The Detmold Base Line Committee

Town of Summerville

South Carolina

June 30, 1998

Committee Membership:
T.R. Dion, P.E. & L.S.—Chairman
T.W. Bailey, P.E. & L.S. Town Council Liaison
R.D. Branton, P.E. & L.S.
J.B. Priestner, P.E. & L.S.
J.E. Chellis, J.D.
S.B. Jones, III
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The Honorable Berlin G. Myers
Mayor, Town of Summerville
100 Civic Center
Summerville, S.C. 29483

Subject: Detmold Base Line Committee Final Report

Dear Mr. Mayor:

The Detmold Baseline Committee is pleased to report that the Committee has completed its charge as outlined in Council's Resolution dated 14 April 1997. The attached Final Report includes the workings of the Committee, its findings, and recommendations for Council's consideration.

As you recall, the work of this Committee is given as a "Birthday Gift" to the Town of Summerville, in celebration of its 150th birthday. The findings and recommendations of this Committee come at an opportune time as the Town begins its long range Master Planning for the first decade of the 21st Century. The strength and functioning of a community rests on a foundation underpinned by mapping. When good map controls do not exist, numerous problems arise in the community such as questions of property line locations, problems defining rights of way, and the uncertainty of the location of political boundaries which can influence taxation, allocation of funds or services, and even where jurisdictional control extends.

Through the help of the South Carolina Geodetic Survey (SCGS), the Town of Summerville has 19 new survey control monuments positioned throughout the Town's interior. These monuments are now part of the National Geodetic Survey (NGS) system. They will provide excellent horizontal control where future surveys referenced to the monuments will improve mapping within the Town. This is essential as the Town embarks on creating a Geographic Information System (GIS) where tight mapping controls are mandatory.

Whenever across the state the SCGS is called on to provide such monuments, there is normally a survey cost which is passed on to those requesting such

monumentation. Due to the purpose for which this Committee requested these monuments, SCGS donated their surveying services. (In the case of this project, the estimated cost is approximately $30,000). For normal contract surveying services, utilizing the various rankings for professionals listed at the beginning of this report, the American Society of Civil Engineers Manual No. 45, entitled A Guide For The Engagement of Engineering Services, indicates that a minimum fee recommended would be $400.00 to $500.00 per working day. Between April 15, 1997 and June 20, 1998, as is explained further in the body of the report, 213 working days were consumed. Based on the above, this is estimated to be ± $85,000.00 minimum. Adding the two figures shows that this Committee's "Birthday Gift" amounts to a normal value of approximately $115,000.00.

As you are aware, the success of this Committee's work weighed heavily on efforts provided by The Citadel, and members of The Citadel's American Society of Civil Engineers (ASCE) Student Chapter. Cadets Duke, Still, and Seegers (now Gore) invested about 800 hours of their time in this project, while other members of the Student Chapter contributed about 600 man-hours. As a result of these efforts, The Citadel's Student Chapter of ASCE just received notification that it is the recipient of a National award (one of eight in the country) for its outstanding participation in this Community Service Project.

In closing, the Committee would like to acknowledge the assistance received from the following which helped to bring the work to completion:

South Carolina Geodetic Survey
South Carolina Department of Transportation
South Carolina Department of Archives and History
Dorchester County School District No. 2
Norfolk-Southern Railroad
The Military College of South Carolina
The Department of Civil and Environmental Engineering—The Citadel
Matt Halter, Drainage Engineer—Town of Summerville
Joe Christie, Planner—Town of Summerville
The South Carolina Historical Society
The Post--Courier
The Summerville Journal Scene
Mr. "K's" Piggly Wiggly
Westvaco

For the Committee,

T.R. Dion, Chair

The Detmold Base Line Committee
Final Report
Town of Summerville
South Carolina

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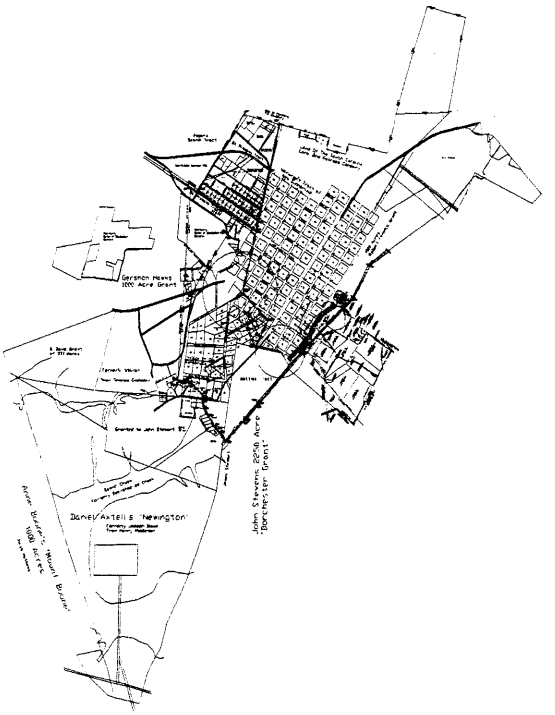

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Cadet S. Seegers, Ex-Officio
Cadet Ben Duke, Ex-Officio

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I. INTRODUCTION

The Town of Summerville, located in the low country of South Carolina, was incorporated 150 years ago with its original corporate boundaries being defined by F.C. Schultz's Plan of the Village of Summerville. This "plan" contained no metes and bounds and showed only general features. It was more like a sketch since it did not appear to be drawn to scale. A portion of Schultz's incorporated area, and additional contiguous acreage located to the north of the railroad tracks, was previously purchased by the South Carolina Canal and Railroad Company in 1830. A street layout for the railroad property was prepared by C.E. Detmold, a Civil Engineer located in Washington, D.C., during the year 1832. There was no record that Detmold, or others, actually laid out on the ground any monumentation that would delineate Detmold's Plan to the terrain. Schultz's "plan", created 17 years after Detmold's Plan, provides strong proof supporting this idea since none of the streets or blocks are shown by Schultz. Evidence shows that most railroad lots were conveyed by deeds referenced to Detmold's Plan, without an independent survey being conducted as part of the transaction.

Other records show that it was only after the turn of the century when much of the railroad property had been sold that lot surveys were being performed and platted with any regularity, possibly the cause of the confusion that exists today. Many land surveyors used the "island concept," where the property surveyed was delineated using "lines of occupation" and not related to a common set of control monuments. Numerous property line conflicts have surfaced throughout the years as the result of various surveys conducted by well-intentioned surveyors, with many of them being rooted in this lack of survey control for the street system.

During the 1980's the Chair was involved with various municipal projects where the water and wastewater systems were being upgraded. These projects required utility easements within the area encompassed by the Detmold Plan. Efforts to relate various streets and blocks together using then current surveying field data and the Detmold Plan provided proof that horizontal survey control problems existed.

The Chair was asked during the summer of 1996 to conduct a property survey of the Timrod Library, located in downtown Summerville. Again, street right of way data and Detmold Line information conflicted. As a result, the Chair undertook a mission to locate in the field over a three week period as many control points as possible to compare various point ground coordinates with the Detmold geometry. Using "least squares" to rotate and translate the ground coordinates with the Detmold geometry, it was determined that the majority of error ellipses ranged between 2.85 feet and 9.36 feet.

Thomas W. Bailey, a Town Councilman and land surveyor, had similar experiences over the years, as did other resident surveyors such as R. David Branton, R.B. Cuthbert, H.H. Foster, and D.L. Richardson. Over the ensuing year Bailey, Branton, and Dion had various informal conversations about the lack of horizontal control and what the "best practice" should be to use when conducting surveys. The "best practice" followed by the Town's only full-time surveyors immediately after World War II, R.B. Cuthbert and H.H. Foster—both employees of the Southern Woodlands Division of the West Virginia Pulp and Paper Company, INC. (WESTVACO), were the block corners

downtown which formed the park or square. It was noted that the orientation and location of these block corners did not exactly correspond to the Detmold Plan. For example the Detmold Plan called for the right of way of Main Street to be 200 feet. Physically the distance between the block corners on the Square measured 199.20 feet at one end and 199.65 feet at the other.

In March 1997 Bailey, Branton, and Dion informally communicated with town officials their concerns about the lack of survey control in Town and offered to assist the Town in resolving these problems. Summerville, being incorporated as a municipality in 1847, was celebrating its 150th birthday, and the group felt that any contribution to resolving these horizontal control problems would be a "present." A group of professionals who deal in real property were empowered by Town Council to research the Town's origins and seek clarification of any conflicting conditions with the sole purpose of improving the quality of mapping within the Town's jurisdiction. This group has been named ***The Detmold Base Line Committee*** of the Town of Summerville.

Background

A cursory review of Town Council's Minutes indicated that between 1892 and 1981 there were over 200 occasions where Council had to take some action to correct or amend street rights of way or alignment. As a result, Town Council passed a Resolution at their 14 May 1997 meeting which states:

Whereas, it is in the best interest of the Town of Summerville and the property owners of Summerville to establish official adjustment lines for the Detmold plan and to relate that plan to ground survey data; and

Whereas, David Branton, Thomas Dion, and Thomas Bailey, registered land surveyors, have volunteered to form a committee to accomplish this task.

Now therefore be it resolved, by the Town Council of Summerville, South Carolina duly assembled that David Branton, Thomas Dion and Thomas Bailey are appointed as the official Town committee to establish the 1997 Detmold adjustment lines;

And be it further resolved, that this committee is empowered to:

1) **Select its chairman and as necessary to appoint up to four additional persons to assist the committee in its work.**
2) **Authorize to examine old records, minutes, ordinances and other available data searching for information relative to this project.**
3) **Receive help from all employees and department heads of the Town from time to time as may be needed to carry out the work.**
4) **Submit a recommended ordinance to Town Council establishing the baseline and official adjustment lines for consideration and adoption by Town Council And be it further resolved, that this committee is authorized to begin its work immediately.**

Initial Committee Actions

The first action the Committee undertook was to review events that had led up to the formation of the Committee and the preliminary results of the lead author's findings from the Summer of 1996 activities. The Committee felt that additional data points defining as many block locations in Town would be necessary to provide a meaningful data base from which the final least squares adjustment could be based. To this end, the committee invited three senior undergraduate civil engineering students at The Citadel to participate in collecting field data and also in reducing it. The Committee decided that the most expeditious method to collect data of this magnitude would be to utilize Global Positioning System (GPS) technology. During the 1990's the U.S. Government established a constellation of navigational satellites called NAVSTAR where their orbit configurations would place four or five satellites overhead for GPS receivers to monitor under normal conditions. Satellite data collected using GPS receivers can be corrected and adjusted where point X, Y, and Z coordinate values are obtained. Some GPS mapping grade receivers, called roving units, can obtain point location data within 10 minutes of operation, while survey grade units require at least an hour

The students were subsequently trained in using both types of GPS receivers and detailed to gather the necessary field data. Once gathered, the data would be corrected and placed in a data base for adjustment.

The Committee recognized early that their efforts would have to relate to an overall coordinate control system scheme if the quality of mapping was to truly be improved. A decision was made to contact the South Carolina State Geodetic Survey in Columbia, South Carolina to seek assistance and guidance where the Committee's results could be tied to the South Carolina State Plane Coordinate System (SCSPCS-3900). Through the efforts of Director Sidney C. Miller, the Geodetic Survey loaned for community service a Trimble GPS Pathfinder roving unit to the Committee for its field work and agreed to install additional control monumentation within the Town's jurisdiction that would be available for local surveyors to relate in the future their survey's to the overall control network.

The Committee also contacted the Norfolk Southern Railroad, now the parent company of the old South Carolina Canal and Railroad Company, to seek clarification of various right of way conflicts. Specifically, current "track maps" show the railroad right of way, which runs through the middle of Town, to be straight and consists of a width 100 feet each side of the track centerline. On Detmold's Plan, the railroad track is not show in the center of the 200 foot right of way. In other documents, the right of way is shown as being 50 feet each side of the track. These discrepancies, coupled with the fact that the track is not physically straight, have contributed to various problems with land surveys over the years. A number of land surveyors have measured from the center of the tracks, while others have projected tangents for property surveys. The track has migrated throughout the years because sidings have been added and removed and rails and ties replaced. This has also resulted in problems with property line surveys.

Office Related Activities

Office related activities were initially focused on gathering background information on the original land grants and maps that delineated the original Town

Limits. Because of various discrepancies in these early documents, it was evident that uncertainty in land boundaries existed early in the Town's history. From these early documents, and copies of the Municipal Charter, and Amendments, and the Detmold Plan, a Baseline Map was put together as a guide to serve as a basis for conducting field observations using undergraduate civil engineering students. The Baseline Map then had Tax Map information superimposed over the other information, where current land owners could easily be identified.

The Baseline Map was then divided into four quadrants using the railroad right of way, running East/West, and Main Street (U.S. Highway 17-Alt), running North/South. Working copies of this Map were used by two survey crews, where each crew used distinct color coding to expedite data collection.

Field Related Activities

Initially, the students had to be instructed on how to use the roving GPS receivers. The students used the equipment to occupy various control points within the town in order to learn about the operation of the equipment and the limits of use, such as the effect of tree canopies on reception capability. To optimize satellite reception due to canopy obstructions, a number of Detmold block corners had to be located using a technique of cross taping between intersection points, and GPS points that were established in the road right of way where tree obstructions were minimized.

Next, the students learned how to use the handheld data collectors. Files were designed where input data consisted of Block Number, Block Quadrant, Description of Point, Tax Map Number, Town Quadrant, and User Name. Each GPS session or day was given a different file name, usually associated with an ascending file number.

Once these preliminary activities were completed, the exploration, searching, and recovery of the various town block markers began. Working with a tape, a Schondstat magnetic detector, and a "sure shot" shovel, many of the points were uncovered and located, while some were not recovered.

The two 2-man survey crews averaged five hours a day during the summer months and methodically worked their way through the various Basemap quadrants, where the four intersection points were located, rather than locating each block. These data were collected by setting a tripod with the GPS antenna attached over the occupied point, and data were collected for 10 minutes, which corresponds to 600 reading at one reading per second. If the 600 positions could not be obtained then at least 300 positions would be required to load the data. If 300 positions were not logged, the point would then be located by cross taping. Upon completion of data collection for that session, the data collector was taken back to the office and downloaded as part of the project database.

Citadel Related Activities

The Head of the Department of Civil and Environmental Engineering at The Citadel became involved in the Detmold Base Line community service project as a result of various civil engineering students under his jurisdiction participating in data collection, adjustment, and interpretation. A unique opportunity for students to become involved on

a professional level in solving a real world problem was recognized early. These students not only were being given an opportunity to interface with other professionals, they were also being afforded an opportunity to create work schedules, learn about the operation of state-of-the-art- equipment, and how to correct and adjust raw data observed as a part of their research efforts. These students also learned to write a report on their findings, involvement, and experience as a result of participating in this research project.

II. ORIGINS OF THE TOWN OF SUMMERVILLE

The Original Grants of Land

The Town of Summerville, as it existed through the first half of the 1900's, was situated on lands held by three land grant holders situated as shown in Figure 1. The first grantee was John Stevens who acquired two tracts totaling approximately 4050 acres. The first tract was described as follows:

John Stevens had a grant for Eighteen hundred acres of Land which said Land is Situate in Berkeley County on the north side of Ashley River butting and bounding to the Southward on the said River to the Eastward on the land of Mr. Gabr. Glage and lands not laid out to the Westward on land formerly in the possession of Mr. Rose and land not laid out and to the Northwest on land not laid out. The said Grant is dated the Seventh day of July 1696 and signed by John Archdale, Esq. Govern. Joseph Blake. Thos Casy, Wm. Hawlett, and John Berisfor, Esq. -Deputies.

Stevens second tract was a grant for 2250 acres dated 1st February 1699-1700 to John Stevens (Off. Secy. State, vol. 38, P. 298) , and it is upon this second grant that part of the Town is situated.

