

*Best Practices  
For a Successful Workflow*

# Letters to Adjoiners

## ➤ What does it do?

1. Opens lines of communication
2. Aids in safety of personnel
3. Gives the public notice and a opportunity to be part of the survey, because part of the line is theirs.

## ➤ Why is it a good idea?

It many times diffuses situations that are not necessary and allows any potential issues to be addressed prior to actual work being performed

## ➤ Does it work?



## SUTTLES SURVEYING, P.A.

November 30, 2022

Clark Family Lakehouse, LLC  
106 Bayern Crest  
Morganton, NC 28655

Re: Notice of Land Survey

To Whom It May Concern:

This letter is to notify you that our company will be performing a survey of the Grigg property located at 4645 Boyd Moore Avenue. The Burke County Courthouse records indicate you may share a common boundary with this property owner. If you have any documents that you feel may help us with the survey of the property we would appreciate your help. We will return these to you promptly and you will be reimbursed for any reasonable costs you may incur.

Should you wish to show our field crew any boundary markers or other information that you feel will help establish the common boundary, a meeting can be arranged that will be convenient for you to do so. Also, if you wish to have your land surveyed while we are in the area it would be more economical to do so at this time while in conjunction with the current survey.

During the process, our crew may be using survey stakes or ribbon to mark-off survey points. These should not be confused with actual monuments that mark the common boundary of your property and that of the above stated owner. All corners for the subject tract will eventually be established with iron stakes.

As stated earlier, this letter is to make you aware that we will be working in the area. Should you have any questions or concerns, please feel free to call our office.

Sincerely,

Suttles Surveying, P.A.  
Jennifer Phillips  
Office Administration

40 South Main Street - Marion, North Carolina 28752 Phone: (828)652-9382  
419 South King Street - Morganton, North Carolina 28655 Phone: (828)433-0423  
Corporate License Number C-0648

# Have a Contract

- **Why should you have a contract?**
- **What should it contain?**
- **How long should it be?**
- **Who signs the contract?**
- **You should insist that contractors sign your contract, rather than you signing theirs**

- Promotes clear communication
- Assures that both you and the client are on the same page
- Scope of work (boundary, topo, etc.)
- Deliverables (Plat, Report, CAD, etc.)
- Delivery Schedule ( 30 days, 90 days etc.)
- Cost ( Lump sum, Hourly rate, Materials rate, deposit required, payment terms )
- Make sure the contract defines that the cost in the contract supersedes any previous estimates or negotiated costs
- It should be as concise and compact as necessary, 1 page is ideal on a small scope, but 3 is most likely normal, depends on scope
- The representative for the firm and the person or persons responsible for the payment of the services
- Contracts presented by contractors are 99% of the time written for subcontractors. Surveyors are classified as design professionals, which requires different wording in a contract. Check with your E&O before you sign.

# NCSS Sample Contract

It is a good template to start with. One item that is a good idea not in this sample is listing a fee schedule for materials and a hourly rate. There are some instances that may entail a time and materials contract. That schedule of rates needs to be listed in order to keep the contract in force if additional work outside the original scope is required or requested. That way the client has some idea of additional costs for the additional work.

*The following Agreement for Professional Surveying Services ("Agreement") has been prepared at the request of NC Society of Surveyors for the benefit of its members by its legal counsel, Jon P. Carr, Jordan Price Wall Gray Jones & Carlton, with the assistance of comments provided by Justin R. Klein, Klein Agency, LLC. The Agreement is a form that is designed to be modified before any particular use. Before using this form, members should thoroughly read the Agreement and modify it for particular use with the assistance and advice of their own attorneys and counselors. The Agreement is not intended to be legal advice and use of the Agreement by any persons is at their own risk. Use of this form by Society members is entirely voluntary; members may use some or all of the provisions or none at all, all at the individual determination of each member acting independently. Members will note that many of the terms are purposely left blank for members to independently complete if those provisions are desired. It is a violation of anti-trust law for one or more persons to agree to use or not to use the Agreement, or to agree to use or to not use certain terms, provisions, rates, charges, and other terms and conditions in any agreement.*

## AGREEMENT FOR PROFESSIONAL SURVEYING SERVICES

NC License # \_\_\_\_\_

THIS AGREEMENT FOR PROFESSIONAL SURVEYING SERVICES ("Agreement"), made this the day of , 20 , by and between a (*Insert State of Organization and Type of Entity*) having its principal business located at ("Surveyor"), and , a (*Insert State of Organization and Type of Entity*) having its principal place of business located at ("Client"). Surveyor and Client may be collectively referred to herein as the "Parties". For and in consideration of the following terms, conditions, covenants, and agreements set forth herein, the Parties hereto agree as follows:

### 1.0 SERVICES TO BE RENDERED

Surveyor shall perform the following services ("Services") at certain real property located at (*Insert Address of Property at which Services will be Rendered and/or Parcel Identification Number*) ("Project Location") (*Insert Specific Description of Services to be Rendered*).

The aforesaid Services at the above-described location shall be referred to as the "Project". Should additional space be needed for a more complete description of Services to be provided in connection with the Project and pursuant to the terms of this Agreement, it shall be attached as Exhibit A, the terms of which are incorporated by reference as though fully stated herein. Surveyor shall not be obligated to Client for the provision of any services of any nature whatsoever not specifically set forth in Section 1.0 and Exhibit A, if attached.

### 2.0 OWNER AND PERTINENT NON-PARTIES

2.1. Client represents that the name and address of the owner of the Project Location is (*Insert Name of Project Property Owner*), a/an (*Insert Type of Entity or "Individual"*) ("Property Owner"). If Client is not the owner of the Project Location, but is obligated to the owner or to some other party dealing with the owner for the services which are the subject of this Agreement, Client identifies, as follows, the names and principal business addresses, respectively, of such other contracting entities and specifies the nature of the contractual relationship of each of the contracting entities to each other:

# Take Pictures

Is a picture really worth a thousand words?

Since cell phones are basically as important as the clothes we wear, so we may as well use them for collecting data.

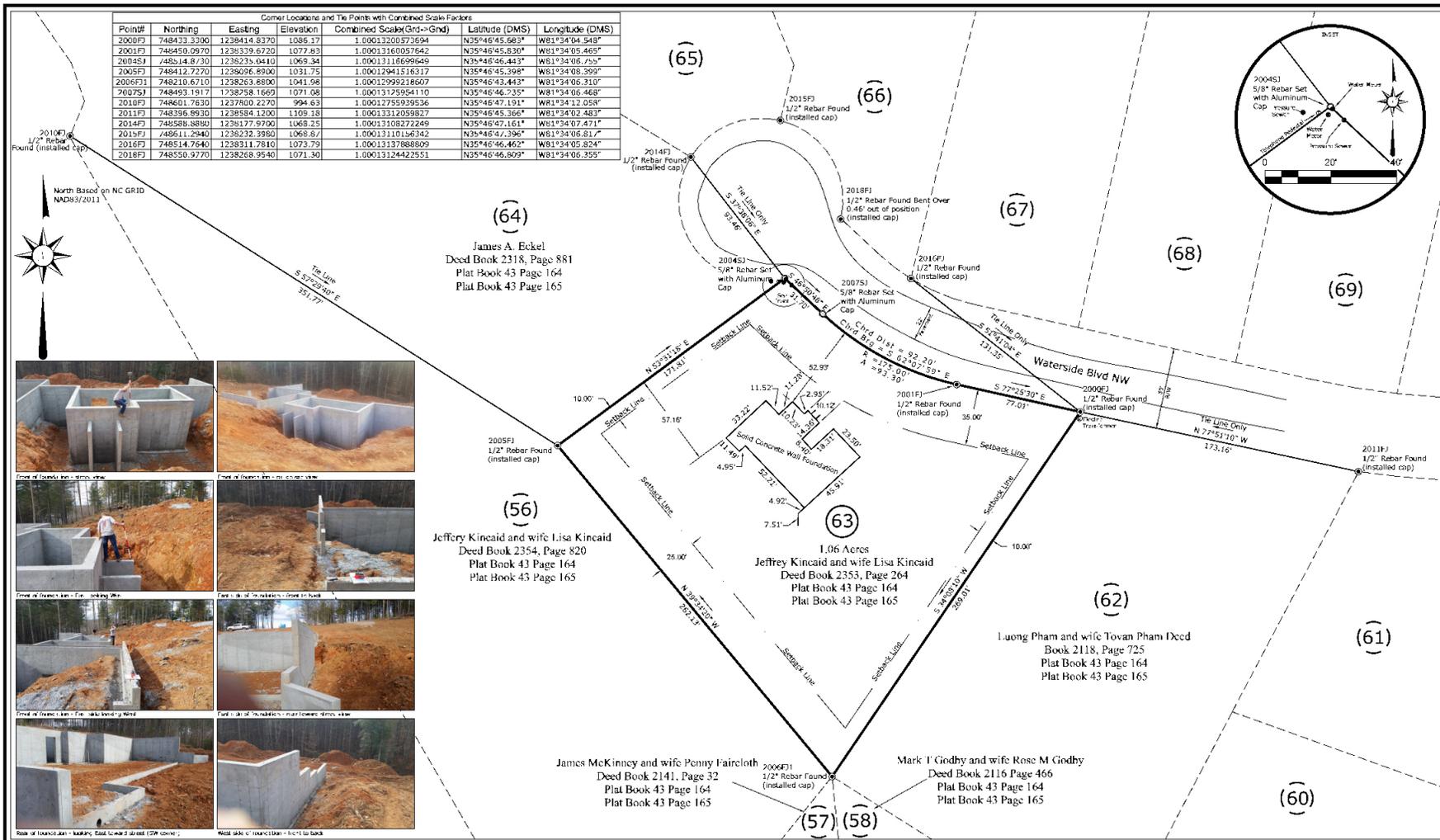
Store in cloud ( IE: Google Photo's, IDrive, Dropbox, OneDrive, etc. )

