1. NAME OF PROPERTY

Historic Name: COKER EXPERIMENTAL FARMS

Other Name/Site Number: Coker's Pedigreed Seed Company

2. LOCATION

Street & Number: U.S. Highway 15 Bypass Not for publication: ___

City/Town: Hartsville Vicinity: X

State: SC County: Darlington Code: 031 Zip Code: _____

3. CLASSIFICATION

Ownership of Property		Category of Property	
Private:	X	Building(s):	___
Public-Local:	___	District:	___
Public-State:	___	Site:	X
Public-Federal:	___	Structure:	___
		Object:	___

Number of Resources within Property

Contributing	Noncontributing	
_____	_____	buildings
1	_____	sites
_____	_____	structures
_____	_____	objects
1	0	Total

Number of Contributing Resources Previously Listed in the National Register: 1

Name of Related Multiple Property Listing: N/A

4. STATE/FEDERAL AGENCY CERTIFICATION

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this ____ nomination ____ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ____ meets ____ does not meet the National Register Criteria.

Signature of Certifying Official Date

State or Federal Agency and Bureau

In my opinion, the property ____ meets ____ does not meet the National Register criteria.

Signature of Commenting or Other Official Date

State or Federal Agency and Bureau

5. NATIONAL PARK SERVICE CERTIFICATION

I hereby certify that this property is:

___ Entered in the National Register
___ Determined eligible for the National Register
___ Determined not eligible for the National Register
___ Removed from the National Register
___ Other (explain):

Signature of Keeper Date of Action

6. FUNCTION OR USE

Historic:	Agriculture	Sub:	Agricultural Field
Current:	Agriculture	Sub:	Agricultural Field

7. DESCRIPTION

ARCHITECTURAL CLASSIFICATION: N/A

MATERIALS:
Foundation:
Walls:
Roof:
Other:

Describe Present and Historic Physical Appearance.

SITE DESCRIPTION

The cotton fields in which David Coker conducted his early breeding experiments with the cotton plant and where he subsequently developed a large-scale and commercially very successful pedigreed seed business are broad open stretches of fertile plain near Hartsville, South Carolina. They are flat open areas, reaching out to the horizon, sometimes to a coppice or a road, but entirely within an agricultural region.

The particular piece of farm land, south of Hartsville and east of Fifth Street, between the Seaboard Air Line Railroad right of way and Highway 15 Bypass was the most intact remnant of the farm land where Coker conducted his earlier seed breeding experiments.

When the Coker Experimental Farms was designated a National Historic Landmark on July 19, 1964, it contained a 220 acre tract of land bounded on the north by the Seaboard Air Line Railroad and on the south by Highway 15 Bypass. The west boundary was Fifth Street (U.S. 15 Business Route) and the east boundary was Swift Creek Road. The landmark was bisected into east and west by Fourth Street (South Carolina Highway 151). At the time of designation (1964), the west side of Fourth Street contained farm structures associated with the Coker Dairy Farm which dated from the 1930s and 1940s. These structures were considered noncontributing resources. Only the farmland was considered nationally significant.

Since designation, the western portion of the landmark has been commercially developed and now contains a Belks, Goodes, Walmart, Winn Dixie, and job placement office, in addition to the dairy farm structures noted above. These newer structures were constructed in the 1980s. Loss of integrity and the fact that much of the western portion of the landmark was used historically as a local dairy farm owned by the Cokers has resulted in the reduction of the landmark boundaries to include just the farmland on the east side of Fourth Street.

There are no structures or buildings within the present boundaries of the landmark.

8. STATEMENT OF SIGNIFICANCE

Certifying official has considered the significance of this property in relation to other properties:
Nationally: X Statewide:___ Locally:___

Applicable National Register Criteria: A X B___ C___ D___

Criteria Considerations (Exceptions): A___ B___ C___ D___ E___ F___ G___

NHL Criteria: 1

NHL Theme(s): XI. AGRICULTURE
E. Agriculture as Business Enterprise
XIII. SCIENCE
C. Biological Sciences
1. Botany

Areas of Significance: Agriculture

Period(s) of Significance: 1898-1938

Significant Dates: 1902, 1909, 1914, 1915

Significant Person(s): N/A

Cultural Affiliation: N/A

Architect/Builder: N/A

State Significance of Property, and Justify Criteria, Criteria Considerations, and Areas and Periods of Significance Noted Above.