The second land grant holder was Robert Fenwick who received a grant for 1000 acres (Off. Secy. State, Vol. 38, p. 400) which was described as follows:

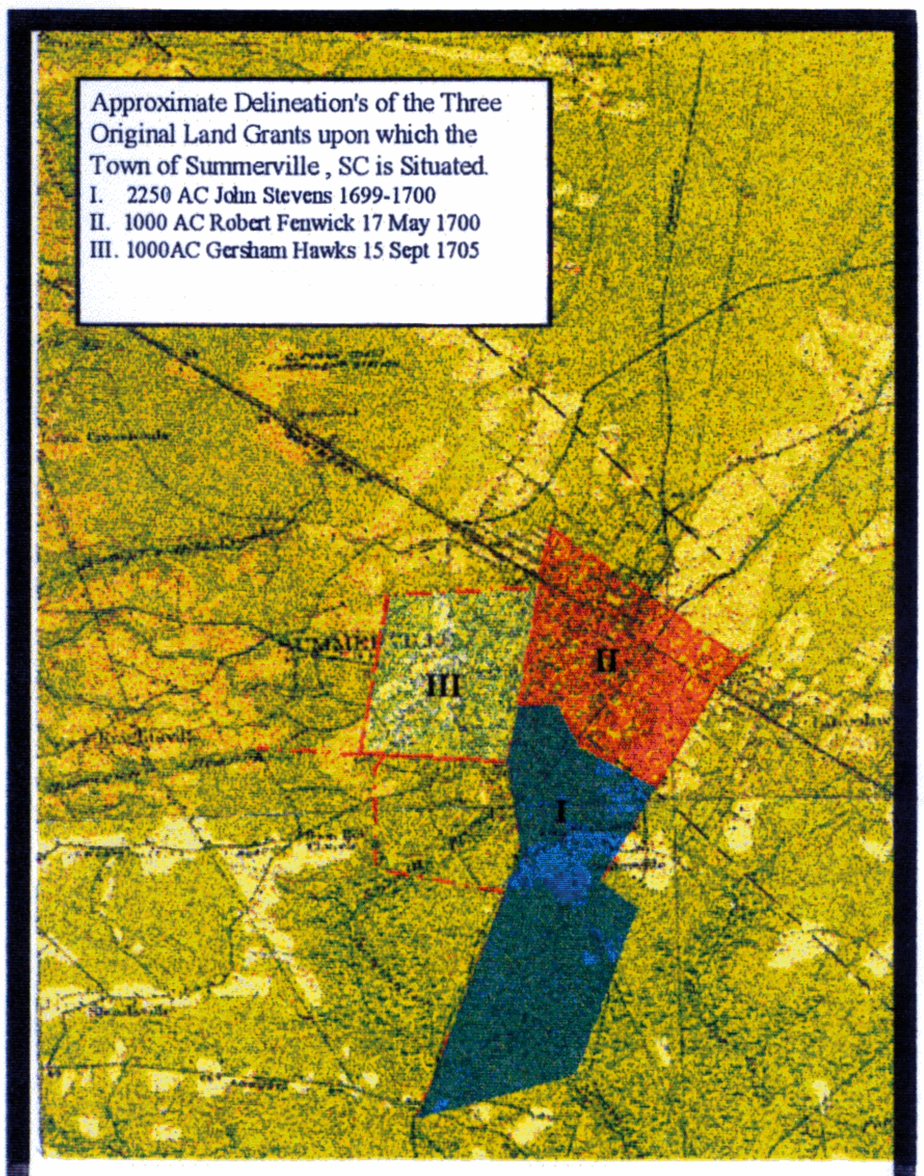


Figure 1. Approximate Positions of Original Land Grants

Robert Fenwick had a grant out of the Secretary's Office for one thousand acres of Land lying on the north side of the head of Ashley River bounding to the Southward on land known by the name of Dorchester Land, to the Northward, Eastward, and Westward on land not yet laid out. Paying yearly to the Lords Proprietors after the first day of December ins ten shillings current money. The said Grant is dated the Seventeenth day of May 1700 and Signed James Moore, Jos Morton, Adm: Bellinger.

The third land grant holder was Gershom Hawks who received a grant for 1000 acres (Off. Secy. State, Vol. 38, 523) which was described as follows:

Gershom Hawks had a grant for one thousand acres of land in Berkeley county on the north side of Ashley River bounding to the South on Moses Martin and Matt Axtell, on the West on the said Axtel and James Lord, to the North on lands not laid out and to the East on Dorchester and the Mill land. Paying to the Lords Proprietors on every first day of December the date thereof ten shillings, the said Grant is dated 15th of September 1705 and Signed N. Johnson, James Moore Rob Howes

More Recent Divisions of Original Grants

Ownership of the three original land grants changed throughout the 1700 and 1800's as described by Lègare Walker in *A Sketch of Summerville, South Carolina—1910.* The Town's location in 1910 was predominately defined by what was then known as:

1. The Williman, Moer or Gadsden Tract—(which includes Old Summerville)
2. The Wainwright or Railroad Tract (New Summerville)
3. The James Stewart or Nettles Tract
4. The Daniel Stewart Tract

The Williman, Moer or Gadsden Tract essentially encompassed the southern portion of the Town and is described by Walker as:

> Beginning at the intersection of the road and the canal back of Mr. Pedder's and Mr. River's, thence to the Stallsville Road near the residence of Dr. Muckenfuss, thence following the line of the James Stewart or Nettles Tract to the Old Methodist Church, and thence East along the line of this tract to a point near the intersection of Main Street and the next Street South of Seventh South Street, thence in a straight line Northwardly (separating it from the Wainwright tract) to a point a little North of the termination of Sixth South Street thence in a straight line Northwestwardly (separating it from the Wainwright tract) to the intersection of Hickory Street and the prolongation of fifth South Street, thence in a general southwestwardly direction to the Southern limits of the town.

The Wainwright Tract, or the Tract of New Summerville includes the following area described by Walker:

> This embraces the entire business portion and the most thickly settled part of the town. It covers all of the town to the North of the Railroad tract and adjoins on the South and West the James Stewart, Williman, and Daniel Stewart tracts. No more definite description is necessary, as there are plats showing the exact lines, of which hereafter.

Walker further describes the James Stewart or Nettles Tract in the following manner:

> Approximately speaking this embraced that portion of the town laying South of Seventh South Street, East of Main Street, and North of Carolina Avenue (Stallsville Road), and also that portion lying West of Main Street, embraced in the following lines: Beginning in the intersection of Main Street and the next Street south of Seventh South Street and running thence almost due West to about the old Methodist Church, thence in a

Southeaswardly direction to a point near the intersection of Main Street and Carolina Avenue.

This tract is the Northern part of a Grant to James Steward by the State of South Carolina (Charles Pinckney Governor) on February 5, 1798, of 500 aces of land, situate in the District of Charleston, St. George Parish on Saw Mill Branch of the Ashley River. (Sec. of State's Office Vol. E. No. 5, p. 232. Plat of same dated Feb 3rd. 1798, vol. No. 35, p. 160.)

The greater portion of this grant lies to the South of Summerville towards Stallsville, but the Northern portion lies in the town as stated. It appears that this may be an infringement of previous grants, also that it is apparently covered by a subsequent grant of 1000 acres to Stephen Nettles in 1803.

The Daniel Stewart Tract is defined by Walker as:

This lay in the Northwest of Summerville and covers a small portion of the northwestern section of the town adjoining the Williman and Wainwright Tracts. Approximately speaking, this tract included the "Hickory Hill" section (Gadsdens, Emerson, Barry) and that portion of the town to the Northwest and Southwest thereof.

Walker goes on to say that it is possible that a small part of the Western portion of the Town (though it may be a part of the Daniel Stewart grant) lay between the Wainwright, the Daniel Stewart and the Williman tracts and came from some source other than these tracts. He concludes with the observation that records are deficient.

The Birth of Summerville

In 1832 the South Carolina Canal and Railroad Company had the Wainwright Tract laid out into the Village of New Summerville as shown in Figure 2. This layout was prepared by C.E. Detmold, a Civil Engineer located in Washington, D.C. There was no record that Detmold, or others, actually laid out on the ground any monumentation that would delineate Detmold's Plan to the terrain.

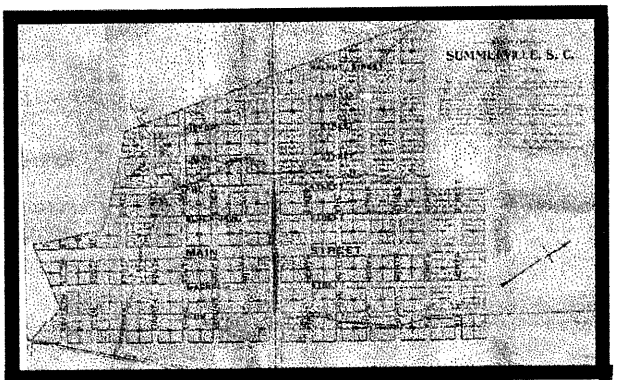


Figure 2. Detmold's Plan of New Summerville

On December 17, 1847 the Town of Summerville was incorporated with its original corporate boundaries being defined in the STATUTES AT LARGE OF SOUTH CAROLINA, p. 460 as ". . . the limits hereafter set forth, shall be deemed, and are hereby declared to be, a body politic and corporate, and shall be called and known by the name of Summerville, and its corporate limits shall extend eastwardly to the Rail Road of the South Carolina Canal and Rail Road Company, southwardly to Saw Mill Creek, which divides Summerville from the village usually called Midville or Stallville, northwardly from Saw Mill Creek, taking up

Rasher's Branch, and thence a straight line intersecting a straight line running northwardly from the old steam Saw Mill on the Railroad. ..".

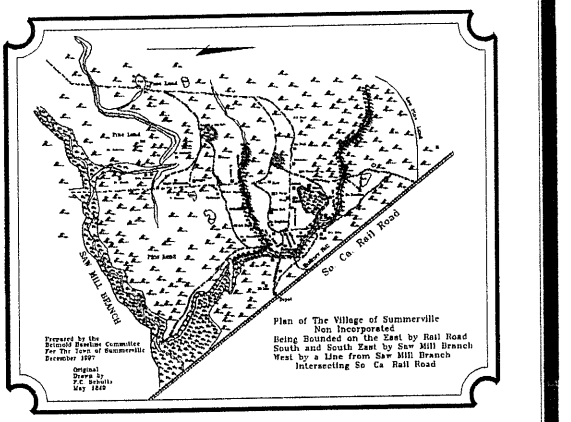


Figure 3 Schultz's Plan of the Village of Summerville

This boundary is represented by F.C. Schultz's Plan of the Village of Summerville in Figure 3. The "plan", prepared two years after the Town's Incorporation, contains no metes and bounds and shows only general features such as a few lanes, 20 residences, and the general topography.

This "plan", created 17 years after Detmold's Plan, again provides strong proof supporting the idea that Detmold's Plan was not established on the ground, since none of the Detmold streets or blocks are shown by Schultz.

Part of the area encompassed by Schultz's Plan includes a portion of the Williman, or Gadsden, tract. This area was known as "Old Summerville" and is represented in Figure 4 as a Plat by Robert K. Payne showing a Plan of the Village of Old Summerville—the Property of Thomas Moore, ESQ, dated December 1831.

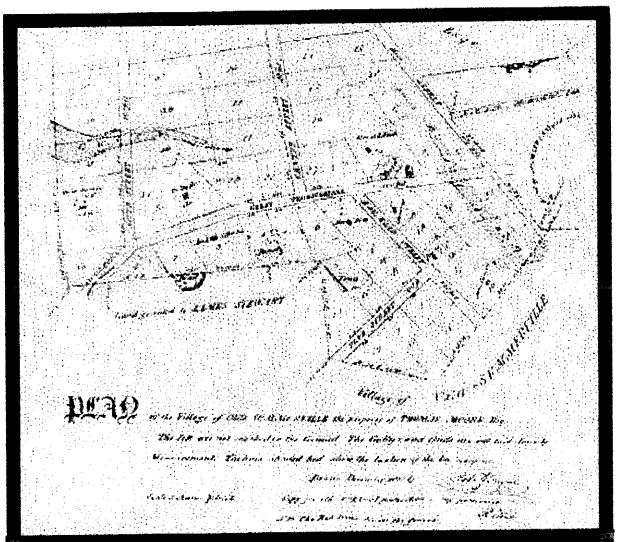


Figure 4 Plat of the Village of Old Summerville

As the years ensued, the Town's Corporate Limits expanded to include areas north of the railroad tracks. R.B. Lee depicted the Town Limits in a Map of Summerville, S.C. that he prepared May 1934. Essentially these same limits prevailed until the end of the 1950's when the Town began to actively annex outlying areas because of phenomenal growth attributed to land development. It is within these same limits that the Committee focused its work.

III. ASSEMBLY OF BACKGROUND MATERIALS AND ANALSYSIS

Introduction

The initial step used to assemble the background material was to create a working basemap in AUTOCAD. This basemap shows the position and relationship of each tract comprising the area in and around the Town of Summerville. The map was initially constructed using survey control points obtained during the summer of 1996 that were tied to the South Carolina State Plane Coordinate System, SCSPC 3900. Figure 5 depicts this map as it was being developed. Much of the information relating to the origins of the Town are poorly defined and create apparent conflicts when combined together. It is within this basemap drawing that the assembly, analysis, and final definition of the included parcels took place. Key survey control points necessary to better define the land boundaries were selected from this basemap for field measurements and adjustment using least squares as discussed in Section IV of this report.

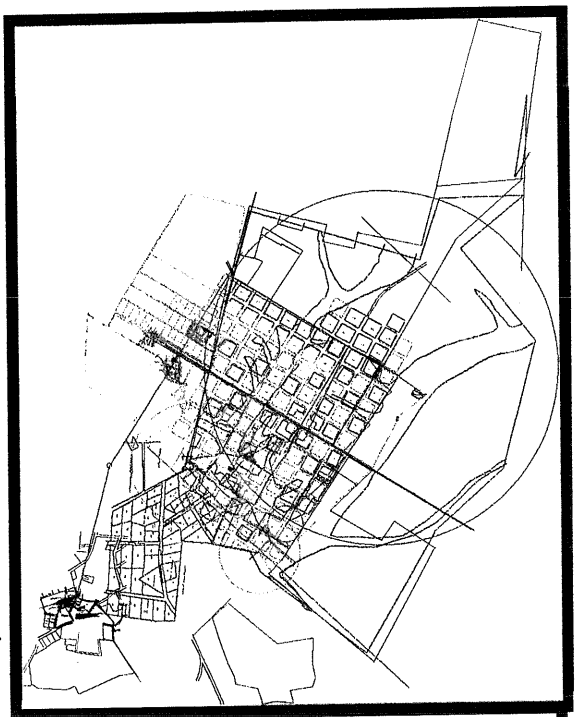


Figure 5 Basemap Under Construction

Original Land Grants

The original part of the Town of Summerville is located on parts of three original grants previously discussed as (1) A 2250 acres grant dated 1st February 1699-1700 to John Stevens, (2) A grant for 1000 acres dated 17 May 1700 to Robert Fenwick, and (3) A grant for 1000 acres dated 15 September 1705 to Gershom Hawks. According to the South Carolina Department of Archives and History very few plats to grants have survived prior to 1731. Because only the abstract of grants exist, which are vague, they provide little help in starting the basemap. It is not until the more definitive four major land tracts forming the Town are preliminarily situated that the original grant extents begin to become evident.

Summerville's Four Major Land Tracts

The four major land tracts which comprise the old part of the Town and described in Section II of this Report can be defined for mapping purposes in varying degrees of detail. The most well defined tract is the Wainwright or Railroad Tract of New Summerville (Detmold's Plan). Two plats help to define this area. The first is a Plan of Sawmill Tract Containing 1809 Acres by W.N. Mallard as surveyed 18 May 1850. This survey represents the same land conveyed by James W. Gray, Master in Equity to the South Carolina Canal and Railroad Company on May 14, 1831, being a part of a larger 2300 acre tract owned by Robert Dewar. The metes and bounds shown on this plat are mostly illegible; therefore, the Plan was digitized and positioned on the basemap. The second map—prepared by C.E. Detmold showing a Plan of New Summerville, March 1832—shows a portion of the previously mentioned 1809 acre parcel. This Plan of New Summerville has boundaries that are not well defined, or well related to any ground monuments. A drawing was prepared of this tract and positioned on the basemap using, for the most part, the railroad.

The second most well defined tract is the Williman, Moer or Gadsden Tract—(which includes Old Summerville). The portion of this tract that was mapped as a Plan of the Village of Old Summerville , the property of Thomas Moore, ESQ. December 1831 was not physically laid out on the ground. This Plan was digitized and laid over the basemap. It does not fit well with various landmarks such as St. Paul's Episcopal Church on Carolina Avenue, Dr. Durant's house (vicinity of Dr. Joe James) on Carolina Avenue, and the Purcell's home (Dr. David Price) on Sumter Avenue.

No maps, or metes and bounds descriptions, were located to define the James Stewart or Nettles Tract, and the Daniel Stewart Tract--other than that which is provided by Lègare Walker in *A Sketch of Summerville*. Knowing that these tracts adjoined the first two mentioned tracts, reliance was placed on using the limits of the Wainwright and Williman Tracts to estimate the other positions.

Shultz's Plan of the Village of Summerville

The original copy of Schultz's Plan of the Village of Summerville, possessed by John H. and Ellen W. Smith was digitized and superimposed over the basemap as shown in Figure 6. Landmarks used to position the overlaid image were the railroad and the location of the railroad depot. Schultz's Sawmill Branch location did not coincide with the basemap position; therefore, Schultz's Plan was scaled to match the branch's position. One interesting feature obtained from this overlay is the location of the westernmost incorporation limits—namely a line from Rasher's Branch towards the vicinity of Maple Street, depicted as a red line. This western town limit is substantiated on a Plat by Robert K. Payne showing the lands of Dr. Hamilton as surveyed November 1853. According to other town records, including a survey by R.B. Lee dated May 1934, the town limits in

this area are defined by a line running from Rasher's Branch to Central Avenue, and then to the railroad near Bryan Street. The Committee was unable to determine when or why the original town limit shown by Payne was abandoned in favor of the Central-Bryan Street run. Other than showing the original incorporation limits and general details, Schultz's Plan is of little value in determining the relationships of the various four major tracts of land to each other.