Accessible from office PC's or phone

It does not replace a field book. It can cut down on sketches and creates a visual record of work performed and evidence collected



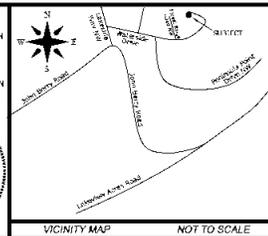




**NORTH CAROLINA, McDOWELL COUNTY**  
 I, J. DOUGLAS SUTTLES, CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL GPS SURVEY MADE UNDER MY SUPERVISION AND THE FOLLOWING INFORMATION WAS USED TO PERFORM THE SURVEY:  
 (1) CLASS OF SURVEY: Class A (NC21-166.1653)  
 (2) POSITIONAL ACCURACY: 0.10"  
 (3) TYPE OF GPS FIELD PROCEDURE: **RTK**  
 (4) DATES OF SURVEY: **FEBRUARY 5 & 6, 2019**  
 (5) DATUM/EPOCH: **NAD83(2011)**  
 (6) PUBLISHED/FIXED-CONTROL USE: **NO/YES**  
 (7) GEOID MODEL: **GEOID12B**  
 (8) COMBINED GRID FACTOR(S):  
 See Table  
 (9) UNITS: **FEET**  
 WITNESS MY ORIGINAL SIGNATURE, REGISTRATION NUMBER AND SEAL THIS 6th DAY OF FEBRUARY, A.D. 2019

**G.S. 47-307.11(a)(1):**  
 THIS SURVEY IS OF AN EXISTING PARCEL (OR PARCELS) OF LAND AND DOES NOT CREATE A NEW STREET OR CHANGE AN EXISTING STREET.

**NORTH CAROLINA, McDOWELL COUNTY**  
 I, KENNETH D. SUTTLES, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN SEE PLAT); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION FOUND IN SEE PLAT; THAT THE RATIO OF PRECISION AS CALCULATED IS **1:16,000**; THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH G.S. 47-38 AS AMENDED WITNESS MY ORIGINAL SIGNATURE, LICENSE NUMBER AND SEAL THIS 8th DAY OF FEBRUARY, A.D. 2019



**Jeffery Kincaid and wife Lisa Kincaid**  
 Drexel Township, Burke County, North Carolina  
 PIN # 2734882357  
 PHYSICAL ADDRESS: 2661 Waterside Blvd NW, Henderson, NC 28050  
 REVISIONS:

SCALE: 1" = 40'  
 DATE: 02-05-2019  
 DRAWN BY: J. Douglas Suttles  
 APPROVED BY: KENNETH D. SUTTLES

**Suttles Surveying, P.A.**  
 Firm Number C-0548  
 COMPUTER: Map Room 1 FIELD BOOK: 05-19  
 FILE NAME: 14243.dwg MAP FILE NO: 14243

# 95% Spreadsheet (RTN)

This spreadsheet was compiled by Gary Thompson, Clay Pate and Rick Edmondson

It is somewhat dated and is not an automated process, but it works and will serve as a record you can incorporate into your report, CAD or just for internal confidence in the values you are publishing

Name	Northing	Easting	Ortho Height	Diff in z (Ortho)	Diff in x (Long)	Diff in y (Lat)	Accuracy
<b>VRS Solutions</b>							
1 x	(sft)	(sft)	(sft)	(sft)	(sft)	(sft)	
VRS 1	564368.7485	1336060.6124	797.3693	-0.0304	0.0062	-0.0256	
Check	564368.6973	1336060.6248	797.3085	0.0304	-0.0062	0.0256	
Average VRS	564368.7229	1336060.6186	797.3389				
1 x	(sft)	(sft)	(sft)	(sft)	(sft)	(sft)	
VRS 1	564368.705	1336060.6314	797.2578	-0.014	-0.02515	0.01265	
Check	564368.7303	1336060.5811	797.2298	0.014	0.02515	-0.01265	
Average VRS	564368.7177	1336060.6063	797.2438				
1 x	(sft)	(sft)	(sft)	(sft)	(sft)	(sft)	
VRS 1	564368.7485	1336060.6124	797.3693	-0.05575	0.0095	-0.02175	
Check	564368.705	1336060.6314	797.2578	0.05575	-0.0095	0.02175	
Average VRS	564368.7268	1336060.6219	797.31355				
1 x	(sft)	(sft)	(sft)	(sft)	(sft)	(sft)	
VRS 1	564368.705	1336060.6314	797.2578	0.02535	-0.0033	-0.00385	
Check	564368.6973	1336060.6248	797.3085	-0.02535	0.0033	0.00385	
Average VRS	564368.7012	1336060.6281	797.28315				
1 x	(sft)	(sft)	(sft)	(sft)	(sft)	(sft)	
VRS 1	564368.7303	1336060.5811	797.2298	0.06975	0.01565	0.0091	
Check	564368.7485	1336060.6124	797.3693	-0.06975	-0.01565	-0.0091	
Average VRS	564368.7394	1336060.5968	797.29955				
1 x	(sft)	(sft)	(sft)	(sft)	(sft)	(sft)	
VRS 1	564368.7303	1336060.5811	797.2298	0.03935	0.02185	-0.0165	
Check	564368.6973	1336060.6248	797.3085	-0.03935	-0.02185	0.0165	
Average VRS	564368.7138	1336060.6030	797.26915				
<b>564368.7203    1336060.6124    797.29135</b>							Average Site GPS Accuracy (95% Confidence)(sft)

Point Number	Point Name	Northing	Easting	Ortho Height	Diff in z (Ortho)	Diff in x (Long)	Diff in y (Lat)	Point Horizontal Accuracy (95% Confidence) (sft)	Point Vertical Accuracy (95% Confidence) (sft)	
<b>OPUS Static Solutions</b>										
1007	<b>NR x</b>									
	OPUS-RS 08682891.dat 001017573									
	meters									
	sft	0	0	0	0	0	0	0	0	
1007	<b>NR x</b>									
	OPUS-RS 08682891.dat 001017573									
	meters									
	sft	0	0	0	0	0	0	0	0	
<b>OPUS Rapid Static Solutions</b>										
1007	<b>NR x</b>									
	OPUS-RS 08682891.dat 001017573									
	meters									
	sft	0	0	0	0	0	0	0	0	
1007	<b>NR x</b>									
	OPUS-RS 08682891.dat 001017573									
	meters									
	sft	0	0	0	0	0	0	0	0	
<b>VRS Solutions</b>										
	<b>NR x</b>	(sft)	(sft)	(sft)	(sft)	(sft)	(sft)			
PNT#	VRS 1	0	0	0	0	0	0			
PNT#	Check	0	0	0	0	0	0			
	Average VRS	0	0	0	0	0	0	0	0	
	<b>NR x</b>	(sft)	(sft)	(sft)	(sft)	(sft)	(sft)			
PNT#	VRS 1	0	0	0	0	0	0			
PNT#	Check	0	0	0	0	0	0			
	Average VRS	0	0	0	0	0	0	0	0	
	<b>NR x</b>	(sft)	(sft)	(sft)	(sft)	(sft)	(sft)			
PNT#	VRS 1	0	0	0	0	0	0			
PNT#	Check	0	0	0	0	0	0			
	Average VRS	0	0	0	0	0	0	0	0	
	<b>NR x</b>	(sft)	(sft)	(sft)	(sft)	(sft)	(sft)			
1005	VRS 1	0	0	0	0	0	0			
1006	Check	0	0	0	0	0	0			
	Average VRS	0	0	0	0	0	0	0	0	
	<b>NR x</b>	(sft)	(sft)	(sft)	(sft)	(sft)	(sft)			
1005	VRS 1	0	0	0	0	0	0			
1006	Check	0	0	0	0	0	0			
	Average VRS	0	0	0	0	0	0	0	0	
								Average Site GPS Accuracy (95% Confidence)(sft)	0.00	0.00

