

DREDGE DISPOSAL SITE NO. 4  
AREA: 272,423.77 SQ. FT.  
(25,309 SQ. M)  
LAT.: 35°43'22.26" N  
LONG.: 82°05'36.65" W

WETLANDS AREA  
1.113 ACRES  
48,468.8 SQ. FT.  
\*INCLUDES OPEN WATER  
AREA\*

BUCK CREEK  
DREDGE SITE  
±1.7 ACRES  
(±73,350 SQ. FT.)

FEMA ZONE AE LIMITS PER  
FIRM MAP NO. 9710078300J  
EFFECTIVE 10-2-2008  
(TYPICAL LINE TAKEN FROM  
WWW.NCFLOODMAPS.COM)

COFFER DAM

FEMA ZONE AE LIMITS PER  
FIRM MAP NO. 9710078300J  
EFFECTIVE 10-2-2008  
(TYPICAL LINE TAKEN FROM  
WWW.NCFLOODMAPS.COM)

LAKE  
TAHOMA

DREDGE DISPOSAL SITE NO. 1  
AREA: 40,400.38 SQ. FT.  
(3,753 SQ. M)  
LAT.: 35°44'19.98" N  
LONG.: 82°05'17.45" W

WETLANDS AREA 1  
0.342 ACRES  
14,885.4 SQ. FT.

LITTLE BUCK CREEK  
DREDGE SITE  
±0.4 ACRES  
(±16,800 SQ. FT.)

WETLANDS AREA 2  
0.321 ACRES  
13,997.8 SQ. FT.

LINEAR  
WETLANDS  
AREA

PROP. ACCESS  
ROAD & TEMP.  
BRIDGE

DREDGE DISPOSAL SITE NO. 2  
AREA: 26,851.85 SQ. FT.  
(2,494.62 SQ. M)  
LAT.: 35°44'19.98" N  
LONG.: 82°04'59.52" W

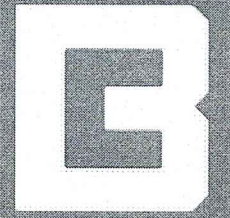
FEMA ZONE AE LIMITS PER  
FIRM MAP NO. 9710078300J  
EFFECTIVE 10-2-2008  
(TYPICAL LINE TAKEN FROM  
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DREDGE DISPOSAL SITE NO. 3  
AREA: 97,990.31 SQ. FT.  
(9,103.6 SQ. M)  
LAT.: 35°44'02.77" N  
LONG.: 82°04'52.57" W

GRAPHIC SCALE



(IN FEET)  
1 inch = 300 ft.



BROWN CONSULTANTS PA

30 BEN LIPPEN SCHOOL  
ROAD, STE. 202  
ASHEVILLE NC 28806  
PHONE: 828.350.7683  
FAX: 828.350.7684

DATE

NO.	REVISIONS	DATE	BY
	DESCRIPTION		

PROJECT TITLE: PROJECT NO.: 17017

DREDGE PROJECT  
FOR  
LAKE TAHOMA INC.

McDOWELL COUNTY NORTH CAROLINA

SHEET TITLE: OVERALL PLAN

SCALE: 1" = 300'

JANUARY 2018

FIELD BOOK#: XXXX

SHEET: 1 OF 1

FILE NAME: XXXXXXXXXXXXXXXXX



GLOBAL POSITIONING SYSTEM CERTIFICATION (OPUS-RS)

THE INITIAL POSITIONS FOR THIS PROJECT WERE PRODUCED FROM RAPID-STATIC GPS OBSERVATIONS (MIN. 15 MINUTE SESSIONS) UTILIZING SPECTRA PRECISION EPOCH 35 GNSS DUAL FREQUENCY RECEIVERS AND WERE COMPUTED BY NGS UTILIZING THE ONLINE POSITIONING USER SERVICE-RAPID STATIC (OPUS-RS) AND ARE RELATIVE TO THE FOLLOWING NGS CORS BASE STATIONS.

