses after demand by the Association to pay said charge or liability, then the Association shall have a lien against his lot thereon and may enforce collection of the charge or liability, together with reasonable attorneys' fees, by any and all remedies afforded by law or in equity, including without limitation, the filing of a notice of lien and perfecting the same as by law provided, to the end that such charge or liability shall become a charge against the said lot or dwelling unit.

(c) If the Association, in its sole discretion, determines that any lot has become unsightly due to grass or weeds that have not been mown, or due to debris of any nature having accumulated on the lot, then the Association shall have the right from time to time to enter the said lot for the purpose of mowing the grass or removing the debris. At least ten (10) days prior to entering a lot for said purpose, the Association shall advise the Owner by letter, sent to his last known address, of the action to be taken if the Owner does not remedy the problem within the said ten (10) day period. The Association shall take reasonable steps to avoid damage to any trees planted on such lot, to the extent that the Association has been put on written notice in advance by the Owner of the approximate location on a chart or map of such lot showing the location of planted trees to be avoided.

Section 5. Duty to Make Repairs

(a) Until accepted for maintenance by governmental authority, the obligation for the repairs, maintenance and improvements of the roads as shown the aforesaid plat(s) or any other common property shall be the responsibility of the Association with the Owner of each lot except as provided herein, being responsible for payment of the assessments levied by the Association, which assessments shall be the personal obligation of the Owner of each lot.

(b) The decision to expend Association funds to repair and maintain the roads or other Common Property shall be made by a majority of the board of directors of the Association. By such vote, the board may delegate such authority to any committee of the board. No owner may waive or otherwise escape liability for the assessments provided for herein by non-use or abandonment of his lot.

(c) Notwithstanding the foregoing, each Owner of a lot shall be solely responsible for any repairs to a road right-of-way or other Common Property caused by the negligent act or acts of said owner, his or her invitees, agents, licensees, or guests. For these purposes, it shall be a negligent act for any building material to be unloaded on any road or road right-of-way.

Section 6. Late Charges and Interest on Unpaid Assessments.

Any assessment not paid within thirty (30) days after the due date shall be subject to such late charges and shall bear interest at a rate per annum as shall be determined by the board of directors of the Association, which interest rate shall not exceed the highest rate of interest

and shall be charged as to any assessment that is not paid within 30 days of its due date. The initial interest rate for late payment is 18% per year (1.5% per month) which shall commence to accrue on any assessment or other account balance that is not paid within thirty (30) days of the date due. The initial date upon which liens may be filed for failure to make payment of assessments and other charges is thirty (30) days after the due date. The board of directors may change the initial late charge, interest rate, due dates and lien assessment date by majority vote of the directors.

#### Section 7. Lien for Unpaid Assessments

(a) In the event the Owner of any lot fails and refuses, after demand by the Association, to pay any annual or special assessment then the Association shall have a lien against said lot and may enforce collection of said assessment in law or in equity, including without limitation, the filing of a notice of lien and perfecting the same as by law provided to the end that such unpaid assessment together with the costs and expenses of collection, including without limitation, reasonable attorneys' fees, shall be a charge and lien against the said lot.

(b) To secure the payment of the annual and special assessments as are levied by the Association, together with the cost of collection including attorney's fees, all such charges shall be a continuing lien upon the lot against which the assessments are made. Such charges shall also be their personal obligation of the person(s) who were the owner or owners of such lot at the time the assessment came due. Their personal obligation shall remain a lien upon the lot upon transfer of title but shall not become the personal obligation of the purchasers thereof unless expressly assumed by them.

(c) Neither the assessments nor the costs of collection shall be a lien upon any Common Property nor shall the lien upon any lot for such charges be senior to any first lien mortgage or first lien deed of trust regardless of the fact the lien arose prior to the date and time of recording of any such first lien mortgage or deed of trust.

### ARTICLE III

#### MEMBERSHIP, VOTING RIGHTS, OFFICERS AND MEETINGS

Section 1. Membership Every owner of a lot which is subject to this Declaration shall be a member of the Association. Membership is appurtenant to and may not be assigned. If and when Declarant develops additional phases in the Subdivision the Owners of those lots shall be members of the Association. The Declarant shall also be a member so long as it owns property within this expandable Subdivision.

