

REQUEST TO WAIVE FILING DEADLINE FOR CONSTRUCTION PERMIT APPLICATION

Graham Media Group, Florida, Inc. (“Graham”), licensee of television stations WCWJ and WJXT, Jacksonville, Florida (the “Stations”), is unable to construct the post-Incentive Auction facilities assigned to WCWJ in the *Closing and Reassignment PN*¹ due to the limitations of WCWJ’s existing tower and tower site. Graham plans instead to co-locate the post-Auction facilities of WCWJ and WJXT on WJXT’s tower, which can be modified to accommodate both Stations in addition to the tower’s other existing tenants. Graham’s analysis and proposal are detailed in Attachment A hereto (the “Repacking Plan”). Accordingly, the Stations hereby request a waiver of the initial construction permit application deadline for reassigned stations so that both Stations may file coordinated applications for alternate facilities in the first priority window.²

Grant of these waivers will serve the public interest by allowing the Stations to efficiently and cost-effectively construct post-Auction facilities while maintaining service to their communities. Moreover, grant of these waivers will not impede or delay any other station’s post-Auction transition or cause additional interference to any station. The Commission therefore should grant these waivers expeditiously.

WCWJ Cannot Construct the Assigned Post-Auction Facilities

WCWJ and WJXT both are licensed to Jacksonville, Florida, and their transmitters are located just over one-half mile apart. Both Stations have been reassigned to new channels in connection with the post-Auction repacking. The Commission has assigned WCWJ to Channel 20 and WJXT to Channel 18; both Stations are assigned to Phase 7.

A station qualifies for an “unable to construct” waiver of the initial construction permit application deadline if the station “is unable to construct a compliant facility on its current tower and a replacement tower cannot be constructed from which the station would be able to meet the specified technical parameters.”³ That is precisely WCWJ’s position. WCWJ’s existing tower was constructed prior to the adoption of the current structural standard for antenna supporting structures, TIA-222-G. Because construction of WCWJ’s post-Auction facilities would require changing the type, size, and/or number of appurtenances on the tower, that construction must be evaluated under the current standard. Graham engaged Malouf Engineering Intl., Inc. (“Malouf”) to assess whether WCWJ’s post-Auction facility could be constructed on the Station’s existing tower — or on any replacement tower at the existing site — in compliance with TIA-222-G. Malouf concluded that no such modification or replacement of WCWJ’s

¹ *Incentive Auction Closing and Channel Reassignment Public Notice*, Docket No. 12-268 *et al.*, Public Notice, DA 17-314 (MB & WTB April 13, 2017) (“*Closing and Reassignment PN*”).

² See *Closing and Reassignment PN* ¶ 70.

³ *Incentive Auction Task Force and Media Bureau Announce Procedures for the Post-Incentive Auction Broadcast Transition*, Public Notice, 32 FCC Rcd 858, 865 ¶ 25 (MB 2017) (“*Procedures PN*”).

current tower is possible at the existing site.⁴ Most notably, because the tower is located in a densely populated area, the current standard would require the new or modified tower to have a guy radius of at least 80 percent of the overall tower height — more than twice the guy radius of the existing tower and well beyond the boundaries of the current site and any surrounding property Graham could feasibly obtain.⁵

Co-Locating the Stations' Post-Auction Facilities Best Serves the Public Interest

Given that Graham cannot construct WCWJ's post-Auction facilities at the Station's current site, Graham has determined that it would be most efficient and cost-effective to construct the post-Auction facilities for both WCWJ and WJXT on WJXT's existing tower, as further detailed below and in the attached Repacking Plan. This co-location would be accomplished by replacing WJXT's existing single-channel directional slot antenna with a shared multi-channel or broadband antenna. A Malouf structural analysis confirms that the necessary modifications to WJXT's tower are feasible, and Graham has confirmed that there is sufficient space at the transmitter site to accommodate the necessary equipment.⁶

For the reasons set forth above, WCWJ satisfies the Commission's standards specifically governing unable-to-construct waivers. The public interest would be best served by extending this waiver to include WJXT, as well, so that both Stations may file coordinated applications for alternate facilities in the first priority window.

A waiver is appropriate "where the particular facts make strict compliance inconsistent with the public interest" and a deviation from the general rule would relieve hardship or produce a "more effective implementation of overall policy on an individual basis."⁷ In the particular context of the post-Auction transition, the Commission has recognized that "alternative transition solutions" proposed by repacked stations "may reduce reimbursement costs or implement a market-wide transition plan that could allow stations to more efficiently utilize limited resources, facilitate coordination, or reduce the impact of the transition on television viewers,"⁸ thus serving the Commission's overall policy of "implement[ing] effectively and efficiently the post-incentive auction transition."⁹

⁴ Repacking Plan at 14-18.

⁵ See Repacking Plan at 18-22.

⁶ Repacking Plan at 31-32, 42-44.

⁷ *Procedures PN*, 32 FCC Rcd at 865 ¶ 24 n.36 (citing *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990) and *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969)).

⁸ See *Incentive Auction Task Force and Media Bureau Adopt Post-Incentive Auction Transition Scheduling Plan*, Public Notice, 32 FCC Rcd 890, 913 ¶ 50 (MB 2017) ("*Transition Scheduling PN*").

⁹ *Procedures PN*, 32 FCC Rcd at 863 ¶ 14.

Graham's alternative transition solution for the Stations offers precisely these types of benefits. In addition to providing a technically feasible approach to construct WCWJ's post-Auction facilities, co-locating the Stations would dramatically reduce the Stations' combined relocation costs. Graham estimates constructing a standalone facility for WCWJ — which, as discussed above, is impossible at the Station's current site — would cost nearly \$6.6 million, including more than \$2.5 million for a new tower.¹⁰ A standalone facility for WJXT would cost nearly \$5.7 million, with a combined cost for both facilities of more than \$12.5 million.¹¹ In contrast, Graham estimates it could construct combined facilities serving both Stations for less than \$9.2 million, thus saving more than \$3.35 million in costs for which the Stations otherwise would be entitled to seek reimbursement.¹²

Finally, granting the waivers requested herein will facilitate the Stations' transition without any adverse effect on any other station. The Stations' existing contours already are quite similar and would become even more closely aligned under Graham's co-location proposal.¹³ The proposed facilities thus would not cause new interference to any station. Nor would waiving the initial construction application deadline for the Stations delay their transition. Graham is not seeking a waiver of the Phase 7 transition deadline. If anything, Graham expects construction of the combined facility would require significantly less time than constructing two standalone facilities (assuming an acceptable standalone site for WCWJ could be located at all). Thus, Graham's proposal would not create or affect transition dependencies among other stations, or otherwise impact any other station's transition schedule.

* * *

Accordingly, for the reasons set forth herein, the Commission should waive the initial construction permit application deadline for WCWJ and WJXT.

¹⁰ Repacking Plan at 33-36.

¹¹ Repacking Plan at 37-41.

¹² Repacking Plan at 40-41.

¹³ For business reasons, Graham also expects to request that it be allowed to swap the Stations' post-Auction channels. Because the Stations would be co-located, such a swap would have no effect on the Stations' combined contour.

