

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility 25932 Service: DTV Call WHRO-TV Channel: 31 (UHF)

Sign:

File **0000027736**

Number:

ID:

FRN: **0002062511** Date **09/07**

Submitted: /2021

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
Hampton Roads Educational Telecommunications Association, Inc.	Chris G. Gunnufsen 5200 HAMPTON BOULEVARD NORFOLK, VA 23508 United States	+1 (757) 889- 9394	chris. gunnufsen@whro. org	Not-for- Profit

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Contact Information

Preparer Contact Name and Information

ddress	Phone	Email
(ddress	ddress Phone

The Preparer is same as the reimbursement contact.

Broadcaster Information and Transition Plan Question Response

Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	Yes
Briefly describe transition plan	The transition plan is being handled by the Owner of the Tower, American Tower Corporation. The tower is complicated due to the total number of broadcasters collocated on the tower. There will be a

Transmitters

Section	Question	Response
Transmitter Related Expenses	Do you have transmitter related expenses?	Yes

Wide Band interim antenna side mounted

on the tower 987'

Existing Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter	Manufacturer	
Manufacturer and Type	Model	DCX Millenium
	Year	2001
	Туре	Inductive Output Tube
	IOT Power Type	Two
	Power Capacity	60 kW

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	HPTV PRLX- U36
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	58 kW
	Justification for New Transmitter	The Channels are to Far apart for Re- tuning. Channel 16 Pre and Channel 31 post Repacking. This has been verified with Hitachi Comark LLC. Manufacturer of the existing channel 16 antenna. The IOT Transmitters has been replaced by the Parallax SS

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	Yes
	Power	500 kVA
	Rigid Conduit and Wiring	Yes
	Size	4 inches
	Length	300.0 feet
	Other Electrical Service	Yes
	Description	Installation of Transmitter Electrical systems
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Туре	Cooling Only
	Size	25 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	Yes
	Size	1500.0 square feet
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Other Transmitter Cost Not Listed

Name	Description
Primary Transmitter - HVAC	2 20 ton A/C units for primary transmitter, separate from combiner system HVAC
Primary Transmitter - Installation	Primary Transmitter - Installation
Primary Transmitter - Demo Old Duct Work	Primary Transmitter - Demo Old Duct Work
Primary Transmitter - Distilled Water	Primary Transmitter - Distilled Water

Antennas

Section	Question	Response
Antenna Related Expenses	Do you have antenna related expenses?	Yes

Primary Antenna

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	Lease New
	Antenna Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing antenna shared with another station or stations?	No
	Is the existing antenna directional?	Yes
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	Yes
Existing Antenna	Class	Full Power
Manufacturer and Type	Mounting	Top Mount
	Antenna position in stack	Bottom
	Polarization	Horizontal
	Туре	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels	N/A
	Design power capacity in use	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	1000.0 kW
	Manufacturer	

Model	TFU- 24GBH-R 08SP
Year	2000

Primary Antenna

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Lease New
	Is this a request for upgraded equipment?	Yes
	Ownership	Leased
	Owner	American Tower LLC
	Is antenna shared?	Yes
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	Yes
New Antenna Manufacturer and Types	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Туре	Broadband Panel
	Number of Stations Supported	4
	Number of Panels/Bays	70
	Lower Limit	470.00 MHz
	Upper Limit	700.00 MHz
	Design power capacity in use	41.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	1950.0 kW
	Manufacturer	
		,

Model	PEP70E-05- 2-T
Year	2019
Justification for New Antenna	Combining Stations to reduce load and Total FCC Costs

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Туре	New
	Number of channels supported	4
	Frequencies of channels supported	RF channel
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	Yes
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Broadband
	Feed Line Size	8 3/16 inches inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Enter a list of RF channel numbers.

RF Channel Number	
20	
16	
31	
33	

Primary Antenna

Other Antenna Cost Not Listed

Name	Description	
Combiner Installation	ATC Estimated Costs for line item 3-C-2	

Interim Antenna

New Antenna Costs

Polarization Elliptical Type Broadband Slot Number of Stations Supported 5 Number of Panels/Bays 24 Lower Limit 482.00 MHz Upper Limit 590.00 MHz Design power capacity in use 75.0 % Other Antenna Type N/A ERP: (Effective Radiated Power) 60.0 kW Manufacturer	Section	Question	Response
Change Type Change Type Change Type Change Type Dwner Commert American Tower Corp Is antenna shared? Is antenna directional? Will antenna be located on or in close proximity to an antenna farm? Class Full Power Mounting Antenna position in stack Polarization Type Broadband Slot Number of Stations Supported Number of Panels/Bays Lower Limit Upper Limit Design power capacity in use Other Antenna Type ERP: (Effective Radiated Power) Manufacturer	New Antenna Description	Use	Interim
New Ownership Leased Owner American Tower Corp Is antenna shared? Yes Is antenna directional? Yes Will antenna be located on or in close proximity to an antenna farm? New Antenna Manufacturer and Type Class Full Power Mounting Side Mount Antenna position in stack Not in Stack Polarization Elliptical Type Broadband Slot Number of Stations Supported 5 Number of Panels/Bays 24 Lower Limit 482.00 MHz Upper Limit 590.00 MHz Design power capacity in use 75.0 % Other Antenna Type N/A ERP: (Effective Radiated Power) 60.0 kW Manufacturer		Description of Use	N/A
Owner American Tower Corp Is antenna shared? Yes Is antenna directional? Yes Will antenna be located on or in close proximity to an antenna farm? Yes New Antenna Manufacturer and Type Class Full Power Mounting Side Mount Antenna position in stack Not in Stack Polarization Elliptical Type Broadband Slot Number of Stations Supported 5 Number of Panels/Bays 24 Lower Limit 482.00 MHz Upper Limit 590.00 MHz Design power capacity in use 75.0 % Other Antenna Type N/A ERP: (Effective Radiated Power) 60.0 kW		Change Type	
Is antenna shared? Yes		Ownership	Leased
Is antenna directional? Will antenna be located on or in close proximity to an antenna farm? Class Full Power Mounting Side Mount Antenna position in stack Not in Stack Polarization Elliptical Type Broadband Slot Number of Stations Supported 5 Number of Panels/Bays 24 Lower Limit 482.00 MHz Upper Limit 590.00 MHz Design power capacity in use 75.0 % Other Antenna Type N/A ERP: (Effective Radiated Power) 60.0 kW Manufacturer		Owner	
Will antenna be located on or in close proximity to an antenna farm? Class Full Power Mounting Side Mount Antenna position in stack Not in Stack Polarization Elliptical Type Broadband Slot Number of Stations Supported 5 Number of Panels/Bays 24 Lower Limit 482.00 MHz Upper Limit 590.00 MHz Design power capacity in use 75.0 % Other Antenna Type N/A ERP: (Effective Radiated Power) 60.0 kW Manufacturer		Is antenna shared?	Yes
New Antenna Manufacturer and Type Class Mounting Antenna position in stack Polarization Type Broadband Slot Number of Stations Supported Lower Limit Upper Limit Design power capacity in use Other Antenna Type ERP: (Effective Radiated Power) Mounting Full Power Full Power Full Power Full Power Antenna Side Mount Not in Stack Polarization Elliptical 5 Number of Stations Supported 5 Number of Panels/Bays 24 Lower Limit 590.00 MHz Design power capacity in use 75.0 % Other Antenna Type N/A ERP: (Effective Radiated Power) Manufacturer		Is antenna directional?	Yes
Manufacturer and Type Mounting Antenna position in stack Polarization Type Broadband Slot Number of Stations Supported Number of Panels/Bays Lower Limit Upper Limit Design power capacity in use Other Antenna Type N/A ERP: (Effective Radiated Power) Manufacturer			Yes
Mounting Antenna position in stack Polarization Elliptical Type Broadband Slot Number of Stations Supported 5 Number of Panels/Bays 24 Lower Limit Upper Limit Design power capacity in use Other Antenna Type N/A ERP: (Effective Radiated Power) Manufacturer		Class	Full Power
Polarization Elliptical Type Broadband Slot Number of Stations Supported 5 Number of Panels/Bays 24 Lower Limit 482.00 MHz Upper Limit 590.00 MHz Design power capacity in use 75.0 % Other Antenna Type N/A ERP: (Effective Radiated Power) 60.0 kW Manufacturer	Manufacturer and Type	Mounting	Side Mount
Type Broadband Slot Number of Stations Supported 5 Number of Panels/Bays 24 Lower Limit 482.00 MHz Upper Limit 590.00 MHz Design power capacity in use 75.0 % Other Antenna Type N/A ERP: (Effective Radiated Power) 60.0 kW Manufacturer		Antenna position in stack	Not in Stack
Number of Stations Supported Number of Panels/Bays Lower Limit Upper Limit Design power capacity in use Other Antenna Type N/A ERP: (Effective Radiated Power) Manufacturer		Polarization	Elliptical
Number of Panels/Bays Lower Limit Upper Limit Design power capacity in use 75.0 % Other Antenna Type N/A ERP: (Effective Radiated Power) Manufacturer		Туре	
Lower Limit Upper Limit Design power capacity in use 75.0 % Other Antenna Type N/A ERP: (Effective Radiated Power) Manufacturer		Number of Stations Supported	5
Upper Limit 590.00 MHz Design power capacity in use 75.0 % Other Antenna Type N/A ERP: (Effective Radiated Power) 60.0 kW Manufacturer		Number of Panels/Bays	24
Design power capacity in use 75.0 % Other Antenna Type N/A ERP: (Effective Radiated Power) 60.0 kW Manufacturer		Lower Limit	482.00 MHz
Other Antenna Type N/A ERP: (Effective Radiated Power) Manufacturer		Upper Limit	590.00 MHz
ERP: (Effective Radiated Power) 60.0 kW Manufacturer		Design power capacity in use	75.0 %
Manufacturer		Other Antenna Type	N/A
		ERP: (Effective Radiated Power)	60.0 kW
Model CDD EDD		Manufacturer	
Model SBB-EPD- 24 C160		Model	SBB-EPD- 24 C160

