INCIDENTAL TAKING OF ENDANGERED
OR THREATENED SPECIES

PERMIT REQUEST

a) Conservation Plan

1) Impact

A) Legal Description:

The subject property is owned by Concord Homes, Inc., a Delaware Company. The legal description is included in Appendix A.

B) Biological data on affected species:

Clonophis kirtlandii (Kirtland's snake) is a small (47 cm total length), rust, brick or red-brown snake with dark brown alternating spots on the back. The belly is usually salmon pink to orange red with flanking rows of black spots. This snake is fossorial and inhabits grass-dominated margins of creeks, ditches and ponds, prairie wetlands, wet meadows, old fields, and vacant lots. Within these habitats, the burrows of crayfish (*Cambarus diogenes*-devil crayfish, *Fallicambarus fodiens*-digger crayfish, and *Procambarus gracilis*-prairie crayfish) are critical microhabitat components offering hibernation sites, concealed foraging areas and shelter.

Kirtland's snakes are secretive and nocturnal and are most commonly encountered under cover objects (tin sheets, boards, logs, flat rocks or other debris). Mating takes place in May (possibly in fall), with females giving birth to 4-15 young in August or September. Diet includes terrestrial earthworms, leeches and slugs. Kirtland's snakes are noted for the dramatic defensive display of flattening the body to almost ribbon-like state. The Kirtland's snake was listed by the IDNR in 1994. Habitat destruction, fragmentation, illegal collecting, pesticide use and resulting elimination of prey species contribute to its compressed range, with populations now occupying 10-11 counties in Illinois.

Sources:

Anton, T.G., D. Mauger, C.A. Phillips, M.J. Dreslik, J.E. Petzing, A.R. Kuhns and J.M. Mui. 2003. *Clonophis kirtlandii*: Aggregating Behavior and site fidelity. Herpetological Review 34(3):248-249.

Phillips, C.A., R.A. Brandon and E.O. Moll. 1999. Field Guide to Amphibians and Reptiles of Illinois. Illinois Natural History Survey Manual No. 8. Illinois Natural History Survey, Champaign.

History of *Clonophis kirtlandii* (Kirtland's snake) at the Bridgeview site:
The presence of Kirtland's snakes was first documented in 1987-1988. During this 13-year period (ca. 1988-2001), numerous excursions of usually short duration (~1 hr) by several biologists recorded approximately 10 individuals. Six adults, including gravid females, were collected between 1989-1992 and held in captivity by Michael J. Miller, DVM (deceased). The gravid females gave birth to 8 young (number of young per litter unknown) that did not survive in captivity; they were preserved and deposited in the herpetology collection at the Field Museum of Natural History (FMNH 251621-28). Other collectors may have encountered individuals during this period that were not recorded.

C) Activities that will result in taking of the endangered or threatened species:

There is a residential development and a small commercial building that will be constructed on the site. This development will be 37 residential buildings, 1 commercial building and an 8.8-acre storm water management area to be constructed on the site. Development will involve reworking the earth to grade for building pads and roads. The earthwork process will result in a take of any species that may be on the site, including Kirtland's snakes.

D) Explanation of the anticipated adverse effects on listed species.

Adverse effects involve the elimination of a known population of Kirtland's snake and the most recently documented population in Cook County.

2) Measures the applicant will take to minimize and mitigate that impact and the funding that will be available to undertake those measures.

A) Plans to minimize the area affected by the proposed action, the estimated number of individuals of an endangered or threatened species that will be taken and the amount of habitat affected.

There are no plans to minimize the affected area. It is unknown how many individuals exist on the site, however, based on field evidence; the number is anticipated to be minimal.

B) Plans for management of the area affected by the proposed action that will enable continued use of the area by endangered or threatened species.

There will be no continued use by the threatened species.

C) Description of all measures to be implemented to minimize or mitigate the effects of the proposed action on endangered or threatened species.

Measures taken will follow the recommendation of the IDNR as noted in a letter dated October 27, 2004. The recommendation stated that "a biological survey of the site be conducted by a professional herpetologist during April/May of next spring to verify the existence of the population, estimate its size and extent, and suggest development measures to minimize adverse impacts to the species, it's habitat or otherwise preserve the population".