Attachment A

WJXT-DT & WCWJ-DT

Repack

Jacksonville, FL

Phase 7 (Both)



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INTRODUCTION



GRAHAM
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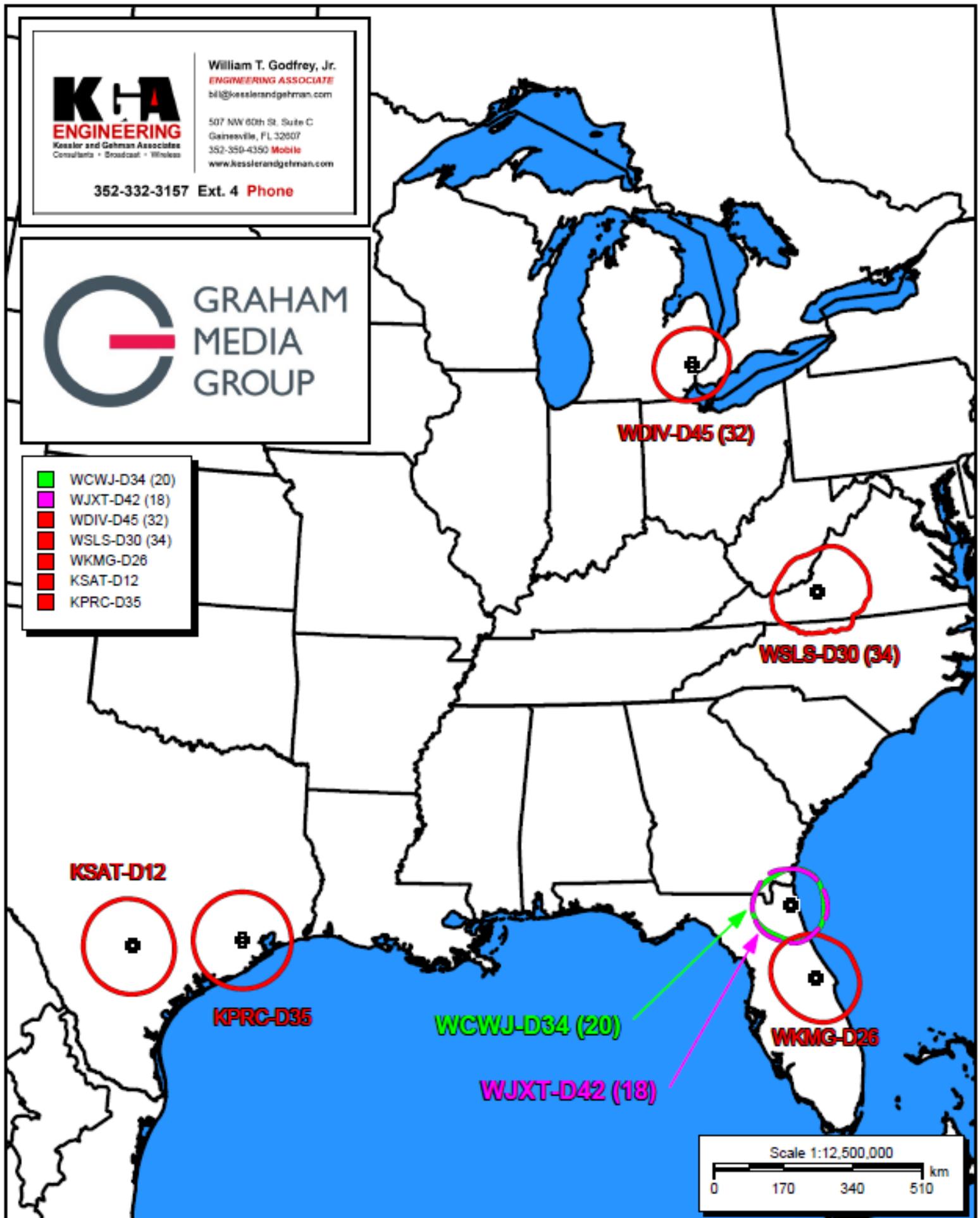
William T. Godfrey, Jr.
ENGINEERING ASSOCIATE
 wtg@kesslerandgetman.com
 507 NW 60th St. Suite C
 Gainesville, FL 32607
 352-350-4350 Mobile
 www.kesslerandgetman.com

352-332-3157 Ext. 4 Phone



**GRAHAM
 MEDIA
 GROUP**

- WCWJ-D34 (20)
- WJXT-D42 (18)
- WDIV-D45 (32)
- WSLs-D30 (34)
- WKMG-D26
- KSAT-D12
- KPRC-D35



Graham Media Group Repack (4 of 7 Stations)

PREVIEW (C⁴)

➤ COMPLEX

“CANNOT CONTRUCT” = Waiver

➤ CONTINGENT

WCWJ and WJXT in 1st Priority Filing Window

➤ COLLOCATED

Savings Greater Than \$3.5 Million

➤ COMMISSION

Need FCC Approval Before June 12th Waiver Deadline





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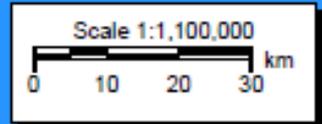
F(50,90) 40.68

WCWJ-DT



WJXT-DT

F(50,90) 41.36



WCWJ-D34 (20)
BLCDT20060630AFM
Latitude: 30-16-36 N
Longitude: 081-33-47 W
ERP: 863.00 kW
Channel: 34
Frequency: 593.0 MHz
AMSL Height: 288.0 m
Elevation: 10.0 m
Horiz. Pattern: Directional

WJXT-D42 (18)
BLCDT20020405AAX
Latitude: 30-16-24 N
Longitude: 081-33-13 W
ERP: 976.00 kW
Channel: 42
Frequency: 641.0 MHz
AMSL Height: 300.0 m
Elevation: 15.0 m
Horiz. Pattern: Directional

Graham Media Group Repack (WCWJ & WJXT)

WCWJ-DT Repack

Channel 34 to 20

Jacksonville, FL

Phase 7



GRAHAM
MEDIA
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WCWJ-DT Repack – Channel 34 to 20

Jacksonville, Florida



PHASE 7



Newton Rd

Newton Rd

Southwind Villas



ANSI/TIA-222-G-2005
APPROVED: AUGUST 2, 2005
REAFFIRMED: DECEMBER 20, 2012
REAFFIRMED: AUGUST 3, 2016

TIA STANDARD

Structural Standard for Antenna Supporting Structures and Antennas

**TIA-222-G
(Revision of TIA-222-F)**

August 2005

ANSI/TIA-222-G Explained

Existing Structures - Defined

As a minimum, existing structures shall be analyzed in accordance with this Standard, regardless of the standard used for the design of the original structure, under any of the following conditions:

- a change in type, size, or number of appurtenances such as antennas, transmission lines, platforms, ladders, etc.
- a structural modification, excepting maintenance, is made to the structure
- a change in serviceability requirements
- a change in the classification of the structure to a higher class in accordance with Table 2-1.

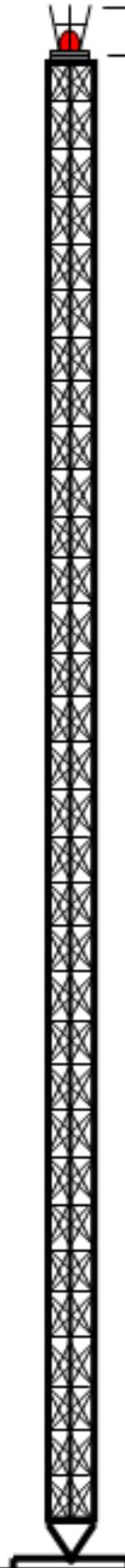
Note: Existing structures need not be re-analyzed for each revision of this Standard unless there are changed conditions as outlined above.