Year	2018
Justification for New Antenna	Complex antenna structure with multiple
	stations trying to remain on the air during the
	transition to new channels. See American
	Tower Plan.

Interim Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Туре	New
	Number of channels supported	5
	Frequencies of channels supported	RF channel
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	Yes
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	В
	Feed Line Size	7 3/16 inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for an antenna?	Yes

Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Enter a list of RF channel numbers.

RF Channel Number	
16	
20	
31	
32	
33	

Interim Antenna

Other Antenna Cost Not Listed

Name	Description
Interim Tower Rental	One time tower rental during repack line item 1-B-1
Interim Antenna - New Combiner Installation	Interim Antenna - New Combiner Installation

Transmission ^{Seffien}	Question	Response
Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

Primary Transmission Line

Existing Transmission Line

n Line Section	Question	Response
Existing Transmission	Type of change	Lease New
Line Description	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Owner	American Tower LLC
	Site	N/A
	Is the existing transmission line shared with another station or stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	
	Туре	Rigid
	Diameter	6 1/8 inches
	Other Diameter	N/A
	Segment Length	19 1/2 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1307 feet per run

Primary Transmission

New Transmission Line

n Line Section	Question	Response
New Transmission Line Costs	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Lease New
	Is this a request for upgraded equipment?	No
	Туре	Rigid
	Diameter	8 3/16 inches
	Other Diameter	N/A
	Segment Length	Broadband
	Other Segment Length	N/A
	Number of parallel runs	2
	Length	1350 feet per run
	Justification for New Transmission Line	Part of a shared Broadband antenna system

rimary

Other Transmission Line Expenses Not Listed

Primary			
Transmission	n Line Name	Description	
	Combiner system	Combiner system for shared Broadband antenna	
	Primary Transmission Line - Nitrogen Generator	Primary Transmission Line - Nitrogen Generator	
	Primary Transmission Line - Other Parts	Primary Transmission Line - Other Parts	

New Transmission Line

Interim	
Transmission	1

n Line Section	Question	Response
New Transmission Line	Use	Interim
Costs	Description of Use	N/A
	Change Type	Purchase New
	Туре	Rigid
	Diameter	8 3/16 inches
	Segment Length	Broadband
	Other Segment Length	
	Number of parallel runs	1
	Length	1100 feet per run
	Justification for New Transmission Line	Single run Dielectric 8- 3/16" Digitline with 950 ft vertical plus 150 ft. run equals 1100 ft. total; Includes nitrogen generator plus 200' of vertical run to get to the combiner network in ATC owned building located in the compound total WHRO 1300

Interim Transmission

Other Transmission Line Expenses Not Listed

n.Line	Description
Transmission line interim	200 Ft of 6 1/8 " line to connect to the Wibeband Interim antenna located in the ATC building approx 200 ft away.
Interim Transmission Line - Other Parts	Interim Transmission Line - Other Parts
Elbows	3 Elbows are needed to connect a new sections of 6 1/8' line to the interim broadband antenna located in American Tower owned building.
Interim Transmission Line - Nitrogen Generator	Interim Transmission Line - Nitrogen Generator

Tower Equipment And Rigging Costs

Section	Question	Response
Tower Equipment or Rigging Costs Changes	Do you have tower equipment or rigging costs changes?	Yes

Primary Tower

Existing Tower

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Is this tower consider Complex?	Candelabra
	Is this tower currently shared with any other stations?	Yes
	One or more FM, AM or TV radio broadcaster(s)	Yes
	Others Types of Users	No
	Is tower documented for structural analysis?	Yes
	Is tower compliant with Rev G?	Yes
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1057874
Coordinates (NAD83 (Latitude (NAD83)	36° 48' 31.8" N-
North American Datum of 1983))	Longitude (NAD83)	076° 30' 11.3" W-
	Overall Structure Height	1258.84 feet
	Support Structure Height	1254.91 feet
	Ground Elevation Above Mean Sea Level (AMSL)	22.97 feet

Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
Tower Owner	American Towers, LLC
Date Constructed	02/03/2006

FM, AM or TV radio broadcasters. Facility ID's, Call Signs and Services of other broadcast stations with whom the tower is shared

Facility ID	Call Sign	Service
40759	WTVZ-TV	DTV
9762	WGNT	DTV
82574	WTPC-TV	DTV
67077	WPXV-TV	DTV
25940	WHRO-FM	FM
47401	WTKR	DTV
25932	WHRO-TV	DTV
25933	WHRV	FM

Primary Tower

Tower Modification Costs

Section	Question	Response
Engineering Study	Please what type of engineering study is required, if any:	Study needed for tower with candelabra
Tower Reinforcements	Please select whether tower reinforcements are needed:	Minor Reinforcements needed

Primary Tower

Tower Rigging Costs

Section	Question	Response
Tower Rigging Costs	Complex Tower	Candelabra
Helicopter Services Required	Are helicopter services required?	Yes

Primary Tower

Other Tower Expenses Not Listed

Name	Description	
Tower Construction Project Management	Tower Construction Project Management	
Tower Permit Drawing Package	Tower Permit Drawing Package	

Outside Professional

Costs associated with American Tower Corporation This is a very complicated site and wil require Project manageme from all Broadcaste collocated on the towe Est is base on Previous conversion to digital in 2001 Outside RF consulting Engineering Services Perform engineering study for new channel assignment and antenna development Prepare engineering section of Form FCC Construction Permit Application Yes	Section	Question	Response
Explanation This is for the project manageme costs associated with American Tower Corporation This is a very complicate site and will require Project manageme from all Broadcaste collocated on the towe Est is base on Previous conversion to digital in 2001 Outside RF consulting Engineering Services Perform engineering study for new channel assignment and antenna development Prepare engineering section of Form FCC Construction Permit Application This is for the project manageme from the project manageme from all broadcaste collocated on the towe Est is base on Previous conversion to digital in 2001 Ves			Yes
the project manageme costs associated with American Tower Corporation This is a very complicate site and wil require Project manageme from all Broadcaste collocated on the towe Est is base on Previous conversion to digital in 2001 Outside RF consulting Engineering Services Perform engineering study for new channel assignment and antenna development Prepare engineering section of Form FCC Construction Permit Application Yes		Number of Hours	770
Engineering Services assignment and antenna development Prepare engineering section of Form FCC Construction Permit Application Yes		Explanation	the project management costs associated with American Tower Corporation. This is a very complicated site and will require Project management from all Broadcasters collocated on the tower. Est is based on Previous conversion to digital in
Construction Permit Application	=		Yes
			Yes
For Auxiliary Facility No		For Auxiliary Facility	No
For Main Facility Yes		For Main Facility	Yes
Prepare engineering section of Form FCC License to Cover Application Yes			Yes
For Auxiliary Facility No		For Auxiliary Facility	No
For Main Facility Yes		For Main Facility	Yes

	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	Do you have Distributed Transmission System engineering services?	N/A
	Critical Facility	N/A
	Terrain-Shielded Facility	N/A
Attorney and Other Outside Consulting	Prepare and file Form FCC Construction Permit Application	Yes
Services	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	NEPA Section 106 environmental review	Yes
	Environmental Assessment	Yes
	ASR Modification	Yes
	FAA Consultation (including preparation of FAA Form 7460)	Yes
	Negotiation of Lease and other Matter for Shared Locations	Yes
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	Yes
RF Field Engineering Services	Comprehensive coverage verification via field study	Yes