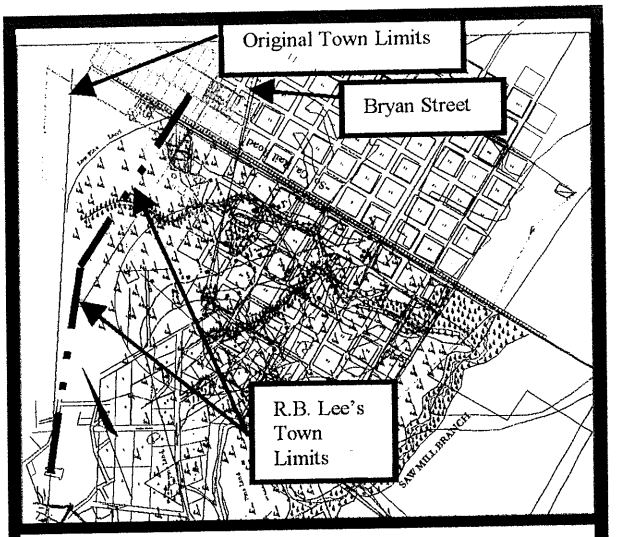


Figure 6 Schultz's Plan on Basemap

Requirements for Additional Information

As the basemap evolved, it revealed areas of conflict as well as other areas of uncertainty. It was quite evident that the Committee needed additional information from which to build its final data base for readjustment lines. Accordingly, the Committee set out to obtain as many additional sources of information as they were able from which to improve the base map. Section VII of this Report includes a majority of these resources.

One of the best sources of information turned out to be *a Plan Of The Grants and Settlements on the Ashley River and Cypress Swamp*, prepared by H.A.M. Smith as published in the *South Carolina Historical and Genealogical Magazine July 1919*. This plan was helpful in showing the general relationships of various parcels of land.

To better define the Williman and Nettles tracts, the Committee sought information pertaining to Newington and Mount Boone Plantations. In addition, more definitive information was required to set the limits of Detmold's Plan, necessitating information on land to the north and west of town. Property records relating to lands previously owned by Judge B.C. Pressley and also lands of the South Carolina Canal and Railroad Company were sought. The more detailed the basemap became, the demand for more reference material grew beyond the point where further information was able to be obtained. At this point, the Committee analyzed the basemap to determine the best way to define the involved land tracts.

Analysis of Background Information

The basemap indicated that the railroad lands north of Summerville could be re-established if key control points pertaining to lands owned by Avenger and Richardson could be re-surveyed in the field. Likewise, another former railroad tract located North and South of Interstate 26 could be better defined if key points were re-surveyed .

Another problem area which presented itself to the Committee was the railroad right of way. Detmold's Plan of New Summerville depicts the railroad going straight through the center of town (the Committee had observed that the tracks are not laid straight), with a 200 foot right of way. It shows the main line track 50 feet north of the centerline position. The Map of Summerville prepared by the South Carolina Georgia Railroad Company shows the right of way to be 200 feet from Sawmill Branch to Bryan Street with the mainline track centered in this right of way. This same right of way beginning at Bryan Street going west towards Westvaco Lumber Mill (formerly J.F. Prettyman & Sons) indicates a 50 foot width each side of the track. Other plats cited in Appendix D, such as the one prepared by Robert K. Payne November 1853 showing the lands of Dr. Hamilton and one by Simons Mayrant Co on May 25th 1907, indicate the right of way is 100 feet along the southern part of the track. Judge B.C. Pressley's records show otherwise as evidenced by M.T. Tighe's map of 1 June 1881, another map recorded in Book O-17, page 185 in the RMC Office in Charleston, and numerous recorded deeds.

As the Committee evaluated the basemap, it formulated a plan for securing field measurements from which to base the adjusted lines as discussed in the following sections of this report. Key areas identified for field measurements included the following:

A. Sawmill Branch from Rasher's Branch to north of where the Berkeley County line turns northwest.
B. Rasher's Branch from Sawmill Branch to the old Pine Forest Inn property.
C. Central Avenue in the vicinity of Simmons Avenue.
D. Briarwood Lane in the vicinity of Allen Avenue (now Willis Lane).
E. Richardson Avenue in the vicinity of Cypress and Oak Streets.
F. Railroad from the trestle at Sawmill Branch to Highway 165 at Westvaco.
G. Maple Street in the vicinity of Westvaco Mill.
H. Wassamassaw Road from Maple Street to Highway 78.
I. Property boundaries in the vicinity of the Mableleanor Oil Well Site.
J. Property boundaries in the vicinity of Weber Road and Palmetto Park to define the location of Avenger and Richardson parcels.
K. Bryan Street from Alston School to the Railroad and vicinity (formerly known as Wassamassaw Road..
L. Westvaco Tract north of Interstate 26 and the Holiday Inn area near I-26.
M. Sumter Avenue, Carolina Avenue, and Marion Avenue.
N. Berkeley-Dorchester County Line at U.S. 17 Alt, Wassamassaw Road, Jedburg, Ridgeville, and Route 27 near Four Hole Swamp.
O. As many Detmold block corners as possible.

IV. SURVEY FIELD DATA COLLECTION AND ADJUSTMENT

Methods of Data Collection Used

The Detmold Base Line Committee collected field data using three primary methods: (1) Global Positioning System (GPS) survey grade receivers, (2) GPS mapping grade receivers, and (3) conventional surveying techniques. A different precision was obtained when each of these surveying methods was employed. For example, the GPS survey grade receivers utilized were Trimble 4000 SSI, SE, and ST receivers which have a published precision of 1 cm $\pm$ 2ppm. The GPS mapping grade receivers included a Trimble Geo Explorer II with a published precision of $\pm$ 2 to 5 meters, and a Trimble GIS Surveyor with a published precision of $\pm$0.10 meters. Conventional surveying techniques relied on total stations, theodolites, and electronic distance measurement devices.

The GPS survey grade receivers and conventional surveying techniques were utilized to locate "key" control points necessary to re-establish the positions of the Town's boundary and the Detmold layout. Mapping grade GIS Surveyor GPS receivers were utilized to locate Detmold Corners for least-squares adjustment. The Geo Explorer II receiver was used to locate amplifying features that aided in the overall production of the final map.

Analysis of 1997 Detmold Base Line Readjustment Map

The boundary encompassed by Detmold's Plan of New Summerville was surveyed with a precision of greater than 1:10,000, as was the railroad track right of way and alignment. The lines representing R.B. Lee's Town Boundary of 1934, B.C. Pressley's Tract north of the railroad, and the boundary of the Land of the South Carolina Canal and Railroad Company were also surveyed at a precision in excess of 1:10,000. Detmold block locations used to build the adjustment database were determined to decimeter accuracy. The total number of mapping and survey grade points in the final database numbered 815. Out of this database 160 points pertained to Detmold Block locations and were used initially for least squares adjustment. Thirty-six of these points were determined to have ground positions that were different from the best fit by thirty or more feet; therefore they were eliminated from the final analysis where 124 were utilized.

Land shown as W.W. Walker near I-26 was positioned for general information using the Geo Explorer II. In addition, the area representing Daniel Axtell's "Newington" was digitized from a copy of the original drawing and positioned using the Geo Explorer II. The Newington tract was utilized to help determine the location of Gershom Hawks 1000 Acre Tract along with the Geo Explorer II positioning of the 157.37 Acre Tract of land formerly owned by Ruth H. Gadsden.

To provide more clarity to the map, Wassamassaw Road, Highway No. 78, Central Avenue, Parkwood Drive, Germantown Road, Simmons Avenue, U.S. 17 Alt from Marion Avenue to Seventh South, and U.S. 17 Alt from 5th North Street to I-26

were included. Their alignments were obtained from S.C. Department of Transportation Plans and not from actual field measurements.

Not shown on the map is the location of the Berkeley/Dorchester County line from Sawmill Branch to Four Hole Swamp. Geo Explorer II field observations made at the county line markers at U.S. 17 Alt, Wassamassaw Road, Jedburg, Ridgeville, and S.C. 27 indicate that the County Line as recognized on the ground is not a straight line. These data were further verified using the Pathfinder unit.

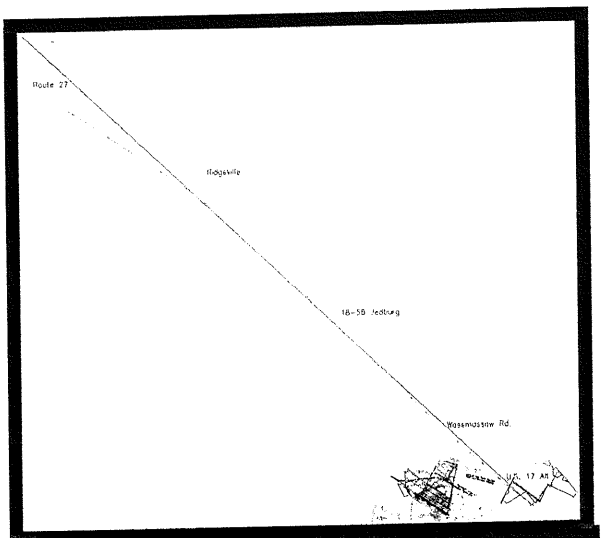


Figure 7 Berkeley/Dorchester County Line Sawmill Branch to Four Hole Swamp

Since the county line appears to vary from the N 49° W , as shown in Figure 7, bearing of reference, the Committee contacted the South Carolina Geodetic Survey for guidance. Alan-Jon Zupan from that office advises that the only way a county line can be reestablished is for both counties request the SCGS to research the problem and make a finding. If both counties agree with the finding and then further request the SCGS to reestablish the line, then the line will be reestablished by that office. Committee recommendation No. 7 reflects this information.

Data Reduction Methods

GPS survey grade receiver data were reduced using Trimble's GPSurvey software. Once these data were reduced, they were included along with the conventional field data for least squares analysis using STAR NET software. The mapping grade data were reduced and differentially corrected using Trimble's Pathfinder Office software. Finally, a best-fit relationship between the original Detmold lines and those same lines found on the ground was obtained using Triad least squares coordinate system transformation software.

conjunction with SCSPC grid bearings. The relationship between the project datum and the SCSPC datum was defined by a combined elevation and scale factor OF 0.999859456182 . All project ground distances must be multiplied by this scale factor to derive corresponding state plane grid distances. No conversion is required for direction since grid north is the same for both datums.

Relationship Between Project and State Plane Coordinate Systems

. The relationship between SCSPC 3900 and project coordinates is defined by:

A. Project Coordinates to State Plane

SPCNorth = [(Project North—100000.00)* 0.999859456182] + 432842.19

SPCEast= [(Project East—200000.00)* 0.999859456182] + 2252843.68

B. State Plane Coordinates to Project Coordinates

$$\text{Pr}oject\ North = \frac{SPC\ North - 332856.2443818}{0.999859456182}$$

$$\text{Pr}oject\ East = \frac{SPC\ East - 2052871.788764}{0.999859456182}$$

Block Number	*Quadrant*	*Project Northing (Int. Ft.)*	*Project Easting (Int. Ft.)*	*NAD '83 ('86 Adj.) Northing (Int. Ft.)*	*NAD '83 ('86 Adj.) Easting (Int. Ft.)*
6	W	100,418.47	198,410.18	433,260.60	2,251,254.09
7	N	101,576.36	198,516.46	434,418.32	2,251,360.35
7	E	101,354.98	198,873.38	434,196.97	2,251,717.22
7	S	100,998.06	198,652.00	433,840.11	2,251,495.87
7	W	101,219.44	198,295.08	434,061.46	2,251,139.00
8	N	101,323.57	197,747.77	434,165.57	2,250,591.76
8	E	101,102.19	198,104.68	433,944.22	2,250,948.63
8	S	100,745.27	197,883.30	433,587.35	2,250,727.28
8	W	100,966.65	197,526.38	433,808.70	2,250,370.41
9	N	102,124.54	197,632.67	434,966.43	2,250,476.68
9	E	101,903.16	197,989.58	434,745.08	2,250,833.55
9	S	101,546.24	197,768.20	434,388.21	2,250,612.20
9	W	101,767.62	197,411.29	434,609.56	2,250,255.33
11	N	102,292.34	198,348.65	435,134.21	2,251,192.57
11	E	102,070.96	198,705.57	434,912.86	2,251,549.44
11	S	101,714.05	198,484.19	434,555.99	2,251,328.09
11	W	101,935.43	198,127.27	434,777.34	2,250,971.22
12	N	100,607.58	197,915.57	433,449.68	2,250,759.55
12	E	100,386.20	198,272.49	433,228.33	2,251,116.42
12	S	100,029.28	198,051.11	432,871.46	2,250,895.07
12	W	100,250.66	197,694.19	433,092.81	2,250,538.20
13	N	101,744.16	199,232.45	434,586.11	2,252,076.24
13	E	101,522.78	199,589.37	434,364.76	2,252,433.11
13	S	101,165.87	199,367.99	434,007.89	2,252,211.76
13	W	101,387.25	199,011.07	434,229.24	2,251,854.89
14	N	100,059.40	198,799.37	432,901.58	2,251,643.22
14	E	99,838.02	199,156.29	432,680.23	2,252,000.09

Block		*Project Northing*	*Project Easting*	*NAD '83 ('86 Adj.) Northing*	*NAD '83 ('86 Adj.) Easting*
Number	*Quadrant*	*(Int. Ft.)*	*(Int. Ft.)*	*(Int. Ft.)*	*(Int. Ft.)*
14	S	99,481.10	198,934.91	432,323.36	2,251,778.74
14	W	99,702.48	198,577.99	432,544.71	2,251,421.87
15	N	101,195.98	200,116.25	434,038.01	2,252,959.91
15	E	100,974.60	200,473.17	433,816.66	2,253,316.78
15	S	100,617.69	200,251.79	433,459.79	2,253,095.43
15	W	100,839.07	199,894.87	433,681.14	2,252,738.57
16	N	99,458.51	199,768.15	432,300.77	2,252,611.86
16	E	99,237.13	200,125.07	432,079.42	2,252,968.73
16	S	98,880.21	199,903.69	431,722.56	2,252,747.38
16	W	99,101.59	199,546.77	431,943.91	2,252,390.51
17	N	100,595.10	201,085.03	433,437.20	2,253,928.56
17	E	100,373.72	201,441.95	433,215.85	2,254,285.42
17	S	100,016.80	201,220.57	432,858.98	2,254,064.08
17	W	100,238.18	200,863.65	433,080.33	2,253,707.21
18	N	98,910.33	200,651.95	431,752.67	2,253,495.54
18	E	98,688.95	201,008.87	431,531.32	2,253,852.41
18	S	98,332.03	200,787.49	431,174.45	2,253,631.06
18	W	98,553.41	200,430.57	431,395.80	2,253,274.19
19	N	100,762.90	201,801.02	433,604.99	2,254,644.44
19	E	100,541.52	202,157.94	433,383.64	2,255,001.31
19	S	100,184.61	201,936.56	433,026.77	2,254,779.96
19	W	100,405.99	201,579.64	433,248.12	2,254,423.10
20	N	98,742.52	199,935.96	431,584.89	2,252,779.65
20	E	98,521.14	200,292.88	431,363.54	2,253,136.52
20	S	98,164.22	200,071.50	431,006.67	2,252,915.17
20	W	98,385.60	199,714.58	431,228.02	2,252,558.30
21-N	N	101,311.08	200,917.22	434,153.09	2,253,760.77

Block		*Project Northing*	*Project Easting*	*NAD '83 ('86 Adj.) Northing*	*NAD '83 ('86 Adj.) Easting*
Number	*Quadrant*	*(Int. Ft.)*	*(Int. Ft.)*	*(Int. Ft.)*	*(Int. Ft.)*
21-N	E	101,089.70	201,274.14	433,931.74	2,254,117.64
21-N	S	100,732.79	201,052.76	433,574.87	2,253,896.29
21-N	W	100,954.17	200,695.84	433,796.22	2,253,539.42
21-S	N	99,016.61	199,494.06	431,858.94	2,252,337.81
21-S	E	98,795.23	199,850.98	431,637.59	2,252,694.68
21-S	S	98,438.31	199,629.60	431,280.72	2,252,473.33
21-S	W	98,659.69	199,272.68	431,502.07	2,252,116.46
22	N	99,343.41	198,967.18	432,185.69	2,251,811.01
22	E	99,122.03	199,324.10	431,964.34	2,252,167.87
22	S	98,765.11	199,102.72	431,607.47	2,251,946.53
22	W	98,986.49	198,745.80	431,828.82	2,251,589.66
23	N	101,911.97	199,948.44	434,753.90	2,252,792.13
23	E	101,690.59	200,305.36	434,532.55	2,253,149.00
23	S	101,333.68	200,083.98	434,175.68	2,252,927.65
23	W	101,555.06	199,727.06	434,397.03	2,252,570.78
24	N	99,891.59	198,083.38	432,733.79	2,250,927.33
24	E	99,670.21	198,440.30	432,512.44	2,251,284.20
24	S	99,313.29	198,218.92	432,155.58	2,251,062.85
24	W	99,534.67	197,862.00	432,376.93	2,250,705.98
25	N	102,460.15	199,064.64	435,302.00	2,251,908.46
25	E	102,238.77	199,421.56	435,080.65	2,252,265.32
25	S	101,881.85	199,200.18	434,723.78	2,252,043.97
25	W	102,103.24	198,843.26	434,945.13	2,251,687.11
26	E	100,218.39	197,556.50	433,060.55	2,250,400.53
26	S	99,861.47	197,335.12	432,703.68	2,250,179.18
27	N	103,008.33	198,180.85	435,850.10	2,251,024.78
27	E	102,786.95	198,537.76	435,628.75	2,251,381.65