A survey will be completed in the spring of 2005 during April and May by a professional herpetologist. At this time, the existence of the species will be determined and, if found, measures will be taken to prevent adverse impacts to the species.

D) Plans for monitoring the effects of measures implemented to minimize or mitigate the effects of the proposed action on endangered or threatened species.

No plans to minimize or mitigate effects of the proposed action apply in this case. Monitoring of viable numbers individuals removed from the site will take place as part of the translocation study proposed in Item 4 below if sufficient numbers of Kirtland's snakes for translocation research are removed from the site. Disposition of Kirtland's snakes in numbers insufficient for a translocation study (1 of either sex, several males) will be agreed to in consultation with the Department during progress reports made during the survey period.

E) Adaptive management practices that will be used to deal with changed or unforeseen circumstances that affect the effectiveness of measures instituted to minimize or mitigate the effects of the proposed action on endangered or threatened species.

No such practices apply as the site is to be eliminated in total as habitat for the Kirtland's snake; however, the

professional herpetologist will conduct follow up consultation to ensure that the funding partnerships described in section 4 below function as proposed for the benefit of the Kirtland's snake.

F) Verification that adequate funding exists to support and implement all mitigation activities described in the conservation plan.

The monies will be established in escrow accounts and distributed to the appropriate parties included in the conservation plan upon approval of the plan.

3) A description of alternative actions the applicant considered that would not result in take, and the reasons that each of those alternatives was not selected.

There were no alternative methods discussed. The Village of Bridgeview created a Request for Proposal for the site which required the site to be developed as residential.

4) Data and information to indicate that the proposed taking will not reduce the likelihood of the survival of the endangered or threatened species in the wild with the State of Illinois, the biotic community of which the species is a part or the habitat essential to the species existence in Illinois.

Four Conservation Plan options in order of preference of the professional herpetologist. Options incorporate management, education, research and a translocation project.

1) **Management:** Funding partnership with the **Forest Preserve District of Will County** for the purpose of management of Kirtland's snake habitat at FPDWC holdings, specifically Plum Valley Area 1, Goodenow Grove Nature Preserve's East Unit, Dutton Road subunit, and West Parking Lot field, etc.

   Costs to restore 40 acres of Will County Kirtland's snake habitat were calculated at $30,540.00. This is a funding partnership with the Forest Preserve District of Will County.

2) **Research:** Funding partnership with the **Illinois Natural History Survey** under the direction of Dr. Chris Phillips for research on a recently rediscovered Kirtland's snake population at Allerton Park, Piatt County, Illinois, or any population where research on the species is feasible or practical as determined by Dr. Phillips.

   Costs for conducting research is $28,800.00. This is a funding partnership with the Illinois Natural History Survey.

3) **Education:** Funding partnership with the **Glenview Park District**/The Grove national historic landmark (Robert Kennicott house and interpretive center) for an educational program display on the Kirtland's snake.

Costs for Education is $2000.00. This is a funding partnership with the Glenview Park District.

If Kirtland's snakes are found in numbers, the following applies:

4) **Translocation study:** Funding partnership with the **Village of Glenview/The Glen Redevelopment Project** for a proposed translocation project. This will involve a multi-stage approach and will include veterinary examination/ certification of health prior to release; marking with Passive Integrated Transponder (PIT) tags prior to release; release, and post-release monitoring (3 months per year, i.e. April-June, for 3 field seasons. This option applies only if Kirtland's snakes are recovered from the Bridgeview property in sufficient numbers to undertake a translocation study (i.e., a minimum of 5 individuals of *both* sexes).

Cost of translocation study is $21,600.00. This would be a funding partnership with the Village of Glenview.

(Funding partnership herein is defined as partnership entered into with municipality or agency resulting in funds provided by client for actions taken in fulfillment of Conservation Plan requirements).

1) An implementing agreement, which shall include, but not be limited to:

A) Names and signatures of all participants in the execution of the conservation plan.

See Appendix B

B) The obligations and responsibilities of each of the identified participants with schedules and deadlines for completion of activities included in the conservation plan and a schedule of progress reports to be provided to the Department.