BASE STATIONS USED

PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
DE8230	MARI MARION CORS ARP	N353913.385	W0815716.172	14992.3
DG5311	NCSW SWANNANOA CORS ARP	N353546.038	W0822524.230	33330.0
DH7137	NCMG MORGANTON CORS ARP	N354227.073	W0813923.999	39528.4
DG7400	NCMA MARSHALL CORS ARP	N354847.313	W0824122.673	54793.7
DF4365	ASUB ASU-BOONE CORS ARP	N361250.844	W0814054.648	65446.8
DM3523	NCHI HICKORY CORS ARP	N354431.010	W0811830.935	70960.1
AJ5575	CONO CONOVER CORS ARP	N354209.468	W0811400.901	77799.4
DH3755	SCGP GREER CPW CORS ARP	N345615.688	W0821357.269	88612.5
DL2082	NCWJ W. JEFFERSON CORS ARP	N362334.948	W0812842.269	92246.7

REF FRAME: NAD83 (CORS96) (EPOCH:2002.0000)

DATE: JANUARY 21, 2011

TIME: 21:16:16 UTC

POSITIONAL ACCURACY: 0.04' (HORIZONTAL) 0.19' (VERTICAL)

ELEVATIONS ARE NAVD 1988 (GEOID MODEL=GEIOD09)

COMBINED GRID FACTOR = 0.99984460

UNITS ARE IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

NOTES

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3. THIS PROPERTY IS SUBJECT TO THE FULL RIGHT OF WAY WIDTH OF NC HIGHWAY 80.
4. AREA SHOWN HEREON WAS COMPUTED BY THE COORDINATE METHOD.
5. ALL DISTANCES/COORDS. SHOWN HEREON ARE HORIZONTAL GRID DISTANCES/COORDS.
6. SEE SHEET 2 FOR LINE TABLE CALLS.

LEGEND:

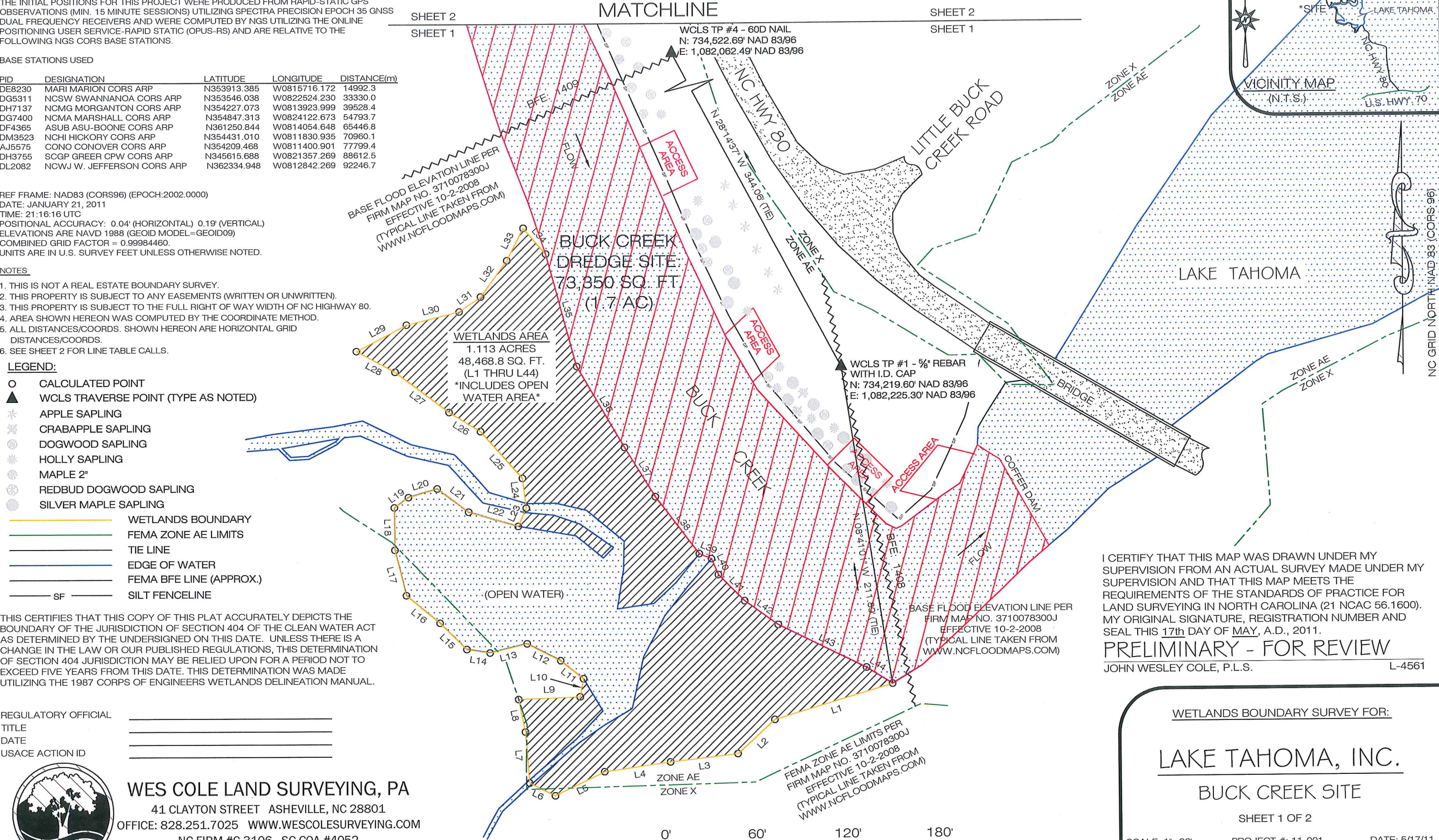
- O CALCULATED POINT
- ▲ WCLS TRAVERSE POINT (TYPE AS NOTED)
- \* APPLE SAPLING
- \* CRABAPPLE SAPLING
- \* DOGWOOD SAPLING
- \* HOLLY SAPLING
- \* MAPLE 2"
- \* REDBUD DOGWOOD SAPLING
- \* SILVER MAPLE SAPLING
- WETLANDS BOUNDARY
- FEMA ZONE AE LIMITS
- TIE LINE
- EDGE OF WATER
- FEMA BFE LINE (APPROX.)
- SF SILT FENCELINE