<b>Project:</b>	14578								2/1/2023
Point Number	Point Name	Northing	Easting	Ortho Height	Diff in z (Ortho)	Diff in x (Long)	Diff in y (Lat)	Point Horizontal Accuracy (95% Confidence) (sft)	Point Vertical Accuracy (95% Confidence) (sft)
<b>VRS Solutions</b>									
	<b>NR x</b>	(sft)	(sft)	(sft)	(sft)	(sft)	(sft)		
2000Asj.1	VRS 1	564368.7485	1336060.6124	797.3693	-0.0304	0.0062	-0.0256		
2000Asj.2	Check	564368.6973	1336060.6248	797.3085	0.0304	-0.0062	0.0256		
	Average VRS	564368.7229	1336060.6186	797.3389				0.03891843	0.059584
	<b>NR x</b>	(sft)	(sft)	(sft)	(sft)	(sft)	(sft)		
2000Asj.3	VRS 1	564368.705	1336060.6314	797.2578	-0.014	-0.02515	0.01265		
2000AChk	Check	564368.7303	1336060.5811	797.2298	0.014	0.02515	-0.01265		
	Average VRS	564368.7177	1336060.6063	797.2438				0.04626153	0.02744
	<b>NR x</b>	(sft)	(sft)	(sft)	(sft)	(sft)	(sft)		
2000Asj.1	VRS 1	564368.7485	1336060.6124	797.3693	-0.05575	0.0095	-0.02175		
2000Asj.3	Check	564368.705	1336060.6314	797.2578	0.05575	-0.0095	0.02175		
	Average VRS	564368.7268	1336060.6219	797.31355				0.038245313	0.10927
	<b>NR x</b>	(sft)	(sft)	(sft)	(sft)	(sft)	(sft)		
2000Asj.3	VRS 1	564368.705	1336060.6314	797.2578	0.02535	-0.0033	-0.00385		
2000Asj.2	Check	564368.6973	1336060.6248	797.3085	-0.02535	0.0033	0.00385		
	Average VRS	564368.7012	1336060.6281	797.28315				0.008750527	0.049686
	<b>NR x</b>	(sft)	(sft)	(sft)	(sft)	(sft)	(sft)		
2000AChk	VRS 1	564368.7303	1336060.5811	797.2298	0.06975	0.01565	0.0091		
2000Asj.1	Check	564368.7485	1336060.6124	797.3693	-0.06975	-0.01565	-0.0091		
	Average VRS	564368.7394	1336060.5968	797.29955				0.030290287	0.13671
	<b>NR x</b>	(sft)	(sft)	(sft)	(sft)	(sft)	(sft)		
2000AChk	VRS 1	564368.7303	1336060.5811	797.2298	0.03935	0.02185	-0.0165		
2000Asj.2	Check	564368.6973	1336060.6248	797.3085	-0.03935	-0.02185	0.0165		
	Average VRS	564368.7138	1336060.6030	797.26915				0.046934648	0.077126
<b>Point Average</b>		<b>564368.7203</b>	<b>1336060.6124</b>	<b>797.29135</b>			Average Site GPS Accuracy (95% Confidence)(sft)	<b>0.03</b>	<b>0.08</b>

# Prism/GPS Pole Bubble

**What minute is your level bubble?**

**How often should you adjust your rod bubble?**

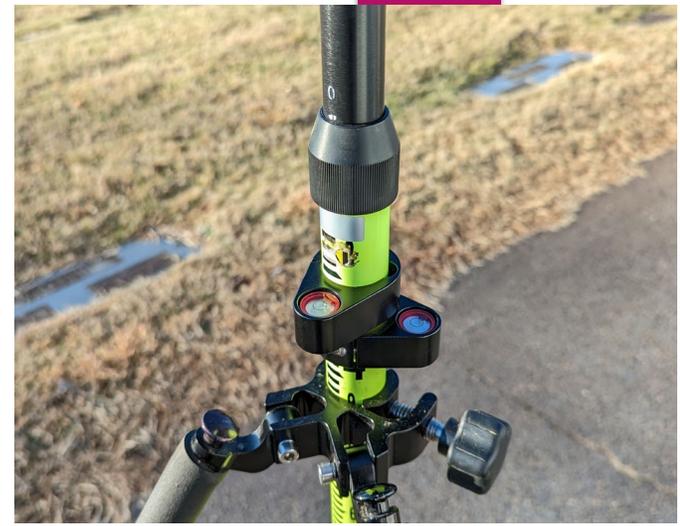
**How do you know it needs to be checked?**



8 Min Bubble – RED



40 Min Bubble=Black



# Check A Know Point

- ▶ *What does that mean?*

*If you set up a base point and you come back another day, a best practice is to tie one of the points from the day before.*

- ▶ *What does that do?*

*It will help ensure that your HI is correct, the coordinate being used for base point is the same as before and will also tell if something has happened to the point since you were last occupying it. It's a good practice and gives you a level of confidence in your control being intact and your setup is input correctly*

- ▶ *How often should you do this?*

*Every time you come back to the same base point.*

# Good Communication

## How to Communicate

- In Person
- Text Messages
- Email
- Letter
- Phone call followed by notes
- Fax if necessary

## Who to communicate with

- Employees
- Client
- Adjoiners
- Superintendent
- Planning
- Zoning
- Review officers
- Project Managers

## What to communicate

- Scope of work
- Areas of Difficulty
- Evidence Found or missing
- Concerns about plans, inconsistencies in design information, vagueness of deed
- Talk with your client so you can better understand your clients' needs and develop a workflow that works for both you and your client

# Import the State Aerial Imagery

All 100 counties have been flown, and are flown on a 4-year cycle, so depending on whether you are on the coast or in the mountains, there is georeferenced imagery that is available to fit your project.

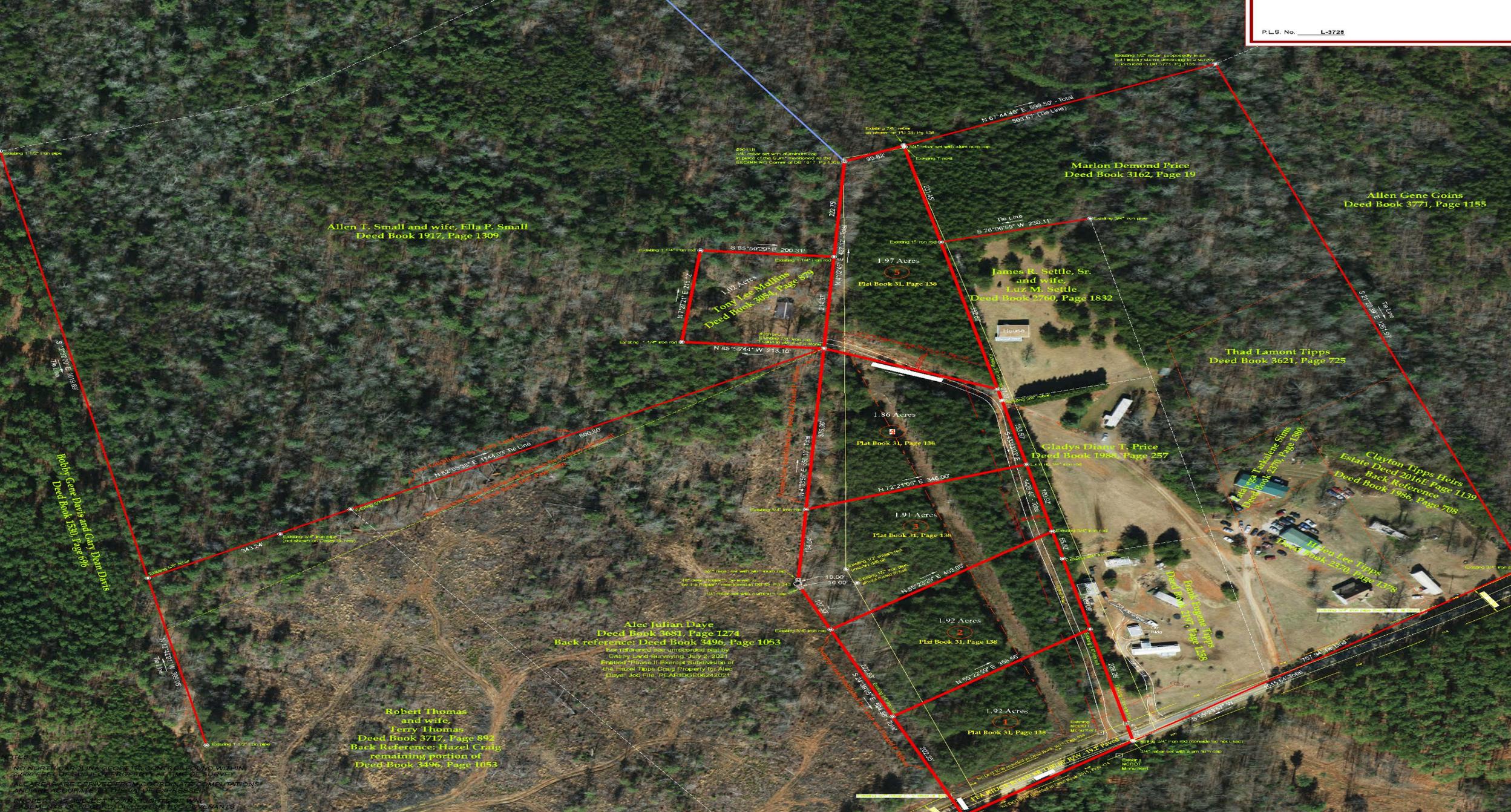
It can be downloaded from

[WWW.NCONEMAP.GOV](http://WWW.NCONEMAP.GOV)

You can download the whole county or each individual tile of just the area needed.