RF exposure measurements	Yes
Additional Field Engineering Service	No
Number of Days	N/A
Justification	N/A

Outside Professional

Other Professional Services Expenses Not Listed

Services Costs	Description
Migratory Bird Assessment	Tower located in a migratory Bird Path
RF System Test	Testing of the combiner to ensure all one (1) frequencies are tuned for optimal patterns.
Site Coordination Meeting	Site coordination meetings with all broadcasters, contractors and vendors involved with the site deliveries and construction. This cost is for travel and logistics expenses accrued.
Ground and Building Drawing Package	Ground & Building A&E Permit Drawing Package

Other Expenses

Section	Question	Response
AM Pattern Disturbance	Is an Impact Study needed?	No
	Is Remediation needed?	No
Facility Expenses	Name	N/A
	Other Distributed Transmission System Expenses Not listed	N/A
	Name	N/A
	Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
Permit and Filing Costs	Local Zoning	Yes
	Non-zoning permits	Yes
	BLM or NFS Coordination	Yes
	FCC Construction Permit Minor Change	No
	FCC License to Cover Application	Yes
	FCC Special Temporary Authority Application	Yes
Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
	Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	Yes
	Does this relocation require Equipment Storage?	Yes
	Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
	Does this relocation require MVPD Notification of a Channel Change?	Yes

Other Expenses

Other Expenses Not Listed

Name	Description
ATC One Time Tower Rental	ATC have 3 repack customers, one non repacked customer and one new customer on the Norfolk TT. The interim Main side mount antenna will allow the broadcasters to minimize their OTA disruption, maintain their coverage contour, complete in safe manner
Comark System Design and Site Survey	Cost associated with Hitachi Comark to do a site visit and design for the Transmitter installation
Grading Road	The Gravel Road Will be destroyed during the repacking andwill require several Gradings during the process due to the complexity of the site and total number of broadcasters impacted
Public Hearing	Cost associated with Public hearings that might be required due to the repacking process and proximity of houses located around the tower
Site Security	Site Security Company during construction for theft prevention and vandalism
Special Insurance Rider	Special insurance rider will need to be purchased by WHRO for the Homes located within 1000' ft of the tower. WHRO owns all of the property surrounding the tower America Tower Leases only a small portion of the ground space, Anchor point Base and Buildin
VSWR Sweep Test	VSWR Sweep Test
Equipment Rental	Equipment Rental
Helicopter Landing Site Prep	Helicopter Landing Site Prep

Cost Information

Transmitters

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter HPTV PRLX- U36	\$2,266,560.06	\$2,616,515.39		\$2,047,221.18	
Primary Transmitter - Installation	\$279.00	\$279.00	Please see WHRO Primary Transmitter Installation Budget Justification Letter	\$279.00	N/A
Primary Transmitter - Distilled Water	\$1,355.00	\$1,355.00	Please see WHRO-TV Primary Transmitter - Other - Distilled Water Budget Revision Justification Letter	\$1,355.00	N/A
Primary Transmitter - Demo Old Duct Work	\$1,717.39	\$1,717.39	Please see WHRO-TV Primary Transmitter - Demo Old Duct Work Budget Revision Justification Letter.pdf	\$1,717.39	N/A

Primary Transmitter - HVAC	\$62,860.00	\$62,860.00	Please see Thermo- Trol Systems Proposal #2008- 22DG & Invoice #7182717. pdf	\$62,860.00	N/A
Other Building Addition Size: 1500.0	\$3,948.67	\$3,948.67	Please see Estimated Cost Justification WHRO-TV- 110-1st Primary Transmitter - Building Addition, 1500 sq. ft. v0	\$3,948.67	N/A
25 Ton system	\$91,500.00	\$12,734.33	Please see American Tower WHRO Main Norfolk Tall Tower 10152 Customer Project Cost Estimation.	\$12,734.33	N/A
Other Electrical Service: Installation of Transmitter Electrical systems	\$200,000.00	\$200,000.00	N/A	\$5,636.79	N/A

4" Rigid Conduit and	\$30,300.00	\$28,800.00	After Digital conversion	\$0.00	N/A
Wiring			in 2009 all		
(Cost per			conduits		
foot)			and switch		
			gear was		
			removed		
			that		
			connected		
			to the		
			analog		
			transmitter.		
Transformer	\$48,400.00	\$276,401.00	This is to	\$0.00	The
3 phase			replace the		Existing 3
/480v - 500			existing 3		wire 600
KVA			wire 600		Kva UPS
			KVA Clean		from Active
			source		power is no
			UPS with a		compatible
			4 wire		with any
			500KVA		solid state
			Clean		transmitter.
			Source		The
			UPS from		replacemen
			Pillar		is a 4 wire
			Formerly		500 kva
			Active		UPS from
			Power		Active
					power a
					division of
					Pillar powei
					systems.
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	\$0.00	N/A

UHF -	\$1,788,000.00	\$1,992,120.00	Includes	\$1,958,690.00	N/A
Liquid			342,120		
Cooled			dollars for		
Solid State			the RFS 6		
Transmitter			pole filter		
52 - 61 kW			and		
			switches to		
			change		
			from the		
			interim		
			antenna to		
			the main		
			antenna		
Sub-total	\$2,266,560.06	\$2,616,515.39	N/A	\$2,047,221.18	N/A
Total for all systems	\$6,909,118.67	\$4,868,839.66	N/A	\$3,769,422.83	N/A

Components

Actual Information Description	File Name	
Primary Transmitter - Installation	Component Description: Amount:	WHRO-TV-110-1st Primary Transmitter - Installation \$279.00
Primary Transmitter - Distilled Water	Component Description: Amount:	Distilled Water \$1,355.00
Primary Transmitter - Demo Old Duct Work	Component Description: Amount:	Sheet Metal \$1,717.39
Primary Transmitter - HVAC	Component Description: Amount:	Install two 20-Ton A /C Systems \$62,860.00

Other Building Addition Size: 1500.0		
Size: 1500.0	Component Description:	1. WHRO-TV-110- 1st Primary
		Transmitter -
		Building Addition, 1500 sq. ft.
	Amount:	\$3,478.67
	Component Description:	Erected Scaffold,
		hung protective
	Amount:	poly, Core drill holes \$470.00
	Amount.	\$470.00
25 Ton system		
	Component Description:	CAPITAL
		CONTRIBUTION -
		NORFOLK TALL TOWER
	Amount:	\$12,734.33
		. ,
Other Electrical Service: Installation of Transmitter		
Electrical systems	Component Description:	18-8 Stainless Steel
·	Amount:	Threaded Rod \$82.75
	Amount.	ψ02.73
	Component Description:	Strut Channel, Low-
		Profile
	Amount:	\$294.53
	Component Description:	18-8 Stainless Steel
	Campanant Boomption	Hex Head Screw
	Amount:	\$199.52
	Component Description	Install receptacle for
	Component Description:	
	Amount:	combiner \$354.91

Component Description: Run fish-tape

between buildings

Amount: \$685.00

Component Description: Black-Oxide Alloy

Steel Hex Drive Flat Head Screw, 7/16" -14 Thread Size

Amount: \$206.29

Component Description: Four-Arm Extended-

Tip Thumb Screw

Amount: \$44.92

Component Description: 18-8 Stainless Steel

Hex Nut

Amount: \$193.36

Component Description: High-Strength

Grade 8 Steel Hex

Head Screw

Amount: \$54.78

Component Description: Belleville Disc

Spring for 3/8" Shaft

Diameter

Amount: \$145.12

Component Description: 18-8 Stainless Steel

Threaded Rod, 5/8"

-11 Thread Size

Amount: \$192.50

Component Description: Nylon Mesh

Cushioned Sanding

Pad

Amount: \$113.21

Component Description: 9"X3"DX12"L

Chalfant \$2,649.55

Amount: \$2,649.55

Component Description: Zinc Yellow-

Chromate Plated Hex Head Screw

Amount: \$182.03

Component Description: 18-8 Stainless Steel

Hex Head Screw

Amount: \$36.54

Component Description: Bolt-Down Swivel

Leveling Mount with

Cushion \$57.45

Amount: \$57.45

Component Description: Male-Female

Threaded Hex

Standoff

Amount: \$47.33

Component Description: COPPER STRAP,

2in. x .032in. x 25ft.

Amount: \$97.00

4" Rigid Conduit and Wiring (Cost per foot)

Information not provided.

Transformer 3 phase/480v

- 500 KVA

Component Description:

Amount:

UPS

\$276,401.00

Component Description:

Invoice to be

resubmitted to LMS.