Section 2. Class Membership Voting The Association shall have two (2) classes of membership:

##### Class A

Class A members shall be all lot Owners with the exception of Declarant, and shall be entitled to one vote for each lot owned. When more than one (1) person owns an interest in a lot all such persons shall be members but the vote for such lot shall be exercised as they, among themselves, shall determine in writing, which writing shall be filed with the Secretary of the meeting prior to voting, but in no event shall more than one vote be cast with respect to any lot.

Class B

(a) Class B members shall be entitled to vote ten (10) votes for each lot owned. Class B membership shall consist of the Declarant, or its successors or assigns, until the happening of either of the following events whichever occurs earlier.

1. The earlier of four months after ninety percent (90%) of all the lots in the Subdivision are sold and conveyed by the Declarant to unrelated third parties or persons; or
2. Ten years from date of recordation of this Declaration; or
3. At such time as Declarant voluntarily relinquishes Majority control of the Association by a duly recorded instrument.

(b) Upon the happening of the earlier of either the three above described events, Class B membership shall cease and terminate and shall be converted to Class A membership.

Section 3. Board of Directors. There shall be five (5) members of the board of directors of the Association who shall serve until such time as their successors are duly elected and agree to serve. The directors shall have annual meetings and other such meetings as may be called at the request of the president of the Association or by any three (3) directors. So long as the Declarant, or its successors and assigns, is the Class B member, it shall select the board, provided it must select two (2) of the members from the lot Owners other than the Declarant.

Section 4. Suspension of Voting Rights. The Association shall have the right to:

(a) Suspend the voting rights (if any) of an Owner for any period during which assessment on his lot remains unpaid and enforce collection of the same; and

(b) Suspend the voting rights (if any) of each Owner who is a contract buyer for any period of time during which payments to the Declarant pursuant to terms of said contract are delinquent, during which period of time the Declarant shall succeed to the voting rights of said contract buyer.

Section 5. Limited Common Area (Boat Slips).

(a) The Owners of Lots 6 through 10, 14-17, and 22 in Phase 1 of Heron Bay as shown on the aforesaid plot(s), together with their family members, agents, licensees, and invitees, shall be eligible for the exclusive use and enjoyment, in common with each other, of a group pier with a cluster of boat slips located in front of the common property line of Lots 13 and 14 said lots on Badin Lake. It is understood that the other Owners in Heron Bay shall not have the right to the use of said pier and boat slips, nor shall they have any obligations with respect to the maintenance and upkeep thereof. Slip locations will be assigned by the Declarant.

(b) Each Owner shall pay an annual assessment of \$50.00 on January 1 of each year, commencing January 31, 1996, for the purpose of providing the necessary funds for the maintenance and upkeep of the group pier and boat slips and on slips on the community pier. This annual assessment may be increased only with a majority vote of the Owners entitled to the use of said pier and boat slips. The Owner of each lot sharing the group pier slips shall be entitled to one vote for said purpose.

(c) The Owners eligible to the use of said pier and boat slips shall among themselves elect a designated Owner to act as treasurer for said Owners, who shall have the responsibility

of opening and maintaining a bank account on behalf of said Owners. The treasurer shall receive the annual assessments, deposit the same in the Owners' bank account, and keep records of all receipts and expenditures. The treasurer shall provide such records to all of the Owners of said lots annually in January of each year, and also upon the request of any Owner of said lots.

(d) All maintenance, upkeep, and repairs to the group pier and boat slips shall require approval of a majority of the Owners entitled to the use thereof.

(e) Any Owner of said lots who does not pay the annual assessment as provided herein shall lose the privilege of the use and enjoyment of the group pier and boat slips for so long as said assessments shall remain unpaid. If the slip becomes a hazard the Home Owner's Association may remove it and bill the Owner for the expense.

(f) The Owner of lot 1-5 and 28 will each be eligible to construct a boat slip from the community pier and each will be responsible for the maintenance and upkeep of his/her slip. If the owner fails to maintain the slip and allows it to become unsightly or a hazard, the Homeowners Association may remove the slip and bill the owner for the expense.