- ▶ You can use the aerials to aid in your initial boundary survey orientation
- ▶ Define your work area and obstacles that will need to be addressed during the workflow of the project
- ▶ Helps to see lines of occupation, ( ie. timber cutting, woods, roads, hedge rows )
- ▶ Aids in picking up features that need to be shown, but are not highly critical.





Allen T. Small and wife, Ella P. Small  
Deed Book 1917, Page 1309

1.02 Acres  
Tony Lee Mullins  
Deed Book 3034, Page 879

Marlon Demond Price  
Deed Book 3162, Page 19

Allen Gene Goins  
Deed Book 3771, Page 1155

James R. Settle, Sr.  
and wife  
Luz M. Settle  
Deed Book 2760, Page 1832

Thad Lamont Tipps  
Deed Book 3621, Page 725

Gladys Diane T. Price  
Deed Book 1988, Page 257

Clayton Tipps Heirs  
Estate Deed 2016E Page 1139  
Back Reference  
Deed Book 1986, Page 708

Hazel Craig  
Deed Book 2170, Page 1378

Alec Julian Daye  
Deed Book 3681, Page 1274  
Back reference: Deed Book 3496, Page 1053

Robert Thomas  
and wife  
Terry Thomas  
Deed Book 3717, Page 892  
Back Reference: Hazel Craig  
remaining portion of  
Deed Book 3496, Page 1053

1.92 Acres  
Plot Book 31, Page 138

Sam Tallant and wife, Mozelle Tallant  
Deed Book 532, Page 28

NO NORTH OR SURVING GEOMETRIC CONTROL FOUND WITHIN 200 FEET OF SUBJECT PROPERTY AT TIME OF SURVEY. ALL AREAS ARE DERIVED FROM COORDINATE COMPUTATIONS AND ARE ACCURATE TO THE VALUE EXPRESSED. PROPERTY IS SUBJECT TO ANY RIGHTS THAT MAY BE CLAIMED BY ANY PARTY. THIS SURVEY IS FOR INFORMATION ONLY. IT IS NOT TO BE USED AS EVIDENCE IN ANY COURT OF LAW. THE BOUNDARIES SHOWN HEREON ARE NOT TO BE CONSIDERED AS A GUARANTEE OF TITLE. THE SURVEYOR'S OFFICE SHALL NOT BE RESPONSIBLE FOR ANY LEGAL CONSEQUENCES ARISING FROM THIS SURVEY.



# Statewide Lidar “Contours”

- The state has flown the each of the 100 counties with lidar. It is available for download in 2 formats
- You can download shape files from [www.nconemap.gov](http://www.nconemap.gov), those can be imported into with geometry only, or they can be imported with the database info as well.
- You can download .LAS files / raw data and compile contours yourself, if you have a point cloud option in your software

# Put a Cap on It

- Is it a requirement?
- Is it a good practice?
- What does it mean for the future work?
- What info should be on the cap?
- What material works best?
- How much do they cost?



# Contact 811

- Why to Contact 811
- Horror Stories
- How to Contact 811
- UCC Meetings

- **It's the Law**

- Everybody knows someone that has hit a buried line and sometimes its not a big deal, other times it could be life threatening ( IE. High Voltage Electric, Gas, Steam Line, etc. )
- Contact 811 in several ways:

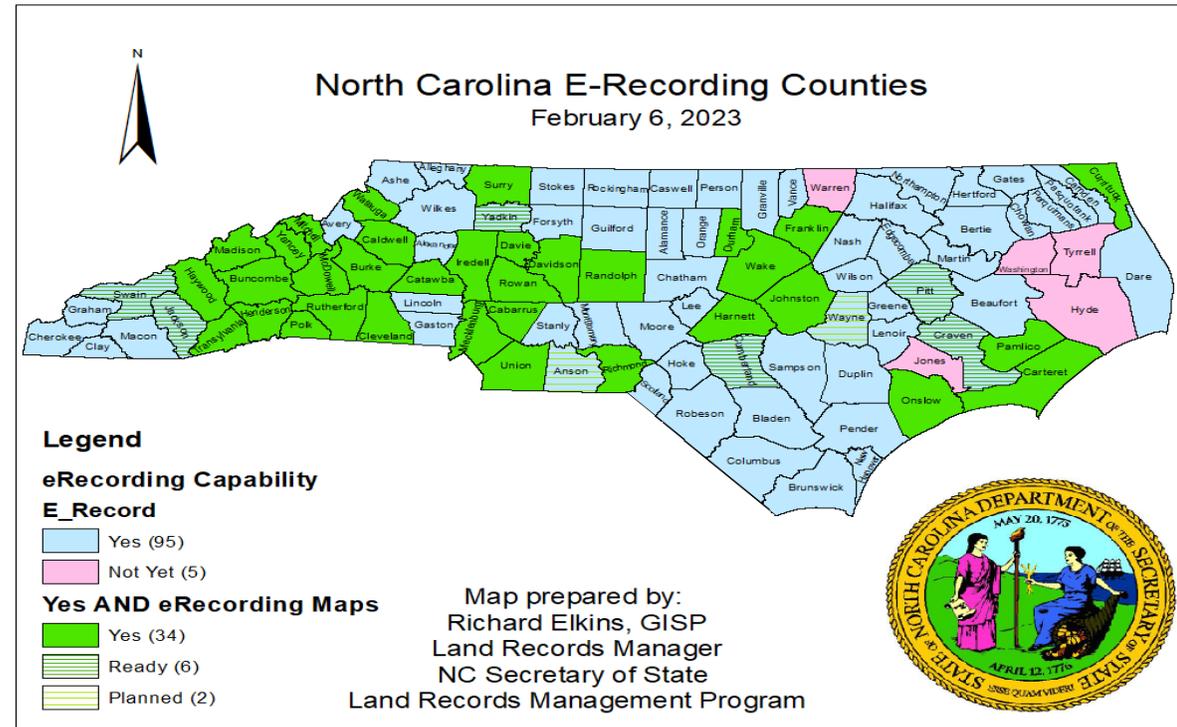
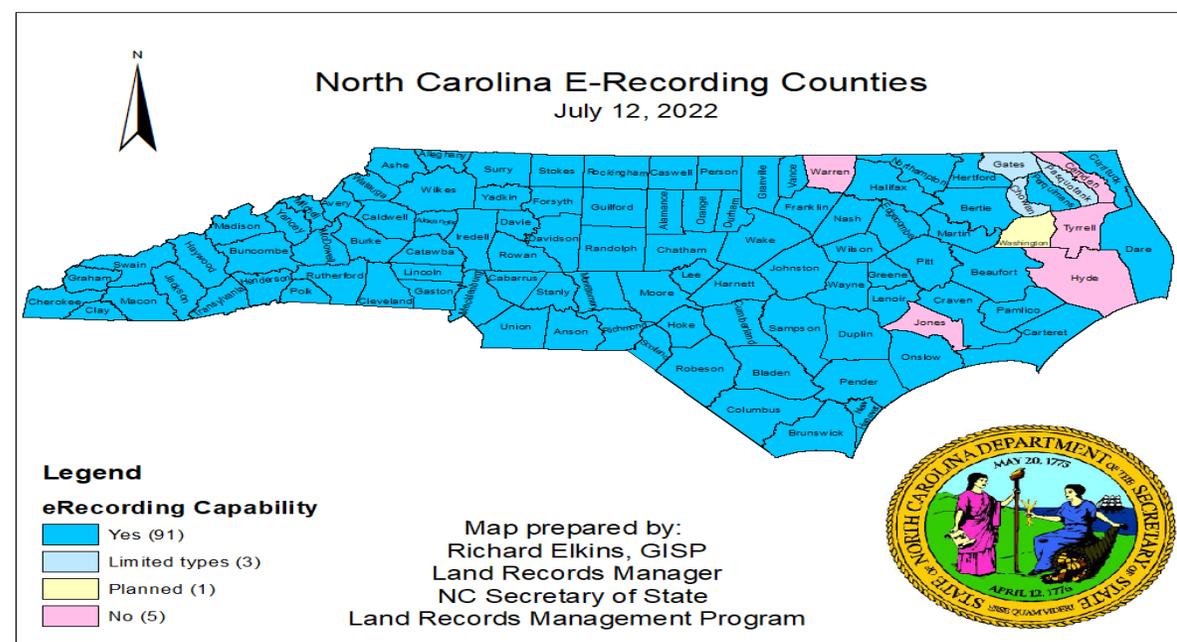
1. Call 811
2. Website submission - [nc811.org](http://nc811.org)
3. Phone APP

- UCCs are found across the state and I would encourage someone from each chapter to attend.