Block Number	*Quadrant*	*Project Northing (Int. Ft.)*	*Project Easting (Int. Ft.)*	*NAD '83 ('86 Adj.) Northing (Int. Ft.)*	*NAD '83 ('86 Adj.) Easting (Int. Ft.)*
27	S	102,430.03	198,316.38	435,271.88	2,251,160.30
27	W	102,651.42	197,959.47	435,493.23	2,250,803.43
28	N	99,723.78	197,367.39	432,566.01	2,250,211.44
28	E	99,502.40	197,724.31	432,344.66	2,250,568.31
28	S	99,145.48	197,502.93	431,987.79	2,250,346.96
28	W	99,366.86	197,146.01	432,209.14	2,249,990.10
29	N	103,724.32	198,013.04	436,565.99	2,250,857.00
29	E	103,502.94	198,369.96	436,344.64	2,251,213.86
29	S	103,146.02	198,148.57	435,987.77	2,250,992.51
30	N	99,175.60	198,251.19	432,017.91	2,251,095.12
30	E	98,954.22	198,608.11	431,796.56	2,251,451.99
30	S	98,597.30	198,386.73	431,439.69	2,251,230.64
30	W	98,818.68	198,029.81	431,661.04	2,250,873.77
31	N	103,176.14	198,896.83	436,017.89	2,251,740.67
31	E	102,954.76	199,253.75	435,796.54	2,252,097.54
31	S	102,597.84	199,032.37	435,439.67	2,251,876.19
31	W	102,819.22	198,675.45	435,661.02	2,251,519.32
32	N	98,574.71	199,219.97	431,417.10	2,252,063.76
32	E	98,353.33	199,576.89	431,195.75	2,252,420.63
32	S	97,996.41	199,355.51	430,838.88	2,252,199.28
32	W	98,217.79	198,998.59	431,060.23	2,251,842.41
33	N	102,627.96	199,780.63	435,469.78	2,252,624.34
33	E	102,406.58	200,137.55	435,248.43	2,252,981.21
33	S	102,049.66	199,916.17	434,891.57	2,252,759.86
33	W	102,271.04	199,559.25	435,112.92	2,252,402.99
34	N	98,026.53	200,103.77	430,869.00	2,252,947.43
34	E	97,805.15	200,460.69	430,647.65	2,253,304.30

Block Number	*Quadrant*	*Project Northing (Int. Ft.)*	*Project Easting (Int. Ft.)*	*NAD '83 ('86 Adj.) Northing (Int. Ft.)*	*NAD '83 ('86 Adj.) Easting (Int. Ft.)*
34	S	97,448.23	200,239.31	430,290.78	2,253,082.95
34	W	97,669.61	199,882.39	430,512.13	2,252,726.09
35	N	102,079.78	200,664.43	434,921.68	2,253,508.02
35	E	101,858.40	201,021.35	434,700.33	2,253,864.89
35	S	101,501.48	200,799.97	434,343.46	2,253,643.54
35	W	101,722.86	200,443.05	434,564.81	2,253,286.67
36	N	97,858.72	199,387.78	430,701.21	2,252,231.55
36	E	97,637.34	199,744.70	430,479.86	2,252,588.41
36	S	97,280.42	199,523.32	430,122.99	2,252,367.07
36	W	97,501.80	199,166.40	430,344.34	2,252,010.20
37	N	101,478.89	201,633.21	434,320.88	2,254,476.66
37	E	101,257.51	201,990.13	434,099.53	2,254,833.53
37	S	100,900.59	201,768.75	433,742.66	2,254,612.18
37	W	101,121.97	201,411.83	433,964.01	2,254,255.31
38	N	98,459.61	198,419.00	431,302.02	2,251,262.90
38	E	98,238.23	198,775.92	431,080.67	2,251,619.77
38	S	97,881.31	198,554.54	430,723.80	2,251,398.42
38	W	98,102.69	198,197.62	430,945.15	2,251,041.55
39	N	101,646.70	202,349.20	434,488.66	2,255,192.55
39	E	101,425.32	202,706.12	434,267.31	2,255,549.42
39	S	101,068.40	202,484.74	433,910.44	2,255,328.07
39	W	101,289.78	202,127.82	434,131.79	2,254,971.20
40	N	99,007.79	197,535.20	431,850.12	2,250,379.23
40	E	98,786.41	197,892.12	431,628.77	2,250,736.10
40	S	98,429.49	197,670.74	431,271.90	2,250,514.75
40	W	98,650.87	197,313.82	431,493.25	2,250,157.88
41	N	102,194.88	201,465.40	435,036.76	2,254,308.87

Block Number	*Quadrant*	*Project Northing (Int. Ft.)*	*Project Easting (Int. Ft.)*	*NAD '83 ('86 Adj.) Northing (Int. Ft.)*	*NAD '83 ('86 Adj.) Easting (Int. Ft.)*
41	E	101,973.50	201,822.32	434,815.41	2,254,665.74
41	S	101,616.58	201,600.94	434,458.55	2,254,444.39
41	W	101,837.96	201,244.02	434,679.90	2,254,087.52
42	N	99,449.69	197,809.29	432,291.96	2,250,653.28
42	E	99,228.31	198,166.21	432,070.61	2,251,010.15
42	S	98,871.39	197,944.83	431,713.74	2,250,788.80
42	W	99,092.77	197,587.91	431,935.09	2,250,431.93
43	N	102,795.77	200,496.62	435,637.57	2,253,340.23
43	E	102,574.39	200,853.54	435,416.22	2,253,697.10
43	S	102,217.47	200,632.16	435,059.35	2,253,475.75
43	W	102,438.85	200,275.24	435,280.70	2,253,118.88
44	N	98,291.80	197,703.01	431,134.23	2,250,547.02
44	E	98,070.42	198,059.93	430,912.88	2,250,903.88
45	N	103,343.95	199,612.82	436,185.67	2,252,456.56
45	E	103,122.57	199,969.74	435,964.32	2,252,813.43
45	S	102,765.65	199,748.36	435,607.45	2,252,592.08
45	W	102,987.03	199,391.44	435,828.80	2,252,235.21
46	N	97,690.91	198,671.79	430,533.43	2,251,515.66
46	E	97,469.53	199,028.71	430,312.08	2,251,872.53
46	S	97,112.61	198,807.33	429,955.21	2,251,651.18
46	W	97,333.99	198,450.41	430,176.56	2,251,294.31
47	N	99,281.88	197,093.30	432,124.17	2,249,937.39
47	E	99,060.50	197,450.22	431,902.82	2,250,294.26
47	S	98,703.58	197,228.84	431,545.95	2,250,072.91
48	E	97,354.43	198,227.74	430,196.99	2,251,071.67
48	S	96,997.51	198,006.36	429,840.13	2,250,850.32
49	N	100,165.68	197,641.48	433,007.84	2,250,485.50

Block		*Project Northing*	*Project Easting*	*NAD '83 ('86 Adj.) Northing*	*NAD '83 ('86 Adj.) Easting*
Number	*Quadrant*	*(Int. Ft.)*	*(Int. Ft.)*	*(Int. Ft.)*	*(Int. Ft.)*
49	E	99,944.30	197,998.40	432,786.50	2,250,842.36
49	S	99,587.38	197,777.02	432,429.63	2,250,621.01
49	W	99,808.76	197,420.10	432,650.98	2,250,264.15
50	N	97,142.73	199,555.59	429,985.32	2,252,399.33
50	E	96,921.35	199,912.51	429,763.97	2,252,756.20
50	S	96,564.43	199,691.13	429,407.11	2,252,534.85
50	W	96,785.81	199,334.21	429,628.46	2,252,177.98
51	N	96,974.92	198,839.60	429,817.54	2,251,683.44
51	E	96,753.54	199,196.52	429,596.19	2,252,040.31
51	S	96,396.62	198,975.14	429,239.32	2,251,818.96
51	W	96,618.00	198,618.22	429,460.67	2,251,462.09
52	N	97,416.82	199,113.69	430,259.37	2,251,957.49
52	E	97,195.44	199,470.61	430,038.03	2,252,314.36
52	S	96,838.52	199,249.23	429,681.16	2,252,093.01
52	W	97,059.90	198,892.31	429,902.51	2,251,736.15
53	E	98,344.51	197,618.03	431,186.93	2,250,462.05
55	N	97,249.01	198,397.70	430,091.59	2,251,241.61
55	E	97,027.63	198,754.62	429,870.24	2,251,598.47
55	S	96,670.71	198,533.24	429,513.37	2,251,377.13
55	W	96,892.09	198,176.32	429,734.72	2,251,020.26
56	N	96,807.11	198,123.61	429,649.75	2,250,967.55
56	E	96,585.73	198,480.53	429,428.40	2,251,324.42
57	N	98,017.71	198,144.91	430,860.18	2,250,988.85
57	E	97,796.33	198,501.83	430,638.83	2,251,345.72
57	S	97,439.41	198,280.45	430,281.96	2,251,124.37
58	N	98,733.70	197,977.10	431,576.07	2,250,821.07
58	E	98,512.32	198,334.02	431,354.72	2,251,177.94

Block Number	*Quadrant*	*Project Northing (Int. Ft.)*	*Project Easting (Int. Ft.)*	*NAD '83 ('86 Adj.) Northing (Int. Ft.)*	*NAD '83 ('86 Adj.) Easting (Int. Ft.)*
58	S	98,155.40	198,112.64	430,997.85	2,250,956.59
58	W	98,376.78	197,755.72	431,219.20	2,250,599.72
59-S1	N	98,300.62	199,661.87	431,143.05	2,252,505.60
59-S1	E	98,079.24	200,018.79	430,921.70	2,252,862.47
59-S1	S	97,722.32	199,797.41	430,564.83	2,252,641.12
59-S1	W	97,943.70	199,440.49	430,786.18	2,252,284.25
59-S2	E	96,912.53	197,953.65	429,755.16	2,250,797.62
59-S2	S	96,555.61	197,732.27	429,398.29	2,250,576.27
60	N	99,617.50	198,525.28	432,459.74	2,251,369.17
60	E	99,396.12	198,882.20	432,238.39	2,251,726.04
60	S	99,039.20	198,660.82	431,881.52	2,251,504.69
60	W	99,260.58	198,303.90	432,102.87	2,251,147.82
61	N	99,184.42	200,210.05	432,026.72	2,253,053.70
61	E	98,963.04	200,566.97	431,805.37	2,253,410.57
61	S	98,606.12	200,345.59	431,448.51	2,253,189.22
61	W	98,827.50	199,988.67	431,669.85	2,252,832.35
62	N	99,785.31	199,241.27	432,627.53	2,252,085.06
62	E	99,563.93	199,598.19	432,406.18	2,252,441.93
62	S	99,207.01	199,376.81	432,049.31	2,252,220.58
62	W	99,428.39	199,019.89	432,270.66	2,251,863.71
63	N	100,881.67	197,473.68	433,723.73	2,250,317.71
63	E	100,660.29	197,830.59	433,502.38	2,250,674.58
63	S	100,303.37	197,609.21	433,145.52	2,250,453.23
63	W	100,524.75	197,252.30	433,366.86	2,250,096.36
64	N	99,352.23	200,926.04	432,194.51	2,253,769.59
64	E	99,130.85	201,282.96	431,973.16	2,254,126.46
64	S	98,773.93	201,061.58	431,616.29	2,253,905.11

Block		*Project Northing*	*Project Easting*	*NAD '83 ('86 Adj.) Northing*	*NAD '83 ('86 Adj.) Easting*
Number	*Quadrant*	*(Int. Ft.)*	*(Int. Ft.)*	*(Int. Ft.)*	*(Int. Ft.)*
64	W	98,995.31	200,704.66	431,837.64	2,253,548.24
65	N	99,900.41	200,042.24	432,742.61	2,252,885.91
65	E	99,679.03	200,399.16	432,521.26	2,253,242.78
65	S	99,322.11	200,177.78	432,164.39	2,253,021.43
65	W	99,543.49	199,820.86	432,385.74	2,252,664.57
66	N	100,501.30	199,073.46	433,343.42	2,251,917.27
66	E	100,279.92	199,430.38	433,122.07	2,252,274.14
66	S	99,923.00	199,209.00	432,765.20	2,252,052.79
66	W	100,144.38	198,852.08	432,986.55	2,251,695.92
67	N	101,049.48	198,189.66	433,891.52	2,251,033.60
67	E	100,828.10	198,546.58	433,670.17	2,251,390.47
67	S	100,471.18	198,325.20	433,313.30	2,251,169.12
67	W	100,692.56	197,968.28	433,534.65	2,250,812.25
68	N	100,153.20	200,810.94	432,995.36	2,253,654.51
68	E	99,931.82	201,167.86	432,774.02	2,254,011.37
68	S	99,574.90	200,946.48	432,417.15	2,253,790.02
68	W	99,796.28	200,589.56	432,638.50	2,253,433.16
69	N	100,754.09	199,842.16	433,596.17	2,252,685.86
69	E	100,532.71	200,199.08	433,374.82	2,253,042.73
69	S	100,175.79	199,977.70	433,017.95	2,252,821.38
69	W	100,397.17	199,620.78	433,239.30	2,252,464.51
70	N	101,850.45	198,074.56	434,692.38	2,250,918.52
70	E	101,629.07	198,431.48	434,471.03	2,251,275.38
70	S	101,272.15	198,210.10	434,114.16	2,251,054.03
70	W	101,493.53	197,853.18	434,335.51	2,250,697.17
71	N	100,321.01	201,526.93	433,163.15	2,254,370.39
71	E	100,099.63	201,883.85	432,941.80	2,254,727.26

Block		*Project Northing*	*Project Easting*	*NAD '83 ('86 Adj.) Northing*	*NAD '83 ('86 Adj.) Easting*
Number	*Quadrant*	*(Int. Ft.)*	*(Int. Ft.)*	*(Int. Ft.)*	*(Int. Ft.)*
71	S	99,742.71	201,662.47	432,584.93	2,254,505.91
71	W	99,964.09	201,305.55	432,806.28	2,254,149.04
72	N	100,869.19	200,643.13	433,711.25	2,253,486.72
72	E	100,647.80	201,000.05	433,489.90	2,253,843.59
72	S	100,290.89	200,778.67	433,133.04	2,253,622.24
72	W	100,512.27	200,421.75	433,354.38	2,253,265.37
73	N	101,470.07	199,674.35	434,312.06	2,252,518.08
73	E	101,248.69	200,031.27	434,090.71	2,252,874.95
73	S	100,891.78	199,809.89	433,733.84	2,252,653.60
73	W	101,113.16	199,452.97	433,955.19	2,252,296.73
74	N	102,018.25	198,790.55	434,860.16	2,251,634.40
74	E	101,796.87	199,147.47	434,638.81	2,251,991.27
74	S	101,439.96	198,926.09	434,281.94	2,251,769.92
74	W	101,661.34	198,569.17	434,503.29	2,251,413.05
75	N	102,566.43	197,906.76	435,408.26	2,250,750.73
75	E	102,345.05	198,263.67	435,186.91	2,251,107.60
75	S	101,988.14	198,042.29	434,830.05	2,250,886.25
75	W	102,209.52	197,685.38	435,051.40	2,250,529.38
76	N	101,036.99	201,359.12	433,879.04	2,254,202.61
76	E	100,815.61	201,716.04	433,657.69	2,254,559.48
76	S	100,458.70	201,494.66	433,300.82	2,254,338.13
76	W	100,680.08	201,137.74	433,522.17	2,253,981.26
77	N	101,637.88	200,390.34	434,479.84	2,253,233.97
77	E	101,416.50	200,747.26	434,258.49	2,253,590.83
77	S	101,059.59	200,525.88	433,901.63	2,253,369.48
77	W	101,280.97	200,168.96	434,122.98	2,253,012.62
78	N	101,204.80	202,075.11	434,046.82	2,254,918.50