WCWJ-DT ELEVATION VIEW

Overall Height of Structure with appurtenances

Height without beacon



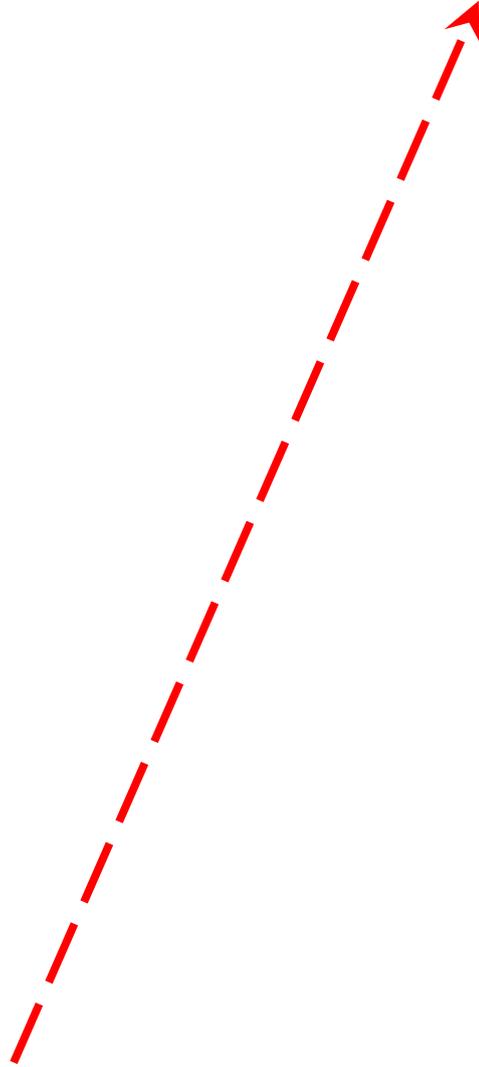
New Standards for Broadcast Structures ANSI/EIA/TIA-222-G

JOHN WAHBA, PH.D., PE
Radian Communication Services
Oakville, ON, Canada

DAVID BRINKER, PE
Rohn Industries, Inc.
Peoria, IL

MARK MALOUF, PE
Malouf Engineering Intl.
Richardson, TX

JOHN ERICHSEN, PE
Valmont Communications
Plymouth, IN



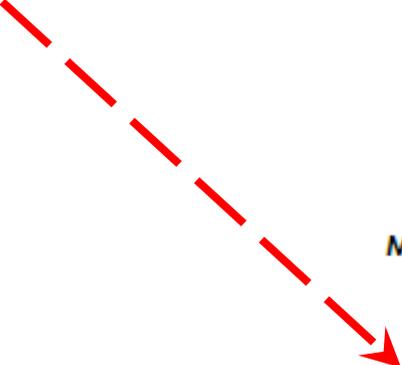
Rigorous Structural Analysis Report



Graham Media Group - WCWJ-TV - CW17 Tower Site
Owner: Graham Media Group
Jacksonville, Florida

March 31, 2017

MEI PROJECT ID: FL05074G-17V1



MALOUF ENGINEERING INTL., INC.



STRUCTURAL CONSULTANTS

17950 PRESTON ROAD, SUITE 720 ■ DALLAS, TEXAS 75252 ■ TEL. 972-783-2578 FAX 972-783-2583
www.maloufengineering.com





March 31, 2017

Mr. Michael Englehaupt
Graham Media Group
 Chicago, IL 60601

RIGOROUS STRUCTURAL ANALYSIS

Structure/Make/Model:	910 ft Guyed Tower	Stainless Inc. / G-8.0
Client/Site Name/#:	Graham Media Group	WCWJ-TV - CW17 Tower
Owner/Site Name/#:	Graham Media Group	WCWJ-TV - CW17 Tower
MEI Project ID:	FL05074G-17V0	
Location:	9117 Hogan Rd Jacksonville, FL 32216	Duval County FCC #1025608
	LAT 30-16-37.0 N	LON 81-33-46.0 W

EXECUTIVE SUMMARY:

Malouf Engineering Int'l (MEI), as requested, has performed a rigorous structural analysis of the above mentioned structure to assess the impact of the existing configuration as noted in Table 1.

Based on the stress analysis performed, the existing structure is **NOT in conformance** with the Int'l Building Code (IBC) / ANSI/TIA-222-G Standard for the loading considered under the criteria listed and referenced in the report sections – tower rated at 174.1% - Girts.

The addition of the proposed changed condition as noted in Table 1 is structurally NOT acceptable.

Due to the extensive modifications required, the new more stringent code requirement triggered by the proposed changes, and the tower condition and age, we recommend a new replacement tower or an alternate tower site be used for the proposed new loading considered.

Respectfully submitted,

MALOUF ENGINEERING INT'L, INC.

Analysis performed by:

Reviewed & Approved by:

Krishna Manda, PE
 Sr. Project Engineer

E. Mark Malouf, PE
 Florida #41758
 972-783-2578 ext. 106
 mmalouf@maloufengineering.com



5. ANALYSIS RESULTS

The results of the structural stress analysis based on data available and with the previous listed criteria, indicated the following:

Table 2: Stress Analysis Results

Component Type	Maximum Stress Ratio	Controlling Elev. (ft) / Component	Pass/Fail	Comment
Guy WIRES	102.0%	775.417	Fail	
LEGS	105.0%	758.75 - 733.75	Fail	
	106.9%	733.75 - 708.75	Fail	
	122.4%	708.75 - 683.75	Fail	
	128.0%	683.75 - 675.417	Fail	
	133.7%	675.417 - 667.083	Fail	
	139.3%	667.083 - 658.75	Fail	
	128.4%	658.75 - 650.417	Fail	
	133.8%	650.417 - 642.083	Fail	
	138.4%	642.083 - 633.75	Fail	
	140.3%	633.75 - 625.417	Fail	
	135.5%	625.417 - 617.083	Fail	
	130.1%	617.083 - 608.75	Fail	
	125.0%	608.75 - 583.75	Fail	
	112.9%	583.75 - 558.75	Fail	
	105.7%	558.75 - 533.75	Fail	
	110.0%	533.75 - 508.75	Fail	
	119.0%	508.75 - 500.417	Fail	
	105.7%	492.083 - 483.75	Fail	
	105.6%	483.75 - 475.417	Fail	
	113.3%	475.417 - 467.083	Fail	
	120.9%	467.083 - 458.75	Fail	
	121.6%	458.75 - 450.417	Fail	
	119.5%	450.417 - 442.083	Fail	
	117.2%	442.083 - 433.75	Fail	
	106.8%	433.75 - 425.417	Fail	
	139.1%	425.417 - 417.083	Fail	
	137.2%	417.083 - 408.75	Fail	
	135.7%	408.75 - 383.75	Fail	
	134.5%	383.75 - 358.75	Fail	
	134.9%	358.75 - 350.417	Fail	
102.6%	350.417 - 342.083	Fail		
103.5%	342.083 - 333.75	Fail		
113.3%	333.75 - 325.417	Fail		
115.0%	325.417 - 317.083	Fail		
117.0%	317.083 - 308.75	Fail		
109.5%	250.417 - 242.083	Fail		
106.2%	242.083 - 233.75	Fail		
103.1%	233.75 - 208.75	Fail		

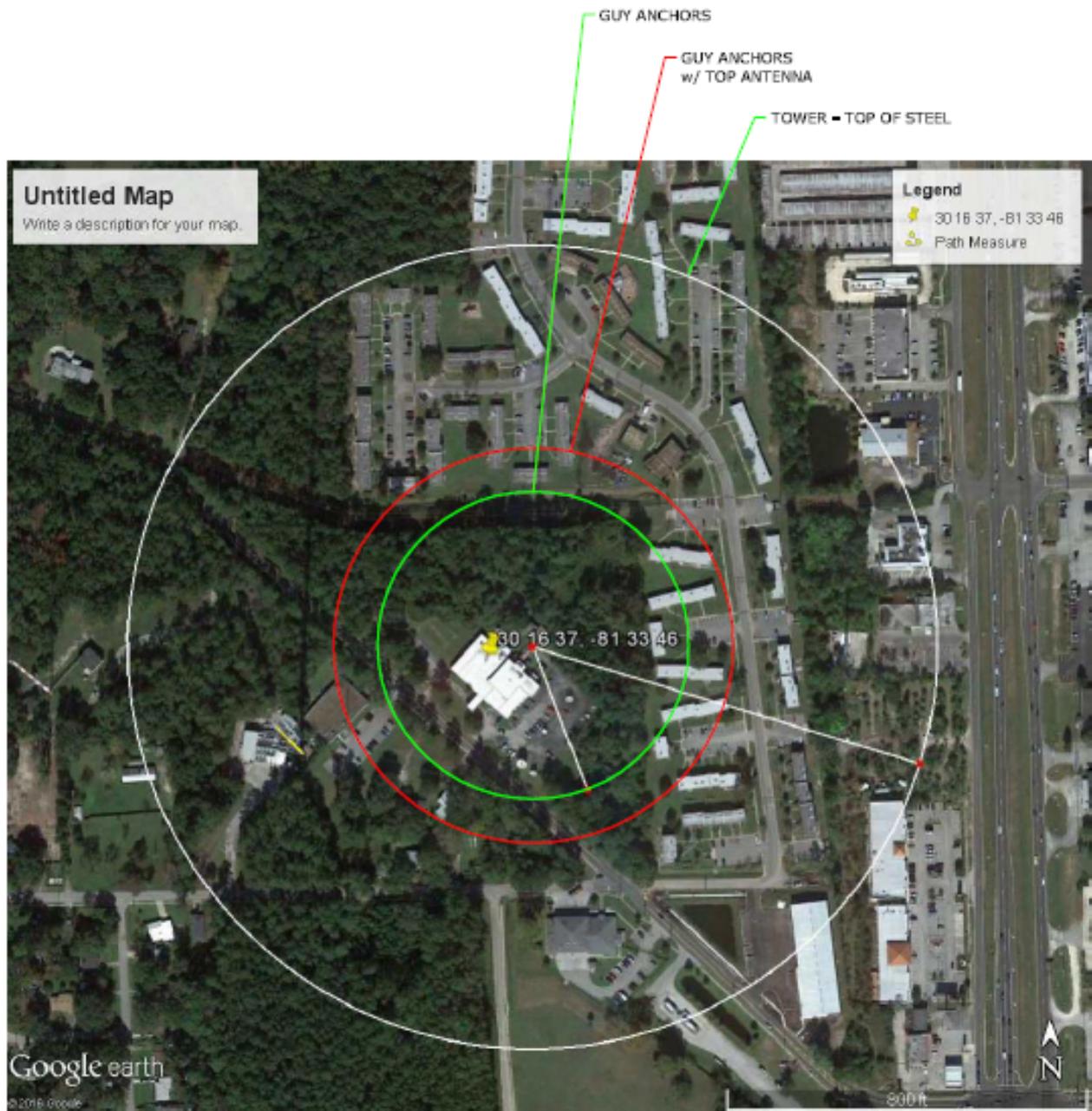
(Results continue on next page.)