# E-recording of Plats

- First plat was E-recorded in 2010 in Johnston County
- Pilot Project started with 5 counties in Western North Carolina around 2015
- Currently there are 34 counties accepting plats for e-recording



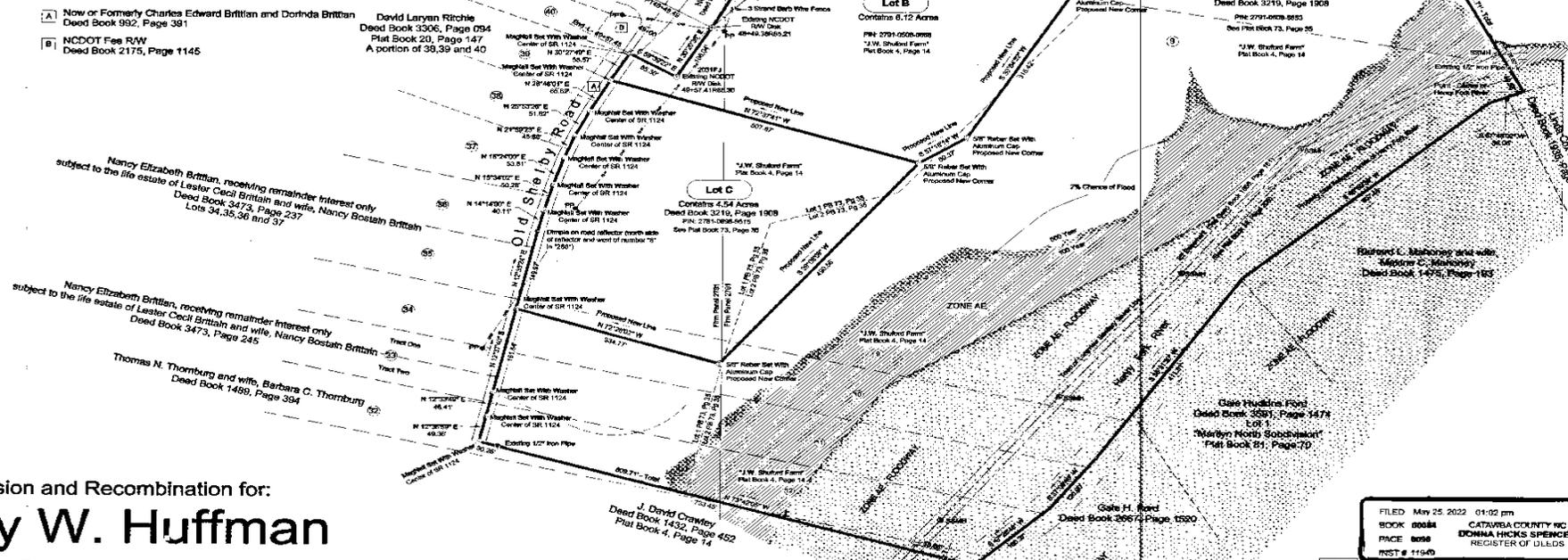
NOTES:  
 ALL AREAS ARE DERIVED FROM COORDINATE COMPUTATIONS AND ARE ACCURATE TO THE VALUE EXPRESSED.  
 PROPERTY IS SUBJECT TO ANY RIGHTS OF WAY, EASEMENTS OR RECORDS, OR RESTRICTIVE COVENANTS.  
 NO TITLE SEARCH CONDUCTED AT TIME OF SURVEY.  
 THIS SURVEY DOES NOT CERTIFY LEGAL TITLE TO THE LAND ITSELF NOR TO THE BOUNDARIES SHOWN HEREON.  
 USERS OF THIS PLAN SHOULD OBTAIN A CURRENT LEGAL TITLE OPINION TO OWNERSHIP TO THE BOUNDARIES.  
 NO LOCATION OF UNDERGROUND UTILITIES LOCATED AT TIME OF SURVEY OTHER THAN SHOWN HEREON.  
 ALL DISTANCES SHOWN HEREON ARE HORIZONTAL GRID DISTANCES.  
 RESERVATION FOR THE R/W OF OLD SHELLEY ROAD AND SWEET BAY LAKE WAS TAKEN FROM THE NCCOT PLANS PROJECT # 1792901, 14-20884.  
 PROPERTY IS ZONED R-10 IN CITY OF HICKORY.  
 FLOOD PLAIN NOTATION  
 LOT B AND LOT C AS SHOWN ON THIS PLAN ARE NOT LOCATED IN A 100-YEAR FLOOD PLAIN. LOT A IS PARTIALLY LOCATED IN A 100-YEAR FLOOD PLAIN AS NOTED ON PLAN. (SEE FIRM MAP 371027100).  
 SEE FIRM MAP 371027100J.  
 WATERSHED NOTIFICATION  
 THE PARCELS OF LAND AS SHOWN ON THIS PLAN HAS NO WATERSHED CLASSIFICATION PER THE CATAWBA COUNTY GIS.  
 PIN NUMBERS 2791-0508-0683 AND 2791-0508-0913 ARE ILLUSTRATED ON PLAT BOOK 74, PAGE 32 AND PLAT BOOK 77, PAGE 83. NO DEED WAS FOUND REFERENCING THE CREATION OF THESE TWO PARCELS.

Station	Northing	Easting	Bearing	Distance	Radius Length	Arc Length	Delta Angle	Chord Bearing	Chord Length	Degree of Curve	Tangent
32+90.830	719374.144	1290021.086	S 88°51'18" E	170.603'							
34+51.433	719364.764	1290162.036				236.275'			326.250'	93°18'08"	N 81°29'38" E
37+77.693	719512.080	1290464.356							309.889'	10°28'15"	162.018'
40+79.500	719774.492	1290814.555	N 29°30'35" E	301.837'							
43+26.361	719943.777	1290788.223				442.912'			245.681'	31°48'45"	N 45°43'58" E
									242.524'	12°36'10"	126.079'

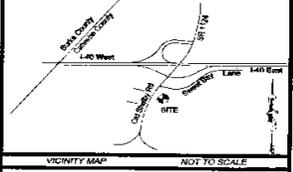
04-916

Station	Northing	Easting	Bearing	Distance	Radius Length	Arc Length	Delta Angle	Chord Bearing	Chord Length	Degree of Curve	Tangent
43+52.590	719491.261	1290049.074	S 13°00'27" W	120.935'							
44+72.888	719374.144	1290021.086	S 13°09'27" W	183.704'							
46+36.588	719214.738	1289964.425				707.837'			212.667'	17°13'58"	S 21°46'28" W
48+49.485	719017.775	1289905.789								03°05'40"	107.280'
49+57.477	718924.822	1289851.117	S 30°23'28" W	107.362'							

- (A) Now or Formerly Charles Edward Brittain and Dorinda Brittain Deed Book 992, Page 391
- (B) NCCOT Fee RW Deed Book 2175, Page 1145



Subdivision and Recombination for:  
**Danny W. Huffman**  
 Hickory Township, Catawba County, North Carolina



NORTH CAROLINA, McDOWELL COUNTY  
 I, C. DOUGLAS BUTTLER, CERTIFY THAT THIS PLAN WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN SEE PLAT). THAT THE BOUNDARIES NOT CLEARLY INDICATED ARE CLEARLY INDICATED AS DASHED LINES DRAWN FROM INFORMATION FOUND IN SEE PLAT. THAT THE RATIO OF PRECISION AS CALCULATED IS 1:30,000 AND THAT THE PLAN WAS PREPARED IN ACCORDANCE WITH G.S. 17-1 AS AMENDED.

CSM 3007 (WHAT IS THE SURVEY CREATES A SUBDIVISION OF LAND WITHIN THE AREA OF A COUNTY OR MUNICIPALITY THAT HAS AN ORDINANCE THAT REGULATES PARCELS OF LAND).  
 (6543-3091) (WHAT IS THE SURVEY IS OF ANOTHER CATEGORY, SUCH AS THE RECOMBINATION OF EXISTING PARCELS, A CONVEYED INTEREST, OR OTHER EXCEPTION TO THE DEFINITION OF SURVEYOR).