(g) Owners of lot 26 and 27 are eligible for a shared pier. The second party to build will have to 1) be under roof, and 2) reimburse one half (1/2) the cost of the pier to the other lot Owner who built the pier before they will be eligible for their boat slip.

(h) Lot purchasers may select the location of their slips on the group and community pier in order of the date of their lot purchase.

#### Section 6. Additional Phases

The Declarant intends (but is not obligated) to develop one or more additional phases of Heron Bay Subdivision and incorporate the same within the provisions of this declaration. Such phases may include condominiums which if developed will have one vote each and will pay the same dues as a lot owner.

### ARTICLE IV

#### CONVEYANCE OF COMMON PROPERTY

Within ten years from the date of recording of this Declaration, Declarant will convey by deed its right, title, and interest in and over the road right-of-ways and any other Common Property within the Subdivision to the Association.

### ARTICLE V

#### ARCHITECTURAL CONTROL

(a) In order to control design and location of the houses and other improvements to be constructed, erected, placed, or installed (hereinafter "improvements") upon the lots in the Subdivision, the Declarant hereby creates an Architectural Review Committee (hereinafter "Committee") for the purpose of reviewing, approving, suggesting changes to, and rejecting plans and specifications for such improvements (regardless of when such Improvements are made), and the landscaping of each lot. This Committee is also created for the purpose of

reviewing, approving, suggesting changes to, and rejecting swimming pools, out buildings, boat houses, ramps, piers, driveways, enclosures for satellite dishes, and if Declarant so desires, for mailbox design. This Committee will be responsible for the control of size, color, materials, and content of rental and sales signs in this Subdivision, and for the approval or disapproval of boats, boat trailers, house trailers, motor homes, tractor trailer trucks, or any other such vehicle, that are kept or maintained or located upon any lot unless located within enclosed garages. The Committee will also be responsible for the control of temporary construction shelters or vehicles in this Subdivision.

(b) The Committee shall consist of three persons designated or appointed from time to time by the Declarant, its successors or assigns, one of whom shall be appointed from among lot owners. After 90% of the lots in Subdivision are sold by the Declarant, its successors or assigns, said Committee shall be elected by a majority vote of the Board of Directors; provided, however, Declarant, its successors or assigns, shall be entitled to at least one Committee member until all of its lots in this Subdivision have been sold.

(c) Except within the building site (unless within 20' of the main dwelling), no trees of any kind in excess of 6 inches in diameter at ground level may be removed from any lot without prior approval of the Committee. No building, fence, wall, outbuilding, or any other accessory feature to the dwelling or any other structure upon any lot shall be commenced, erected, placed, maintained, or altered on any lot or combination of contiguous lots until the Complete Construction Plans (hereinafter "Plans") are approved in writing by the Committee or its designated agents.

(d) The Plans include the complete construction plans, the plot plan (showing proposed location and elevation of such building, fences, walks, drives, parking area, etc.) proposed building plans and specifications, exterior color, finish, and materials. The areas over which the approval shall be required shall include but shall not be limited to the size and plan of the principal residential structure, and all accessory buildings, structures and improvements on the lot, the size and plan of the garage or carport, location and manner of construction of each driveway, swimming pool, utility building, patio, tennis court, and other improvements for athletic, recreational, or gymnastic purposes, and all other exterior improvements, the composition and color of raw and finished materials used on the exterior of all structures, and the location and type of any landscaping, shrubbery, and other plantings.

(e) The Committee or its designated agents shall have thirty (30) days after physical receipt of the plans to accept or reject the same in whole or in part. If no response by the Committee has been made in writing within said 30 days, the plans shall be deemed to be approved as submitted. After the plans are approved and after the Committee gives written permission for construction to begin, the actual construction shall be commenced and completed in accordance with the approved Plans, together with the requirements of the Declaration and, in this regard each Owner shall provide the Committee with the foundation survey as soon as it is made. The Committee shall have the right to waive setback violations when the remedial costs of correcting such violation, in the Committee's opinion, would impose undue hardship upon the violator.

