

R. D. Richards Surveying, Inc.

8567 C.R. 13 North

St. Augustine, Fl. 32092

Phone: (904) 940-0721 Fax: (904) 940-5896

Licensed Business No. 7397

Specific Purpose Survey

Antenna Direction Certification

TOWER OWNER:

PHILLIPS BROADCASTING, LLC
567 LEWIS POINT RD. EXTENSION
ST. AUGUSTINE, FL 32086

TOWER LOCATION:

567 LEWIS POINT RD
ST. AUGUSTINE, FL 32086

ANTENNA STRUCTURE REGISTRATION NUMBER:

ASRN 1027312

ANTENNA OWNER:

FLAGLER BROADCASTING, LLC
3434 SW 26TH PLACE
CAPE CORAL, FL 33914

GENERAL NOTES:

- 1.) THIS IS A SPECIFIC PURPOSE SURVEY.
- 2.) THE PURPOSE OF THE SURVEY WAS TO ORIENT A DIRECTIONAL FM ANTENNA TO A SPECIFIC AZIMUTH. THE AZIMUTH SPECIFIED FOR THE ANTENNA WAS 255 DEGREES, TRUE NORTH, RECKONED CLOCKWISE FROM TRUE NORTH.
- 3.) METHOD USED:
 - A.) FOR THE TOWER LOCATION TWO CONTROL POINTS WERE SET. GEODETIC COORDINATES WERE THEN OBTAINED BY USING A TOPCON HIPER LITE+ GPS RECEIVER AS A ROVER. RTK CORRECTIONS WERE OBTAINED FROM THE FLORIDA PERMANENT REFERENCE NETWORK (FPRN). USING THE TWO CONTROL POINTS THE TOWER WAS THEN LOCATED USING A SOKKIA SRX ROBOTIC TOTAL STATION. FROM THIS AN INITIAL ANTENNA FEEDLINE POSITION WAS THEN CALCULATED.

- B.) FOR THE CONTROL AZIMUTH TWO CONTROL POINTS WERE SET. THE FIRST CONTROL POINT (POINT "A") WAS SET AT AN AZIMUTH OF 255° (TRUE NORTH) AND AT A DISTANCE OF 542.4' FROM THE FEEDLINE. THE SECOND CONTROL POINT (POINT "B") WAS SET AT A RANDOM AZIMUTH AND DISTANCE. GEODETIC COORDINATES WERE THEN OBTAINED BY USING A TOPCON HIPER LITE+ GPS RECEIVER AS A ROVER. RTK CORRECTIONS WERE OBTAINED FROM THE FLORIDA PERMANENT REFERENCE NETWORK (FPRN).
- C.) THE ANTENNA WAS THEN ORIENTED BY USING A SOKKIA SRX ROBOTIC TOTAL STATION. THE TOTAL STATION WAS SET ON POINT "A". POINT "B" WAS USED AS A BACKSIGHT. THE APPROPRIATE ANGLE WAS THEN TURNED FROM THE BACKSITE (POINT "B") TO THE ANTENNA FEEDLINE AS AN AZIMUTH CHECK. AFTER THE AZIMUTH CHECK WAS MADE THE ANTENNA WAS THEN ORIENTED TO THE AZIMUTH OF 255° (TRUE NORTH).

4.) THE ACCURACY OF THE ANTENNA ORIENTATION OF 255 DEGREES IS PLUS OR MINUS 1 DEGREES.

5.) THIS IS A TWO PAGE DOCUMENT AND NOT VALID UNLESS BOTH SHEETS ARE PRESENT.

6.) SURVEY DATE: 12/13/2015

7.) THIS SURVEY MEETS THE STANDARDS OF PRACTICE ADOPTED BY THE FLORIDA DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES, BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS, CHAPTER 5J-17 OF THE FLORIDA ADMINISTRATIVE CODE.

DocuSigned by:

C774B3390C6C436...

DS


12/15/2015 | 10:44 AM ET

Robert D. Richards
Professional Surveyor and Mapper
Florida Cert. #5790