Block		*Project Northing*	*Project Easting*	*NAD '83 ('86 Adj.) Northing*	*NAD '83 ('86 Adj.) Easting*
Number	*Quadrant*	*(Int. Ft.)*	*(Int. Ft.)*	*(Int. Ft.)*	*(Int. Ft.)*
78	E	100,983.42	202,432.03	433,825.47	2,255,275.36
78	S	100,626.50	202,210.65	433,468.61	2,255,054.02
78	W	100,847.89	201,853.73	433,689.96	2,254,697.15
79	N	101,752.98	201,191.31	434,594.93	2,254,034.82
79	E	101,531.60	201,548.23	434,373.58	2,254,391.69
79	S	101,174.68	201,326.85	434,016.71	2,254,170.34
79	W	101,396.06	200,969.93	434,238.06	2,253,813.47
80	N	101,920.79	201,907.30	434,762.71	2,254,750.71
80	E	101,699.41	202,264.22	434,541.36	2,255,107.58
80	S	101,342.49	202,042.84	434,184.49	2,254,886.23
80	W	101,563.87	201,685.92	434,405.84	2,254,529.36
81	N	102,521.68	200,938.52	435,363.52	2,253,782.07
81	E	102,300.30	201,295.44	435,142.17	2,254,138.94
81	S	101,943.38	201,074.06	434,785.30	2,253,917.59
81	W	102,164.76	200,717.14	435,006.65	2,253,560.72
82	N	103,069.86	200,054.72	435,911.62	2,252,898.39
82	E	102,848.48	200,411.64	435,690.27	2,253,255.26
82	S	102,491.56	200,190.26	435,333.40	2,253,033.91
82	W	102,712.94	199,833.34	435,554.75	2,252,677.05
83	N	103,618.04	199,170.92	436,459.72	2,252,014.72
83	E	103,396.66	199,527.84	436,238.37	2,252,371.59
83	S	103,039.74	199,306.46	435,881.51	2,252,150.24
83	W	103,261.12	198,949.54	436,102.85	2,251,793.37
84	N	104,166.22	198,287.13	437,007.83	2,251,131.05
84	E	103,944.84	198,644.04	436,786.48	2,251,487.92
84	S	103,587.92	198,422.66	436,429.61	2,251,266.57
84	W	103,809.30	198,065.75	436,650.96	2,250,909.70

Block		*Project Northing*	*Project Easting*	*NAD '83 ('86 Adj.) Northing*	*NAD '83 ('86 Adj.) Easting*
Number	*Quadrant*	*(Int. Ft.)*	*(Int. Ft.)*	*(Int. Ft.)*	*(Int. Ft.)*
85	N	102,353.87	200,222.53	435,195.73	2,253,066.18
85	E	102,132.49	200,579.45	434,974.38	2,253,423.05
85	S	101,775.57	200,358.07	434,617.51	2,253,201.70
85	W	101,996.95	200,001.15	434,838.86	2,252,844.83
86	N	102,902.05	199,338.73	435,743.83	2,252,182.51
86	E	102,680.67	199,695.65	435,522.49	2,252,539.37
86	S	102,323.75	199,474.27	435,165.62	2,252,318.03
86	W	102,545.13	199,117.35	435,386.97	2,251,961.16
87	N	103,450.23	198,454.94	436,291.94	2,251,298.83
87	E	103,228.85	198,811.85	436,070.59	2,251,655.70
87	S	102,871.93	198,590.47	435,713.72	2,251,434.35
87	W	103,093.31	198,233.56	435,935.07	2,251,077.48
88	N	102,186.06	199,506.54	435,027.95	2,252,350.29
88	E	101,964.68	199,863.46	434,806.60	2,252,707.16
88	S	101,607.76	199,642.08	434,449.73	2,252,485.81
88	W	101,829.15	199,285.16	434,671.08	2,252,128.94
89	N	102,734.24	198,622.74	435,576.05	2,251,466.62
89	E	102,512.86	198,979.66	435,354.70	2,251,823.49
89	S	102,155.94	198,758.28	434,997.83	2,251,602.14
89	W	102,377.33	198,401.36	435,219.18	2,251,245.27
90	N	98,468.43	200,377.86	431,310.83	2,253,221.49
90	E	98,247.05	200,734.78	431,089.48	2,253,578.35
90	S	97,890.13	200,513.40	430,732.62	2,253,357.00
90	W	98,111.51	200,156.48	430,953.97	2,253,000.14
91	N	98,901.51	198,693.09	431,743.85	2,251,536.96
91	E	98,680.13	199,050.01	431,522.50	2,251,893.82
91	S	98,323.21	198,828.63	431,165.64	2,251,672.47

Block		*Project Northing*	*Project Easting*	*NAD '83 ('86 Adj.) Northing*	*NAD '83 ('86 Adj.) Easting*
Number	*Quadrant*	*(Int. Ft.)*	*(Int. Ft.)*	*(Int. Ft.)*	*(Int. Ft.)*
91	W	98,544.59	198,471.71	431,386.99	2,251,315.61
92	N	98,132.81	198,945.88	430,975.26	2,251,789.71
92	E	97,911.43	199,302.80	430,753.91	2,252,146.58
92	S	97,554.51	199,081.42	430,397.05	2,251,925.23
92	W	97,775.89	198,724.50	430,618.39	2,251,568.36
93	N	97,584.63	199,829.68	430,427.16	2,252,673.38
93	E	97,363.25	200,186.60	430,205.81	2,253,030.25
93	S	97,006.33	199,965.22	429,848.94	2,252,808.90
93	W	97,227.71	199,608.30	430,070.29	2,252,452.03
94	N	100,333.49	198,357.47	433,175.63	2,251,201.38
94	E	100,112.11	198,714.39	432,954.28	2,251,558.25
94	S	99,755.19	198,493.01	432,597.41	2,251,336.90
94	W	99,976.57	198,136.09	432,818.76	2,250,980.03
95	E	103,061.04	198,095.87	435,902.80	2,250,939.81
95	S	102,704.12	197,874.48	435,545.93	2,250,718.46
96	N	101,302.27	198,958.36	434,144.27	2,251,802.19
96	E	101,080.89	199,315.28	433,922.92	2,252,159.06
96	S	100,723.97	199,093.90	433,566.06	2,251,937.71
96	W	100,945.35	198,736.98	433,787.40	2,251,580.84
97	N	103,892.13	198,729.03	436,733.77	2,251,572.88
97	E	103,670.75	199,085.94	436,512.43	2,251,929.75
97	S	103,313.83	198,864.56	436,155.56	2,251,708.40
97	W	103,535.21	198,507.65	436,376.91	2,251,351.53
98	E	102,619.14	197,821.78	435,460.97	2,250,665.76
99	N	96,700.83	199,281.50	429,543.49	2,252,125.28
99	E	96,479.45	199,638.42	429,322.14	2,252,482.15
99	S	96,122.53	199,417.04	428,965.27	2,252,260.80

Block Number	*Quadrant*	*Project Northing (Int. Ft.)*	*Project Easting (Int. Ft.)*	*NAD '83 ('86 Adj.) Northing (Int. Ft.)*	*NAD '83 ('86 Adj.) Easting (Int. Ft.)*
99	W	96,343.91	199,060.12	429,186.62	2,251,903.93
100	N	103,237.67	200,770.71	436,079.41	2,253,614.28
100	E	103,016.29	201,127.63	435,858.06	2,253,971.15
100	S	102,659.37	200,906.25	435,501.19	2,253,749.80
100	W	102,880.75	200,549.33	435,722.54	2,253,392.93
101	N	102,963.58	201,212.61	435,805.35	2,254,056.12
101	E	102,715.85	201,612.02	435,557.65	2,254,455.47
101	S	102,358.93	201,390.64	435,200.79	2,254,234.12
101	W	102,606.66	200,991.23	435,448.49	2,253,834.77
102	N	102,663.14	201,697.00	435,504.95	2,254,540.44
102	E	102,415.40	202,096.41	435,257.25	2,254,939.79
102	S	102,058.48	201,875.03	434,900.38	2,254,718.44
102	W	102,306.22	201,475.62	435,148.08	2,254,319.09
103	N	102,362.69	202,181.39	435,204.55	2,255,024.76
103	E	102,141.31	202,538.31	434,983.20	2,255,381.63
103	S	101,784.39	202,316.93	434,626.33	2,255,160.28
103	W	102,005.77	201,960.01	434,847.68	2,254,803.41
104	N	102,804.59	202,455.48	435,646.39	2,255,298.81
104	E	102,583.21	202,812.40	435,425.04	2,255,655.68
104	S	102,226.29	202,591.02	435,068.17	2,255,434.33
104	W	102,447.67	202,234.10	435,289.52	2,255,077.46
105	N	103,105.04	201,971.09	435,946.79	2,254,814.49
105	E	102,857.30	202,370.50	435,699.09	2,255,213.85
105	S	102,500.38	202,149.12	435,342.22	2,254,992.50
105	W	102,748.12	201,749.71	435,589.92	2,254,593.14
106	N	103,405.48	201,486.70	436,247.19	2,254,330.17
106	E	103,157.74	201,886.11	435,999.49	2,254,729.52

Block Number	*Quadrant*	*Project Northing (Int. Ft.)*	*Project Easting (Int. Ft.)*	*NAD '83 ('86 Adj.) Northing (Int. Ft.)*	*NAD '83 ('86 Adj.) Easting (Int. Ft.)*
106	S	102,800.83	201,664.73	435,642.62	2,254,508.17
106	W	103,048.56	201,265.32	435,890.32	2,254,108.82
107	N	103,679.57	201,044.80	436,521.24	2,253,888.33
107	E	103,458.19	201,401.72	436,299.89	2,254,245.20
107	S	103,101.27	201,180.34	435,943.03	2,254,023.85
107	W	103,322.65	200,823.42	436,164.37	2,253,666.99

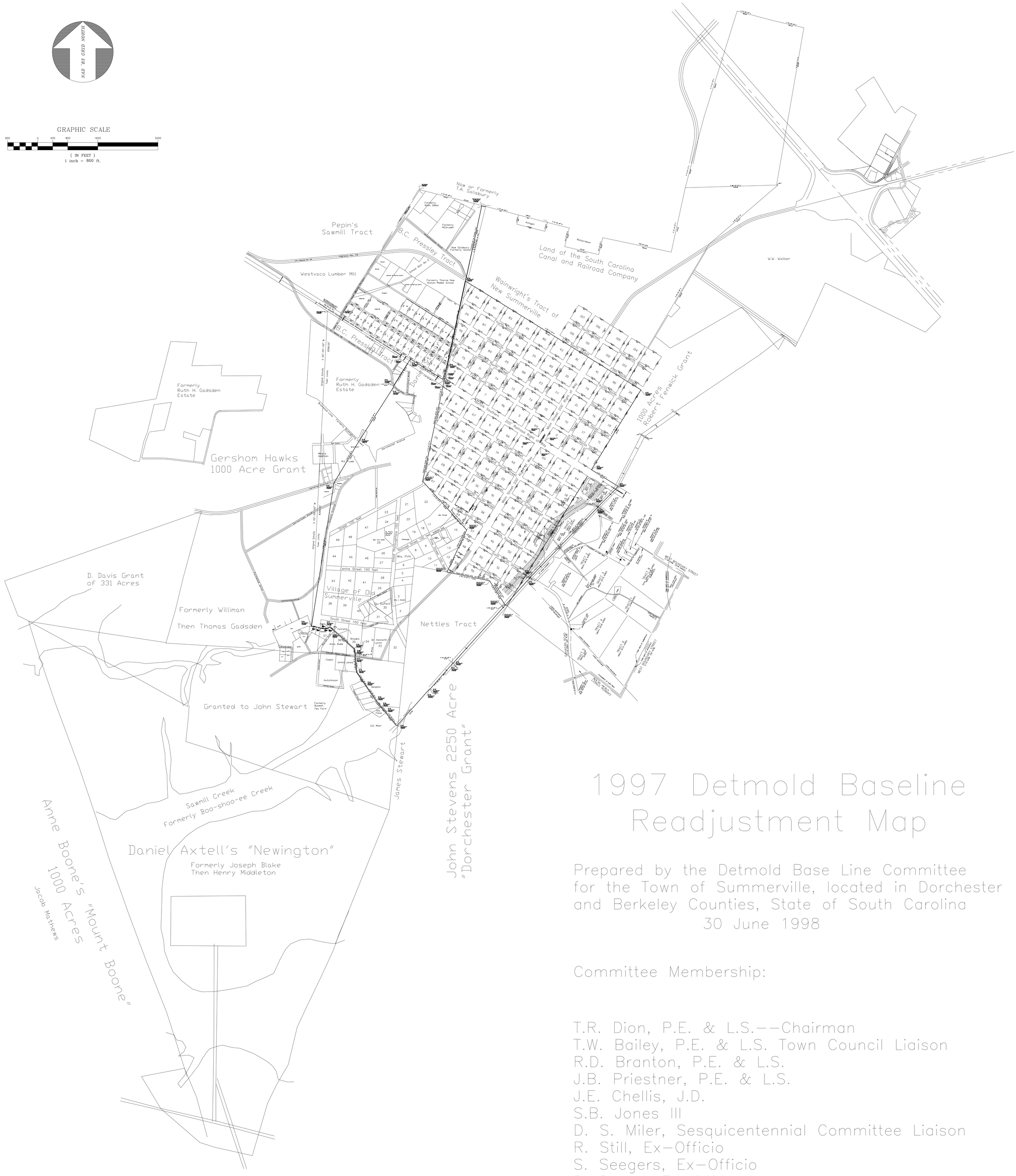
The 1997 Detmold Base Line Readjustment Map is a separate document that is considered part and parcel to this report. A large scale rendition of this Map is depicted in Figure 8.

NAD '83 GRID NORTH

GRAPHIC SCALE

800 0 400 800 1600 3200

(IN FEET)
1 inch = 800 ft.



1997 Detmold Baseline Readjustment Map

Prepared by the Detmold Base Line Committee
for the Town of Summerville, located in Dorchester
and Berkeley Counties, State of South Carolina
30 June 1998

Committee Membership:

T.R. Dion, P.E. & L.S.--Chairman
T.W. Bailey, P.E. & L.S. Town Council Liaison
R.D. Branton, P.E. & L.S.
J.B. Priestner, P.E. & L.S.
J.E. Chellis, J.D.
S.B. Jones III
D. S. Miler, Sesquicentennial Committee Liaison
R. Still, Ex-Officio
S. Seegers, Ex-Officio
B. Dukes, Ex-Officio

VI. RECOMMENDATIONS

The Detmold Baseline Committee makes the following recommendations after reasoned consideration of the combined information assembled before it to improve the quality of mapping within the Town of Summerville.

1. **Implement the Recommended Ordinance offered in Appendix A.** By implementing this Ordinance, the Town will ensure uniformity and a common basis for all future mapping conducted within its limits. Over the years this will provide continuity and a permanent record for future surveys, and will provide a basis for the Town to create an accurate BASEMAP of its properties.

2. **Provide to the *public* information pertaining to the Detmold Baseline Readjustment.** This provision will insure the availability of critical information required for the conduct of future land surveys within the Town Limits. NGS Monument information, control coordinates, and the required scaling factor must be know upon which the new survey can be based.

3. **Adopt the 1997 Detmold Base Line Readjustment Map as the Official Map for delineating Detmold lines.** A copy of this Map should be available in Town Hall to any interested party as a source of reference. It is recommended that this Official Map **not** be recorded in the Dorchester County Court House to alleviate potential conflicts with existing recorded records. The purpose, therefore, is to provide a basis for future mapping activities, and is not intended to be made retroactive.

4. **Create and promulgate a *Recommended Procedures Manual for Plat Preparation.*** This Manual should be created and administered under the auspices of the Town of Summerville's Public Works Committee.

5. **Coordinate future Plat approvals for RMC recording with other interested governmental bodies**. Organizations such as the Summerville Commissioners of Public Works, the Dorchester County Department of Public Works, Berkeley County Department of Public Works, and the Dorchester County Water and Sewer Authority have in various areas within the Town's jurisdiction various interests such as easements, rights-of-way, etc. Possibly the Town of Summerville's Planning Department could be utilized as a "clearing house" where several copies of submitted plats are farmed out for comment prior to the approval of any plat. This would ensure, for example, that the Summerville Commissioners of Public Works would have a chance to check their records to see if any sewer lines affect the subject property to insure that their interests, and the interests of the public, are protected. A review should not take more than 10 working days to complete, and should also automatically include the Town's

Public Works Department and Zoning Office. Final plat approval would be made by a designated official—currently the Director of Public Works.

6. **Require electronic drawing files of submitted plats**. Submitted electronic data files using the DWG or DXF format will allow the Town of Summerville's Public Works Department to build an accurate base map over time, and will also provide an opportunity during the plat review process an opportunity to evaluate how the submitted plat relates to the overall mapping system adopted by the Town.

7. **Coordinate activities with Dorchester County, Berkeley County, and the South Carolina Geodetic Survey to better define the line separating Dorchester and Berkeley Counties from Sawmill Branch to Four Hole Swamp**. Information obtained from positioning the "county-line" highway markers indicated that the county line separating Dorchester from Berkeley County is not straight as called for on paper. To resolve this discrepancy, both Dorchester County and Berkeley County officials must request assistance in writing from the South Carolina Geodetic Survey to research the boundary. After the research is completed, the Geodetic Survey will submit the results to the counties, and if the counties agree to the proposed re-establishment of the boundary, then the South Carolina Geodetic Survey will draft legislation that the county delegations must submit to the legislature for approval.

   Once the county line has been re-defined, the Official Map should be updated to include that portion which passes through the Town's jurisdictional limits.