THIS CERTIFIES THAT THIS COPY OF THIS PLAT ACCURATELY DEPICTS THE BOUNDARY OF THE JURISDICTION OF SECTION 404 OF THE CLEAN WATER ACT AS DETERMINED BY THE UNDERSIGNED ON THIS DATE. UNLESS THERE IS A CHANGE IN THE LAW OR OUR PUBLISHED REGULATIONS, THIS DETERMINATION OF SECTION 404 JURISDICTION MAY BE RELIED UPON FOR A PERIOD NOT TO EXCEED FIVE YEARS FROM THIS DATE. THIS DETERMINATION WAS MADE UTILIZING THE 1987 CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL.

REGULATORY OFFICIAL \_\_\_\_\_  
TITLE \_\_\_\_\_  
DATE \_\_\_\_\_  
USACE ACTION ID \_\_\_\_\_



**WES COLE LAND SURVEYING, PA**  
41 CLAYTON STREET ASHEVILLE, NC 28801  
OFFICE: 828.251.7025 WWW.WESCOLESURVEYING.COM  
NC FIRM #C-3106 SC COA #4052  
NC L-4561 SC 27443 TN 2432



I CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION AND THAT THIS MAP MEETS THE REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA (21 NCAC 56.1600). MY ORIGINAL SIGNATURE, REGISTRATION NUMBER AND SEAL THIS 17th DAY OF MAY, A.D., 2011.

**PRELIMINARY - FOR REVIEW**  
JOHN WESLEY COLE, P.L.S. L-4561

WETLANDS BOUNDARY SURVEY FOR:

**LAKE TAHOMA, INC.**  
**BUCK CREEK SITE**

SHEET 1 OF 2

SCALE: 1"=60' PROJECT #: 11-001 DATE: 5/17/11  
MARION TOWNSHIP, McDOWELL COUNTY, NC



LEGEND:

- CALCULATED POINT  
▲ WCLS TRAVERSE POINT (TYPE AS NOTED)  
\* APPLE SAPLING  
\* CRABAPPLE SAPLING  
\* DOGWOOD SAPLING  
\* HOLLY SAPLING  
\* MAPLE 2"  
\* REDBUD DOGWOOD SAPLING  
\* SILVER MAPLE SAPLING