Surveys intended to remove and relocate animals affected by the proposed action will commence on 1 April 2005 and will end on 1 June 2005 under the direction of the professional herpetologist. Progress reports to be provided to the department regarding encounters (if any) with Kirtland's snakes and disposition of individuals in consultation with the Department, during the survey period as such encounters occur.

C) Certification that each participant in the execution of the conservation plan has the legal authority to carry out their respective obligations and responsibilities under the conservation plan.

See Appendix C.

D) Assurance of compliance with all other federal, state and local regulations pertinent to the proposed action and to execution of the conservation plan.

To the best of our knowledge, this action meets and complies with all other federal, state, and local regulations.

E) Copies of any final federal authorizations for a taking already issued to the applicant, if any.

There are no federal authorizations for a taking already issued to applicant.

APPENDIX A
LEGAL DESCRIPTION

THAT PART OF THE SOUTH HALF OF SECTION 12, TOWNSHIP 37 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, BOUNDED AND DESCRIBED AS FOLLOWS: BEGINNING ON THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 12 AT A POINT WHICH IS 860.00 FEET WEST FROM THE SOUTHEAST CORNER OF SAID SECTION 12 AND RUNNING THENCE NORTH, PARALLEL WITH THE EAST LINE OF SAID SOUTHEAST QUARTER, A DISTANCE OF 883.50 FEET; THENCE WEST, PARALLEL WITH THE SOUTH LINE OF SAID SOUTHEAST QUARTER, A DISTANCE OF 514.00 FEET; THENCE NORTH, PARALLEL WITH THE EAST LINE OF SAID SOUTHEAST QUARTER, A DISTANCE OF 753.50 FEET; THENCE NORTHEASTERLY ON A CURVE LINE, CONVEX TO THE NORTHWEST, AND HAVING A RADIUS OF 80.00 FEET, A DISTANCE OF 125.72 FEET TO A POINT ON THE NORTH LINE OF THE SOUTH 1717.00 FEET OF SAID SOUTHEAST QUARTER, WHICH POINT IS 1294.00 FEET WEST FROM THE EAST LINE OF SAID SOUTHEAST QUARTER; THENCE NORTH, PARALLEL WITH THE EAST LINE OF SAID SOUTHEAST QUARTER, A DISTANCE OF 40.00 FEET TO AN INTERSECTION WITH THE NORTH LINE OF THE SOUTH 1757.00 FEET OF SAID SOUTHEAST QUARTER; THENCE WEST ALONG THE NORTH LINE OF THE SOUTH 1757.00 FEET OF SAID SOUTHEAST QUARTER AND ALONG THE NORTH LINE OF THE SOUTH 1757.00 FEET OF THE SOUTHWEST QUARTER OF SAID SECTION 12, A TOTAL DISTANCE OF 1500.05 FEET TO AN INTERSECTION WITH THE WEST LINE OF THE EAST 158.33 FEET OF SAID SOUTHWEST QUARTER; THENCE SOUTH ALONG THE WEST LINE OF THE EAST 158.33 FEET AFORESAID, A DISTANCE OF 1757.00 FEET, TO THE SOUTH LINE OF SAID SOUTHWEST QUARTER; AND THENCE EAST ALONG THE SOUTH LINE OF SAID SOUTHWEST QUARTER AND ALONG THE SOUTH LINE OF SAID SOUTHEAST QUARTER OF SECTION 12, A TOTAL DISTANCE OF 1932.76 FEET TO THE POINT OF BEGINNING, (EXCEPT THAT PART CONVEYED TO JOAN L. HOMEYER BY QUIT CLAIM DEED RECORDED APRIL 10, 1979 AS DOCUMENT 24913825, AND ALSO EXCEPT THAT PART FALLING WEST OF THE EAST RIGHT-OF-WAY LINE OF 76th AVENUE, AND ALSO EXCEPT THAT PROPERTY PREVIOUSLY CONVEYED TO HELEN ZARR BY DEED RECORDED JANUARY 25, 1978 AS DOCUMENT NUMBER 24299164, AND ALSO EXCEPT THAT PROPERTY PREVIOUSLY CONVEYED TO THE UNITED STATES POSTAL SERVICE BY DEED RECORDED OCTOBER 24, 1975 AS DOCUMENT NUMBER 23269596, AND ALSO EXCEPTING THAT PART OF THE SOUTH HALF OF SECTION 12, TOWNSHIP 37 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING ON THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 12, AT A POINT 860.00 FEET WEST OF THE SOUTHEAST CORNER OF SAID SECTION 12; THENCE NORTH 00 DEGREES 13 MINUTES 51 SECONDS WEST 883.50 FEET, ALONG A LINE PARALLEL TO THE EAST LINE OF SAID SECTION 12; THENCE SOUTH 89 DEGREES 41 MINUTES 21 SECONDS WEST 334.50 FEET, ALONG A LINE PARALLEL TO THE SOUTH LINE OF SAID SECTION 12; THENCE SOUTH 00 DEGREES 13 MINUTES 51 SECONDS EAST 883.50 FEET, ALONG A LINE PARALLEL TO SAID EAST LINE OF SECTION 12, TO A POINT ON SAID SOUTH LINE OF SECTION 12; THENCE NORTH 89 DEGREES 41 MINUTES 21 SECONDS EAST 334.50 FEET, ALONG SAID SOUTH LINE OF SECTION 12, TO THE POINT OF BEGINNING, ALSO, EXCEPT THEREFROM THAT PORTION FALLING WITHIN 100th PLACE AND THAT PORTION TAKEN FOR ROAD PURPOSES PURSUANT TO CONDEMNATION CASE NO. 89L50250, CIRCUIT COURT OF COOK COUNTY, ILLINOIS, AND ALSO EXCEPT THAT PORTION OF LAND LOCATED IN THE EAST HALF OF THE SOUTHEAST QUARTER OF SAID SECTION 12, WHICH FALLS WITHIN 103RD STREET), IN COOK COUNTY;

