

February 10, 2011
File No. 25140.00

Mr. Keith Kinney
Engineer/I.T. Manager
Clear Channel Radio
1003 Norfolk Square
Norfolk, Virginia 23502

Re: Directional Antenna Alignment, Located in Chesapeake, Virginia

Dear Mr. Kinney:

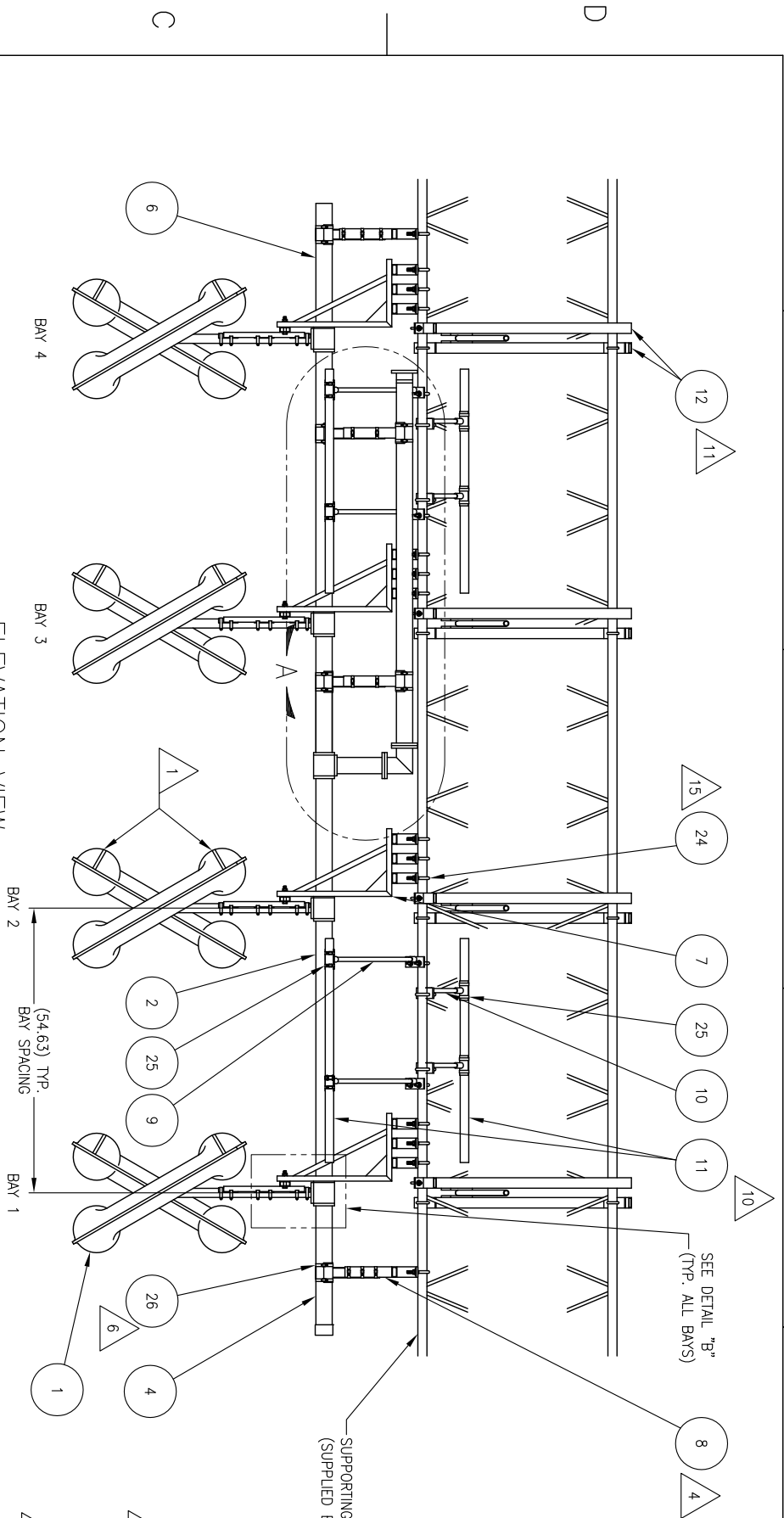
This letter is to certify that the 4-bay directional antenna system installed for Clear Channel Radio (WKUS) on January 28, 2011 in Chesapeake, Virginia, Tax Parcel ID 1320000000031, located at the intersection of Poindexter Street and I-464 was found to be oriented to 151° 15' true north, a deviation of 0° 15' from 151° orientation specified by the antenna manufacturer on the plans prepared by Electronics Research, Inc. entitled "MP-4C-DA-SP Installation" dated February 5, 2010 and revised February 1, 2010 having a revision description of "Revised Antenna Orientation Per Test Site".