SUMMARY STATEMENT OF SIGNIFICANCE

The scientific breeding of hardier, more disease-resistant strains of plant material giving greater yield, is at the center of the agricultural revolution of the twentieth century in the United States. The rediscovery, in 1900, of the laws of plant genetics that Austrian Gregor Mendel had discovered and articulated in 1865, has allowed the most remarkable improvements in agricultural production. Whereas in 1900, the average American farmer was producing for himself and about five other people, by the last quarter of the 20th century, he was producing enough for himself and about thirty other people. One of the earliest users of the laws of "Mendelism," was David R. Coker of South Carolina, who built an extensive program of scientific research and development of pedigreed seeds, of new strains of plants which helped to overcome blight and vermin, and of extension services to tens of thousands of farmers.

HISTORICAL BACKGROUND

The great Augustine monk-scientist, Gregor Mendel (1822-84) discovered the basic principles of heredity in the third quarter of the nineteenth century, but they were not accepted and applied until early in the twentieth century. Mendel worked and published in the field he called "plant hybridization" only rather briefly, between the time in 1856 when he began his experiments in the monastery at Brunn, Austria, until 1868 when he was appointed abbot of his monastery and assumed pre-occupying administrative duties. Ironically, he turned to further study, and ultimately his experiments, after 1850 when he was refused a state teaching license because he failed biology and geology.

Reporting to the Natural Science Society in 1865, he revealed his discovery that the micro-organic units he called genes, which determined hereditary traits, obeyed simple statistical rules. When this fact was realized three decades later, it became the foundation of the science of modern biology, but in his own time, he was unrecognized, and the potential for selective scientific development of new plant strains lay entirely dormant.

Finally, in 1900, three other Austrian experimenters independently achieved similar results and they then discovered Mendel's work by searching the literature of 34 years earlier. In this period of rediscovery and experimental application at the turn of the century, "Mendelism" as it came to be called, spread throughout the Western world including America, where some of the earliest practical use of the principle was made. In South Carolina, the work of David Coker, first with cotton plants and later with many other plants, proved to have an enormous impact upon Southern agriculture as a whole.

Returning to his ruined plantation following the Civil War, Major James Coker was determined to rebuild the farm and to again pursue his scientific proclivities. He had been a student at Harvard before the war studying Natural Science with Professors Horsford, and Alexander Agassiz (son of the great Louis Agassiz), and learning Botany from the highly-distinguished Asa Gray. Most of his time had been spent in the chemical laboratory doing practical analytical work, and as soon as James returned to Hartsville, South Carolina, at the

war's end, he set up crop-improvement experiments at the plantation. Although these may have been effective to some extent in this post-bellum era, Major Coker was preoccupied with the task of simply rebuilding the property and accumulating what turned out to be one of the greatest South Carolina fortunes ever amassed. He established one of the largest department stores in the state, became a partner in a cotton and naval supply dealership at Charleston, organized the Darlington Bank, built a railroad between Darlington and Hartsville, and organized the Hartsville Cotton Mills, the Hartsville Cotton-Seed Oil Mill, and the Bank of Hartsville.

When Major Coker's second son, David, became sickly and had to retire from the family department store in 1898, he turned to the task of possibly improving the already thriving plantation crops. In fifty years of farming, his father James never once failed to make a profit. David Coker joined with Dr. H.J. Webber, who had recently been placed in charge of the U.S. Department of Agriculture's cotton-breeding program, in a co-operative effort to improve, through breeding, one of the domestic upland cottons. Coker and Webber strove to develop productive long staple cotton that could be grown throughout the South. By 1903, David Coker's central work had become his plant-breeding experiments, doubtless with the encouragement of his scientifically-bent father, and by then in conjunction with the work of his brother, Dr. W.C. Coker, and Dr. D.N. Shoemaker.

Beginning with thirty experimental cotton plant selections, and methodically applying the latest techniques in the scientific breeding of crops, the work of Coker Experimental Farms ultimately played a great role in the agricultural revolution in the South which was beginning to take place. With the extension of techniques of the rediscovered "Mendelism," plant breeding became the core of a vital new educational enterprise as well as a commercial one. The Coker's Pedigreed Seed Company was organized in 1914 as the farm division of the J.L. Coker & Company. David Coker was Pedigreed Seed Company's president.

David Coker increasingly coupled the spread of information and demonstration with his experimental work. He regarded the Agricultural Extension Service as one of the most important organizations assisting farmers and supported it throughout the state. As his work broadened to include a wide variety of field and vegetative crops, such as corn, rye, oats, peas, beans, tobacco, melons, and sorghum, hundreds and then thousands of farmers came each year to see the crops, to hear about seed breeding, and to get a wide range of agricultural advice.