Table 3: Stress Analysis Results - Cont'd

Component Type	Maximum Stress Ratio	Controlling Elev. (#) / Component	Pass/Fail	Comment
DIAGONALS	134.6%	900.479 - 892.083	Fail	
	126.9%	892.083 - 883.75	Fail	
	107.2%	883.75 - 858.75	Fail	
	104.5%	808.75 - 800.417	Fail	
	127.0%	800.417 - 792.083	Fail	
	142.3%	792.083 - 783.75	Fail	
	103.7%	783.75 - 775.417	Fail	Bolts Control
	107.5%	708.75 - 683.75	Fail	
	118.6%	683.75 - 675.417	Fail	
	104.8%	658.75 - 650.417	Fail	Bolts Control
	110.5%	650.417 - 642.083	Fail	
	107.8%	642.083 - 633.75	Fail	
	102.1%	625.417 - 617.083	Fail	
	100.9%	558.75 - 533.75	Fail	
	128.4%	533.75 - 508.75	Fail	
127.5%	508.75 - 500.417	Fail		
HORIZONTALS	135.4%	883.75 - 858.75	Fail	
	103.6%	833.75 - 808.75	Fail	
	103.4%	758.75 - 733.75	Fail	
	138.6%	708.75 - 683.75	Fail	
	129.1%	558.75 - 533.75	Fail	
	167.5%	533.75 - 508.75	Fail	
	101.7%	408.75 - 383.75	Fail	
	100.7%	383.75 - 358.75	Fail	
TOP GIRTS	174.1%	892.083 - 883.75	Fail	
	160.7%	883.75 - 858.75	Fail	
	128.6%	808.75 - 800.417	Fail	
	131.0%	767.083 - 758.75	Fail	
	121.7%	758.75 - 733.75	Fail	
	100.0%	708.75 - 683.75	Fail	
	106.6%	633.75 - 625.417	Fail	Bolts Control
	129.1%	617.083 - 608.75	Fail	
	114.4%	608.75 - 583.75	Fail	
	143.0%	533.75 - 508.75	Fail	
	171.1%	508.75 - 500.417	Fail	
	109.5%	425.417 - 417.083	Fail	
106.9%	417.083 - 408.75	Fail		
TOP GUY PULL-OFF	56.5%	775.417 - 767.083	Pass	Bolts Control
BASE FDN	69.3%	Bearing	Pass	
GUY ANCHOR FDN	77.8%	Shear	Pass	
GUY ANCHOR SHAFT	113.1%	Tension	Fail	Outer Anchor Shaft

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101 **PLAN: TOWER INFLUENCE ZONE**
SCALE: NOT TO SCALE

03/27/2017

MALOUF ENGINEERING INTERNATIONAL, INC.

MEI

17950 PRESTON ROAD SUITE 720
DALLAS, TEXAS 75252-5635
972-783-2578 (fax: 2583)
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910' GUYED MAST - WCWJ-TV-CW17 TOWER		
TOWER CLASSIFICATION		
MB PROJECT ID	SHEET NUMBER	REV.
FL05074G-17V1	001	0

From: Bill Harland [mailto:bharland@eriinc.com]
Sent: Wednesday, May 03, 2017 5:03 PM
To: William T. Godfrey, Jr.
Cc: Dave Benco
Subject: RE: New WCWJ Tower (***Important***), Jacksonville, FL estimate to replace ASRN 1025608

Bill,

With the information we have we are working on an estimate for replacing the existing WCWJ tower. The real issues are that it only has 37% guy radius and this eliminates the ability to actually design and build what would be a Class III structure. To meet Class III would require either more land or guy easements to allow a greater guy radius. I should have an update from Engineering later this week regarding progress.

Thank you,
Bill Harland
ELECTRONICS RESEARCH, INC.
+1 812 925-4020x214 (direct)
+1 812 455-1823 (cell)
bharland@eriinc.com

**945' GUYED WCWJ TOWER
ASR #1025608**



- EXISTING 37% GUYING = 3.6 ACRES TOTAL**
- STANDARD 80% GUYING = 17.0 ACRES TOTAL**



Kessler and Gehman Associates, Inc.
Consultants • Broadcast • Wireless
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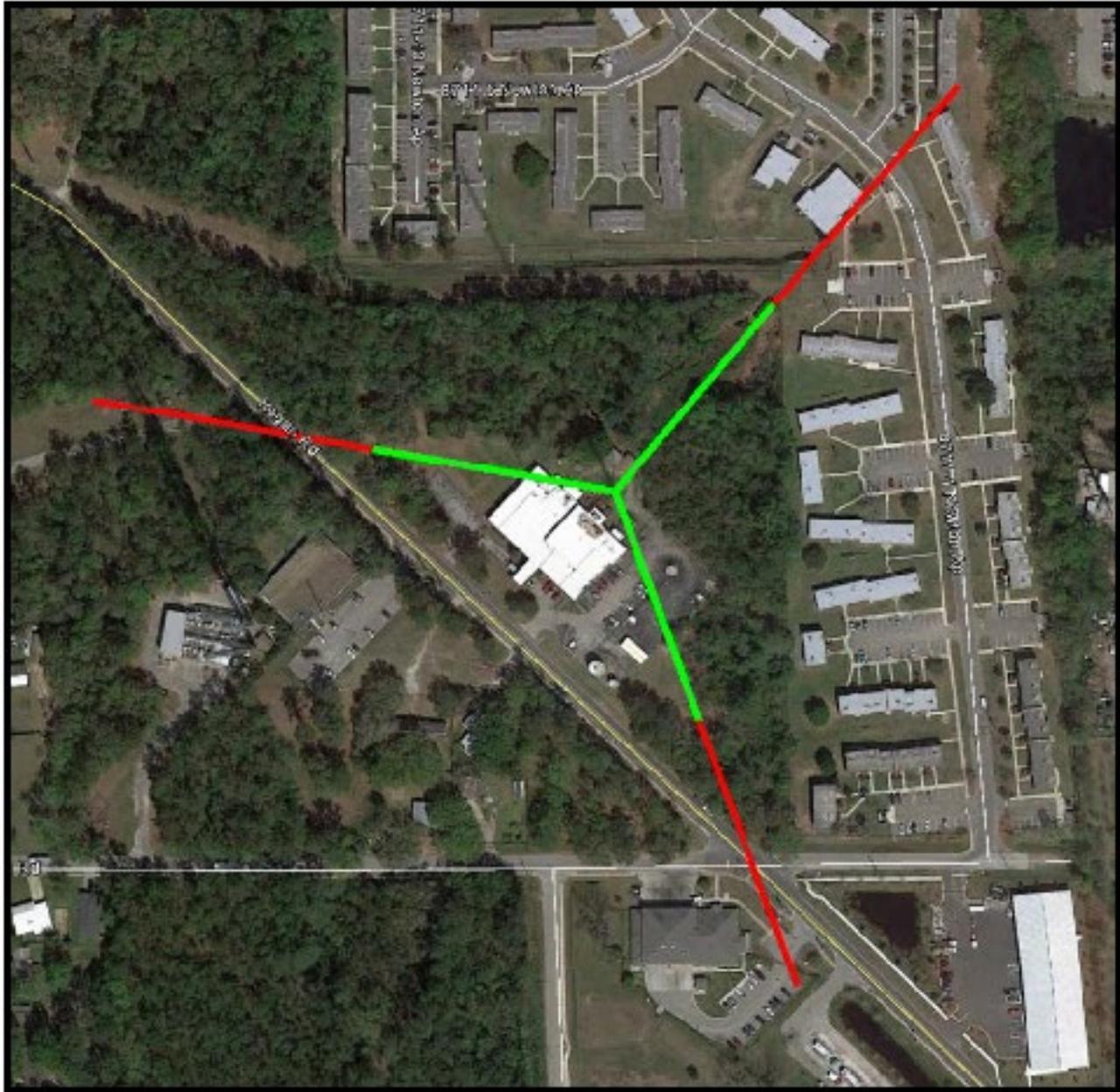
GRAHAM MEDIA GROUP
WCWJ - JACKSONVILLE, FL
20170525