- WETLANDS BOUNDARY  
— FEMA ZONE AE LIMITS  
— TIE LINE  
— EDGE OF WATER  
— FEMA BFE LINE (APPROX.)  
— SILT FENCELINE

BASE FLOOD ELEVATION LINE PER  
FIRM MAP NO. 3710078300J  
EFFECTIVE 10-2-2008  
(TYPICAL LINE TAKEN FROM  
WWW.NCFLOODMAPS.COM)

BFE: 1410

ZONE AE  
ZONE X

BUCK CREEK  
DREDGE SITE:  
73,350 SQ. FT.  
(1.7 AC)

WCLS TP #4 - 60D NAIL  
N: 734,522.69' NAD 83/96  
E: 1,082,062.49' NAD 83/96

FEMA ZONE AE LIMITS PER  
FIRM MAP NO. 3710078300J  
EFFECTIVE 10-2-2008  
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SHEET 2  
SHEET 1

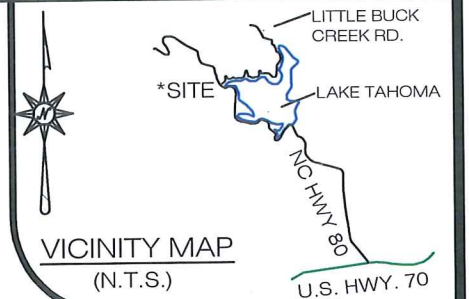
MATCHLINE

0' 60' 120' 180'

PRELIMINARY

\*\*\*PROGRESS DRAWING\*\*\*

NOT FOR SUBMITTAL,  
RECORDATION, OR CONVEYANCES



LINE	BEARING	DISTANCE
L1	S 73°17'42" W	80.84'
L2	S 47°43'17" W	33.30'
L3	S 83°22'09" W	44.73'
L4	S 81°47'48" W	43.51'
L5	S 64°19'02" W	36.22'
L6	N 63°20'53" W	18.97'
L7	N 04°26'31" W	33.85'
L8	N 11°25'58" W	21.99'
L9	N 87°50'42" E	40.69'
L10	N 10°44'25" E	12.15'
L11	N 51°18'46" W	19.23'
L12	N 62°58'25" W	24.88'
L13	S 76°20'38" W	25.10'
L14	N 81°07'47" W	15.41'
L15	N 45°35'29" W	24.90'
L16	N 50°16'57" W	28.61'
L17	N 13°55'23" W	30.92'
L18	N 00°36'20" W	27.99'
L19	N 54°19'32" E	11.53'
L20	N 73°16'29" E	19.68'
L21	S 53°32'22" E	25.94'
L22	S 73°37'28" E	33.96'

LINE	BEARING	DISTANCE
L23	N 24°00'23" E	13.11'
L24	N 06°57'12" W	19.85'
L25	N 41°36'27" W	41.45'
L26	N 58°34'26" W	24.32'
L27	N 53°04'20" W	44.39'
L28	N 61°32'20" W	28.82'
L29	N 62°16'38" E	37.19'
L30	N 76°10'41" E	35.83'
L31	N 55°22'24" E	17.20'
L32	N 36°07'00" E	29.59'
L33	N 26°57'36" E	23.88'
L34	S 41°05'28" E	22.66'
L35	S 15°17'36" E	76.99'
L36	S 30°14'48" E	62.00'
L37	S 31°39'59" E	38.33'
L38	S 37°12'12" E	47.40'
L39	S 66°57'28" E	8.70'
L40	S 23°26'23" E	11.51'
L41	S 44°36'16" E	24.37'
L42	S 54°20'41" E	27.31'
L43	S 63°36'19" E	64.54'
L44	S 57°29'24" E	20.13'

GLOBAL POSITIONING SYSTEM CERTIFICATION (OPUS-RS)

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REGULATORY OFFICIAL

TITLE

DATE

USACE ACTION ID



WES COLE LAND SURVEYING, PA

41 CLAYTON STREET ASHEVILLE, NC 28801

OFFICE: 828.251.7025 WWW.WESCOLESURVEYING.COM

NC FIRM #C-3106 SC COA #4052

NC L-4561 SC 27443 TN 2432

NOTES

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4. AREA SHOWN HEREON WAS COMPUTED BY THE COORDINATE METHOD.
5. ALL DISTANCES/COORDS. SHOWN HEREON ARE HORIZONTAL GRID DISTANCES/COORDS.
6. LINE TABLE CALLS PERTAIN TO WETLANDS BOUNDARY SHOWN ON SHEET 1.