8. **Communicate with Norfolk-Southern Railroad a desire to better define the alignment and width of the railroad right of way through the Town of Summerville.** The Committee recommendations are included in Appendix D. With reference to the Right of Way width, the original charter to the South Carolina Canal and Railroad Company granted a 100 foot right of way on each side of the track. Evidence shows that the property encroachments from Bryan Street to Maple Street along the north side of the tracks, and from Cypress Street to Highway 165 along the south side of the tracks are a result of Judge B.C. Pressley offering for sale property that bounded only 50 feet from the track centerline. Judge Pressley's authority to sell up to 50 feet from the centerline of the track could not be established by the Committee; however, a complete records search on this matter was beyond the scope of Committee charge. Various plats including that of M.T. Tighe dated June1st, 1881, as does the Official Sales Map of Summerville, S.C. for the South Carolina and Georgia Railroad Company, show a 50' right of way in this area. However, other information such as the plat prepared by Robert K. Payne on November 1853, showing the lands of of Dr. Hamilton, indicates that a 100 foot Right of Way along the south side of the tracks existed. The Committee requests that the Town communicate with Norfolk Southern its desire to formalize an agreement on the alignment and width of right

of way through Town where the Right of Way width conforms to that offered by Judge Pressley. This recommendation is based on: (1) it is obvious that the purchasers bought in good faith according to the 50' right of way provision, (2) that the possible encroachment conflict can be traced to a particular individual and an area that is not widespread, (3) that the majority of the landowners who purchased this land are minority and low income families, (4) that the railroad has not actively used this land for 100 years, and (5) if the railroad needs this land in the future, it can always regain title-as a last resort-using condemnation.

9. **Use this Final Report as a basis for consideration of applications from property owners seeking Quit Claims or other conveyances from the Town.**

10. **Include in the future, as part of the Town's long range planning activities, issues associated with ways to improve mapping.**

VII. REFERENCES

Numerous reference sources were consulted by the Committee during the conduct of its work. Some of these sources include:

South Carolina Geodetic Survey
South Carolina Department of Transportation
South Carolina Department of Archives
Dorchester County Court House
Charleston County Court House
Colleton County Court House
Dorchester County School District No. 2
Norfolk-Southern Railroad
The Military College of South Carolina
The South Carolina Historical Society

Specific reference materials gleaned from the above sources include, but are not limited to the following:

1. Bailey, T.W. *Plat of Section I Greenshire Subdivision*, March 6, 1970.
2. Bailey, T.W. *Plat of Tracts B and D and a Portion of Tract C on a Plat Prepared for Brawley Miles July 1920 by R.B. Lee recorded in Dorchester County Book 2, 159.* April 1981.
3. Bailey, T.W. *A Plat of a Portion of a Tract of Land Owned by Marie J. Salisbury (Plat represents the Portion of a Larger Tract That Lies Without the Town of Summerville). Lots Shown hereon is adjacent to the Town of Summerville, in Dorchester County, S.C.*, January 13, 1961.
4. Bailey, T. W. *Plat of Land s of Ethel F. Jones, Depicting Parcels A, B, and C, Parcel C About to Be Conveyed to E.M. Jones II, and Neyle D. Jones*, August 30, 1982.
5. Bailey, T.W. *Plat of a Lot Located Adjacent to Summerville, Dorchester County, S.C. Containing 2 1/10 Acre, Owned by P. Kramer*, May 25, 1962.
6. Bailey, T.W. *Plat Showing The Location of Fourth South St & Hickory Street, as Shown on Detmold's Map of "New Summerville", in Relation to the Established Property Lines of a Lot located in Summerville, Dorchester County, S.C. Owned by Alexander M. Melfi*, 17 February 1962.
7. Bailey, T.W. *Plat of a Lot Located (on Oak Street)in Summerville, Dorchester county, S.C. Owned by T.W. Messervy*, 4 May 1961.
8. Bailey, T.W. *Map Showing The Correct Location Of Fourth South Street In Summerville, S.C. In Relation to Bethany Methodist Church Property & A Lot Owned by the Town of Summerville, S.C.* 30 November 1961.
9. Bailey, T.W. *Map Showing Relation Of Portions of 5th South Street, and Laurel Street, According to Detmold's Plan of "New Summerville" and Lands of St. Johns. R.C. Church*, 3/5/68

10. Bailey, T.W. *Plat of A Lot In Summerville, Dorchester Co, S.C. Owned by Marjoire M. Leisenring, et al. And Proposed to be Conveyed to J.R. Middlebrook*, January 12, 1970.
11. Bailey, T.W. *Plat Showing Three Tracts Of Land Property of Marcus Grant and Located Along 3rd North Street Ext. Near the Town of Summerville, Dorchester County, South Carolina*, February 1982.
12. Bailey, T.W. *Plat of Lot D3 as shown on a Plat by Thomas W. Bailey Dated August 1971 surveyed for James O. Ivey*, January 27, 1983.
13. Bailey, T.W. *Plat of a Lot in Summerville, Dorchester County, S.C., Owned by Josephine A. Vincent, Surveyed* November 12, 1964.
14. Bailey, T.W. *Plat of a Lot Located in Summerville, Dorchester County, S.C. Owned by Josephine A. Vincent*, Surveyed August 7, 1964.
15. Bailey, T.W. *A Map of a Portion of the Estate of T.W. Salisbury Known Locally as "Salisbury's Dairy Property" Situate in Dorchester and Berkeley Counties in the State of south Carolina*, Feb. 1960.
16. Bailey, T.W. *Plat of a Lot Owned by the Estate of Jeanne Gadsden*, August 21, 1968
17. Bass, J.D. *Plat of Two Parcels of Land, Parcel "A" is to be Retained by---- David W. Smoak, Parcel "B" is Proposed to be Conveyed to – Gerald L. Gaillard*, February 15, 1994.
18. Bass, J.D. *Plat Showing 0.93 Acres Surveyed at the Request of W.E. Bailey*, 5/26/97
19. Branton, R.David. *Plat Showing The Combination of an Existing 4.049 Acre Tract of Land Owned by the Summerville Presbyterian Church With A 0.191 Acre Parcel About to be Quit Claimed by the Town of Summerville to Form a 4.240 Acre Tract of Land Owned by The Summerville Presbyterian Church*, Dated 23 April 1996.
20. Branton, R. David. *Topographic Plat of Summerville Baptist Church Located in Town of Summerville, Dorchester County, S.C.* dated 5/26/93.
21. Branton, R. David. *Subdivision Plat of Property Owned by John W. and Patricia A. Krisel located at 230 Sumter Avenue in the Town of Summerville—Dorchester County, S.C.* Dated 09-10-92.
22. Branton, R. David. *Plat of 207.68 Acres of the Gahagan Plantation Being Subdivided into Eight (8) Tracts owned by Richard Vaughn Jenkins, Jr & Robert I. Williams as Trustees for Richard Jeffery Jenkins & Albert Andrew Jenkins Located in the Towns of Summerville & Lincolnville in the Counties of Dorchester and Charleston in the State of South Carolina*, Dated 10/1/93.
23. Campbell, J. H. *Plat of Lot "A", "B", "C" and "D", owned by Jerome Sanders, Located on Legion Road in the Town of Summerville*, dated 10-12-90.
24. Cheatham, B.F. *Plat of a Tract of Land Containing 92.2 Acres about to be Convened From E.T. Salisbury to Thomas M. Knight, Said Property is Located Near The Town of Summerville*, May 1966.
25. Collette, C.P. *Plat of "Glynn Acres Subdivision" situated on North Palmetto Street Extension, Town of Summerville*, Aug 3, 1964.

26. Comm in Equity and Simon Verdier. *Deed* dated 2/27/1835, recorded M 10-99 Charleston County RMC.
27. Cooper, T.P. *Plat of 993.6 Acres of Land near Summerville Belonging to Dr. W.M. Brailsford*, 15 Jan, 1846.
28. Cuthbert, R.B. *Plat of A Portion Of A Tract Of Land Owned by S.E. Hutson, about to be Conveyed to S.E. Hutson, Jr. Located in Dorchester County, South Carolina Containing 85.6 Acres*, October 18, 1952.
29. Cuthbert, R.B. *Plat of a Lot Owned by J.H. Pratt Located On the S.W. Corner of 7th South & Magnolia Streets, Summerville, South Carolina, Dorchester County*, 5/10/52.
30. Cuthbert, R.B. *Plat of a Tract of Land owned by Heirs of William M. Thorne about to Be conveyed to School District No. 18 of Dorchester County, S.C. Near the town of Summerville, S.C. Dorchester County*, Nov. 12, 1949.
31. Cuthbert, R.B. *Plat of a Lot Owned by T.A. deLiesseline,Jr. Located in Summerville, S.C. Dorchester County, Surveyed* Nov 20, 1954.
32. Cuthbert, R.B. *Plat of a Tract of Land Owned by Hemphill Construction Corp (Formerly Est. of Eleanor F. Buswell) Located in Summerville, S.C. Dorchester County, containing 4.80 Acres*, Nov 6, 1950.
33. Cuthbert, R.B. *Plat of a Lot Owned by Anna Bubb about to be Conveyed to George H. Seago, Jr. Located near Summerville, S.C. Dorchester County Containing 1.6 Acres*, March 2, 1953.
34. Cuthbert, R.B. *Plat of a Lot Owned By Charles D. Dean, Jr. and Harriet B. Dean, Located on Marion Avenue, Summerville, Dorchester County, South Carolina*, November 24, 1951.
35. Cuthbert, R.B. *Plat of (2) Lots Owned by C.S. Jones Located In Summerville, S.C.-Dorchester County*, March 26, 1957.
36. Cuthbert, R.B. *Plat of (2) Parcels of Land Owned by Carlotta T. Jenkins located in Summerville, S.C.—Dorchester County.*
37. Cuthbert R.B. *Plat of a Portion of a Tract of Land Owned by The Estate Wilson Waring about to be conveyed to James L. Mason Located in Dorchester County, South Carolina, containing 2.0 Acres*, November 3, 1954.
38. Cuthbert, R.B. *Plat of a Lot Owned by James T. Boyle Aout to be Conveyed to Ward L. Helmey, Jr. Located in Dorchester County, S.C. Containing 0.5 Acres*, Surveyed September 15, 1965.
39. Cuthbert, R.B. *Plat of a Lot Owned by Carroll R. Flowers Located in Dorchester County, South Carolina Containing 2.2 Acres*, Surveyed Sept 3, 1956.
40. Cuthbert, R.B. *Plat of Three (3) Parcels of Land-Located in Summerville, S.C. Dorchester County. Parcel "A" Owned by Mayrant H. Sweat, Parcel "B" Owned by Richard F. Sweat, parcel "C" Owned by Mayrant H. Sweat about to be Conveyed to Richard F. Sweat*, Surveyed May 1, 1954.
41. Cuthbert, R.B. *Plat of a Portion of a Tract of Land Owned by Ethel F. Jones about to be Conveyed to Allan M. Jones Located near Summerville, S.C. Dorchester County Containing 2.58 Acres*,
42. Detmold, C.E. *Plan of New Summerville, Situated in St. George's Dorchester Parish in the District of Charleston, laid out on March1832.*

43. Dion, T.R. *Plat of Several Parcels of Land Located in Brownsville, Near The Town of Summerville's West End, Dorchester County, South Carolina,* 18 August 1981.
44. Dion, T.R. *Plat of the Land of Mary E. Gresham, Located in Brownsville, Near the Town of Summerville's West End, Dorchester County, S.C.,*. 4 June 1982.
45. Dion, T.R. *Plat of Lots 12, 13, & 14 of the Halcyon Subdivision, Section III, Town of Summerville, Dorchester County, S.C.,* October 30, 1976.
46. Dion, T.R. *Plat of a 2.12 Acre Tract Of Land Owned by David L. Richardson, Jr. and Karen L. Richardson, and a 0.73 Acre Tract of Land Owned by E.W. Dion, About to be conveyed to David L. Richardson and Karen L. Richardson, Located in the Town of Summerville, Dorchester County, S.C,,* 5 July 1982.
47. Dion, T.R. *Plat of 8 Tracts of Land which Are a Portion of the Land Owned by Mrs. Ruth H. Gadsden Located in and Near the Northwest Side of the Town of Summerville, S.C. and Containing 148.88 Acres, More or Less, of Which 33.64 Acres, More or Less are Located Within the Town Limits,* July 1977.
48. Dion, T.R. *Plat of a Tract of Land Which is a Portion of the Lands Owned by Mrs. Ruth H. Gadsden Located near the Northwest Side of the Town of Summerville, S.C. and Containing 157.37 Acres, More or Less,* December 1977.
49. Dion, T.R. *Plat of 3.81 Acres of Land Owned by Lena C. Cox, Consisting of Three Parcels. Parcel "A" contains 1.85 Acres and is about to be conveyed to Brant and Pam Shelbourne. Parcel "B Contains 1.2 Acres and Parcel "C" Contains 0.76 Acres,* 5 June 1997.
50. Foster, H.H. *A Plat Of 710 South Magnolia Street in Summerville, Dorchester County, S.C. Showing Proposed Construction,* Nov 13, 1965.
51. Foster, H. H. *A Plat Showing Certain Property Containing 0.56 Acre Recently Conveyed by William Frazier to Marion Miller Jones Located in the Town of Summerville, in Dorchester County, S.C.,* Feb 5, 1955.
52. Foster, H.H. *A Plat Showing a Parcel of Land Owned by Harold M. Sebring located in Dorchester County, S.C. Adjacent to the Town of Summerville containing 3.76 Acre About to be conveyed to Richard Elmore Cauthen,* Feb 11, 1954.
53. Foster, H.H. *Plat Showing Location of Bell Property In Relation to Westvaco's Maintenance Shop in Summerville, S.C.* 8-2-77.
54. Foster, H.H. *A Plat of Halcyon Owned by E.W. Dion Containing 14.77 Acres Subdivided into 3 Parcels, A, B, and C, Located Adjacent to the Town of Summerville, South Carolina,* 17 February, 1974.
55. Foster, H.H. *A Plat of a Portion of Certain Property Known as "Pinehurst Tea Farm" Proposed to be Conveyed by Frederic G. Buswell and Others to Harold M. Sebring Located Adjacent to the Town of Summerville in Dorchester County, S.C. Containing 69.05 Acres,* January 22, 1955.
56. Foster, H.H. *A Plat Showing A Lot With Dwelling Owned by Jennie K. Butler, Located in the Town of Summerville, in Dorchester County, S.C.,* Feb 6, 1960.
57. Foster, H.H. *A Plat Showing A Lot & Dwelling Owned by Jeannie H. Haskell Located in the Town of Summerville In Dorchester County, South Carolina*

Containing 0.71 Acres About to be Conveyed to Eleanor W. Dion, August 2, 1963.

58. Foster, H.H. *A Map of Narva Corp. & L.A. Walker Property Northeast of & Near Summerville on West Side of S.C. Hwy 64, Situate in Berkeley Co, S.C.* –October 1945.
59. Foster, H.H. *A Map of Narva Corp. & L.A. Walker Property Northeast of & Near Summerville on West Side of S.C. Hwy. 64*, October 1945.
60. Foster, J.W. *Map Showing Subdivision of 39.5 Acres of Land Belonging to The Durham Corporation and Situate Near Summerville, Dorchester County, S.C. Outside Lines Surveyed and Street Intersections Located by J.W. Foster*, January 1921.
61. Foster, J.W. *Map Showing Lands of Miss M.S. Flud at the Northwest Town Limit of Summerville, Dorchester County, S.C. as Compiled from Maps of the Several Pieces and From Field Notes Made by Me*, June 1954.
62. Foster, J.W. *Map Showing Property of the Summerville Baptist Church in Summerville Dorchester County, S.C. with Buildings Thereon* , June 26, 1948
63. Foster, J.W. *Map Showing 13.56 Acres of Land on Main Street, Summerville, Dorchester County, S.C. Purchased For The Site of A High School*, February 1924.
64. Foster, J.W. *Map Showing 52 ½ Acres of Land Northeast of Summerville, Dorchester County, S.C. About to be Conveyed by L.A. Walker and the Narva Corporation to George Segelkin*, June 1936.
65. Gadsden, John. *Plat of the Property of Dr. Muckenfuss* April 1900.
66. Gaillard, J.P. *Map Showing Land in the Immediate Vicinity of the Mableleanor-Oil-Well, Summerville, S.C. Surveyed by F.G. Moorhead and J.P. Gaillard*, January 1921.
67. Gaillard, J.P. *Map of a Portion of the Sasportas-Tract Situate in Berkeley and Dorchester Counties, S.C.* January 1926.
68. Gaillard, J.P. *Map of The Old Golf Course About To Be Conveyed to W. Carroll Wilson* (Golf Links).
69. Gaillard, W.L. *Plat of No. 119 Marion Street in the Town of Summerville, Owned by the Estate of Barton Dean, About to be conveyed to Mary D. and John A. Puckett*, dated Dec. 12, 1990.
70. George, James W., Comm in Equity *deed from , to The South Carolina Canal and Railroad Company, Title to 1800 acres of Pine Land St. George's Dorchester*
71. Gilbert, W.E. *Plat of Palmetto Park Subdivision, Dorchester County Town of Summerville*, 10 November 1976.
72. Glen, A.L. *Tract of Land Situate in Dorchester and Berkeley Counties, South Carolina, Surveyed for Narva Corporation and L.A. Walker*, May 1946.
73. Glen, A.L. *Plat of lands of Bettina V. Williams*, Surveyed July 1946.
74. Hale, C.A. *Summerville, S.C. Land and Industrial Department—Southern Railway*, Sept 1901.
75. Hamilton, H. *Plat Represents "A Lot" in the Town of Summerville, in the County of Dorchester, in the State of South Carolina. Said lot is about to be conveyed by*

Edmund R. Cuthbert to Charles D. Dean, Jr. and Harriet B. Dean, November 19, 1945.