(f) The actual construction shall be the responsibility of the Owner of the lot and his builder. Any permission granted for construction under this covenant and any designation of approved licensed contractors shall not constitute or be construed as an approval, warranty or guaranty, expressed or implied, by the Declarant or the Committee or its designated agent of the structural stability, design or quality of any building or other improvement or of the contractor who constructs such buildings or other improvements.

ARTICLE VI  
GENERAL USE RESTRICTIONS

Declarant does hereby covenant and agree with all persons, firms or corporations hereafter acquiring title to any portion of the Property, that the Property shown on the recorded plat(s) herein referred to, and all Property presently owned as part of Heron Bay Subdivision which plat(s) are to be recorded, and all Property which may be acquired in the future to be made a part of Heron Bay Subdivision, is made subject to the Declaration of Restrictive Covenants of Heron Bay Subdivision (hereinafter referred to as "Restrictions") which Restrictions shall be recorded separately and shall refer to this Declaration and incorporate it by reference.

ARTICLE VII  
CAPTIONS, ENFORCEMENT AND INVALIDATION

Section 1. Whenever the context and construction so require, all words used in the singular number herein shall be deemed to have been used in the plural, and vice versa, and the masculine gender shall include the feminine and neuter and the neuter shall include the masculine and feminine.

Section 2. The captions herein are inserted only as a matter of convenience and for reference and in no way define, limit or describe the scope of this Declaration nor the intent of any provisions hereof.

Section 3. Enforcement shall be by proceedings at law or in equity against any person or persons violating or attempting to violate any covenant, either to restrain violation or to recover damages. In the event it is necessary to enforce this Declaration by appropriate legal or equitable proceedings, the party or parties violating or attempting to violate the same shall be liable for the cost of such proceedings including reasonable attorneys' fees.

Section 4. Invalidation of any one or more of these covenants by judgement or court shall not adversely affect the balance of this Declaration, which shall remain in full force and effect.

Section 5. The Declarant reserves the right to amend this Declaration from time to time without joinder of any of the Owners for the following purposes:

- (a) To clarify the meaning of or to correct clerical errors in the Declarations.
- (b) To correct grammar spelling, capitalization and other matters of syntax.

All other amendments to this Declaration shall require an affirmative vote of at least sixty-six (66%) of the lot and condominium Owners and the vote of the Declarant, its successors, and assigns.



## ARTICLE VIII

## THESE RESTRICTIONS RUN WITH THE LAND

This Declaration of Covenants, Conditions and Restrictions of Heron Bay Subdivision and Homeowners Association are to run with the land and shall benefit and be binding on all parties and persons (and their respective heirs, representatives, successors and assigns) claiming title to any of the Property herein described for a period of thirty (30) years from the date this Declaration is recorded, after which time said Covenants shall be automatically extended for successive periods of ten (10) years, unless an instrument signed by a sixty-six percent (66%) majority of the then Owners of the lots and condominiums, and the Declarant and has been recorded agreeing to change said Declaration in whole or in part.

IN WITNESS WHEREOF, the Declarant has caused this Declaration of Covenants, Conditions and Restrictions of Heron Bay Subdivision and Homeowners Association to be duly executed this 24th day of October, 1994.

KEJ MARKETING CO., INC.

(CORPORATE SEAL)

By: Rita A. Collins  
Rita A. Collins, President

Maxine W. Turner  
Assistant Secretary

STATE OF NORTH CAROLINA )

COUNTY OF Montgomery )

I, a Notary Public of the County and State aforesaid, certify that Rita A. Collins personally came before me this day and acknowledged that she is the President of KEJ Marketing Co., Inc., a North Carolina corporation, and that by authority duly given and as the act and deed of the said corporation the foregoing instrument was signed in its name by her as its President, sealed with its corporate seal and attested by Maxine W. Turner as its Assistant Secretary.

Witness my hand and seal this 24<sup>th</sup> day of October, 1994.

Jammy L. Cassier  
Notary Public

Commission expires: \_\_\_\_\_

My Comm. Expires Nov. 11, 1995

STATE OF NORTH CAROLINA  
COUNTY OF MONTGOMERY

The foregoing certificate(s) of Jammy L. Cassier  
is (are) certified to be correct. This instrument was presented for registration this day and hour and duly recorded in the Office of

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