EXHIBIT 1

GUY WIRE RADIUS LIMITATIONS

- Standard: 80% of overall tower height
- As guy radius decreases...
 - tower loading thresholds decrease
 - Increased downward forces
 - Guy tensioning strength must increase
 - Guy tensioning increases tower leg compression
- 37% guy system designed for 222-G cannot be built.

**945' GUYED WCWJ TOWER
ASR #1025608**



- EXISTING 37% GUYING = 3.6 ACRES TOTAL**
- STANDARD 80% GUYING = 17.0 ACRES TOTAL**



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GRAHAM MEDIA GROUP
WCWJ - JACKSONVILLE, FL
20170525

EXHIBIT 3

DTV Legal STA Application
General Information

* indicates required field

Application Description

Description of the application(255 characters max.) is visible only to you and is not part of the submitter's your Applications workspace.

Requesting a Waiver of Section 73.3700(b)(1)
(i)

A station granted a waiver under this “unable to construct” standard will be allowed to file an application for a construction permit for an alternate channel or expanded facilities during the first priority filing window described below.

WJXT-DT Repack

Channel 42 to 18

Jacksonville, FL

Phase 7

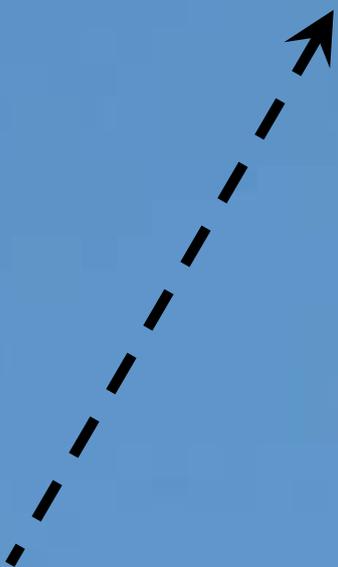


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WJXT-DT



WCWJ-DT & WJXT-DT

Repack Plan

Jacksonville, FL

Phase 7 (Both)



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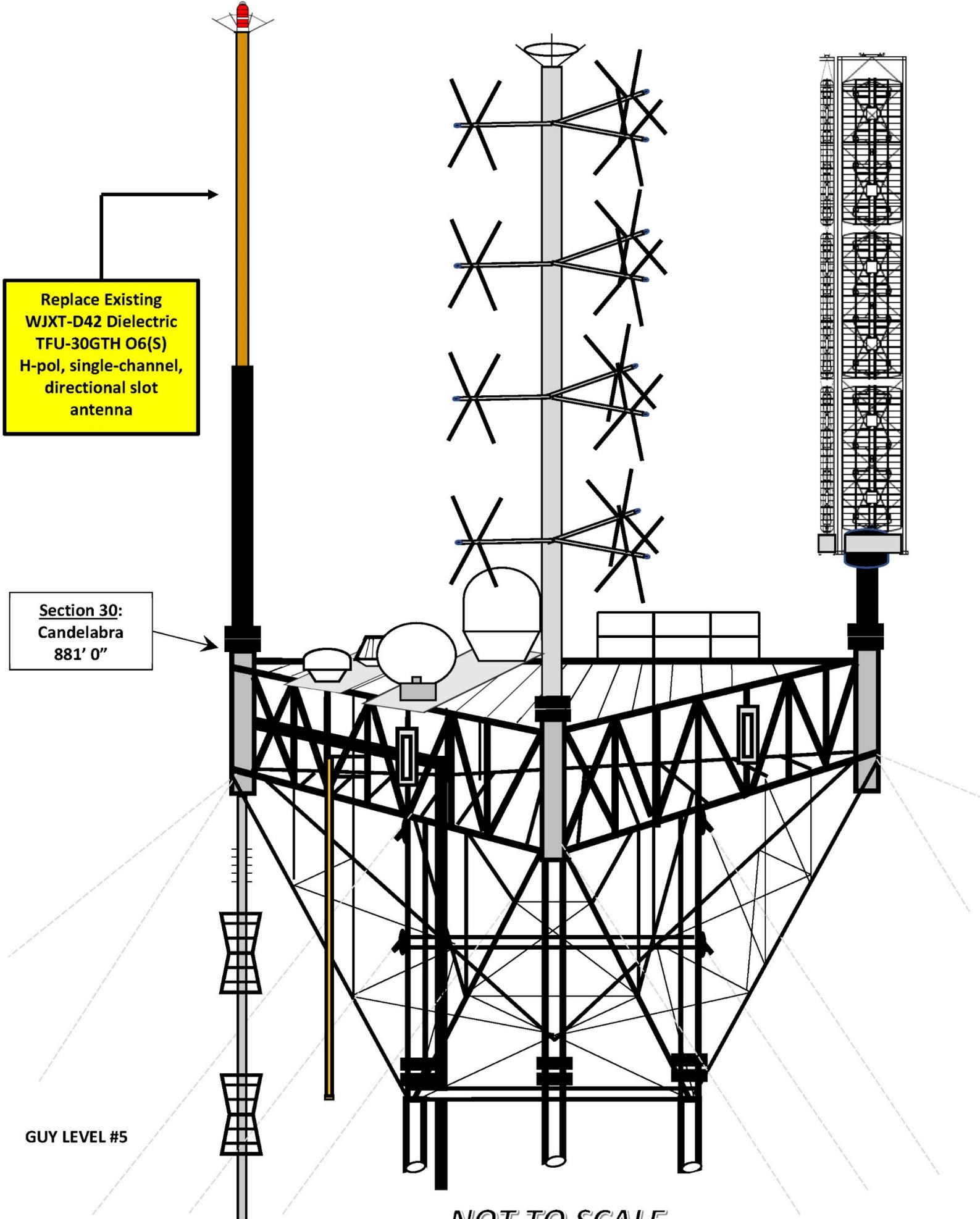


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Graham Media Group
Jacksonville, FL WJXT WCWJ