ALSO EXCEPTING THAT PART OF SAID SOUTH HALF OF SECTION 12, TOWNSHIP 37 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT ON THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 12, BEING 1,194.50 FEET WEST OF THE SOUTHEAST CORNER THEREOF; THENCE NORTH 00 DEGREES 13 MINUTES 51 SECONDS WEST ALONG A LINE THAT IS PARALLEL WITH THE EAST LINE OF SAID SOUTHEAST QUARTER, 50.00 FEET; THENCE SOUTH 89 DEGREES 41 MINUTES 21 SECONDS WEST ALONG A LINE THAT IS PARALLEL WITH AND 50.00 FEET NORTH OF THE SOUTH LINE OF SAID SOUTHEAST QUARTER, 1,238.32 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING SOUTH 89 DEGREES 41 MINUTES 21 SECONDS WEST ALONG SAID PARALLEL LINE, 300.00 FEET; THENCE NORTH 45 DEGREES 18 MINUTES 18 SECONDS WEST 28.28 FEET TO THE WEST LINE OF THE EAST 118.33 FEET OF THE SOUTHWEST QUARTER OF SAID SECTION 12, SAID LINE BEING ALSO THE EAST LINE OF 76TH AVENUE; THENCE NORTH 00 DEGREES 17 MINUTES 57 SECONDS WEST ALONG SAID WEST LINE OF THE EAST 118.33 FEET, A DISTANCE OF 198.00 FEET; THENCE NORTH 89 DEGREES 41 MINUTES 21 SECONDS EAST 320.00 FEET; THENCE SOUTH 00 DEGREES 17 MINUTES 57 SECONDS EAST 218.00 FEET TO THE PLACE OF BEGINNING, CONTAINING 37.215 ACRES, MORE OR LESS, IN COOK COUNTY, ILLINOIS.

APPENDIX B
Participants Involved with execution of the plan

Participants Involved with Execution of the Plan:

David Ihle
Land Development Area Manager
Lennar Communities of Chicago
1540 E. Dundee Road
Palatine, Illinois 60074

Tom Anton
The Ecological Consulting Group
800 Oak Street #3B
Winnetka, Illinois 60093-2550

APPENDIX C
Participants Authority to Execute the Plan

I, Tom Koenig, President of Lennar Communities of Chicago, do hereby authorize David Ihle, of Lennar Communities of Chicago, and Tom Anton, of the Ecological Consulting Group, to carry out their respective responsibilities under the conservation plan hereto attached.

Tom Koenig
President
Lennar Communities of Chicago
1540 E. Dundee Road
Palatine, Illinois 60074