Sincerely,

Baldwin & Gregg, LTD

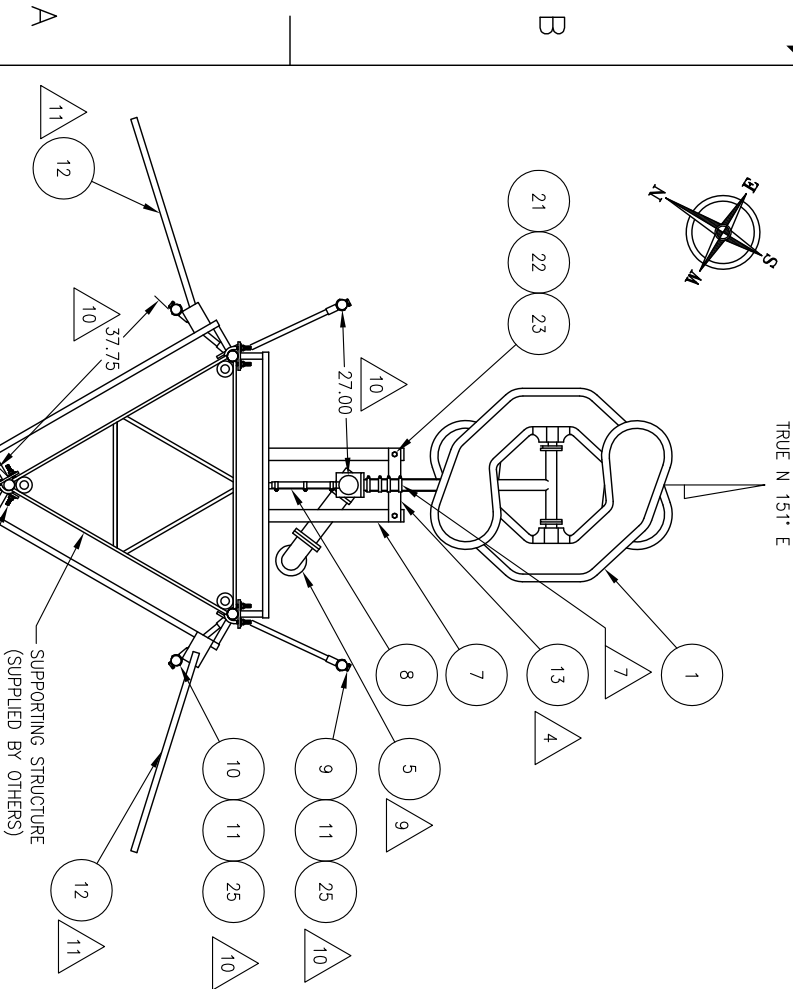
A handwritten signature in blue ink, appearing to read "Eric S. Patterson".