This was the best demonstration farm in the state. David Coker campaigned tirelessly across the South to reeducate the region's farmers.

Gradually the influence of this demonstration work on the seed farms spread throughout the region and became instrumental in the agricultural revolution of the twentieth century in the United States and especially the South. Through the improvement of crops (by the production of disease-resistant strains), the increase in yield of those crops, and the fostering of the development of agricultural products much more closely attuned to the needs of industrial users, the meshing of science, agriculture, and industry in a more efficient method than ever before took place.

While many factors went into the explosion in farm production, the size of the average farm and the onset of large-scale mechanization to name two, the important role of the scientific breeder of seeds can hardly be overstated. By 1963, approximately 65% of the cotton acreage of the Southeast, 80% of the oat acreage, 75% of the flue-cured tobacco acreage, 40% of the hybrid corn acreage, and an increasing percentage of the soybean acreage, could be traced to seed developed by Coker scientists. Employing scores of agricultural scientists and thousands of farmhands on more than 65 breeding and testing stations in 10 Southern states, Missouri, California, and Mexico, the Coker Experimental Farms continue to combine scientific research and development with large-scale commercial pedigreed seed production and a continuous program of information-dissemination to farmers throughout the region. The combination of scientific experimentation and education, begun by David Coker, continues to this day.

9. MAJOR BIBLIOGRAPHICAL REFERENCES

Carman, Harry J.
n.d. "David Robert Coker" in Dictionary of American Biography, Supplement 2. pp. 110-111

Cohn, David L.
1956 The Life and Times of King Cotton. New York.

Gaines, Francis P.
n.d. "James L. Coker" in Dictionary of American Biography, IV. pp. 280-281.

National Survey of Historic Sites and Buildings
1963 Agriculture and the Farmers Frontier (Theme XVIIa). United States Department of the Interior, National Park Service, Washington, D.C.. pp. 155-158.

Simpson, George L., Jr.
1956 The Cokers of Carolina. Chapel Hill, North Carolina.

Previous documentation on file (NPS):

___ Preliminary Determination of Individual Listing (36 CFR 67) has been requested.
___ Previously Listed in the National Register.
___ Previously Determined Eligible by the National Register.
X Designated a National Historic Landmark: **July 19, 1964**
___ Recorded by Historic American Buildings Survey: #
___ Recorded by Historic American Engineering Record: #

Primary Location of Additional Data:

X State Historic Preservation Office: **South Carolina**
___ Other State Agency
___ Federal Agency
___ Local Government
___ University
___ Other (Specify Repository):

10. GEOGRAPHICAL DATA

Acreage of Property: 145 acres

UTM References:

	Zone	Easting	Northing
A	17	585860	3802960
B	17	586520	3803220
C	17	587000	3802400
D	17	586500	3801900

Verbal Boundary Description:

Beginning at the intersection of the railroad right-of-way of the Seaboard Air Line and Fourth Street (South Carolina Highway 151) (UTM Reference Point A); thence proceed northeasterly along the south side of the railroad right-of-way to the west shoulder of Swift Creek Road (UTM Reference Point B); thence proceed south along the west shoulder of Swift Creek Road to its intersection with the north curb of Highway 15 Bypass (UTM Reference Point C); thence proceed west along the north curb of Highway 15 Bypass to its intersection with Fourth Street (UTM Reference Point D); and thence proceed north along the east side of Fourth Street to UTM Reference Point A.

Boundary Justification:

Although many thousands of acres once formed the heart of the Coker Experimental Farms' main station at Hartsville, South Carolina, it is this tract of land upon which David R. Coker conducted his experiments early in this century which is commemorated in the National Historic Landmark. Currently, 145 acres of this area today remain an agricultural zone, with the other portions having been since used for residential and commercial development for the town of Hartsville.

11. FORM PREPARED BY

Original Prepared in 1964, by Horace J. Sheely. Jr., Registration Chief, Branch of Historic Sites, National Park Service, Washington, D.C.

