



(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility **6463** | Service: **DTV** | Call **WFXT** | Channel: **34 (UHF)** |
ID: | Sign:
File **0000027904**
Number:
FRN: **0029118650** | Date **11/08**
Submitted: **/2018**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
COX MEDIA GROUP NORTHEAST, LLC Doing Business As: COX MEDIA GROUP NORTHEAST, LLC	Director of Engineering 25 FOX DRIVE DEDHAM, MA 02027 United States	+1 (781) 467- 2525	sean. anker@coxinc. com	Limited Liability Company

Reimbursement Contact Information

Reimbursement Contact Name and Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Contact Information

Preparer Contact Name and Information

Applicant	Address	Phone	Email
Sean Anker <i>Director of Engineering Cox Media Group Northeast, LLC</i>	Director of Engineering 25 Fox Drive Dedham, MA 02027 United States	+1 (781) 467- 2525	Sean.Anker@coxinc. com

**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	Move to American Tower interim site broadcasting on current channel while we prepare our current site for operation on new channel with new transmitter and new shared antenna.

Transmitters

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

**Auxiliary
Transmitter****Existing Transmitter Information**

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Backup
	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 and Type	Manufacturer	
	Model	DCX
	Year	2004
	Type	Inductive Output Tube
	IOT Power Type	Single
	Power Capacity	25 kW

**Auxiliary
Transmitter****New Transmitter Costs**

Section	Question	Response
New Transmitter	Use	Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Manufacturer	
	Model	ULXTE-40
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	25.3 kW
	Justification for New Transmitter	Comark has advised us that they are no longer going to retune existing DCX transmitters.

**Auxiliary
Transmitter****Other Transmitter Costs**

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	Yes
	Size	2 inches

	Length	400.0 feet
	Other Electrical Service	Yes
	Description	Surge suppressor, UPS
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Type	Cooling Only
	Size	15 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
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

Auxiliary Transmitter

Other Transmitter Cost Not Listed

Name	Description
UHF inside RF system including switching	Mask filter and accessories.
480V Transformer 112.5kVA	The transmitter specifies a 112.5 kVA transformer to provide 208V power service.
208V electrical distribution panel	A new electric distribution panel is required for the new 208V system.

**Primary
Transmitter**

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 and Type	Manufacturer	
	Model	DCX
	Year	1999
	Type	Inductive Output Tube
	IOT Power Type	Three
	Power Capacity	60 kW

**Primary
Transmitter**

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Manufacturer	
	Model	ULXTE-60
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	38.0 kW
	Justification for New Transmitter	Comark has advised us that they can not retune our existing transmitter, and suitable output IOT transmitters cost more than the solid-state system.

**Primary
Transmitter**

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	Yes

	Power	150 kVA
	Rigid Conduit and Wiring	Yes
	Size	2 inches
	Length	700.0 feet
	Other Electrical Service	Yes
	Description	Surge suppressor, UPS for control and transmitter electronics
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Type	Heating and Cooling
	Size	30 tons
	Other Size	N/A tons
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leasehold 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

Primary Transmitter

Other Transmitter Cost Not Listed

Name	Description
Replace generator transfer switch	Transfer switch replacement is necessary due to code compliance work noted in this section.

Replace 1000A-480V switchgear	Due to mains replacement for code compliance, the main disconnect and primary switch gear must be replaced.
Ice Shield for HVAC equipment	Ice protection for HVAC compressor split units placed in close proximity of tower located within a geographical location prone to ice and snow.
208V distribution panel	Transmitter will require a new electric distribution panel for the 208V system.
UHF inside RF system including switching	Mask filter, dummy load, other accessories.
20 Ton HVAC for combiner	20 ton HVAC system to provide cooling of the combiner facility.
Replace 1000A-480V electrical service entrance wiring	Required for code compliance due to the amount of electric work being permitted. Mains currently run through old cabinetry /transfer switch.

**Interim
Transmitter**

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Interim
	Description of Use	N/A
	Change Type	Purchase
	Manufacturer	
	Model	ULXTE-24
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	16.1 kW
	Justification for New Transmitter	Continue service to Boston viewers during rework of primary site.

**Interim
Transmitter**

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	Yes
	Size	2 inches
	Length	400.0 feet
	Other Electrical Service	Yes

	Description	Surge Suppression, UPS for transmission and control systems.
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Type	Heating and Cooling
	Size	15 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
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
Inside RF System	Is an additional interior RF system required to support this interim transmitter?	Yes

Interim Transmitter **Other Transmitter Cost Not Listed**

Name	Description
Electrical installation of transmitter	Electrical conduit and wiring from American Tower Corp., provided connection to all Interim Transmitter equipment, and drilling holes in exterior wall for transmitter connections to outside equipment.
480V Electrical Sub-panel	New 480V electrical sub-panel wired off of the existing switchgear required to supply power for the additional transmitter added to the shared space. This space currently does not have sufficient power available.

208V Electrical distribution panel	New 208V panel and distribution for transmitter and related electronics
Studio to Transmitter Link	Cost to install and lease fiber STL for duration of operation and build backup microwave STL path.
Remote Control	System to allow remote control of the transmitter and associated equipment from the main studio location.
75kVA transformer	To convert 480V main power to 208V.