20170521

Exhibit 1
28

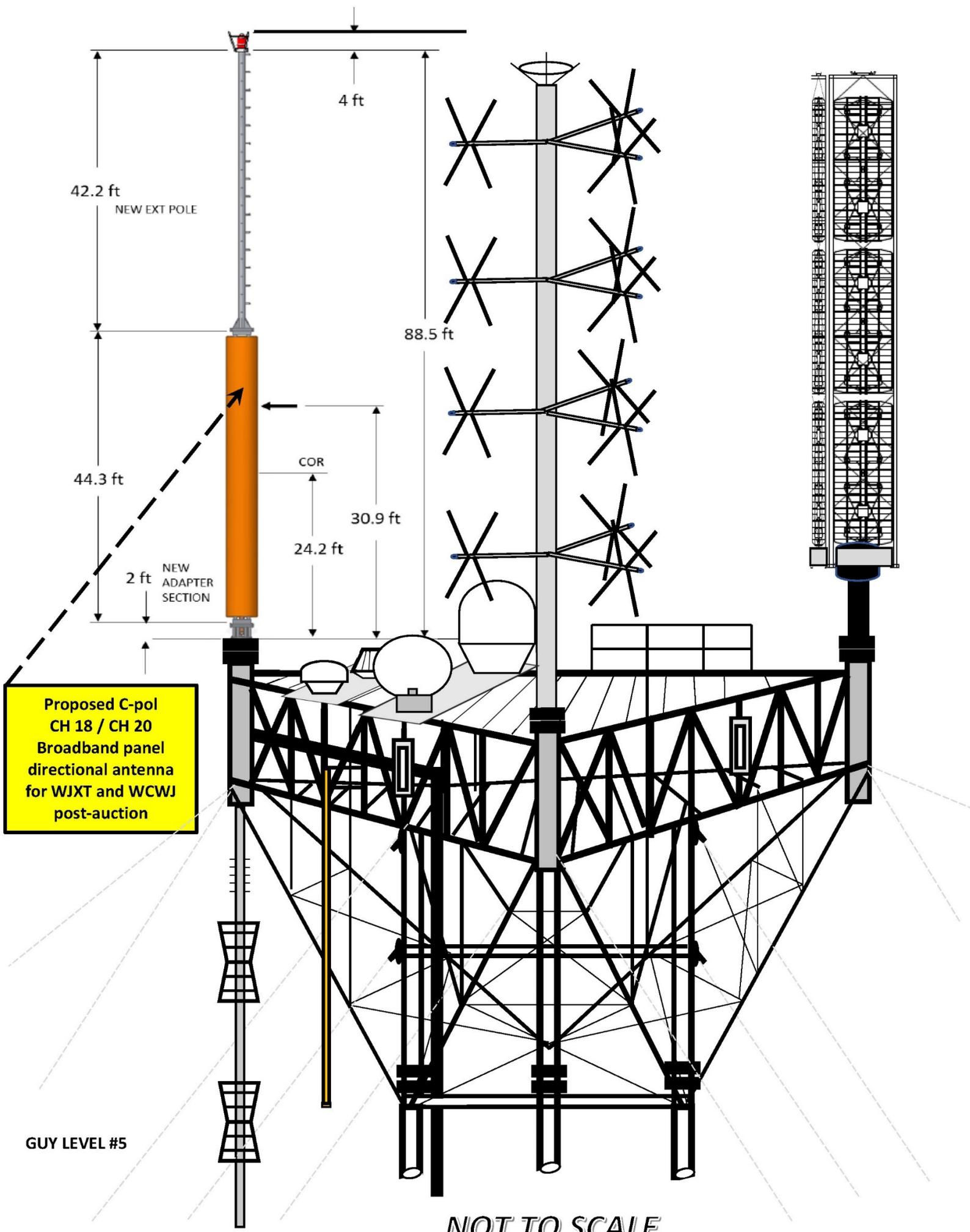


Replace Existing
WJXT-D42 Dielectric
TFU-30GTH O6(S)
H-pol, single-channel,
directional slot
antenna

Section 30:
Candelabra
881' 0"