Eric S. Patterson, L.S.
Director of Surveys



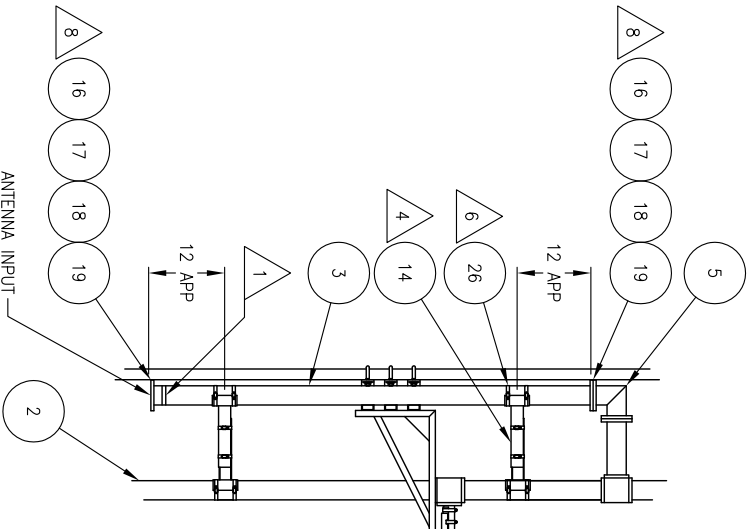
ELEVATION VIEW

SCALE: 1:16



TOP VIEW

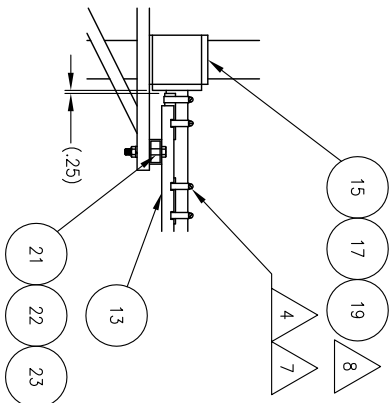
SCALE: 1:16



DETAIL "A"

SCALE: 1:16

NOTE: DIRECTORS HAVE BEEN OMITTED FOR CLARITY.



DETAIL "B"

SCALE: 1:8

NOTES:

1. ALL RED BANDS DESIGNATE SIDE TO BE MOUNTED DOWNWARD
2. ASSEMBLE ANTENNA SYSTEM BY MATING CORRESPONDING NUMBERS.
3. OVERALL LENGTH OF ANTENNA SYSTEM IS 18'-2" APPROXIMATE.
4. ENSURE TO PLUMB ANTENNA VERTICALLY BY LOOSENING HOSE CLAMPS ON PRE-CLAMPED SUPPORT SADDLES AND ADJUSTABLE LINE BRACKETS.
5. FINAL ORIENTATION TO BE DETERMINED BY LICENSED SURVEYOR.

6. HOSE CLAMPS USED TO SECURE LINE BRACKETS TO INTERBAY LINE.
7. HOSE CLAMPS USED TO SECURE ELEMENTS TO SUPPORT SADDLE.
8. APPLY 1/2 GREASE PACKET TO EACH O-RING.
9. CENTERFREED CAN BE ROTATED TO AVOID ANY OBSTRUCTIONS.
10. VERTICAL DIRECTORS ARE INTERLEAVED BETWEEN BAY PAIRS. DEMENSIONS ARE THE SAME FOR BOTH SIDES.
11. HORIZONTAL DIRECTORS ARE MOUNTED AT BAY LEVEL.
12. UNLESS OTHERWISE NOTED, ALL BOLTED CONNECTIONS SHALL INITIALLY BE BROUGHT TO A SNUG-TIGHT CONDITION WHERE JOINT TIGHTNESS IS ATTAINED WITH A FEW IMPACTS OF AN ORDINARY SPUD WRENCH TO BRING THE PILES INTO FIRM CONTACT. A SYSTEMATIC APPROACH SHALL BE USED TO BRING THE JOINT INTO A SNUG-TIGHT CONDITION STARTING WITH THE MOST RIGID PART OF THE JOINT AND PROCEEDING TOWARD THE FREE EDGES.
13. APPLY AN ADDITIONAL 1/3 TURN TO ALL BOLTED CONNECTIONS FOR FINAL TIGHTENING. UNLESS OTHERWISE NOTED, FINAL TIGHTENING OF ALL BOLTS SHOULD BE COMPLETED AFTER FINAL CONSTRUCTION OF THE STRUCTURE/ASSEMBLY. PLEASE NOTE, SPECIAL ATTENTION SHALL BE GIVEN TO TIGHTENING OF 1/2" DIAMETER A325 BOLTS, U-BOLTS, AND THREADED RODS AS TO PREVENT STRIPPING THE THREADS FROM OVER-TIGHTENING.
14. THE C.O.R. FOR THIS ANTENNA IS 420'.
15. ITEMS ARE TYPICAL THROUGHOUT THE ANTENNA ARRAY.