Amount:

N/A

Switchgear - industrial 800 amp	Information not provided.	
UHF - Liquid Cooled Solid State Transmitter 52 - 61 kW	Component Description:	Parallax 58kW Liquid Cooled
	Amount:	Digital Transmitter \$881,410.50
	Component Description:	Parallax 58kW Liquid Cooled Digital Transmitter
	Amount:	\$979,345.00
	Component Description:	Parallax 58kW liquid cooled digital
	Amount:	\$97,934.50
	Component Description:	Invoice to be resubmitted to LMS.
	Amount:	N/A
	Component Description:	Invoice to be
	Amount:	resubmitted to LMS. N/A

Cost Information

Antennas

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Antenna SBB-EPD- 24 C160	\$440,609.28	\$312,858.61		\$252,275.27	
Interim Antenna - New Combiner Installation	\$9,814.28	\$9,814.28	Please see Estimated Cost Justification WHRO-TV- 280-Interim Antenna - New Combiner Installation v0	\$9,814.28	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$8,500.00	Shared cost with Other Broadcasters being repacked See WHRO IM Norfolk Tall Tower 10152 Repack Cost Estimates	\$0.00	N/A
Elbow complex, broadband, at antenna input, per 7 3/16. feedline (if needed)	\$16,850.00	\$5,851.20	Please see WHRO American Tower quote Main Norfolk Tall Tower 10152	\$5,851.20	N/A

Combiner	\$126,000.00	\$50,000.00	Shared Costs See	\$0.00	25 percent payment
splitting			American		on
/switching			Tower		combiners
for dual			document:		
feed lines,			WHRO IM Norfolk Tall		
if applicable			Tower 10152		
			Repack Cost		
			Estimates		
			plus		
			10,000.00 as		
			shared		
			installation		
			Costs line		
			item 3-C-2		
New	\$84,200.00	\$56,494.80	see	\$56,494.80	Combiner
combiner,			Estimated		25 %
cost per			Cost		payment
channel			Justification		
(without			WHRO-TV-		
antenna)			280-Interim		
			Antenna -		
			New		
			Combiner v0		
Sweep test	\$6,730.00	\$8,333.33	Shared	\$6,249.99	25 percent
of existing			expense with		payment
antenna			Other		for sweep
			Broadcasters		tests
			Being		
			repacked		
			See		
			American		
			Tower Document:		
			WHRO IM		
			Norfolk Tall		
			Tower 10152 Repack Cost Estimates		

UHF - High Power, Side Mount, basic slot antenna, 24 bay,, 60 - 65 kW input, directional,, elliptically or circularly polarized	\$116,265.00	\$116,265.00	Please see American Tower WHRO Main Norfolk Tall Tower 10152 Customer Project Cost Estimation.	\$116,265.00	N/A
Interim Tower Rental	\$57,600.00	\$57,600.00	Interim antenna Tower rental during repack	\$57,600.00	N/A
Primary Antenna PEP70E-05- 2-T	\$1,339,213.33	\$421,883.33		\$270,665.96	
Combiner Installation	\$13,333.33	\$13,333.33	Per station combiner installation costs	\$9,999.99	N/A
Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)	\$18,950.00	\$12,000.00	N/A	\$10,021.66	N/A
	\$126,000.00	\$126,000.00	N/A	\$0.00	N/A

New combiner, cost per channel (without antenna)	\$84,200.00	\$66,000.00	N/A	\$65,589.98	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$5,000.00	N/A
UHF - High Power Top Mount (200- 1000 kW), Four Station broadband panel antenna, elliptically or circularly polarized	\$1,090,000.00	\$198,150.00	This is the per cost per station with 4 station total using the BBA	\$180,054.33	N/A
Sub-total	\$1,779,822.61	\$734,741.94	N/A	\$522,941.23	N/A
Total for all systems	\$6,909,118.67	\$4,868,839.66	N/A	\$3,769,422.83	N/A

Components

Actual Information Description	File Name	
Interim Antenna - New Combiner Installation	Component Description: Amount:	Misc. supplies \$132.68
	Component Description:	25. WHRO-TV-280- Interim Antenna - New Combiner Installation
	Amount:	\$9,681.60

Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.	
Elbow complex, broadband, at antenna input, per 7 3/16. feedline (if needed)	Component Description:	3. WHRO-TV-280- Interim Antenna - 7 3/16" Broadband Elbow Complex
	Amount:	\$1,000.00
	Component Description:	3. WHRO-TV-280- Interim Antenna - 7 3/16" Broadband Elbow Complex
	Amount:	\$2,000.00
	Component Description:	24. WHRO-TV-280- Interim Antenna - 7 3/16" Broadband Elbow Complex
	Amount:	\$2,851.20
Combiner output splitting /switching for dual feed lines, if applicable	Information not provided.	

New combiner, cost per channel (without antenna)

Component Description: 21. WHRO-TV-280-

Interim Antenna -New Combiner

Amount: \$11,000.00

Component Description: 23. WHRO-TV-280-

Interim Antenna -New Combiner

Amount: \$23,494.80

Component Description: 21. WHRO-TV-280-

Interim Antenna -New Combiner \$22,000.00

Component Description: Invoice to be

resubmitted to LMS.

Amount: N/A

Amount:

Component Description: Invoice to be

resubmitted to LMS.

Sweep test of existing antenna

Component Description: 22. WHRO-TV-280-

Interim Antenna -

Sweep Test

Amount: \$2,083.33

Component Description: 22. WHRO-TV-280-

Interim Antenna -

Sweep Test

Amount: \$4,166.66

Component Description: Invoice to be

resubmitted to LMS.

Amount: N/A

Component Description: Invoice to be

resubmitted to LMS.

UHF - High Power, Side Mount, basic slot antenna, 24 bay,, 60 - 65 kW input, directional,, elliptically or circularly polarized

Component Description: 20. WHRO-TV-280-

Interim Antenna -UHF High Power Side Mount,

Directional, E-POL

Amount: \$15,000.00

Component Description: 22. WHRO-TV-280-

Interim Antenna -UHF High Power Side Mount,

Directional, E-POL

Amount: \$71,265.00

Component Description: 20. WHRO-TV-280-

Interim Antenna-UHF High Power Side Mount,

Directional, E-POL

Amount: \$30,000.00

Component Description: Invoice to be

resubmitted to LMS.

Amount: N/A

Component Description: Invoice to be

resubmitted to LMS.

Interim Tower Rental

Component Description: 23. WHRO-TV-280-

Interim Antenna -Interim Tower

Rental

Amount: \$28,800.00

Component Description: 26. WHRO-TV-280-

Interim Antenna -

Interim Tower Rental

Amount: \$14,400.00

Component Description: Invoice to be

resubmitted to LMS.

Amount: N/A

Component Description: 23. WHRO-TV-280-

Interim Antenna -Interim Tower

Rental

Amount: \$14,400.00

Component Description: Invoice to be

resubmitted to LMS.

Combiner Installation		
	Component Description:	2. WHRO-TV-210-
	·	Primary Antenna -
		Combiner
		Installation
	Amount:	\$6,666.66
	Component Description:	Invoice to be
		resubmitted to LMS.
	Amount:	N/A
	Component Description:	Invoice to be
		resubmitted to LMS.
	Amount:	N/A
	Component Description:	2. WHRO-TV-210-
		Primary Antenna -
		Combiner
		Installation
	Amount:	\$3,333.33

Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)

Component Description: 4. WHRO-TV-210-

Primary Antenna - 8 3/16" Broadband Elbow Complex

Amount: \$3,000.00

Component Description: 5. WHRO-TV-210-

Primary Antenna - 8 3/16" Broadband Elbow Complex

Amount: \$1,021.66

Component Description: Invoice to be

resubmitted to LMS.

Amount: N/A

Component Description: 4. WHRO-TV-210-

Primary Antenna - 8 3/16" Broadband Elbow Complex

Amount: \$6,000.00

Component Description: Invoice to be

resubmitted to LMS.

Amount: N/A

Combiner output splitting /switching for dual feed lines, if applicable

Information not provided.

New combiner, cost per channel (without antenna)		
mamier (without antenna)	Component Description:	1. WHRO-TV-210-
		Primary Antenna - New Combiner
	Amount:	\$33,000.00
	Component Description:	1. WHRO-TV-210-
		Primary Antenna -
	Amount:	New Combiner \$16,500.00
	, sinounce	ψ10,000.00
	Component Description:	3. WHRO-TV-210-
		Primary Antenna -
	Amazonto	New Combiner
	Amount:	\$16,089.98
	Component Description:	Invoice to be
	, and the second	resubmitted to LMS.
	Amount:	N/A
	Component Description:	Invoice to be
		resubmitted to LMS.
	Amount:	N/A
Sweep test of existing		
intenna	Component Description:	4. WHRO-TV-210-
		Primary Antenna -
		Sweep Test
	Amount:	\$5,000.00

UHF - High Power Top Mount (200-1000 kW), Four Station broadband panel antenna, elliptically or circularly polarized

Component Description: CAPITAL

> **CONTRIBUTION -**NORFOLK TALL

TOWER

Amount: \$49,537.50

Component Description: 2. WHRO-TV-210-

> Primary Antenna -**UHF High Power** Top Mount, 4 Station Broadband,

E-POL

Amount: \$31,441.83

Component Description: Invoice to be

resubmitted to LMS.