I, J. DOUGLAS BUTTLER, CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION AND THE FOLLOWING INFORMATION WAS USED TO PREPARE THE SURVEY:  
 (1) CLASS OF SURVEY: CLASS A (N.C.S. 17-103)  
 (2) POSITIONAL ACCURACY: 1/1000  
 (3) TYPE OF GPS FIELD PROCEDURE:  
 RTK

- (4) DATE OF SURVEY: MAY 19, 2022
- (5) DATUM/EPOCH: NAD83/2011
- (6) PUBLIC NOTICE/CONTROL: YES
- (7) RECORD METHOD: SCHEMATIC
- (8) DOMINANT GRID FACTORS: SEE PLAT
- (9) LIMITS: SEE PLAT

WITNESS MY ORIGINAL SIGNATURE, REGISTRATION NUMBER AND SEAL THIS 25TH DAY OF MAY, A.D. 2022.

APPROVE AS OFFICER FOR RECOMBINATION OF LAND PLAT I, C. DOUGLAS BUTTLER, CERTIFY THAT I HAVE OBSERVED THAT THE DEED SHOWS NONE OF AN EASEMENT FROM THE CITY OF HICKORY SUBDIVISION REGULATIONS THAT THIS DEED INVOLVES THE CONVEYANCE OF PORTIONS OF PARCELS OF LAND TO BE USED AS LOTS WHERE THE TOTAL NUMBER OF LOTS IS NOT EXCEEDED AND THE REGULATOR HAS REVIEWED THE STANDARDS OF THE CITY AS SHOWN IN THE CITY'S SUBDIVISION REGULATIONS.

Ownership Certificate for Easement from Subdivision Land Division Plat (1) (W) (W) that I am (see) the owner (S) of the property described herein, which property is located within the jurisdiction of the City of Hickory.

NORTH CAROLINA, CATAWBA COUNTY  
 I, KAREN SPOFFORD, hereby certify for said County and State, to hereby certify, that Danny W. Huffman, personally appeared before me and acknowledged to me the execution of the foregoing instrument.

Witness my hand and official seal on the 25th day of May, 2022.

My commission expires July 15, 2025

NORTH CAROLINA, CATAWBA COUNTY  
 I, C. DOUGLAS BUTTLER, REVIEW OFFICER OF THE CITY OF HICKORY, CERTIFY THAT THE SUBDIVISION CERTIFICATION IS APPLIED MEETS ALL REGULATORY REQUIREMENTS FOR RECORDING.

NORTH CAROLINA, CATAWBA COUNTY  
 THE FOREGOING CERTIFICATE OF REVIEW OFFICER FOR CITY OF HICKORY IS CERTIFIED TO BE CORRECT AND FILED FOR REGISTRATION ON THIS DAY OF MAY, 2022 AT \_\_\_\_\_ AM, IN THE BOOK \_\_\_\_\_

FILED May 25, 2022 01:02 pm  
 BOOK 0084 CATAWBA COUNTY NC  
 PAGE 0056 DANNY W. HUFFMAN  
 RST # 11940

REGISTER OF DEEDS  
 SCALE: 1" = 100'  
 DATE: May 19, 2022  
 REGISTER OF DEEDS  
 C. DOUGLAS BUTTLER  
 REGISTER OF DEEDS

LEGEND  
 COMPUTED POINT  
 BOUNDARY LINE  
 EXISTING FROM RECORD  
 THE LINE  
 ADJACENT LINE  
 CONCRETE MONUMENT  
 GEODETIC MONUMENT  
 P. K. MAIL, RAILROAD SPIKE, COTTON OR SPIKE  
 POWER POLE  
 REMAINING BEYOND MARKERS  
 COMPUTER: Clinton 2021  
 FILE NAME: 14505.dwg  
 MAP FILE NO.: 14540

2020 OLD SHELLEY ROAD  
 HICKORY, NC 28602  
 FAX MAP INFORMATION: PIN: 2791-0508-0214 PIN: 2791-0508-7630 PIN: 2791-0508-0569  
 2791-0508-0508 PIN: 2791-0508-7529 PIN: 2791-0508-0515

Point	Northing	Easting	Elevation	NC Grid Tie Coordinates, Convergence Angles, Scale Factors and Other Information	Latitude (GDA83)	Longitude (GDA83)	Height	Description
2000FJ	719304.017	1290101.150	966.48	N 01°22'48.7831" E	1.00009850157894	1.00013768458723	-106.57	Existing monument
2031FJ	718981.629	1289624.732	955.67	N 01°22'49.9051" E	1.00009906219608	1.00013732945893	-106.56	Existing monument

NOTES:  
 ALL AREAS ARE DERIVED FROM COORDINATE COMPUTATIONS AND ARE ACCURATE TO THE VALUE EXPRESSED.  
 PROPERTY IS SUBJECT TO ANY RIGHTS OF WAY, EASEMENTS OF RECORD, OR RESTRICTIVE COVENANTS.  
 NO TITLE SEARCH CONDUCTED AT TIME OF SURVEY.  
 THIS SURVEY DOES NOT CERTIFY LEGAL TITLE TO THE LAND ITSELF NOR TO THE BOUNDARIES SHOWN HEREON.  
 USERS OF THIS PLAT SHOULD OBTAIN A CURRENT LEGAL TITLE OPINION TO OWNERSHIP TO THE BOUNDARIES.  
 NO LOCATION OF UNDERGROUND UTILITIES LOCATED AT TIME OF SURVEY OTHER THAN SHOWN HEREON.  
 ALL DISTANCES SHOWN HEREON ARE HORIZONTAL GRID DISTANCES.

REFERENCE FOR THE ROW OF OLD SHELLEY ROAD AND SWEET BAY LANE WAS TAKEN FROM THE NCDOT PLANS PROJECT # S.1792801, U-2528AA.

PROPERTY IS ZONED IN IN CITY OF HICKORY.  
**FLOOD PLAN NOTATION**  
 LOT 9 AND LOT 10 AS SHOWN ON THIS PLAT ARE NOT LOCATED IN A 100 YEAR FLOOD PLAIN. LOT 10 IS PARTIALLY LOCATED IN A 100 YEAR FLOOD PLAIN AS NOTED ON PLAT. SEE FIRM MAP 371027916GJ.

**WATERSEAL NOTIFICATION**  
 THE PARCELS OF LAND AS SHOWN ON THIS PLAT HAS NO WATERSEAL CLASSIFICATION PER THE CATAWBA COUNTY GIS.

**PIN NUMBERS 2791-0508-0665 and 2791-0988-9515**  
 ARE ILLUSTRATED ON PLAT BOOK 74, PAGE 32 AND PLAT BOOK 77, PAGE 33. NO DEED WAS FOUND REFERENCING THE CREATION OF THESE TWO PARCELS.

Station	Northing	Eastng	Bearing	Distance	Radius Length	Arc Length	Delta Angle	Chord Bearing	Chord Length	Degree of Curve	Tangent
32+80.830	719374.144	1290021.889	S 86°51'18" E	170.803'							
34+51.433	719364.784	1290192.036			295.279'	326.230'	63°18'08"	N 61°29'38" E	309.889'	19°24'15"	182.016'
37+77.693	719512.680	1290464.356						N 29°50'33" E	301.837'		
40+79.500	719774.492	1290614.555			442.912'	245.051'	31°46'45"	N 45°43'56" E	242.524'	12°56'10"	126.079'
43+25.161	719943.777	1290788.223									

Station	Northing	Eastng	Bearing	Distance	Radius Length	Arc Length	Delta Angle	Chord Bearing	Chord Length	Degree of Curve	Tangent
43+92.580	719491.291	1290049.074	S 13°09'27" W	120.305'							
44+72.885	719374.144	1290021.889						S 13°09'27" W	163.704'		
46+36.588	719214.738	1289984.425			707.837'	212.897'	17°13'56"	S 21°46'28" W	212.095'	08°08'40"	107.256'
48+49.485	719017.775	1289905.749						S 30°23'28" W	107.992'		
49+57.477	718624.622	1289851.117									

- A) Now or Formerly Charles Edward Brittan and Dorinda Brittan Deed Book 982, Page 391
- B) NCDOT Fee RW Deed Book 2175, Page 1145

David Laryan Ritchie Deed Book 3306, Page 094 Plat Book 00, Page 147 A portion of 38,39 and 40

Nancy Elizabeth Brittan, receiving remainder interest only subject to the life estate of Lester Cecil Brittan and wife, Nancy Bostain Brittan Deed Book 3473, Page 237 Lots 34,35,36 and 37

Nancy Elizabeth Brittan, receiving remainder interest only subject to the life estate of Lester Cecil Brittan and wife, Nancy Bostain Brittan Deed Book 3473, Page 245