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PRELIMINARY - FOR REVIEW

JOHN WESLEY COLE, P.L.S.

L-4561

WETLANDS BOUNDARY SURVEY FOR:

LAKE TAHOMA, INC.

BUCK CREEK SITE

SHEET 2 OF 2

SCALE: 1"=60'

PROJECT #: 11-001

DATE: 5/17/11

MARION TOWNSHIP, McDOWELL COUNTY, NC



SHEET 2  
SHEET 1

I CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION AND THAT THIS MAP MEETS THE REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA (21 NCAC 56.1600). MY ORIGINAL SIGNATURE, REGISTRATION NUMBER AND SEAL THIS 17th DAY OF MAY, A.D., 2011.

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3. THIS PROPERTY IS SUBJECT TO THE FULL RIGHT OF WAY WIDTH OF LAKESHORE DRIVE.
4. AREA SHOWN HEREON WAS COMPUTED BY THE COORDINATE METHOD.
5. ALL DISTANCES/COORDS. SHOWN HEREON ARE HORIZONTAL GRID DISTANCES/COORDS.
6. SEE SHEET 3 FOR LINE TABLE CALLS.

LEGEND:

- CALCULATED POINT  
▲ WCLS TRAVERSE POINT (TYPE AS NOTED)
- WETLANDS BOUNDARY  
— FEMA ZONE AE LIMITS  
— TIE LINE  
— EDGE OF WATER  
— FEMA BFE LINE (APPROX.)  
— OVERHEAD UTILITY LINE

GLOBAL POSITIONING SYSTEM CERTIFICATION (RTK)

THE NETWORK POSITIONAL ACCURACY OF THE RTK DERIVED POSITIONAL INFORMATION IS 0.03' HORIZONTAL & 0.03' VERTICAL.

HORIZONTAL POSITIONS ARE REFERENCED TO NAD 83 (NSRS 2007)  
VERTICAL POSITIONS ARE REFERENCED TO NAVD 88 (GEOID 09)  
COMBINED FACTOR 0.9998453