Amount: N/A

Component Description: CAPITAL

> **CONTRIBUTION -**NORFOLK TALL

TOWER

Amount: \$99,075.00

Component Description: Invoice to be

resubmitted to LMS.

Cost Information

Transmission Line

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description Interim Transmission Line	Predetermined Cost Estimate \$499,801.62	Estimated Cost \$203,401.62	Estimated Cost Justification	Actual Cost \$176,107.42	Actual Cost Justification
Elbows	\$28,730.70	\$28,730.70	Elbows to connect the vertical run to the interim antenna 3 Total @ 1930.00 each per Dielectric Quote	\$1,436.50	Includes additional items not in the original quote
Interim Transmission Line - Other Parts	\$29,779.92	\$29,779.92	Please see Estimated Cost Justification WHRO-TV- 380-Interim Transmission Line - Other Parts v1	\$29,779.92	N/A
Transmission line interim	\$0.00	\$0.00	these costs are included in the Interim Transmission Line - Rigid Transmission Line budget category	\$0.00	N/A

Rigid Transmission Line - copper, 8 3 /16" broadband	\$438,900.00	\$142,500.00	see WHRO American Tower quote Main Norfolk Tall Tower 10152, second section - Norfolk Tall Tower 10152	\$142,500.00	N/A
Interim Transmission Line - Nitrogen Generator	\$2,391.00	\$2,391.00	Please see American Tower WHRO Main Norfolk Tall Tower 10152 Customer Project Cost Estimation at 50% of the cost, per the vendor	\$2,391.00	N/A
Primary Transmission Line	\$1,162,975.12	\$360,118.12		\$360,118.12	
Primary Transmission Line - Other Parts	\$7,549.97	\$7,549.97	Please see Estimated Cost Justification WHRO-TV- 310-Primary Transmission Line - Other Parts v1	\$7,549.97	N/A
Primary Transmission Line - Nitrogen Generator	\$2,391.00	\$2,391.00	Please see American Tower WHRO Main Norfolk Tall Tower 10152 Customer Project Cost Estimation at 50% of the cost, per the	\$2,391.00	N/A

Combiner system	\$75,734.15 \$1,077,300.00	\$75,734.15 \$274,443.00	Please see WHRO 1931009 Order Confirmation - Primary Transmission Line - Combiner System Please see	\$75,734.15 \$274,443.00	N/A
Transmission Line - copper, 8 3 /16" broadband	\$1,U11,3UU.UU	φ <i>21</i> 4,443.00	Estimated Cost Justification WHRO-TV- 310-Primary Transmission Line - 8 3_16_ Broadband Rigid Copper v0	φ2/4,443.UU	IV/A
Sub-total	\$1,662,776.74	\$563,519.74	N/A	\$536,225.54	N/A
Total for all systems	\$6,909,118.67	\$4,868,839.66	N/A	\$3,769,422.83	N/A

Components

Actual Information	
Description	File Name

Elbows		
	Component Description:	Invoice to be resubmitted to LMS.
	Amount:	N/A
	Component Description:	Invoice to be resubmitted to LMS.
	Amount:	N/A
	Component Description:	Invoice to be resubmitted to LMS.
	Amount:	N/A
	Component Description:	item 1 R0004542501 field Flange 5 at 287.30
	Amount:	\$1,436.50
Interim Transmission Line - Other Parts		
Interim Transmission Line - Other Parts	Component Description:	WHRO-TV-380- Interim Transmission Line -
	Component Description: Amount:	Interim
		Interim Transmission Line - Other Parts
	Amount: Component Description:	Interim Transmission Line - Other Parts \$11.62 WHRO-TV-380- Interim Transmission Line - Other Parts
	Amount:	Interim Transmission Line - Other Parts \$11.62 WHRO-TV-380- Interim Transmission Line -
	Amount: Component Description:	Interim Transmission Line - Other Parts \$11.62 WHRO-TV-380- Interim Transmission Line - Other Parts
	Amount: Component Description: Amount:	Interim Transmission Line - Other Parts \$11.62 WHRO-TV-380- Interim Transmission Line - Other Parts \$29.60 RIGID TRANSMISSION

Transmission line interim		
	Component Description:	Invoice to be resubmitted to LMS.
	Amount:	N/A
	Component Description:	Invoice to be
		resubmitted to LMS.
	Amount:	N/A

Rigid Transmission Line - copper, 8 3/16" broadband	Component Description:	24. WHRO-TV-380- Interim Transmission Line - 8 3/16"" Broadband
	Amount:	Rigid Copper \$22,000.00
	Component Description:	24. WHRO-TV-380- Interim Transmission Line - 8 3/16" Broadband Rigid Copper
	Amount:	\$44,000.00
	Component Description:	27. WHRO-TV-380- Interim Transmission Line - 8 3/16" Broadband Rigid Copper
	Amount:	\$76,500.00
	Component Description: Amount:	Invoice to be resubmitted to LMS. N/A
	Component Description: Amount:	Invoice to be resubmitted to LMS. N/A
	Component Description: Amount:	Invoice to be resubmitted to LMS. N/A
Interim Transmission Line - Nitrogen Generator	Component Description:	21. WHRO-TV-380- Interim Transmission Line -
	Amount:	Nitrogen Generator \$2,391.00

Primary Transmission Line		
- Other Parts	Component Description:	4291-08 Nucalgon
		Nubrite
	Amount:	\$11.62
	Component Description:	Misc. hardware
	Amount:	\$228.75
	Component Description:	XFMR 6-50 /6-75
		UHF 3 ST
	Amount:	\$7,242.40
	Component Description:	O-RING BUNA
	Amount:	\$67.20
Primary Transmission Line		
Nitrogen Generator	Component Description:	20. WHRO-TV-310- Primary
		Transmission Line -
		Nitrogen Generator
	Amount:	\$2,391.00
Combiner system		
	Component Description:	RIGID
		TRANSMISSION
		LINE
	Amount:	\$75,734.15

Rigid Transmission Line - copper, 8 3/16" broadband

Component Description: 5. WHRO-TV-310-

Primary

Transmission Line - 8 3/16" Broadband Rigid Copper

Amount: \$110,335.50

Component Description: 6. WHRO-TV-310-

Primary

Transmission Line -8 3/16" Broadband Rigid Copper

Amount: \$108,939.75

Component Description: 5. WHRO-TV-310-

Primary

Transmission Line -8 3/16" Broadband Rigid Copper

\$55,167.75

Component Description: Invoice to be

resubmitted to LMS.

Amount: N/A

Amount:

Component Description: Invoice to be

resubmitted to LMS.

Cost Information

Tower Equipment and Rigging Costs

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower GTOWER	\$686,725.83	\$509,591.83		\$494,616.81	
Tower Permit Drawing Package	\$4,700.00	\$4,700.00	Please see American Towers Customer Project Cost Estimation	\$4,700.00	N/A
Tower Construction Project Management	\$27,500.00	\$27,500.00	Please see Estimated Cost Justification WHRO-TV- 410-Existing Primary Tower - Tower Construction Project Management v0	\$23,974.99	N/A
Minor tower reinforcement /modifications	\$158,000.00	\$79,953.33	please see Estimated Cost Justification WHRO-TV- 410-Existing Primary Tower - Minor Reinforcement Modifications v0	\$79,953.33	N/A

Total for all systems	\$6,909,118.67	\$4,868,839.66	N/A	\$3,769,422.83	N/A
Sub-total	\$686,725.83	\$509,591.83	N/A	\$494,616.81	N/A
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$321,912.67	please see Estimated Cost Justification WHRO-TV- 410-Existing Primary Tower - Tower Rigging v0	\$315,862.66	N/A
Tower Helicopter Lift	\$55,525.83	\$55,525.83	Please see American Tower WHRO Main Norfolk Tall Tower 10152 Customer Project Cost Estimation	\$55,525.83	N/A
Structural engineering tower load study for a documented tower with candelabra	\$20,000.00	\$20,000.00	Part of the total tower rebuild with 4 other broadcasters American Tower Document WHRO IM Norfolk Tall Tower 10152 Repack Cost Estimates	\$14,600.00	this included structural and tower mapping for structura

Components

Actual Information	
Description	File Name

Tower Permit Drawing
Package

Component Description: 9. WHRO-TV-410-

Existing Primary
Tower - Tower
Permit Drawing

Package

Amount: \$2,350.00

Component Description: 11. WHRO-TV-410-

Existing Primary
Tower - Tower
Permit Drawing

Package

Amount: \$1,175.00

Component Description: 9. WHRO-TV-410-

Existing Primary
Tower - Tower
Permit Drawing

Package

Amount: \$1,175.00

Tower Construction Project	
Management	

Component Description: 11. WHRO-TV-410-

Existing Primary
Tower - Tower
Construction
Project

Management

Amount: \$1,796.87

Component Description: 12. WHRO-TV-410-

Existing Primary
Tower-Tower
Construction
Project

Management

Amount: \$18,584.37

Component Description: 11. WHRO-TV-410-

Existing Primary
Tower-Tower
Construction
Project

Management

Amount: \$3,593.75

Minor tower reinforcement /modifications

Component Description: 7. WHRO-TV-410-

Existing Primary
Tower - Minor
Reinforcement
/Modifications

Amount: \$12,500.00

Component Description: 7. WHRO-TV-410-

Existing Primary
Tower - Minor
Reinforcement
/Modifications

Amount: \$25,000.00

Component Description: 8. WHRO-TV-410-

Existing Primary
Tower - Minor
Reinforcement
/Modifications
\$42,453,33

Amount: \$42,453.33

Component Description: Invoice to be

resubmitted to

LMS.