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 Manufacturer and Type	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	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)	780.0 kW
	Manufacturer	

Model	TFU-19ETT /VP-R 4 C190
Year	2009

**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?	No
	Ownership	Leased
	Owner	American Tower
	Is antenna shared?	Yes
	Is antenna directional?	Yes
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna Manufacturer and Types	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Bottom
	Polarization	Elliptical
	Type	Broadband Panel
	Number of Stations Supported	5
	Number of Panels/Bays	14
	Lower Limit	430.00 MHz
	Upper Limit	600.00 MHz
	Design power capacity in use	100.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	910.0 kW
	Manufacturer	
	Model	PEP56D

Year	2018
Justification for New Antenna	American Tower is removing the current top mounted antennas on the Needham Hts. candelabra and replacing it with a broadband panel. Other stations listed will be using as interim/aux.

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Type	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?	No
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Single Channel

	Feed Line Size	7 3/16 inches inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	No
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
34
20
21
32
33

**Primary
Antenna**

Other Antenna Cost Not Listed

Name	Description
Combiner installation	Installation of combiner; Single chain of 5 high power constant impedance waveguide modules, and/or dual chains of 5 directional filter modules per Dielectric layout. required for broadband antenna system

**Interim
Antenna**

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Interim
	Description of Use	N/A
	Change Type	Lease New
	Ownership	Leased
	Owner	American Tower Corporation
	Is antenna shared?	No
	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	Horizontal
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels/Bays	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Design power capacity in use	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	300.0 kW
	Manufacturer	
	Model	TFU-24WB-1-R C170

	Year	2017
	Justification for New Antenna	American Tower Corp. will be providing the new interim facility. The antenna will be used to support WFXT and other stations during the repack process.

Interim Antenna

Other Antenna Costs

Section	Question	Response
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	S
	Feed Line Size	8 3/16 inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for an antenna?	No
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

Interim Antenna

Other Antenna Cost Not Listed

Information not provided.

Transmission Line

Section	Question	Response
Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

Primary
Transmission Line

Existing Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Lease New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	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	
	Type	Rigid
	Diameter	6 1/8 inches
	Other Diameter	N/A
	Segment Length	20 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1080 feet per run

Primary
Transmission Line

New Transmission 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
	Type	Rigid
	Diameter	7 3/16 inches
	Other Diameter	N/A
	Segment Length	Broadband
	Other Segment Length	N/A
	Number of parallel runs	2
	Length	1250 feet per run
	Justification for New Transmission Line	We will have one run to the new combiner, and then two runs up the tower to the new antenna.

Primary
Transmission Line

Other Transmission Line Expenses Not Listed

Name	Description
Transmission line from transmitter to combiner	New transmission line to take the signal from the transmitter to the combiner.

Interim
Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Type	Rigid
	Diameter	8 3/16 inches
	Segment Length	Broadband
	Other Segment Length	
	Number of parallel runs	1
	Length	80 feet per run
	Justification for New Transmission Line	Transmission line from transmitter to antenna combiner connection point.

Interim
Transmission Line

Other Transmission Line Expenses Not Listed

Information not provided.

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?	Unknown
	Is tower compliant with Rev G?	Unknown
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1004233
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	42° 18' 10.7" N-
	Longitude (NAD83)	071° 13' 04.9" W-
	Overall Structure Height	1200.77 feet
	Support Structure Height	1101.04 feet
	Ground Elevation Above Mean Sea Level (AMSL)	150.92 feet

Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
Tower Owner	American Towers, LLC
Date Constructed	04/19/2005

**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
23439	WBOS	FM
26897	WBMX	FM
9639	WODS	FM
1901	WBZ-FM	FM
73238	WLVI	DTV

**Primary
Tower**

Tower Modification Costs

Section	Question	Response
Engineering Study	Please what type of engineering study is required, if any:	Study needed for undocumented /poorly documented tower
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?	No

**Primary
Tower**

Other Tower Expenses Not Listed

Name	Description
Construction project management	Est. 12 hours on Modification project management and 20 hours for RF installation project management for a total of twenty 20 days,
Ground and Building A and E Permit Drawing Package	The generation of a construction drawing package.
Tower Permit Drawing Package	The generation of a construction drawing package.

**Outside
Professional**

Section	Question	Response
Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	95
	Explanation	ATC costs to manage all of the tower /antenna work.
Outside RF consulting Engineering Services	Perform engineering study for new channel assignment and antenna development	Yes
	Prepare engineering section of Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare engineering section of Form FCC License to Cover Application	Yes
	For Auxiliary 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 Services	Prepare and file Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes

	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	NEPA Section 106 environmental review	No
	Environmental Assessment	Yes
	ASR Modification	No
	FAA Consultation (including preparation of FAA Form 7460)	No
	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 Services Costs

Other Professional Services Expenses Not Listed

Name	Description
RF System Test	Testing of the combiner to ensure all frequencies are tuned for optimal patterns.
ATC Perform engineering study for new channel assignment and antenna development	ATC's cost to perform engineering study for new channel assignment and antenna development