GUY LEVEL #5

NOT TO SCALE

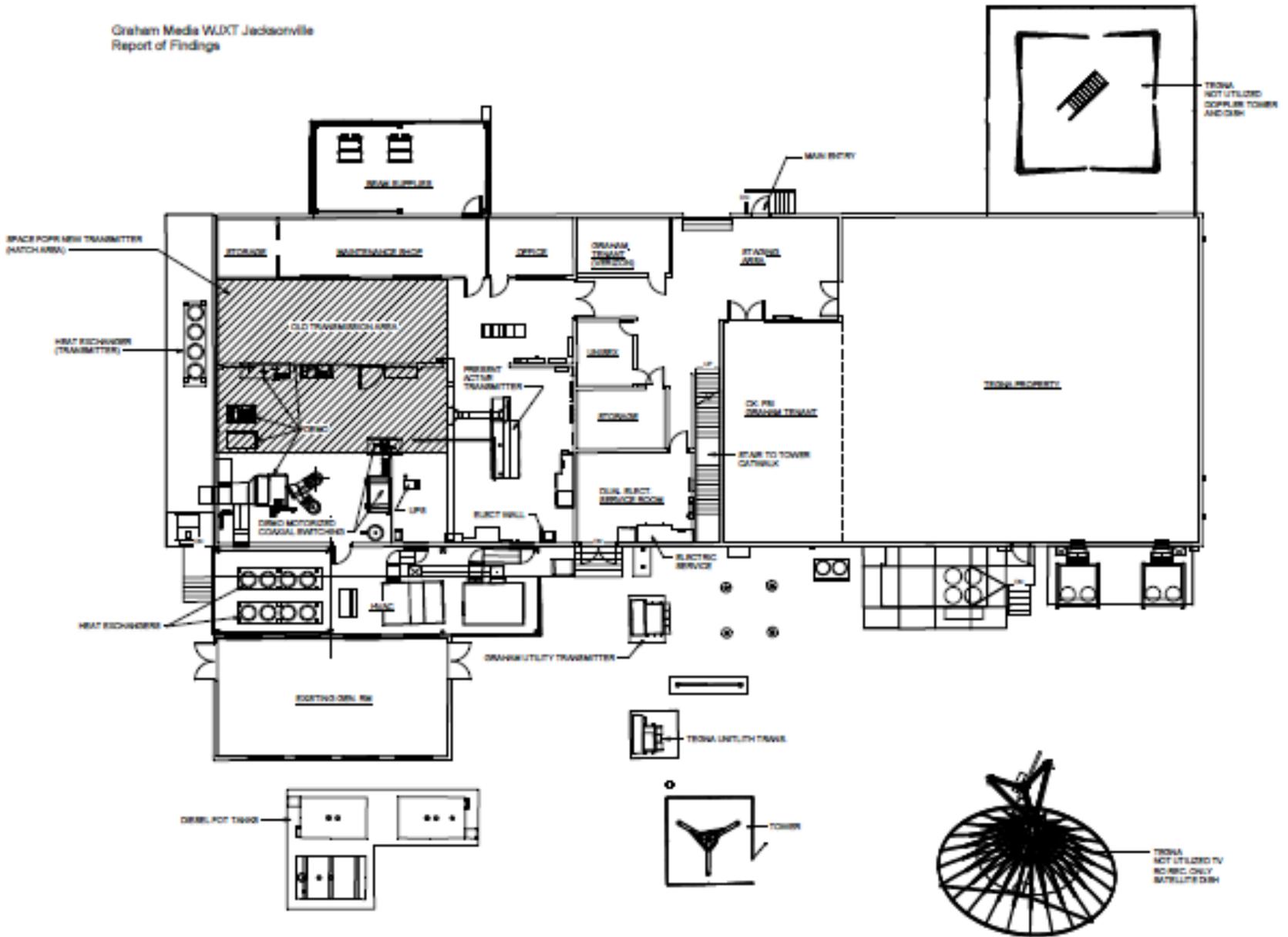


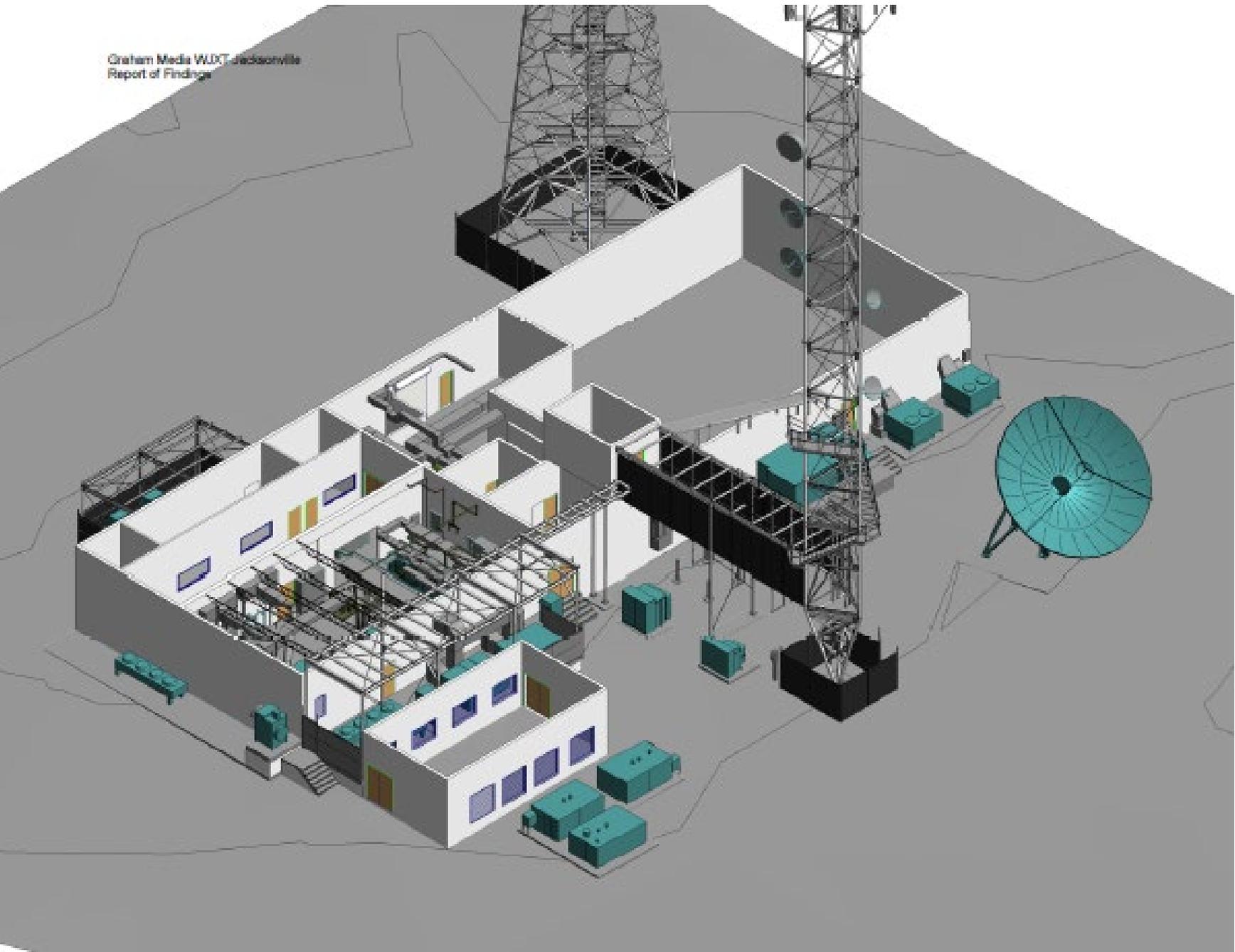
Proposed C-pol
 CH 18 / CH 20
 Broadband panel
 directional antenna
 for WJXT and WCWJ
 post-auction

GUY LEVEL #5

NOT TO SCALE

Graham Media WJXT Jacksonville
 Report of Findings





WCWJ-DT

*Budget for Total Estimated
Costs to Repack*



GRAHAM
MEDIA
GROUP



Proposal

Submitted to:

Graham Media Group

161 N. Clark Street
Suite 2900
Chicago, IL 60601

Attn: Mike Englehaupt

by:

Electronics Research, Inc.

Bill Harland
Vice President of Marketing

PHONE: +1 (812) 925-6000, Ext. 214

FAX: +1 (812) 925-4030

bharland@eriinc.com

This document includes pages 1 of 14 and is governed by the terms and conditions contained herein. Upon customer acceptance, order is subject to final review and written acceptance by ERI at our main business office. Unless otherwise stated in the body of this quotation, freight charges are not included and will be added to the final invoice. Also, unless listed separately in the body of this quotation, prices do not include any state, local, or other taxes or duties.

Proposal Number: 20170502-284

Date: May 2, 2017
Valid Through: June 14, 2017
FOB Plants of Origin / Ex Works Factories
Reference: TV WCWJ CH 20 Tower Replacement Estimate

Payment Terms: 50% payment with order
50% of equipment prior to shipment
40% of services prior to mobilization
10% of services upon substantial completion

Please **complete** the Purchaser's Acceptance block, **scan** this document along with your deposit check and **e-mail** to: peggy@eriinc.com or **FAX** to: 812-925-4030. Please **remit** down payment to the address below, attn: Accounts Receivable.

Purchaser's Acceptance:

Please accept our order for the products and services contained in this proposal.

Signature _____

Name _____

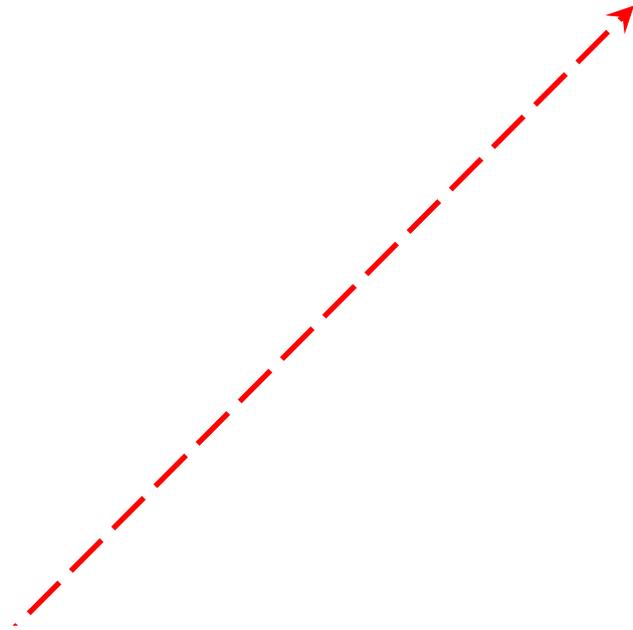
Title _____

P.O. Number _____

Item	Qty	Part #	Description	Unit Price	Extended
------	-----	--------	-------------	------------	----------

Includes mobilization to site.
 Tower erection and appurtenance installation.
 Final plumb and tension.
 Clean up and demobilization.
 Weather days charged at 50% of standard day rate.