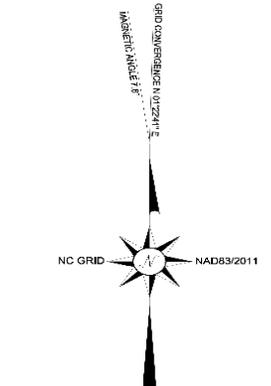
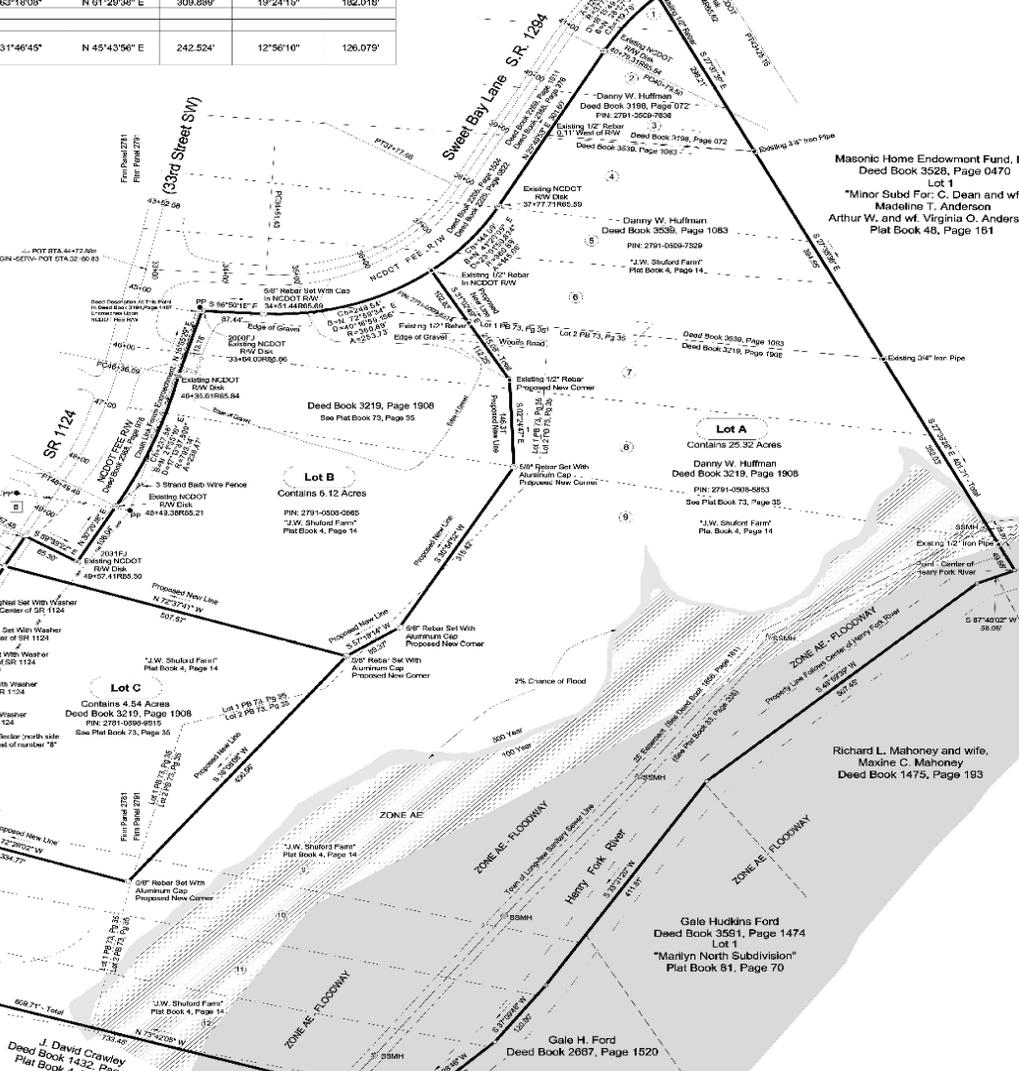
Thomas N. Thornburg and wife, Barbara C. Thornburg Deed Book 1489, Page 394

J. David Crawley Deed Book 1492, Page 452 Plat Book 4, Page 14

Gale H. Ford Deed Book 2687, Page 1520

Gale H. Ford Deed Book 3551, Page 1474 Lot 1 "Marilyn North Subdivision" Plat Book 51, Page 70

Richard L. Mahoney and wife, Maxine C. Mahoney Deed Book 1475, Page 193



# Subdivision and Recombination for:

## Danny W. Huffman

### Hickory Township, Catawba County, North Carolina

VICINITY MAP NOT TO SCALE

**NORTH CAROLINA, McDOWELL COUNTY**  
 I, J. DONALD SUTTLES, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN SEE PLAT). THAT THE REFINERS HAS NOT BEEN ASSESS OR INDICATED BY DASHED LINES DRAWN FROM INFORMATION FOUND IN SEE PLAT, THAT THE RATIO OF PRECISION AS CALCULATED IS 1:10,000 ±. THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH G.S. 47-30 AS AMENDED.

MAJOR HOME ENDOWMENT FUND, INC. Deed Book 3528, Page 0470  
 Lot 1  
 "Minor Subd For: C. Dean and wf. Mastelino T. Anderson Arthur W. and wf. Virginia O. Anderson" Plat Book 48, Page 161

I, J. DONALD SUTTLES, CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION AND THE FOLLOWING INFORMATION WAS USED TO PERFORM THIS SURVEY:  
 (1) CLASS OF SURVEY: (2) POSITIONAL ACCURACY: (3) TYPE OF GPS FIELD PROCEDURE:  
 (4) DATES OF SURVEY: (5) INSTRUMENTS USED:  
 (6) PUBLIC REFERENCE CONTROL USED:  
 (7) BECID MODEL: (8) (9) CONTROL GRID FILE: (10) UNITS: (11) SEE PLAT



WITNESS MY ORIGINAL SIGNATURE, REGISTERED NUMBER 32071, THIS 25TH DAY OF MAY, 2022.

P.L.S. No. 13728  
 Approval Certificate for Recombination of Land Plat  
 I certify that to the best of my ability, I have determined that the plat shown hereon is correct in accordance with the provisions of the laws of this State and that the plat involves the combination or reconstruction of portions of portions of property or platted lots whose total number, area and measurement and the results thereon are equal to or exceed the standards of the City as shown in the City's subdivision regulations.

Director of Planning & Dev. Date  
 Ownership Certificate for Exempt from Subdivision Land Division Plat  
 I (I hereby certify that I am the owner of the property described herein, which property is located within the City of Hickory.

Owner Date  
 I, \_\_\_\_\_ a Notary Public for said County and State, do hereby certify that I am a Notary Public in and for the County and State of North Carolina and acknowledge the due execution of the foregoing instrument. Witness my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2022.  
 My commission expires \_\_\_\_\_

NORTH CAROLINA, CATAWBA COUNTY  
 I, \_\_\_\_\_ REVIEW OFFICER OF CITY OF HICKORY, CERTIFY THAT THIS PLAT IS THAT TO WHICH THIS LAW IS APPLICABLE AND I HEREBY RECOMMEND IT FOR RECORDING.

DATE REVIEW OFFICER  
 NORTH CAROLINA, CATAWBA COUNTY  
 THE FOREGOING CERTIFICATE OF REVIEW OFFICER FOR CITY OF HICKORY IS CERTIFIED TO BE CORRECT AND NOT FOR REPRODUCTION ON THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2022 AT \_\_\_\_\_, \_\_\_\_\_.



REGISTER OF DEEDS  
 FILE NAME: 14540.DWG  
 MAP FILE NO: 14540

**LEGEND**  
 ○ COMPUTED POINT  
 ○ 5/8" REBAR SET  
 --- EXISTING PCHN (DASHED)  
 --- CONCRETE ENCLOSURE  
 --- P.K. NAIL, RAIL ROAD SPIKE, COTTON GUN SPIKE  
 ● POWER POLE  
 --- BOUNDARY LINE  
 --- TIE LINE  
 --- ADJACENT LINE  
 --- GEODETIC ENCLOSURE  
 --- SANITARY SEWER MANHOLE

PHYSICAL ADDRESS: 2020 OLD SHELLEY ROAD, HICKORY, NC 28002  
 TAX MAP INFORMATION: PIN: 2791-0508-0214, PIN: 2791-0209-7639, PIN: 2791-0508-0665, PIN: 2791-0988-9515  
 CLIENT'S OWNERSHIP: DANNY W. HUFFMAN, Deed Book 3198, Page 072, Deed Book 3219, Page 1065, Deed Book 3239, Page 083

Point#	Northing	Eastng	Elevation	Convergence	Grid Scale(Grd-Gnd)	Combined Scale(Grd-Gnd)	Latitude (DMS)	Longitude (DMS)	Geoid	Description
2000.FJ	719304.017	1290101.130	966.48	N 01°22'46.793167" E	1.000096650157864	1.00013789458723	N35°42'10.44000"	W81°23'28.89640"	-105.57	Existing monument
2031.FJ	718981.529	1289924.732	955.67	N 01°22'46.965114" E	1.000096652195908	1.000137329468993	N35°42'08.22092"	W81°23'30.40131"	-105.56	Existing monument

REVISIONS:  
 SUTTLES SURVEYING, PA  
 4150/1444 STREET  
 589 2E  
 WOOD LENOIR COUNTY, NC 28782  
 (828) 682-9322 3072  
 WIKONAH NORTH CAROLINA (828) 452-6143 2023



“

Set a “deadman” as a backsight

”

NOT JUST FOR CONSTRUCTION, CONTROL OR STANDARD BOUNDARY

A “deadman” improves your accuracy and efficiency. It eliminates retracing your steps when equipment becomes out of level.