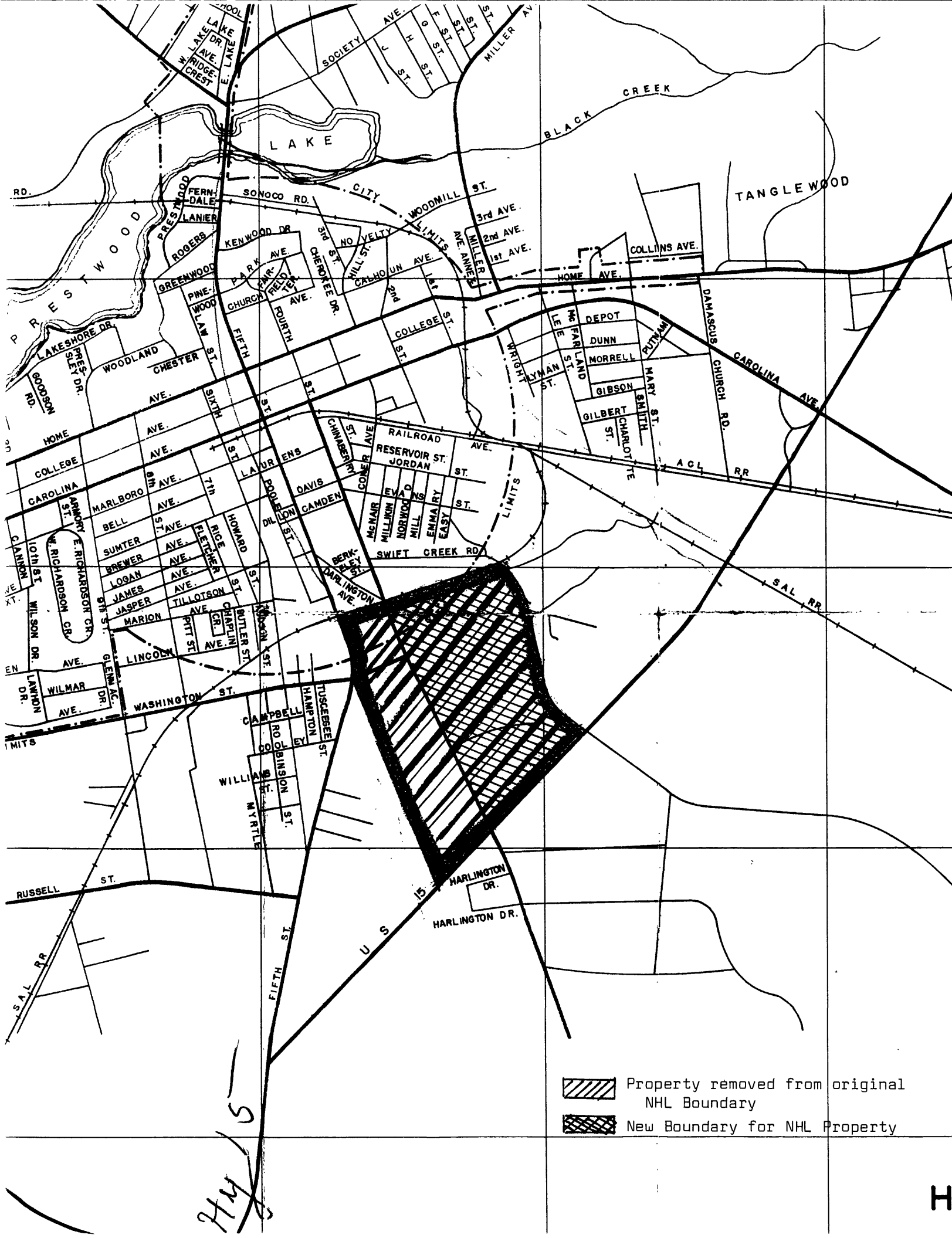
Revised nomination and boundary study prepared in 1979, by James Dillon, Architectural Historian, History Division, National Park Service, Washington, D.C.

Revised Boundary Study prepared in October 1993 by Mark R. Barnes, Ph.D., Senior Archeologist, National Park Service, Southeast Regional Office, 75 Spring Street, SW, Atlanta, Georgia 30303; 404/331-2638.

Nomination edited in February 1994 by Patricia Henry, Historian, History Division, National Park Service, P.O. Box 37127, Suite 310, Washington, D.C., 20013-7127; 202/343-8163.

All previous copies of this nomination and documentation are on file in the National Historic Landmarks Survey files.

Date: June 13, 1994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TANGLEWOOD
PRESTWOOD
SONOCO RD.
CITY LIMITS
WOODMILL ST.
COLLINS AVE.
HOME AVE.
COLLEGE ST.
RAILROAD AVE.
RESERVOIR ST.
JORDAN ST.
SWIFT CREEK RD.
CAROLINA AVE.
DAMASCUS CHURCH RD.
SAL RR
ACL RR
WASHINGTON ST.
LINCOLN
RUSSELL ST.
HARLINGTON DR.
U S 15
FIFTH ST.
WILLIAMSTON
MYRTLE
CAMPBELL
COOLEY
Property removed from original NHL Boundary
New Boundary for NHL Property