Amount: N/A

Component Description: Invoice to be

resubmitted to

LMS.

Structural engineering tower load study for a documented tower with candelabra

Component Description: 6. WHRO-TV-410-

Existing Primary
Tower - Tower
Load Study for
Documented
Tower with
Candelabra

Amount: \$2,737.50

Component Description: 6. WHRO-TV-410-

Existing Primary
Tower - Tower
Load Study for
Documented
Tower with
Candelabra

Amount: \$5,475.00

Component Description: 7. WHRO-TV-410-

Existing Primary
Tower - Tower
Load Study for
Documented
Tower with
Candelabra

Amount: \$6,387.50

Component Description: Invoice to be

resubmitted to

LMS.

Amount: N/A

Component Description: Invoice to be

resubmitted to

LMS.

Tower Helicopter Lift		
	Component Description:	10. WHRO-TV-410-
		Existing Primary
		Tower - Helicopter
		Lift
	Amount:	\$55,525.83

Complex Tower (includes, for example, those with candelabras and/or stacked antennas)

Component Description: 9. WHRO-TV-410-

Existing Primary
Tower - Tower
Rigging, Complex

Tower

Amount: \$194,412.54

Component Description: Cost for 4 liftin

eyes and bolts (for shelters) left on site for future use as requested

Amount: \$200.00

Component Description: 8. WHRO-TV-410-

Existing Primary Tower - Tower Rigging, Complex

Tower

Amount: \$80,833.42

Component Description: Invoice to be

resubmitted to

LMS.

Amount: N/A

Component Description: Invoice to be

resubmitted to

LMS.

Amount: N/A

Component Description: 8. WHRO-TV-410-

Existing Primary Tower - Tower Rigging, Complex

Tower

Amount: \$40,416.70

Cost Information

Outside Professional Services

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Co
Outside Professional Services	\$302,265.85	\$234,068.18		\$107,594.10	
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$5,200.00	N/A
Ground and Building Drawing Package	\$11,000.00	\$11,000.00	Cost to Generate the Construction Drawing package for 4 Broadcast stations. Cover the interim and Main antenna packages	\$3,525.00	All of thes were und Non Zoning Permit which hav been Zeroed o but I can remove them.
Site Coordination Meeting	\$2,895.85	\$2,895.85	The estimated cost has been adjusted to include all invoices submitted for reimbursement at this time.	\$2,895.85	N/A

RF System Test	\$5,000.00	\$5,000.00	Perform systems checks on Combiner network due to the volume of broadcaster using the antenna ATC Doc WHRO IM Norfolk Tall Tower 10152 Repack Cost Estimates	\$5,000.00	N/A
Migratory Bird Assessment	\$500.00	\$500.00	estimated costs for being in a bird migration mitigation ATC DocWHRO IM Norfolk Tall Tower 10152 Repack Cost Estimates	\$437.49	N/A
RF Exposure Measurements	\$21,050.00	\$6,500.00	Shared Expense	N/A	N/A
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	N/A	N/A	N/A
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	\$2,105.00	\$700.00	To reimburse American Tower if needed	N/A	N/A
ASR modification (prepare FCC Form 854)	\$2,105.00	\$800.00	Shared cost of the Broadcasters being repacked	N/A	N/A

Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	\$10,520.00	\$3,500.00	Per ATC Doc WHRO IM Norfolk Tall Tower 10152 Repack Cost Estimates	N/A	N/A
NEPA Section 106 environmental review, if needed	\$6,310.00	\$2,000.00	Per ATC Doc WHRO IM Norfolk Tall Tower 10152 Repack Cost Estimates	N/A	N/A
Attorney Fees - Negotiation of lease and other matters for shared locations	\$4,210.00	\$4,000.00	N/A	\$3,869.48	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	\$144.00	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A N/A		N/A
Prepare request for Special Temporary Authorization	\$2,050.00	\$2,850.00	The estimated cost has been adjusted to include all invoices submitted for reimbursement at this time.	\$2,025.00	N/A

Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	\$250.00	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	N/A	N/A
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$3,636.33	The estimated cost has been adjusted to include all invoices submitted for reimbursement at this time.	\$3,636.33	N/A
Project management of the transition	\$121,660.00	\$85,895.00	Shared Expense via American Tower Doc WHRO IM Norfolk Tall Tower 10152 Repack Cost Estimates. Also see Widelity Strategic Support Quote.	\$77,069.95	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,541.00	The estimated cost has been adjusted to include all invoices submitted for reimbursement at this time.	\$3,541.00	N/A

Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Sub-total	\$302,265.85	\$234,068.18	N/A	\$107,594.10	N/A
Total for all systems	\$6,909,118.67	\$4,868,839.66	N/A	\$3,769,422.83	N/A

Components

Actual Information			
Description	File Name		

Perform engineering study for new channel assignment and antenna development

Component Description: 14. WHRO-TV-

530-RF Eng -Engineering Study for New Channel Assignment

Amount: \$2,500.00

Component Description: develop final

operating constants, preparation of engineering portions of FCC application for license to cover.

Amount: \$200.00

Component Description: Invoice to be

resubmitted to

LMS.

Amount: N/A

Component Description: 15. WHRO-TV-

530-RF Eng -Engineering Study for New Channel Assignment

Amount: \$1,250.00

Component Description: Invoice to be

resubmitted to

LMS.

Amount: N/A

Component Description: 14. WHRO-TV-

530-RF Eng -Engineering Study for New Channel

Assignment

Amount: \$1,250.00

Ground and Building Drawing Package

Component Description: 10. WHRO-TV-

590-Ground and Building Drawing

Package

Amount: \$2,350.00

Component Description: Invoice to be

resubmitted to

LMS.

Amount: N/A

Component Description: 10. WHRO-TV-

590-Ground and Building Drawing

Package

Amount: \$1,175.00

Component Description: Invoice to be

resubmitted to

LMS.

Amount: N/A

Component Description: Invoice to be

resubmitted to

LMS.

Amount: N/A

Component Description: Invoice to be

resubmitted to

LMS.

Site Coordination Meeting **Component Description:** 15. WHRO-TV-590-Site Coordination Meeting \$625.00 Amount: **Component Description:** 15. WHRO-TV-590-Site Coordination Meeting \$1,250.00 Amount: **Component Description:** 16. WHRO-TV-590-Site Coordination Meeting Amount: \$1,020.85 **Component Description:** Invoice to be resubmitted to LMS. Amount: N/A

Component Description: Invoice to be

resubmitted to

LMS.

RF System Test		
	Component Description:	17. WHRO-TV-
		580-Field
		Engineering
		Service - RF
		System Test
	Amount:	\$1,250.00
	Component Description:	17. WHRO-TV-
		580-Field
		Engineering
		Service - RF
		System Test
	Amount:	\$2,500.00
	Component Description:	17. WHRO-TV-
		580-Field
		Engineering
		Service - RF
		System Test
	Amount:	\$1,250.00
	Component Description:	Invoice to be
		resubmitted to
		LMS.
	Amount:	N/A
	Component Description:	Invoice to be
	Component Description.	resubmitted to
		LMS.
	Amount:	N/A
	Amount.	IN/A

Migratory Bird Assessment		
	Component Description:	16. WHRO-TV- 590-Migratory Bird
		Assessment
	Amount:	\$145.83
	Component Description:	16. WHRO-TV-
		590-Migratory Bird Assessment
	Amount:	\$291.66
		4_3 3
	Component Description:	Invoice to be
		resubmitted to
	Amount:	LMS. N/A
	Allount	14// (
	Component Description:	Invoice to be
		resubmitted to
	Amount:	LMS. N/A
	Amount	IV/A
RF Exposure Measurements	Information not provided.	
Comprehensive coverage verification via field study, if needed	Information not provided.	
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	Information not provided.	
ASR modification (prepare FCC Form 854)	Information not provided.	
Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	Information not provided.	
NEPA Section 106 environmental review, if needed	Information not provided.	