# Hand Held Laser Measurement

- What is it?

A device that can be used to measure distances without a physical tape or rule

- What can you use it for?

Measuring walls, inverts of pipes, size of pipes

- Who makes them?

Leica, Bosch, Tacklife, Morpilot



# Mapping Checklist

- Improves Quality Control
- Ensures Compliance with the Standards
- Provides a consistent Product to the Public

Check List For Mapping Project #	Checked	Notes:
811 underground	<input type="checkbox"/>	
Adjoiners spelled correctly	<input type="checkbox"/>	
Alta Table A items	<input type="checkbox"/>	
Bar scale	<input type="checkbox"/>	
Border filled	<input type="checkbox"/>	
Boundary Certification	<input type="checkbox"/>	
Checked By	<input type="checkbox"/>	
closure / map check	<input type="checkbox"/>	
corner descriptions	<input type="checkbox"/>	
County Certifications	<input type="checkbox"/>	
Current Ownership	<input type="checkbox"/>	
Date	<input type="checkbox"/>	
deed corners	<input type="checkbox"/>	
Dimensions of Structures	<input type="checkbox"/>	
Drawn By	<input type="checkbox"/>	
F11 statement	<input type="checkbox"/>	
Grid Tie Coordinates	<input type="checkbox"/>	
GPS Certification	<input type="checkbox"/>	
If digital to be released, Disclaimer	<input type="checkbox"/>	
Legal Description	<input type="checkbox"/>	
Line Type not in Legend	<input type="checkbox"/>	
Lines associated with points, check layer	<input type="checkbox"/>	
North Arrow	<input type="checkbox"/>	
North Orientation	<input type="checkbox"/>	
Physical Address	<input type="checkbox"/>	
Pin #	<input type="checkbox"/>	
Power Easement	<input type="checkbox"/>	
revisions	<input type="checkbox"/>	
Road Right of Ways	<input type="checkbox"/>	
Road widths	<input type="checkbox"/>	
Scale	<input type="checkbox"/>	
Sewer easement	<input type="checkbox"/>	
Subject Spelled correctly	<input type="checkbox"/>	
Symbols not in Legend	<input type="checkbox"/>	
Title block info	<input type="checkbox"/>	
Topo Certification	<input type="checkbox"/>	
Vertical Accuracy	<input type="checkbox"/>	
Vertical Datum	<input type="checkbox"/>	
BM Identified	<input type="checkbox"/>	
Vicinity Map	<input type="checkbox"/>	
Road Surface Type	<input type="checkbox"/>	
Building or Structures Identified	<input type="checkbox"/>	
Fences Patterned	<input type="checkbox"/>	
Standard Notes	<input type="checkbox"/>	
Corner descriptions in L60	<input type="checkbox"/>	
Calls in L80	<input type="checkbox"/>	
Adjoiners in L140	<input type="checkbox"/>	
Notes in L80	<input type="checkbox"/>	



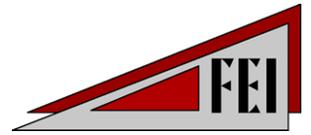
**Allen Geomatics**  
Advance, NC  
www.allengeomatics.com



**Berntsen International, Inc.**  
Madison, WI  
www.berntsen.com



**DRMP**  
Cary & Charlotte, NC  
www.drmp.com



**Fleming Engineering, Inc.**  
Greensboro, NC  
www.flemingengineering.com



**Allen Precision Equipment**  
Atlanta, GA  
www.allenprecision.com



**BGE, Inc**  
Charlotte & Raleigh, NC  
www.bgeinc.com/services/  
surveying



**Duncan-Parnell, Inc.**  
Morrisville, NC  
www.duncan-parnell.com



**Frontier Precision Unmanned**  
Pfafftown, NC  
www.frontierprecision.com



**AllenBuild Instruments**  
Wake Forest, NC  
www.allenbuildinstruments.com



**Bolton & Menk, Inc.**  
Youngsville, NC  
www.bolton-menk.com



**Earl Dudley, LLC**  
Greenville, SC  
www.earldudley.com



**Geo-Tronics**  
Hillsboro, TN  
www.geo-tronics.com



**Allied Associates, P.A.**  
Winston-Salem, NC  
www.alliedapa.com



**Cape Fear Engineering**  
Wilmington, NC  
www.capecfearengineering.com



**Ed Holmes & Associates Land Surveyors, PA**  
Asheville, NC  
www.edholmessurveying.com



**GPI Geospatial, Inc.**  
Charlotte, NC  
www.gpinet.com



**AP Surveying PLLC**  
Shelby, NC  
www.apsurveyingpllc.com



**Colliers Engineering & Design**  
Charlotte, NC  
www.colliersengineering.com



**eGPS Solutions**  
Norcross, GA  
www.egps.net



**GSC Surveying, Inc.**  
Raleigh, NC  
www.gscsurveying.com



**Avioimage Mapping Services**  
Charlotte, NC  
www.avioimage.com



**Concord Engineering & Surveying, Inc.**  
Concord, NC  
www.cesicgs.com



**Emlid**  
Austin, TX  
www.emlid.com



**Hayes Instrument Company**  
Shelbyville, TN  
www.hayesinstrument.com



**Benchmark Tool & Supply**  
Raleigh, NC  
www.benchmarksupply.com



**CS4 Services NC**  
Davidson, NC  
www.cs4services.com



**ESP Associates, Inc.**  
Charlotte & Raleigh, NC  
www.espassociates.com



**Helton Surveying & Mapping**  
Maiden, NC  
www.helton.biz

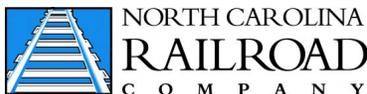


**Insurance Management Consultants Inc.**  
Davidson, NC  
www.imcipls.com

**Moss Oak Properties Land & Luxury**  
Statesville, NC  
tedbenbow.landandluxury.com

**SLS-NC, Inc.**  
Glennville, WV  
www.slsww.com

**TGS Engineers**  
Morganton, Shelby, & Garner, NC  
www.tgsengineers.com



**Johnson Lumber Products**  
Ivanhoe, NC  
email:stakes@intrstar.net

**NC Railroad Co.**  
Raleigh, NC  
www.ncrr.com

**SmartDrone**  
Tyler, TX  
www.smartdrone.us

**The Wooten Company**  
Raleigh, NC  
www.thewootencompany.com



**Land Design Insurance Group**  
Timonium, MD  
www.landdesigninsurance.com

**NV5 Engineers & Consultants**  
Raleigh & Charlotte, NC  
www.nv5.com

**Spatial Data Consultants**  
High Point, NC  
www.spatialdc.com

**Trans Ash Inc.**  
Cincinnati, OH  
www.transash.com



**Lawrence Associates PA**  
Monroe, NC  
www.lawrencesurveying.com

**R.B. Pharr & Associates**  
Charlotte, NC  
www.rbpharr.com

**Stewart, Inc.**  
Raleigh, Durham, & Charlotte, NC  
www.stewartinc.com

**Transit & Level, Inc.**  
Cary, NC  
www.transitandlevel.com



**Maps Surveying Inc.**  
Fayetteville & Raleigh, NC  
www.mapssurveying.com

**Regional Land Surveyors**  
Greensboro, NC  
www.regionallandsurveyors.com

**Summit Design and Engineering Services**  
Raleigh & Hillsborough, NC  
www.summitde.net

**US Survey Supply**  
Brandon, OR  
www.ussurveysupply.com



**McKim & Creed**  
Raleigh, NC  
www.mckimcreed.com

**Sam, LLC**  
Raleigh, NC  
www.sam.biz

**SURDEX Corporation**  
Chesterfield, MO  
www.surdex.net

**WithersRavenel**  
Cary, NC  
www.withersravenel.com



**Michael Underwood & Associates, P.A.**  
Wilmington, NC  
munderwood@mua-pa.com

**Scott Church Land Surveying**  
North Wilkesboro, NC  
www.scottchurchsurveying.com

**Taylor Wiseman & Taylor**  
Apex & Charlotte, NC  
www.taylorwiseman.com

**Younts Insurance Agency**  
Lexington, NC  
www.yountsinsurance.com