76. Hamilton, Hugh. *Plat Represents A Lot in the Town of Summerville in the County of Dorchester, in the State of South Carolina. Said Lot is about to be conveyed by J. Cleveland Cone to Chalmers L. Simmons*, November 26, 1942.
77. Hamilton, Hugh. *Plat of 9.62 Acre tract of land made for Wade H. Dean*, July 4, 1943.
78. Hamilton, Hugh. *Plat Represents A Lot in the Town of Summerville in the County of Dorchester, in the State of South Carolina. Said Lot is about to be Conveyed to Samuel D. Trincher*, September 9th, 1942.
79. Hyer, D.B. *Plat of a Block in Summerville, S.C. Bounded by the Above Streets (Hickory, Laurel, 4th South) Surveyed at the Request of W.H. Richardson, ESQ*, Feb 1899
80. Jones, H.C. *Lot of Land in Summerville, S.C. Sold by Elizabeth F. Jones to Annette J. Jenkins as Surveyed June 1977*.
81. Kingman, L. and B.C. Pressley. *Deed of Compromise*, recorded U14-1-236 dated 1/22/1863 Charleston County RMC.
82. Lea Mond, H.J. *Plat of Summerville Baptist Church*, Summerville, S.C. Dated 7 February 1979.
83. Lee, R.B. *Map of the Town of Summerville* dated May 1934.
84. Lee, R.B.. *A Map of Narva Corporation & L.A. Walker Property* July 1920.
85. Lee, R.B. *Plat of 628.93 Acres of Land in Dorchester and Berkeley Counties, S.C. Just North-East of the Town of Summerville, Surveyed at the request of Mr. L.A. Walker*, July 1920.
86. Lee, R.B. *Plat Showing a Proposed Road 30 Feet Wide, Running From Summerville To North of Summerville, in Dorchester and Berkeley Counties, S.C.*, July 1920.
87. Lee, R.B. *Plat Showing Three Tracts of Land Just North East of Summerville Dorchester Count, S.C. Containing 50.0 Acres, Surveyed at the Request of Walker and Jenkins*, July. 1920.
88. Lee, R.G. *Map of Summerville, S.C. Being a True Copy of Detmold's Plan of the New Town made in 1832 copied for Walker, and Jen*kins July 1920.
89. Lee, R.B. *Plat of Land Just North-East of Summerville Dorchester County, S.C. Being a Portion of the Southern Railway Lands, Surveyed and Subdivided at Request of Walker and Jenkins*, July 1920.
90. Lee, R.B. *Plat of 628.93 Acres of Land in Dorchester and Berkeley Counties, S.C. Just North-East of Summerville, Surveyed at the Request of Mr. L.A. Walker*, July 1920.
91. Lee, R.B. *Plan Showing a Proposed Road 30 Feet Wide Running From Summerville to North Summerville in Dorchester and Berkeley Counties, S.C. Surveyed at The Request of Messrs. John Taylor & T.W. Salisbury*, July 1920.
92. Lesser, Charles H. *South Carolina Begins, The Records of a Proprietary Colony 1663-1721, S.C. Department of Archives and History*, Columbia, S.C.
93. Lines W.M. *Plat of Two Parcels of Land Being a Portion of Square 30 As Shown On the Detmold Plan of New Summerville Circa 1832*, Revised July 10, 1972.

94. Lines, W.M. *Plat of Lot No 8, As Shown on a Plat By R.B. Cuthbert Dated July 15, 1952 Entitled. "Plat of a Subdivision Owned by Elizabeth J. Riggs and Mikell J. Leland"* dated 18 September 1975.
95. Mahoney, K.A. and G.A. Simmons. *A Plat Showing A Tract of Land Located on Int. Hwy. 26 North of the Town of Summerville, Berkeley County, South Carolina Containing 80.17 Acres Owned by Mac Rhodes, et al,* Surveyed January 1988.
96. Mallard, W.N. *Plan of Saw Mill Tract Containing Sixteen Hundred and Nine Acres Situate Part in St. James Goose Creek and Part In St. George Dorchester on Saw Mill Creek,* 18 May 1850.
97. Miley, G.E. *Plat of Section Two and a Portion of Section of Three, Greenshire Subdivision, Summerville, S.C.,* 28 June 1971.
98. Miley, G.E. *Plat of Flack-Jones Lumber Company, INC. Situate ¼ Mile West of Summerville, Surveyed and Found to Contain 68.16 Acres,* August 321, 1962.
99. Mitchell, W.H., R. Earl Fischer, and James C. Rogers. *Plat Showing a Tract of Land Owned by W.W. Walker—Berkeley and Dorchester Counties, South Carolina,* January 1965.
100. Moorer, T.B. *Map of Summerville, S.C. From Original By R.B. Lee, C.E.* May 1934.
101. O'Hear, James. *Map of A Part of a Tract of Land Situated in Summerville, South Carolina, Formerly the Property of Mrs. Kate Muller lately purchased by Lègare and L.A. Walker,* February 1912.
102. Payne, Robert K. *Plan of the Village of Old Summerville, the Property Thomas Moore, Esq.,* December 1831.
103. Payne, Robert K. *Plat of a Farm or Tract of Land Situate Partly in the Corporate Limits of Summerville Parish of St. James Goose Creek Charleston District Containing 110.50 Acres,* November 1853.
104. Pepin, S and R. Mignot and Joseph I. Waring. Commissioner of Equity—Result of Foreclosure (see M10-99 – Charleston County RMC).
105. Pinckney, Robert Q. *Plan of Newington Plantation on Sawmill Creek,* 1873.
106. Prettyman, C.F. *Map of Land of J.F. Prettyman & Sons, Dorchester County South Carolina containing 20.75 Acres,* January 30th, 1912.
107. Richardson, D.L. *A Plat of a Proposed Sanitary Sewer Line Easement Crossing Lots of Eleanor W. Dion, Alvin P. Tiedemann, and H. Evans Townsend III, Summerville, S.C. about to be dedicated to the Commissioners of Public Works, Summerville, S.C,* 25 May 1976.
108. Saboe, J.M. Rogers Cove, *the Re-subdivision of Lots 66-75, Formerly the Lands of Durham Land corporation,* June 15, 1984.
109. Sanders, J. O'Hear. *Perimeter Survey by Ben F. Cheatham, Reg. CE & L.S. May 1966, Area with corners lettered A, B, C, D, Y, Z, A-1, B-1, C-1, E-1 and A containing 16.0 Acres by J. O'Hear Sanders, Jr.* March 17, 1968.
110. Schultz, F.C. *Plan of the Village of Summerville,* Non Incorporated, Being Bounded on the East by Railroad, South and Southeast by Sawmill Branch, West by al line from Saw Mill Branch Intersecting the South Carolina Railroad, May 1849.

111. Simons and Huger. *Plat of a Tract of Land in Summerville, S.C. Surveyed at the Request of Mr. John Gadsden July 1899* (Pine Forest Inn).
112. Simons Mayrant Company dated 25th May 1907 (Vicinity of Oak Street and Richardson Avenue).
113. Simons Mayrant and Company. *Plat of Newington Situate in St. George Dorchester County, S.C.* February 1904.
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APPENDIX A— RECOMMENDED ORDINANCE FOR IMPLEMENTING THE 1997 DETMOLD BASE LINE ADJUSTMENT

STATE OF SOUTH CAROLINA) TOWN OF SUMMERVILLE
)
COUNTY OF DORCHESTER) ORDINANCE NO._____

AN ORDINANCE ESTABLISHING DETMOLD BASE LINE READJUSTMENT, PROVIDING FOR SURVEY CONTROL MONUMENTS AS ESTABLISHED BY THE SOUTH CAROLINA GEODETIC SURVEY AND GUIDELINES FOR PLATTING DETMOLD BASE LINES AND RELATED LINES ON PLATS.

WHEREAS, the Town Officials of Summerville are aware that good map controls alleviate numerous problems which can arise in a community such as questions of property line locations affecting rights of way, and the location of political boundaries which can influence jurisdictional control, taxation and allocation of funds or services;

WHEREAS the Town of Summerville through resolution of Town Council formed the Detmold Base Line Committee on May 14, 1997 and empowered it to investigate the relationship of the Town's physical layout and the layout proposed "on paper" depicted by Detmold's Plan of New Summerville, circa 1832;

WHEREAS, the Detmold Base Line Committee through the help of the South Carolina Geodetic Survey procured 19 new survey control monuments positioned throughout the interior of the Town of Summerville;

WHEREAS, these monuments, which are now part of the National Geodetic Survey (NGS) system, will provide excellent horizontal control coordinates for future surveys with the concomitant benefit of improved mapping within the Town;

WHEREAS, the Town acknowledges that a Geographic Information System (GIS) requires stringent mapping controls;

WHEREAS, by implementing this Ordinance, the Town will ensure uniformity and a common basis for all future mapping conducted within its limits, and in particular, clarification of best evidence on the ground of the location of the lines of Detmold's Plan of New Summerville, circa 1832. Prospectively, this will provide mapping continuity, a permanent record for future surveys, and a basis for the Town to create an accurate BASE MAP of its properties;

WHEREAS, the Town wishes to provide to the public information pertaining to the 1997 Detmold Readjustment Lines and to insure the availability of critical information required for the conduct of future land surveys within the Town Limits including such factors as NGS Monument information, control coordinates, and the required scaling factors upon which a new survey can be based;

WHEREAS, the Town wishes to adopt the 1997 Detmold Base Line Map as the Official Map for delineating Detmold lines and desires that this Map should be made available in Town Hall to any interested party as a source of reference;

WHEREAS, the Town recognizes a need to require electronic drawing files for submitted plats to allow the Town to build an accurate BASE MAP over time; and, during the plat review process to evaluate how the submitted plat relates to the overall mapping system adopted by the Town.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS

1. The 1997 Detmold Base Line Readjustment Map shall be and is hereby adopted by the Town of Summerville as the Official Map reference for delineation of and the location on the ground of the boundary lines as shown on Detmold's Plan of New Summerville, circa 1832, and recorded in the RMC Office for Charleston County in Book B, at Page 97.

2. The Public Works Committee is directed to file, or cause to be filed, in the Town Hall, the Original Map, which map shall be made available to the public for inspection and copying during normal business hours and any copying by whatever means or manners thereof shall be made at the usual and customary expense prevailing from time to time.

3. The Public Works Committee is directed to create, promulgate, and administer a *Recommended Procedures Manual for Plat Preparation.*

4. The Officer of the Town who is charged with approval of plats within the Town of Summerville, shall require plats submitted for approval meet:

   a. All applicable provisions provided for in the *Minimum Standards of Practice for Land Surveying in South Carolina.*

   b. All applicable provisions provided for in the *Recommended Procedures Manual for Plat Preparation.*

5. Nothing herein contained shall be construed as a change in the location of any boundary lines within the Town of Summerville, according to the location of such boundaries as shown and delineated on any recorded map, plat or survey or as described in any deed of record for lands within the Town of Summerville.

6. In the event the 1997 Detmold Base Line Readjustment Map creates an encroachment or overlap of existing boundaries, as between property

owners, or property owners and pubic rights of way, the existing boundaries as described by any deed, map, plat or survey shall control and no property owner, or interested party may use the 1997 Detmold Base Line Readjustment Map as evidence of a right, title or interest in land which absent the 1997 Detmold Base Line Readjustment Map, said property owner or interested party would not have evidence of a right, title or interest. In short, the 1997 Detmold Baseline Readjustment Map will not give a property owner or interested party any right, title or interest in land, nor shall it be used as evidence of any greater interest than that of another property owner or interested party.

APPENDIX B— RECOMMENDED PROCEDURES FOR PLAT PREPARATION

RECOMMENDED PROCEDURES FOR PLAT PREPARATION

Plat Requirements

1. State Plane coordinates NAD83 (86)-- (SCSPC 3900) shall be shown on the plat for at least two (2) property corners. The coordinates and the names of the geodetic monument used for the control noted on the plat with the grid distance and the grid bearing shown to at least one (1) of the coordinated property corners.

2. In lieu of the requirements set forth in Paragraph 1 above, project coordinates based on NGS "DOTY" having a North value equal to 100,000.00 feet and an East value equal to 200,000.00 feet may be noted and used to locate at least two (2) property corners. The coordinates and the names of the geodetic monument used for the control will be noted on the plat, along with the project ground distance and the grid bearing shown to at least one (1) corner of the coordinated property corners.

3. Horizontal ground project distances (not grid distances) will be shown on the plat for all segments of the boundary survey. A combined state plane scale and elevation reduction factor equal to 0.999859456182 will be noted on the plat. The parcel area will be based on horizontal ground project distances.

4. All bearings will be referenced to the state plane coordinate grid North meridian, which is the same as project North.

5. The relationship between SCSPC 3900 and project coordinates is defined by:

   A. Project Coordinates to State Plane

   SPCNorth = [(Project North—100000.00)* 0.999859456182] + 432842.19

   SPCEast= [(Project East—200000.00)* 0.999859456182] + 2252843.68

   B. State Plane Coordinates to Project Coordinates

$$\text{Project North} = \frac{SPC\ North - 332856.2443818}{0.999859456182}$$

$$\text{Project East} = \frac{SPC\ East - 2052871.788764}{0.999859456182}$$

6. Plats shall show as a minimum the following lines and their relationship to each other, when applicable:
   A. Occupation or agreement.
   B. Prior Detmold Lines as established by prior recorded maps, plats or surveys.
   C. 1997 Detmold Readjustment Lines
   D. Lines as established by any recorded deed in the owner's chain of title.

Survey Closure Requirements The survey closure requirements shall conform to the applicable standards set forth in the *Minimum Standards Manual for the Practice of Land Surveying in South Carolina.*

An example plat, which represents acceptable practice under these procedures is shown in Figure 9. This illustration is a guideline to be used by the Land Surveyor in preparation of drawings and should not be used solely in place of the text contained herein.