Attorney Fees - Negotiation of lease and other matters for shared locations

Component Description:

Amount:

Services Rendered

\$202.00

Component Description:

Amount:

Services Rendered

\$272.00

Component Description:

Amount:

Services Rendered

\$252.50

Component Description:

Amount:

Services Rendered

\$85.50

Component Description: email to repacked

tv stations \$202.00

Amount:

Component Description:

WHRO-TV-550-

Attorney -

Negotiate Lease and Other Matters

Amount: \$221.50

Component Description:

Amount:

Services Rendered

\$1,063.98

Component Description: Email reminder

regarding WHRO repack quarterly progress reports required by FCC

Amount: \$202.00

Component Description:

Amount:

Services Rendered

\$353.50

Component Description: Services Rendered Amount: \$101.00 **Component Description:** WHRO-TV-550-Attorney -Negotiate Lease and Other Matters Amount: \$315.00 **Component Description:** Services Rendered Amount: \$35.00 **Component Description: Email Reminder of** WHRO quarterly repack transition Amount: \$50.50 **Component Description:** Services Rendered Amount: \$513.00 Attorney Fees -Prepare and File FCC Form 2100 (main), **Component Description:** Services Rendered License to Cover Application Amount: \$144.00 Attorney Fees - Prepare and Information not provided. File FCC Form 2100 (main), Construction Permit Application

Prepare request for Special		
Temporary Authorization	Component Description:	Develop technical
		parameters for
		side-mount interim
		antenna
	Amount:	\$850.00
	Component Description:	Develop
		parameters for
		final repack CH-
		31 configuration
	Amount:	\$1,175.00
	Component Description:	Develop technical
		parameters for
		auxiliary antenna
		on repack
	Amount:	\$825.00
Prepare engineering section of FCC Form 2100 (main),		
License to Cover Application	Component Description:	Confirm and
2.05.100 to Covor Application		revise final
		operating
		constants
	Amount:	\$250.00
Prepare engineering section	Information not provided.	
of FCC Form 2100 (main), Construction Permit		

Address transition timing and coordination issues w/ other stations and wireless

Component Description: Services Rendered

Amount: \$303.00

Component Description: 14. WHRO-TV-

590-Transition
Timing and
Coordination

Issues

Amount: \$1,458.33

Component Description: Invoice to be

resubmitted to

LMS.

Amount: N/A

Component Description: 13. WHRO-TV-

590-Transition
Timing and
Coordination
Issues

Amount: \$625.00

Component Description: Invoice to be

resubmitted to

LMS.

Amount: N/A

Amount:

Component Description: 13. WHRO-TV-

590-Transition
Timing and
Coordination
Issues

\$1,250.00

Project management of the transition

Component Description: 12. WHRO-TV-

510-Project Management

Amount: \$2,370.00

Component Description: Project

Amount: Management \$1,511.25

Component Description: Project

Amount:

Amount:

Amount:

Amount:

Amount:

Amount:

Management \$9,261.25

Component Description: Project

Management \$4,376.20

Component Description: Project

Management \$19,026.25

Component Description:

Project Management

Amount: \$3,118.05

Project

Management \$10,582.50

Component Description:

Component Description:

Project

Management

\$38.75

Component Description: Project

Management \$2,986.05

Component Description:

Invoice to be resubmitted to

LMS.

Component Description: Project

Amount: Management \$778.75

Component Description: Invoice to be

resubmitted to

LMS.

Amount: N/A

Component Description: 13. WHRO-TV-

510-Project Management \$2,370.00

Amount:

Component Description: Project

Management

Amount: \$3,635.35

Component Description: Invoice to be

resubmitted to

LMS.

Amount: N/A

Component Description: Project

Management

Amount: \$3,511.40

Component Description: 12. WHRO-TV-

510-Project Management

Amount: \$4,740.00

Component Description: Project

Management

Amount: \$740.00

Component Description: Invoice to be

resubmitted to

LMS.

N/A Amount:

Component Description:

Project

Amount:

Management \$6,899.15

Component Description:

Project

Amount:

\$1,125.00

Management

Attorney Fees - Prepare and File request for Special **Temporary Authorization**

Component Description:

Services Rendered

Amount:

\$412.00

Component Description:

WHRO-TV-550-

Attorney - Special Temporary

Authorization

Amount:

\$630.00

Component Description: WHRO-TV-550-

Attorney - Special

Temporary Authorization

Amount: \$109.00

WHRO-TV-550-**Component Description:**

Attorney - Special

Temporary Authorization

Amount: \$560.00

Component Description: Services Rendered

Amount: \$1,830.00

Prepare and or review	Information not provided.
reimbursement form	

Cost Information

Other Expenses

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$210,967.58	\$210,402.58		\$60,823.97	
Disposal Costs (for equipment and other waste, net of any salvage value)	\$6,603.42	\$6,603.42	Please see Estimated Cost Justification WHRO-TV- 610- Disposal Costs v0	\$6,603.42	N/A
Equipment Rental	\$1,071.89	\$1,071.89	Please see WHRO-TV Equipment Rental Budget Revision Justification Letter.pdf	\$1,071.89	N/A
Helicopter Landing Site Prep	\$1,208.18	\$1,208.18	Please see WHRO-TV Helicopter Landing Site Prep Budget Revision Justification Letter.pdf	\$1,208.17	N/A
VSWR Sweep Test	\$18,442.94	\$18,442.94	Please see WHRO-TV VSWR Sweep Test Budget Revision Justification Letter.pdf	\$0.00	N/A

Special Insurance	\$2,500.00	\$2,500.00	Special insurance	N/A	N/A
Rider			Rider to		
IVIUCI			cover the		
			costs of the		
			homes that		
			are within		
			2000 ft of		
			the tower.		
			ATC owes		
			the tower		
			WHRO		
			Owns all		
			the Land.		
			ATC Lease		
			the Base,		
			Anchors		
			and		
			Building		
			land from		
			WHRO		
Site Security	\$16,200.00	\$16,200.00	Very	N/A	N/A
			complicated		
			site		
			installation.		
			lots o		
			expensive		
			materials		
			lying		
			around very		
			easy to		
			steal. The		
			steal. The compound		
			steal. The compound is gated but		
			steal. The compound is gated but access		
			steal. The compound is gated but access under ditch		
			steal. The compound is gated but access under ditch area is		
			steal. The compound is gated but access under ditch		
Public Hearing	\$500.00	\$500.00	steal. The compound is gated but access under ditch area is	N/A	N/A
Public Hearing	\$500.00	\$500.00	steal. The compound is gated but access under ditch area is possible	N/A	N/A
Public Hearing	\$500.00	\$500.00	steal. The compound is gated but access under ditch area is possible Costs	N/A	N/A
Public Hearing	\$500.00	\$500.00	steal. The compound is gated but access under ditch area is possible Costs associated	N/A	N/A
Public Hearing	\$500.00	\$500.00	steal. The compound is gated but access under ditch area is possible Costs associated with Public	N/A	N/A
Public Hearing	\$500.00	\$500.00	steal. The compound is gated but access under ditch area is possible Costs associated with Public hearing	N/A	N/A
Public Hearing	\$500.00	\$500.00	steal. The compound is gated but access under ditch area is possible Costs associated with Public hearing materials	N/A	N/A
Public Hearing	\$500.00	\$500.00	steal. The compound is gated but access under ditch area is possible Costs associated with Public hearing materials sent to	N/A	N/A
Public Hearing	\$500.00	\$500.00	steal. The compound is gated but access under ditch area is possible Costs associated with Public hearing materials sent to surrounding	N/A	N/A

Grading Road	\$4,500.00	\$4,500.00	Regrading drive access to the site for at least 1 year	N/A	N/A
Comark System Design and Site Survey	\$15,300.00	\$15,300.00	This is to visit the tower site location and design the transmitter installation locations and RF plumbing of the system.	\$15,300.00	See P3921E WHRO Site design and Survey quote.
ATC One Time Tower Rental	\$57,600.00	\$57,600.00	Rental Fee associated with repacking for the Interim antenna	N/A	N/A
MVPD Notification of Channel Change	\$500.00	\$500.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	\$15,000.00	\$15,000.00	N/A	N/A	N/A
Equipment Storage	\$24,000.00	\$24,000.00	N/A	\$2,429.34	N/A