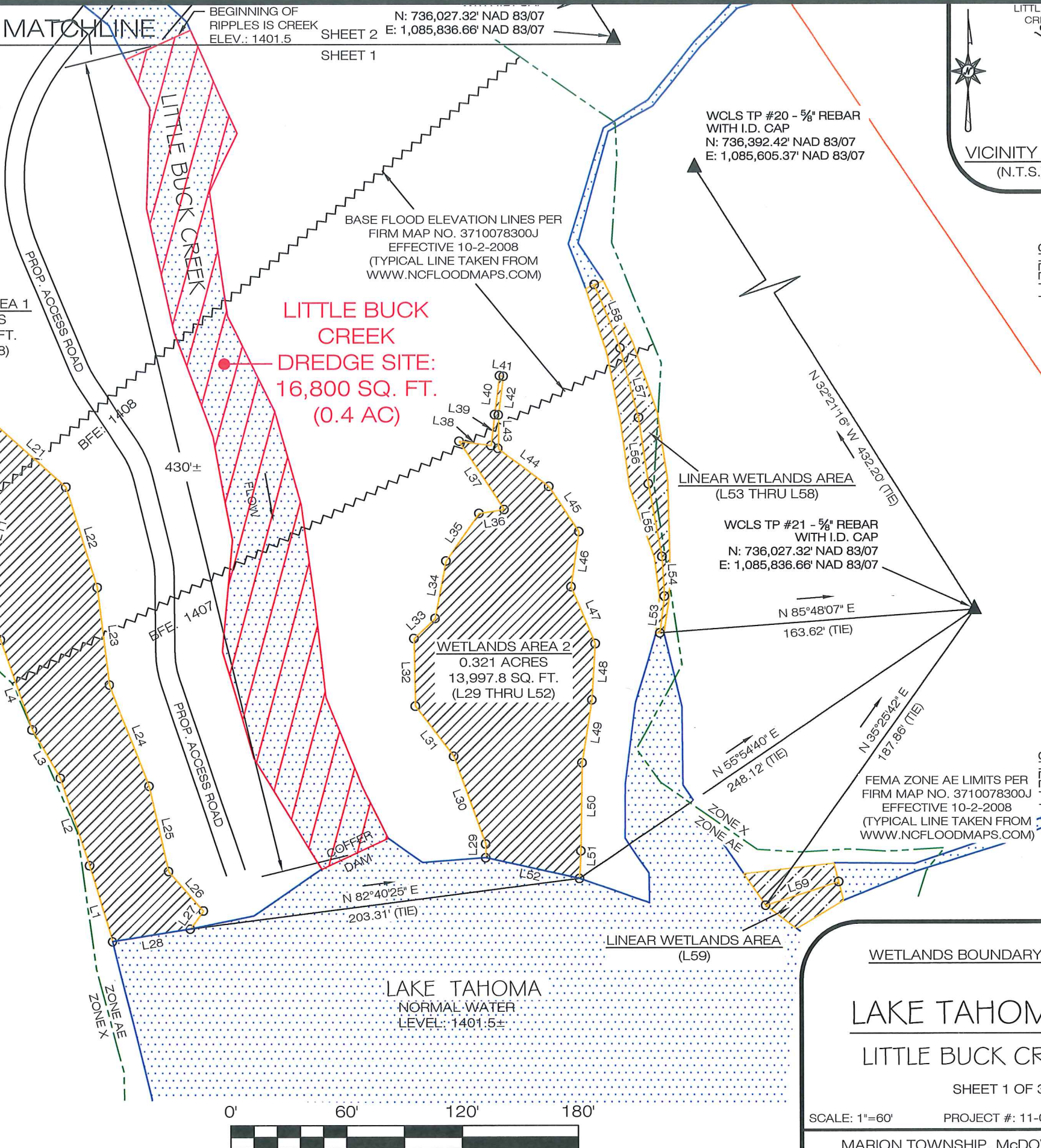
EQUIPMENT USED: SPECTRA PRECISION EPOCH 35 GNSS DUAL FREQUENCY RECEIVER

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NC FIRM #C-3106 SC COA #4052  
NC L-4561 SC 27443 TN 2432



VICINITY MAP  
(N.T.S.)

SHEET 3  
MATCHLINE

SHEET 1

WETLANDS BOUNDARY SURVEY FOR:

**LAKE TAHOMA, INC.**  
**LITTLE BUCK CREEK SITE**

SHEET 1 OF 3

SCALE: 1"=60' PROJECT #: 11-001 DATE: 5/17/11  
MARION TOWNSHIP, McDOWELL COUNTY, NC



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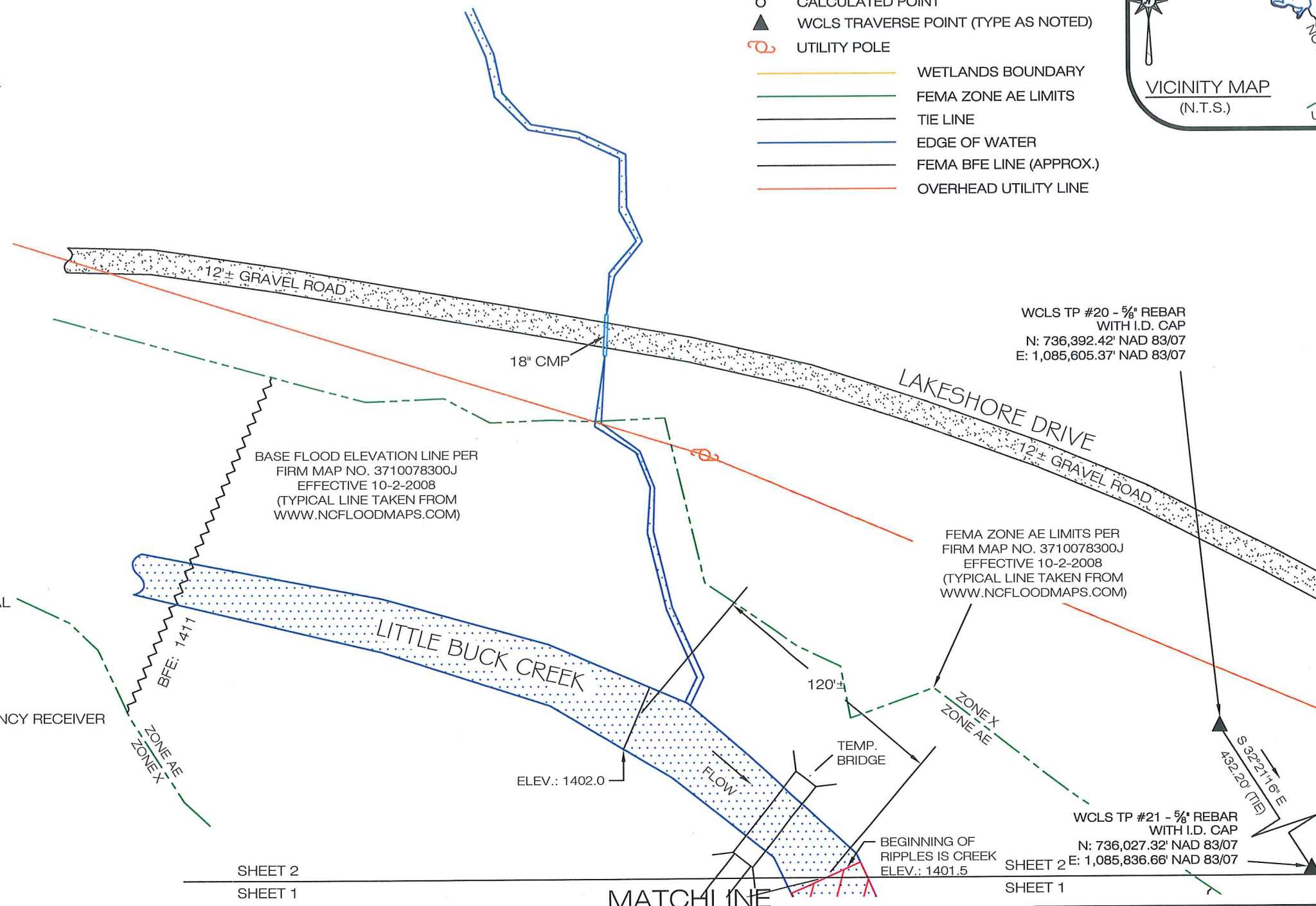
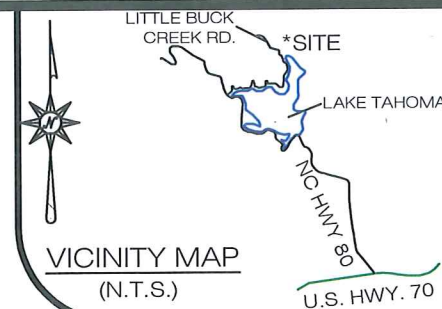
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NC FIRM #C-3106 SC COA #4052

NC L-4561 SC 27443 TN 2432

LEGEND:

- O CALCULATED POINT
- ▲ WCLS TRAVERSE POINT (TYPE AS NOTED)
- UTILITY POLE
- WETLANDS BOUNDARY
- FEMA ZONE AE LIMITS
- TIE LINE
- EDGE OF WATER
- FEMA BFE LINE (APPROX.)
- OVERHEAD UTILITY LINE



**PRELIMINARY**  
\*\*\*PROGRESS DRAWING\*\*\*  
NOT FOR SUBMITTAL,  
RECORDATION, OR CONVEYANCES



WETLANDS BOUNDARY SURVEY FOR:

**LAKE TAHOMA, INC.**

**LITTLE BUCK CREEK SITE**

SHEET 2 OF 3

SCALE: 1"=60'

PROJECT #: 11-001

DATE: 5/17/11

MARION TOWNSHIP, McDOWELL COUNTY, NC