Total Price	\$2,586,115.00
Net Package Price	\$2,586,115.00
Estimated Freight	<u>Not Included</u>
Grand Total	\$2,586,115.00



Total Price	\$2,586,115.00
Net Package Price	\$2,586,115.00
Estimated Freight	<u>Not Included</u>
Grand Total	\$2,586,115.00



WCWJ-DT Channel 20

Estimated Budget for Total Repack Costs

- \$2,586,115.00 – New Tower (Can't Construct)
- \$1,400,000.00 – 34 kW SS LC TX (Main)
- \$555,000.00 – 20 kW SS AC TX (Int – Build Tower)
- \$400,000.00 – CH 20 SC H-pol DA antenna (Main/Int)
- \$400,000.00 – Tower Rigger (> 500 ft tower)
- \$300,000.00 – Professional Services
- \$192,000.00 – 1,100 ft 6-1/8" TX Line (Int Alt Site)
- \$140,000.00 – Interior RF Systems
- \$135,000.00 – Replace AUX SC H-pol DA Antenna
- \$120,000.00 – 1.8 kW SS AC TX (Replacement)
- \$110,000.00 – Antenna Installation
- \$100,000.00 – Permits
- \$80,000.00 – Storage & Disposal
- **\$6,582,630.00 – Total Budget Estimate**

WJXT-DT

*Budget for Total Estimated
Costs to Repack*



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WJXT-DT Channel 18

Estimated Budget for Total Repack Costs

- \$1,400,000.00 – 42 kW SS LC TX (Main)
- \$1,000,000.00 – Serious Tower Modifications
- \$900,000.00 – 21.6 kW SS AC TX (Int – Alt Site)
- \$388,000.00 – Helicopter Lift
- \$300,000.00 – Professional Services
- \$235,000.00 – CH 18 SC H-pol DA antenna (Main)
- \$220,000.00 – Antenna Installation
- \$216,000.00 – 1,200 ft 6-1/8” TX Line (Main)
- \$190,000.00 – 1,000 ft 6-1/8” TX Line (Int – Alt Site)
- \$207,000.00 – High-VHF BB Antenna (Int 2 VHF)
- \$150,000.00 – Tower Rigger (> 500 ft tower)
- \$140,000.00 – Interior RF Systems
- \$135,000.00 – SC H-pol DA Antenna (Int Alt Site)
- \$125,000.00 – 750 ft 4” TX Line (VHF Int)
- \$100,000.00 – Permits
- \$80,000.00 – Storage & Disposal
- **\$5,680,540.00 – Total Budget Estimate**

WJXT-DT & WCWJ-DT COLLOCATED

Budget for Total Estimated

Costs to Repack at WJXT Site



WJXT-D18 & WCWJ-D20

Estimated Budget for Total Repack Costs

COLLOCATED COSTS

- \$1,400,000.00 – 42 kW SS LC TX (WJXT)
- \$1,400,000.00 – 34 kW SS LC TX (WCWJ)
- \$1,000,000.00 – Serious Tower Modifications
- \$900,000.00 – 21.6 kW SS AC TX (WJXT Int – Alt Site)
- \$730,000.00 – Broadband Panel E-pol Antenna (WJXT/WCWJ)
- \$550,000.00 – Professional Services
- \$400,000.00 – Antenna Installation
- \$388,000.00 – Helicopter Lift
- \$300,000.00 – Tower Rigger (> 500 ft tower x 2)
- \$246,415.00 – 1,200 ft 6-1/8” Broadband TX Line (WJXT/WCWJ)
- \$240,000.00 – Combiner Output Splitting & Switching (WJXT/WCWJ)
- \$190,000.00 – 1,000 ft 6-1/8” TX Line (Int – Alt Site)
- \$140,000.00 – Interior RF Systems
- \$135,000.00 – Replace WCWJ AUX SC H-pol DA Antenna
- \$135,000.00 – SC H-pol DA Antenna (WJXT Int Alt Site)
- \$130,000.00 – High-VHF BB Antenna (Int 2 VHF)
- \$125,000.00 – 750 ft 4” TX Line (VHF Int)
- \$120,000.00 – 1.8 kW SS AC TX (Replacement)
- \$100,000.00 – Permits
- \$80,000.00 – Storage & Disposal
- **\$9,182,985.00 – Total Budget Estimate**

COLLOCATED SAVINGS

WJXT	WCWJ	Separate	Collocated
\$5,680,540.00	\$6,582,630.00	\$12,533,170.00	\$9,182,985

TOTAL AMOUNT SAVED BY COLLOCATING: \$3,350,185.00



GRAHAM
MEDIA
GROUP



Rigorous Structural Analysis Report



Graham Media Group - WJXT Channel 4 Tower Site
Owner: First Coast Tower Group (WTLV/WJXT) - WJXT Ch. 4 Tower
Jacksonville, Florida

May 15, 2017

MEI PROJECT ID: FL05028G-17V1



17950 PRESTON ROAD, SUITE 720 ■ DALLAS, TEXAS 75252 ■ TEL. 972-783-2578 FAX 972-783-2583
www.maloufengineering.com





May 15, 2017

Mr. Michael Englehaupt
Graham Media Group
 Chicago, IL 60601

RIGOROUS STRUCTURAL ANALYSIS

Structure/Make/Model:	882 ft Guyed Tower	Matthew J. Vlissides & Associates / Candelabra GT
Client/Site Name/#:	Graham Media Group	WJXT Channel 4 Tower
Owner/Site Name/#:	First Coast Tower Group (WTLV/WJXT)	WJXT Channel 4 Tower
MEI Project ID:	FL05028G-17V1	
Location:	9830 Anders Blvd Jacksonville, FL 32246	Duval County FCC #1017604
	LAT 30-16-25.0 N	LON 81-33-12.0 W

EXECUTIVE SUMMARY:

Malouf Engineering Int'l (MEI), as requested, has performed a rigorous structural analysis of the above mentioned structure to assess the impact of the changed condition as noted in Table 1.

Based on the stress analysis performed, the existing structure is **NOT in conformance** with the Florida Building Code / Int'l Building Code (IBC) / ANSI/TIA-222-G Standard for the loading considered under the criteria listed and referenced in the report sections – tower rated at 157.5% - Guy Anchor.

The implementation of the proposed changed condition as noted in Table 1 is structurally NOT acceptable.

The tower will require strengthening modifications to the 1 section of legs and to the candelabra diagonals and pedestal members and guy anchors in order to properly support the proposed loading considered. Please note the overstress is attributed to the proposed loading which significantly increased the tower stress.

MEI appreciates the opportunity of providing our continuing professional services to you. If you have any questions or need further assistance on this or other projects please contact us.

Respectfully submitted,

MALOUF ENGINEERING INT'L, INC.

Analysis performed by:

Reviewed & Approved by:

Krishna Manda, PE
 Sr. Project Engineer

[Handwritten Signature]
 E. Mark Malouf, PE
 Florida #41758
 972-783-2578 ext. 106
 mmalouf@maloufengineering.com



5/15/2017

6. FINDINGS & RECOMMENDATIONS

- Based on the rigorous stress analysis results, the subject structure is **rated at 157.5%** of its support capacity (controlling component: Guy Anchor) with the proposed changed condition considered. Please refer to Table 3 and to Appendix 1 for more details of the analysis results.
- Based on the stress analysis performed, the existing structure is **NOT in conformance** with the FBC / IBC / ANSI/TIA 222-G Standard for the loading considered under the criteria listed and referenced in the report sections.
- *The installation of the proposed changed condition as noted in Table 1 is structurally NOT acceptable.* Please refer to Appendix 1 for Schematic Lines Layout.
- This tower is above its maximum support capacity for the appurtenances and loading criteria considered. Please note the overstress is attributed to the proposed loading which significantly increased the tower stress.
- Based on the analysis results and possible modification investigation, this structure would require the following estimated modifications in order to meet the previously noted requirements with the proposed changed condition:
 1. Modify leg members at elevations overstressed - 1 section -by strengthening and/or by mid-bracing, as required.
 2. Modify candelabra bracing members by strengthening or by replacement, as required.
 3. Re-work/Replace existing top antenna support pedestal to fit proposed ERI TV Antenna.
 4. Reinforce guy anchor foundation as required.
- **The preliminary structural modification cost can be approximately estimated to vary between \$300,000 to \$375,000 which would include labor and materials.**

Modification Design is Not within the scope of this report. The tower reinforcement design and detailing can be performed by MEI under a new consulting agreement.

GMG Requests:

- 1) *WCWJ Waiver – Unable to construct*
- 2) *WJXT Waiver – Coverage Loss with 1% Expansion Allowance*
- 3) *Contingent Applications in 1st Priority Filing Window*
 - ❖ *Channel change*
 - *WJXT moves to Channel 20*
 - *WCWJ moves to Channel 18*
- 4) *Reimbursement For:*
 - ❖ *Solid State, Liquid Cooled Main Transmitters Instead of IOTs*
 - ❖ *Interim Broadband VHF C-pol Antenna*
 - ❖ *1,100 ft Broadband Transmission Line*