Delivery and Handling Charges						
Coordination \$5,000.00 \$5,000.00 N/A \$750.00 N/A Local Zoning \$1,750.00 \$1,750.00 N/A \$0.00 N/A FCC Filing \$195.00 \$190.00 N/A N/A N/A Fees - Special Temporary Authorization request FCC Filing \$335.00 \$325.00 N/A N/A N/A Fees - Form 2100 license to cover application Totol fication \$11,000.00 N/A \$6,750.00 N/A Sub-total \$210,967.58 \$210,402.58 N/A \$60,823.97 N/A Total for all \$6,909,118.67 \$4,868,839.66 N/A \$3,769,422.83 N/A	Delivery and Handling	\$26,711.15	\$26,711.15	Estimated Cost Justification WHRO-TV- 610- Equipment Delivery and	\$26,711.15	N/A
Local Zoning \$1,750.00 \$1,750.00 N/A \$0.00 N/A FCC Filing \$195.00 \$190.00 N/A N/A		\$2,000.00	\$2,000.00	N/A	N/A	N/A
FCC Filing \$195.00 \$190.00 N/A	_	\$5,000.00	\$5,000.00	N/A	\$750.00	N/A
Fees - Special Temporary Authorization request FCC Filing \$335.00 \$325.00 N/A N/A N/A Fees - Form 2100 license to cover application DTV Medical \$11,550.00 \$11,000.00 N/A \$6,750.00 N/A Facility Notification Sub-total \$210,967.58 \$210,402.58 N/A \$60,823.97 N/A Total for all \$6,909,118.67 \$4,868,839.66 N/A \$3,769,422.83 N/A	Local Zoning	\$1,750.00	\$1,750.00	N/A	\$0.00	N/A
Fees - Form 2100 license to cover application DTV Medical \$11,550.00 \$11,000.00 N/A \$6,750.00 N/A Facility Notification Sub-total \$210,967.58 \$210,402.58 N/A \$60,823.97 N/A Total for all \$6,909,118.67 \$4,868,839.66 N/A \$3,769,422.83 N/A	Fees - Special Temporary Authorization	\$195.00	\$190.00	N/A	N/A	N/A
Facility Notification Sub-total \$210,967.58 \$210,402.58 N/A \$60,823.97 N/A Total for all \$6,909,118.67 \$4,868,839.66 N/A \$3,769,422.83 N/A	Fees - Form 2100 license to cover	\$335.00	\$325.00	N/A	N/A	N/A
Total for all \$6,909,118.67 \$4,868,839.66 N/A \$3,769,422.83 N	Facility	\$11,550.00	\$11,000.00	N/A	\$6,750.00	N/A
	Sub-total	\$210,967.58	\$210,402.58	N/A	\$60,823.97	N/A
systems	Total for all systems	\$6,909,118.67	\$4,868,839.66	N/A	\$3,769,422.83	N/A

Components

Actual Information	
Description	File Name

Disposal Costs (for equipment and other waste, net of any salvage value)	Component Description: Amount:	Mixed Material Recoverables Hauling Services \$290.42
	Component Description: Amount:	Labor, equipment, and disposal \$6,313.00
Equipment Rental	Component Description: Amount:	TS420 STIHL 14" CUTQUICK \$1,071.89
Helicopter Landing Site Prep	Component Description: Amount:	Magnesium Chloride \$1,208.17
VSWR Sweep Test	Component Description: Amount:	Broadband AMPL / SMA \$2,522.92
Special Insurance Rider	Information not provided.	
Site Security	Information not provided.	
Public Hearing	Information not provided.	
Grading Road	Information not provided.	

Comark System Design and		
Site Survey	Component Description:	Invoice to be
		resubmitted to
		LMS.
	Amount:	N/A
	Component Description:	System Design
		Service / Site
		Survey
	Amount:	\$15,300.00
ATC One Time Tower	Information not provided.	
Rental		
MVPD Notification of Channel Change	Information not provided.	
Develop and air	Information not provided.	
announcement of upcoming channel change		
Equipment Storage	O	40 WUDO TV
	Component Description:	19. WHRO-TV- 610-Equipment
		Storage
	Amount:	\$2,429.34
Equipment Delivery and		
Handling Charges	Component Description:	Forklift Variable
		Reach
	Amount:	\$2,586.86
	Component Description:	Forklift Variable
	A	Reach
	Amount:	\$2,738.50
	Component Description	Eroight and
	Component Description:	Freight and Shipping

Component Description: Forklift Variable

Reach \$2,573,82

Amount: \$2,573.82

Component Description: Forklift Variable

Reach

Amount: \$2,586.86

Component Description: Forklift Variable

Reach

Amount: \$2,586.86

Component Description: Dielectric Freight

Charges for invoice 637004.
Cover letter for Dielectric Shipping is located in the Attachments

Amount: \$41.86

Component Description: Forklift Variable

Reach

Amount: \$2,586.86

Component Description: Invoice to be

resubmitted to

LMS.

Amount: N/A

Component Description: FREIGHT AND

SHIPPING

Amount: \$1,991.25

Component Description: ATC MS1 1-A-4 at

25% of total

Component Description: FREIGHT AND **SHIPPING** Amount: \$304.51 **Component Description:** 19. WHRO-TV-610-Equipment Delivery and Handling \$1,666.66 Amount: **Component Description:** FREIGHT AND **SHIPPING** Amount: \$84.83 **Component Description:** 19. WHRO-TV-610-Equipment Delivery and Handling **Amount:** \$3,333.33 **Component Description:** Forklift Variable Reach Amount: \$793.95 **BLM or NFS Coordination** Information not provided. Non-zoning permits 18. WHRO-TV-**Component Description:** 610-Non-Zoning **Permits Amount:** \$375.00 ATC MS2 3-D-1 **Component Description:** Ground and building Permit additional 50% payment 25%

Amount:

remaining

N/A

Component Description: 18. WHRO-TV-

610-Non-Zoning

Permits

Amount: \$187.50

Component Description: 18. WHRO-TV-

610-Non-Zoning

Permits

Amount: \$187.50

Component Description: ATC MS2 item 3-D-

1 Tower Permit additional 50% payment 25% remaining

Amount: N/A

Component Description: 3-D-1 Ground and

building permit package MS1 at 25% of total

Amount: N/A

Component Description: 3-D-1 Tower

Permits drawing

package

Local Zoning		
	Component Description:	ATC MS2 item 1-A-
		3 permit costs
		Additional 50%
		payment 25%
		remaining
	Amount:	N/A
	Component Description:	Invoice to be
		resubmitted to LMS.
	Amount:	LIVIS. N/A
	Amount.	IV/A
FCC Filing Fees - Special Temporary Authorization request	Information not provided.	
FCC Filing Fees - Form 2100 license to cover	Information not provided.	
application		
DTV Medical Facility Notification		
	Component Description:	Medical
		notification Mailing
	Amount:	\$3,750.00
	Component Description:	Medical Notification
	Amount:	\$3,000.00

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$6,909,118.67	\$4,868,839.66	\$3,769,422.83

Reimbursem	enrestiatus	Response
	The facility has ceased operating on its pre- auction channel.	Yes
	Construction of final facilities or all necessary modifications are complete.	Yes
	All receipts for reimbursement have been submitted no further costs are expected to be incurred. Note this will lock the Form 399 from further editing and begin close-out procedures with the Fund Administrator.	No

Section Question Response

Submission of Estimated Expenses Statements

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.

- 1. The Authorized
 Person signing
 below certifies that he
 /she is authorized to
 submit this TV
 Broadcaster
 Relocation Fund
 Reimbursement
 Form on behalf of
 the above-named
 entity.
- 2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.
- 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.

- 4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- 5. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
- 7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Chris Gunnar Gunnufsen Vice President Technology

09/07/2021

Section Question Response

Submission of Actual Cost Documentation Statements

WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISIONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).

- 1. The Authorized
 Person signing
 below certifies and
 represents that he
 /she is authorized to
 submit this TV
 Broadcaster
 Relocation Fund
 Reimbursement
 Form on behalf of
 the above-named
 entity.
- The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.
- The above-named entity acknowledges that all certifications and attached documentation are considered material representations.

- 4. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.
- 5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- 6. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.

- 8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
- 9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Chris Gunnar Gunnufsen Vice President Technology

09/07/2021

Section Question Response

Submission of Final Allocation or Accounting Information Statements

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.

- 1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. The abovenamed entity acknowledges that all certifications and attached documentation are considered material representations.
- 2. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.

- 3. The above-named entity certifies that all costs identified as "actual costs" herein accurately represent the costs actually paid by the above-named entity, including any discounts, refunds, or rebates.
- 4. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 5. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
- 6. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Chris Gunnar Gunnufsen Vice President Technology

09/07/2021

Attachments