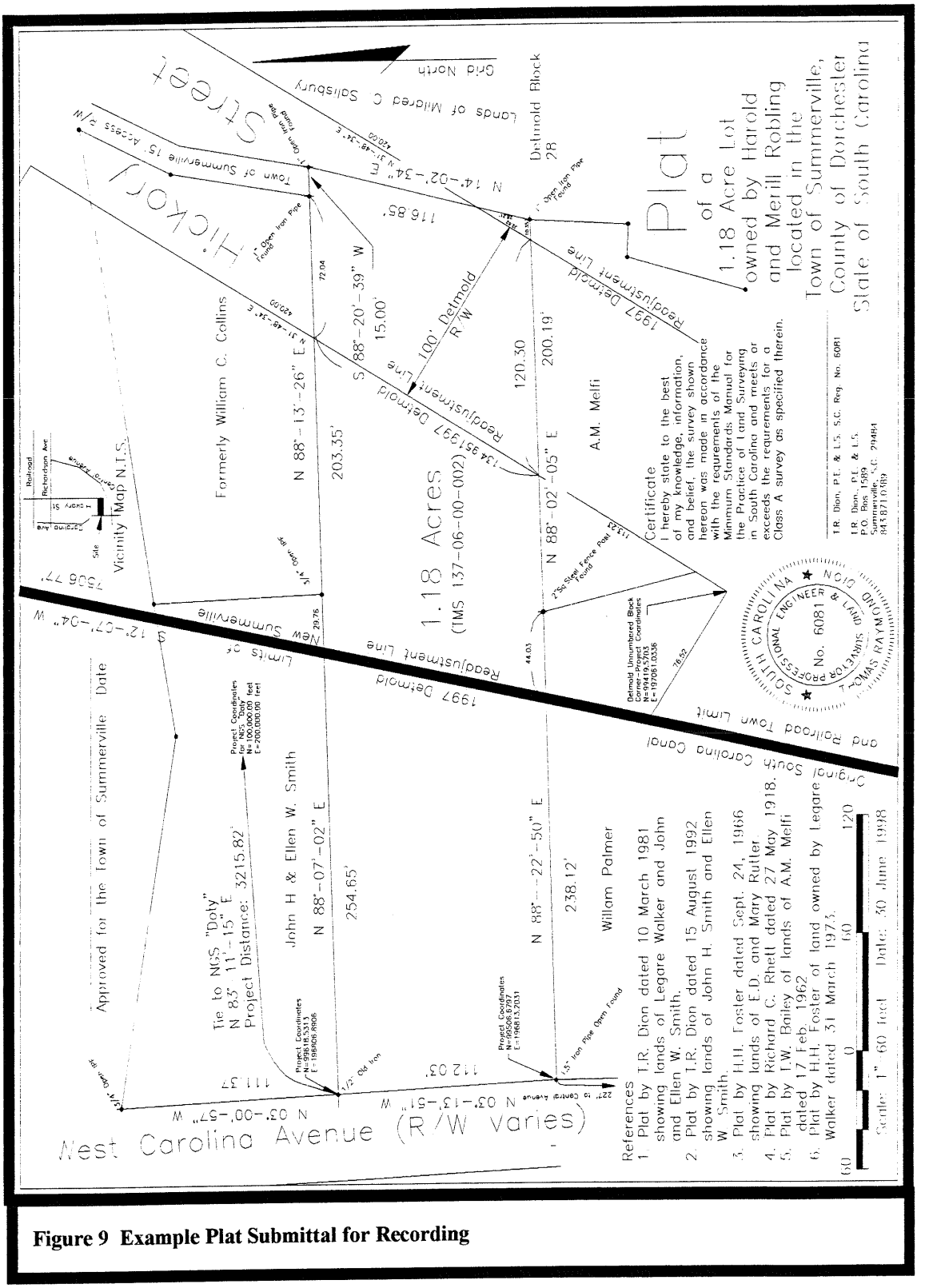

Figure 9 Example Plat Submittal for Recording

APPENDIX C-- SURVEY REFERENCE MONUMENT DATA

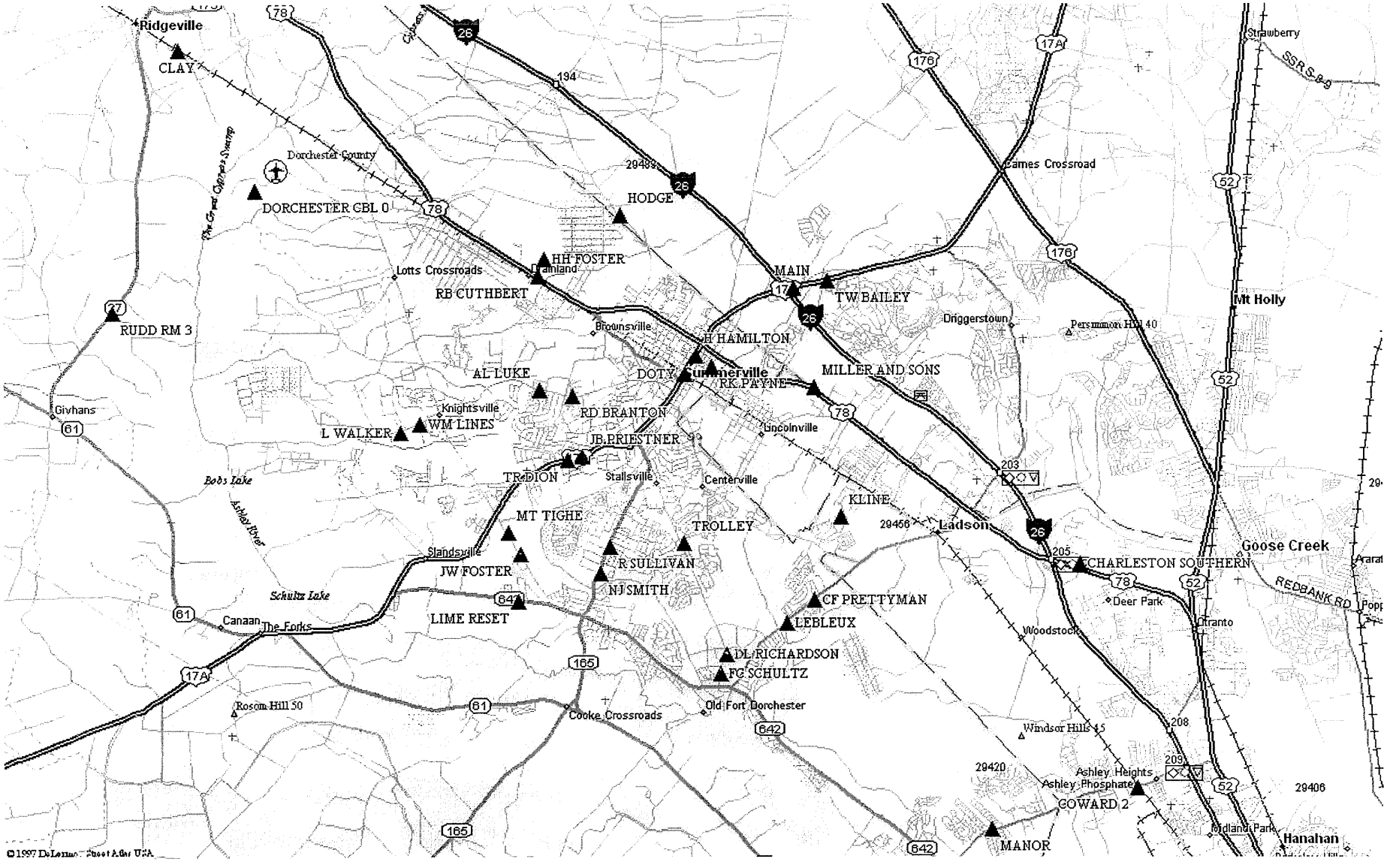

Figure 10 - NGS Monument Locations

CURRENT NGS (NATIONAL GEODETIC SURVEY) DATA SHEETS MAY BE OBTAINED ONLINE AT:

www.ngs.noaa.gov

APPENDIX D—NORFOLK SOUTHERN RIGHT OF WAY RECOMMENDATIONS

Introduction

When the Town of Summerville was Incorporated 150 years ago, the South Carolina Railroad had a main line which served as the northern border of the incorporation limits as shown on Schultz's Plan of the Village of Summerville. Detmold's Plan of New Summerville, made in 1832, depicts the railroad going straight through the center of town, with a 200 foot right of way from the eastern most limits to the area where Bryan Street is located today. This map, however, does not show the main line track centered in the 200 foot right of way. It shows the main line track 50 feet north of the centerline position. The Map of Summerville shown on the South Carolina Georgia Railroad Company shows the right of way to be 200 feet from Sawmill Branch to Bryan Street with the mainline track centered in this right of way. The right of way beginning at Bryan Street going west towards Westvaco Lumber Mill (formerly J.F. Prettyman & Sons) indicates a 50 foot width each side of the track.

The Incorporation Charter for the "South Carolina Canal and Rail Road Company" indicates in 1833 that ". . . That in the absence of any contract or contracts with the said company, in relation to the lands through which the said road, or any of its branches, is not, or hereafter may be constructed, signed by the owner, thereof, or by hi agent, or by any claimant or person in possession thereof, which may be confirmed by the owner thereof, it shall be presumed that the land upon which the said road, or any of its branches, now is, or hereafter may be, constructed, together with a space of one hundred feet on each side of the center of the said road or roads, has been granted to the said company by the owner or owners thereof; and the said company shall have good right and title to the same, and shall have, hold, and enjoy the same, unto them and their successors, so long as the same may be used for the purposes of said road. . .".

Various plats, such as the one prepared by Robert K. Payne dated November 1853 showing the lands of Dr. Hamilton, indicate graphically that the railroad right of way is approximately 100 feet on the southern side of the track from Parsons Road to approximately Cypress Street. Another Plat of Summerville, S.C., of the Land and Industrial Department of Southern Railway prepared September 1901 by C.A. Hale, Engineer and Surveyor, shows a 200 foot right of way from Sawmill Branch (ditch) to Bryan Street. The Plat stops at this westernmost boundary, also used by Detmold.

Other plats such as one prepared by Simons Mayrant Co on May 25th, 1907 indicate the railroad right of way between Carolina Avenue and Cypress Street is 100 feet on the southerly side of the railroad. Other plats, such as the one prepared by James O'Hear February 1912, indicate both a 50 foot right of way line and a 100 foot line along the southern side of the tracks in this same area.

The Dilemma Posed by Judge B.C. Pressley

Judge B.C. Pressley purchased a 600 Acre Tract of Land from Catherine B. Verdier 10/20/1862 as recorded in Deed R14-63 and shown as Pepin's Sawmill Tract ,recorded in Charleston County RMC Office, Plat Book B-5. This plat shows the railroad location through his property; however no right of way is stipulated or shown. Through the years Judge Pressley sold off various lots and tracts. A large number of these conveyances were delineated on a map by M.T. Tighe, dated June 1st, 1881. For that part of the property located north of the railroad and between Bryan Street on the East and

Westvaco Mill on the west. These parcels were conveyed with a 50 right of way being shown on the plat. Other conveyances by Judge Pressley along the southern right of way of the railroad between Cypress Street and Highway 165 (Richardson Avenue crossing the Railroad just west of Westvaco) also rely on a 50 right of way width as evidenced in Book O-17, page 185 in the RMC Office of Charleston. Where Judge Pressley obtained ownership to within 50 feet of the track was not determined by the Committee; however, his conveyances are congruent with that which is indicated on the South Carolina and Georgia Railroad Company Map of Summerville, S.C . prepared by E.S. Bowen, General Manager..

Current Right of Way and Track Maps of the Southern Railway-Carolina Division operated by the Southern Railway Company- Charleston Division, Station 1056+00 to Station 1267+20 (V 38/4) indicates that the track is centered within a 200 foot wide right of way that extends straight through Town. Thus the dilemma in defining the width of the railroad right of way in this section of track

Committee Findings Relative To Right of Way Width

With reference to the Right of Way width, the original charter to the South Carolina Canal and Railroad Company granted a 100 foot right of way on each side of the track. Evidence shows that the property encroachments from Bryan Street to Maple Street along the north side of the tracks, and from Cypress Street to Highway 165 along the south side of the tracks are a result of Judge B.C. Pressley offering for sale property that bounded only 50 feet from the track centerline. Judge Pressley's authority to sell up to 50 feet from the centerline of the track was not established by the Committee; however, a complete records search on this matter was beyond the scope of Committee charge. Various plats including that of M.T. Tighe dated June1st, 1881 as does the Official Sales Map of Summerville, S.C. for the South Carolina and Georgia Railroad Company show a 50' right of way in this area. However, other information such as the plat prepared by Robert K. Payne on November 1853, showing the lands of Dr. Hamilton, indicates a 100 foot Right of Way along the south side of the tracks existed. The Committee requests that the Town communicate with Norfolk Southern its desire to formalize an agreement on the alignment and width of right of way through Town where the Right of Way width conforms to that offered by Judge Pressley. This recommendation is based on: (1) it is obvious that the purchasers bought in good faith according to the 50' right of way provision, (2) that the possible encroachment conflict can be traced to a particular individual and an area that is not widespread, (3) that the majority of landowners who purchased this land are minority and low income families, (4) that the railroad has not actively used this land for 100 years, and (5) if the railroad needs this land in the future, it can always regain title-as a last resort-using condemnation.

Committee Findings Relative to Right of Way Alignment

Field observations indicate that the alignment of the railroad track is not straight from Sawmill Branch to the Highway 165 crossing, as indicated on current track maps.

Adjusted field data defining the current centerline of the tracks from Sawmill Branch to Highway 165 based on project ground coordinate values using NGS Monument "Doty" with assigned North being 100,000.00 feet and assigned East being 200,000.00 feet, are as follows:

Point Number	Northing	Easting	Description
763	98781.8945	202029.8124	C.L. Trestle at Charleston County
97	98982.8373	201706.9998	C.L. Tracks
96	99464.5676	200931.1356	C.L. Tracks
95	99738.9382	200489.5026	C.L. Tracks
90	99922.2959	200194.3583	C.L. Tracks
99	100308.7259	199572.7771	C.L. Tracks
100 <MP22>	100660.7531	199005.9312	Mile Post 22
639	101670.7641	197394.5563	C.L. Tracks
640	101729.6188	197301.1773	C.L. Tracks
641	101792.4732	197201.3436	C.L. Tracks
642 <Hold>	101850.7311	197108.8455	Hold for B.C. Pressley R/W Align.
643	101911.7609	197012.0447	C.L. Tracks
644	101971.7314	196916.8126	C.L. Tracks
645	102033.5233	196818.6073	C.L. Tracks
647	102092.6262	196724.6382	C.L. Tracks
649	102150.9389	196632.0763	C.L. Tracks
650	102207.3300	196542.4830	C.L. Tracks
648	102254.6992	196467.3916	C.L. Tracks
646	102306.8402	196384.7896	C.L. Tracks
605	102448.4193	196160.1701	C.L. Tracks
606	102523.7575	196040.2195	C.L. Tracks
607	102599.0709	195920.9012	C.L. Tracks
608	102672.3875	195804.4446	C.L. Tracks
609	102748.8766	195683.2975	C.L. Tracks
610	102838.4914	195541.2161	C.L. Tracks
611	102914.0757	195421.4396	C.L. Tracks
612	102928.4110	195399.5739	C.L. Tracks
613	103058.4252	195192.8971	C.L. Tracks
614	103212.6333	194948.1346	C.L. Tracks
615	103284.3983	194834.1677	C.L. Tracks
616 <CL Maple&RR>	103361.2777	194712.1238	Hold for B.C . Pressley R/W Align.
621<MP23>	103473.9758	194533.4823	Mile Post 23
620	103655.6039	194245.9030	C.L. Tracks
619 <Hwy 165>	104159.3012	193447.7972	C.L. Tracks at S.C. Hwy 165

Right of Way Alignment Recommendations

The railroad right of way alignment is an integral part of the Detmold Readjustment survey. Because the railroad is centrally located in town, it is essential that

the right of way portion located within the Detmold limits be congruent with the adjusted block and street right of way positions. Likewise, in the area contiguous with lands formerly of Judge B.C. Pressley, it is also essential that the right of way be congruent with the overall plan of the platted lands. Following these premises, the Committee recommends that the railroad right of way alignment be established through the Town of Summerville by:

A. Using the centerline of the railroad trestle at Sawmill Branch as a point of beginning;

B. Thence proceeding along a line formed by the mid point of an imaginary line connecting the southeastern corner of Block 1 and the northeastern corner of Block 64 using the 1997 Detmold Readjustment lines;

C. Thence proceeding in a westerly direction along a line centered in the 200 foot railroad right of way formed by the 1997 Detmold Readjustment lines to the Detmold limits running in Bryan Street.

D. Beginning at the Bryan Street Detmold limits at a point 50 feet south of Judge B.C. Pressley's tract located north of the railroad, and proceeding westerly on a grid bearing of N 57°-46'-48" W to a point even with the southwestern corner of lot 15;

E. Thence to the centerline of the railroad crossing at S.C. Highway No. 165 (Richardson Avenue Extension).

ORDINANCE ADOPTED BY THE TOWN OF SUMMERVILLE, OCTOBER 14TH, 1998

98-0802

AN ORDINANCE

AN ORDINANCE ESTABLISHING THE DETMOLD BASE LINE READJUSTMENT MAP, PROVIDING FOR SURVEY CONTROL MONUMENTS AS ESTABLISHED BY THE SOUTH CAROLINA GEODETIC SURVEY AND GUIDELINES FOR PLATTING DETMOLD BASE LINES AND RELATED LINES ON PLATS.

BE IT ORDAINED, by the Mayor and Council of the Town of Summerville, in Council assembled, as follows:

1. The 1997 Detmold Base Line Readjustment Map ("Readjustment Map") shall be and is hereby adopted by the Town of Summerville as the official map reference for delineation of and the location on the ground of the boundary lines as shown on Detmold's Plan of New Summerville, circa 1832, which is recorded in the RMC Office for Charleston County in Book B, at Page 98.

2. There shall be filed, in the Town Hall, the Readjustment Map, which shall be made available to the public for inspection and copying during normal business hours.

3. The Town Council shall promulgate a *Recommended Procedures Manual for Plat Preparation*.

4. The Official of the Town who is charged with approval of plats shall require plats submitted for approval meet:

   a. All applicable provisions provided for in the *Minimum Standards of Practice for Land Surveying in South Carolina*; and

   b. All applicable provisions provided for in the *Recommended Procedures Manual for Plan Preparation*.

5. Nothing herein contained shall be construed as a change in the location of any boundary lines within the Town of Summerville, according to the location of such boundaries as shown and delineated on any recorded map, plat or survey or as described in any deed of record for lands within the Town of Summerville.

6. In the event the Readjustment Map creates an encroachment or overlap of existing boundaries, as between property owners, or property owners and public rights of way, the existing boundaries as described by any deed, map, plat or survey shall control and no property owner, or interested party may use the Readjustment Map as evidence of a right, title or interest in land which absent the Readjustment Map, said property owner or interested party would not have evidence of a right, title or interest.

The Readjustment Map will not give a property owner or interested party any right, title or interest in land, nor shall it be used as evidence of any greater interest than that of another property owner or interested party.

Ratified this 14th day of October, 1998.

MAYOR

Attest: Lisa Wallace
TOWN CLERK

First Reading Aug. 12, 1998

Second Reading Oct. 14, 1998