SPECIFICATIONS				THIRD ANGLE PROJECTION			
INFO	INSPECTION	TEST	FINISH	INTERNAL	EXTERNAL	UNLESS OTHERWISE SPECIFIED, TOLERANCES	UNLESS OTHERWISE SPECIFIED
—	—	—	—	—	—	1. PLACE DIMENSIONS ± .030	1. PLACE DIMENSIONS ± .030
—	—	—	—	—	—	2. PLACE DIMENSIONS ± .003	2. PLACE DIMENSIONS ± .003
—	—	—	—	—	—	3. PLACE DIMENSIONS ± .003	3. PLACE DIMENSIONS ± .003
—	—	—	—	—	—	4. PLACE DIMENSIONS ± .003	4. PLACE DIMENSIONS ± .003
—	—	—	—	—	—	5. PLACE DIMENSIONS ± .003	5. PLACE DIMENSIONS ± .003
—	—	—	—	—	—	6. PLACE DIMENSIONS ± .003	6. PLACE DIMENSIONS ± .003
—	—	—	—	—	—	7. PLACE DIMENSIONS ± .003	7. PLACE DIMENSIONS ± .003
—	—	—	—	—	—	8. PLACE DIMENSIONS ± .003	8. PLACE DIMENSIONS ± .003
—	—	—	—	—	—	9. PLACE DIMENSIONS ± .003	9. PLACE DIMENSIONS ± .003
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—	—	—	—	—	—	11. PLACE DIMENSIONS ± .003	11. PLACE DIMENSIONS ± .003
—	—	—	—	—	—	12. PLACE DIMENSIONS ± .003	12. PLACE DIMENSIONS ± .003
—	—	—	—	—	—	13. PLACE DIMENSIONS ± .003	13. PLACE DIMENSIONS ± .003
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—	—	—	—	—	—	15. PLACE DIMENSIONS ± .003	15. PLACE DIMENSIONS ± .003
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—	—	—	—	—	—	21. PLACE DIMENSIONS ± .003	21. PLACE DIMENSIONS ± .003
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—	—	—	—	—	—	23. PLACE DIMENSIONS ± .003	23. PLACE DIMENSIONS ± .003
—	—	—	—	—	—	24. PLACE DIMENSIONS ± .003	24. PLACE DIMENSIONS ± .003
—	—	—	—	—	—	25. PLACE DIMENSIONS ± .003	25. PLACE DIMENSIONS ± .003
—	—	—	—	—	—	26. PLACE DIMENSIONS ± .003	26. PLACE DIMENSIONS ± .003
—	—	—	—	—	—	27. PLACE DIMENSIONS ± .003	27. PLACE DIMENSIONS ± .003
—	—	—	—	—	—	28. PLACE DIMENSIONS ± .003	28. PLACE DIMENSIONS ± .003

REVISIONS				REVISIONS			
REV	DESCRIPTION	DATE	APPROVED	REV	DESCRIPTION	DATE	APPROVED
A	REVISED ANTENNA ORIENTATION PER TEST SITE	2/1/2011	GH				

13	EA	HC0048	#48 HOSE CLAMP, SS	26
35	EA	HC0028	#28 HOSE CLAMP, SS	25
66	EA	UB0813-0262GA	1/2-13 X 2.63" U-BOLT, GA	24
9	EA	NU0813	1/2-13 HEX NUT, SS	23
9	EA	WI08SS	1/2" SPLIT LOCKWASHER, SS	22
9	EA	SC0813H0300	1/2-13 X 3" LG H.H., SS	21
6	EA	GREASE	SILICONE GREASE PACKETS	20
11	EA	OR2340S	3 1/8 SILICONE O-RING	19
13	EA	NU0616	3/8-16 HEX NUT, SS	18
48	EA	WI06SS	3/8" SPLIT LOCKWASHER, SS	17
13	EA	SC0616H0150	3/8-16 X 1.50 LG H.H., SS	16
35	EA	SC0616H0087	3/8-16 X .88 LG H.H., SS	15
2	EA	BT0014	LINE TO LINE BRACKETS	14
4	EA	BT25121A-7	ANTENNA SADDLE	13
8	EA	BT25121A-6	HORIZONTAL DIRECTORS	12
8	EA	BT25121A-5	VERTICAL DIRECTORS	11
8	EA	BT25121A-4	VERTICAL DIRECTOR BRKS 10.25"	10
8	EA	BT25121A-3	VERTICAL DIRECTOR BRKS 18"	9
2	EA	BT25121A-2	LINE BRACKETS	8
4	EA	BT25121A-1	ELEMENT BRACKETS	7
1	EA	CO0033	24" LINE STUB	6
1	EA	CL3064C-50.63	CENTERFREED ASSEMBLY	5
1	EA	CL3063B-25.31	1/4 WAVE STUB	4
1	EA	CL3031	6" MATCHING SECTION	3
2	EA	CL3061B-50.63	INTERBAY LINE	2
4	EA	AE-CP-3BR0	RADIATING ELEMENT	1

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