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.
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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	No
	BLM or NFS Coordination	No
	FCC Construction Permit Minor Change	Yes
	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
Interim Site Building Permits	The cost of prep and submission of the forms for permits, on behalf of the one (1) broadcasters for jurisdictional permits, required for electrical, building and other required tasks associated with the install of the equipment in the transmitter space.
Interim Site Construction Project Management	(24) hours on Modification project management and RF installation project management.
Interim Site Equipment Delivery and Handling Costs	This cost is for the material/equipment, delivery and offloading by third party contractors.
Interim Site Ground and Building Permit Drawings	The generation of a construction drawing package for one (1) broadcasters /customers.
Interim Site Lease	One-time lease payment to cover the duration of the interim site construction and operation time periods.
Interim Site Public Hearing	Public hearing to alter height of tower by changing top antenna.
Interim Site RF System Test	Testing of the combiner to ensure all frequencies are tuned for optimal patterns.
Interim Site 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.
Interim Site Tower Permit Drawing Package	The generation of a construction drawing package for one (1) broadcasters /customers.
Interim Site Tower Rigging	Includes the installation of the new antenna, refurbishing of two (2) transmission Lines, any required tower bracket material to support the additional transmission line on the tower, and one 44' antenna stub section (labor included).
Interim Site transition timing and coordination	Coordination and transition planning with all parties onsite.

Main Site Structural Engineering Study	Required for safe installation of antenna equipment.
Interim Site Nitrogen System Upgrade	Upgrade of necessary nitrogen generation system to maintain pressure in transmission lines.
Main Site Asbestos and Lead Tests	Asbestos testing, removal and abatement for walls which could contain lead paint and /or the flooring may contain asbestos, because of the age of the facility and the era when the original construction took place.
Main Site Nitrogen System	Installation of necessary nitrogen generation system to maintain pressure in transmission lines.
Main Site Public Hearing	Cost for representation during any required public hearings.
Main Site Security During Install	Site security for installation and storage of Transmission line and materials for 30 days X 12 hours. These materials are a high risk of theft due to the material makeup such as copper, brass and aluminum.

**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
Interim Transmitter ULXTE-24	\$1,060,974.79	\$694,180.89		\$625,173.09	
UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW	\$684,000.00	\$558,506.10	Cost estimate reduced from \$590,205.90 to reflect final actual cost.	\$558,506.10	N/A
Studio to Transmitter Link	<i>\$78,000.00</i>	\$78,000.00	Combined monthly cost for fiber link during interim operation, plus antennas, receiver, and tower work for microwave STL path.	\$17,265.63	N/A

Electrical installation of transmitter	\$20,474.98	\$20,474.98	Cost required for electrical installation of transmitter. This component reduces by \$15,000 two items that were in the initial budget -- \$10,000 from 208V Panel and \$5,000 from 2" Conduit. It also includes drilling holes to outside required for install.	\$20,474.98	N/A
UHF inside RF system including switching	\$147,500.00	\$0.00	N/A	N/A	N/A
2" Rigid Conduit and Wiring (Cost per foot)	\$10,400.00	\$5,000.00	Reduced from \$10,000 to \$5,000 to reflect estimated amount from American Tower and addition of a budget line to cover electrician costs incurred directly by WFXT.	\$3,750.00	N/A

Other Electrical Service: Surge Suppression, UPS for transmission and control systems.	\$4,394.81	\$4,394.81	N/A	N/A	N/A
15 Ton system	\$88,400.00	\$0.00	This item will not be required as expected.	N/A	N/A
480V Electrical Sub-panel	\$10,000.00	\$10,000.00	ATC estimate	\$7,500.00	N/A
208V Electrical distribution panel	\$0.00	\$0.00	This item has been reduced to zero from \$10,000. A separate budget item was added to reflect WFXT's actual electrical costs that were directly incurred for installation of the transmitter.	N/A	N/A
Remote Control	\$17,805.00	\$17,805.00	Updated cost due to increase in actual implementation cost to cover computer equipment.	\$17,676.38	N/A
75kVA transformer	\$0.00	\$0.00	N/A	N/A	N/A
Primary Transmitter ULXTE-60	\$1,955,351.97	\$1,557,535.14		\$504,163.19	

Ice Shield for HVAC equipment	\$4,000.00	\$4,000.00	Ice protection for HVAC compressor split units placed in close proximity of tower located within a geographical location prone to ice and snow.	\$3,000.00	"Main ATC I INV_460200 and cos estimate 110718.p replaces : previous versions : invoice num 46020013
20 Ton HVAC for combiner	\$22,000.00	\$22,000.00	N/A	\$16,500.00	"Main ATC I INV_460200 and cos estimate 110718.p replaces : previous versions : invoice num 46020013
Replace 1000A-480V electrical service entrance wiring	\$17,500.00	\$17,500.00	N/A	N/A	N/A
UHF inside RF system including switching	\$138,801.97	\$138,801.97	N/A	\$26,068.27	N/A
208V distribution panel	\$10,000.00	\$10,000.00	N/A	N/A	N/A
Replace 1000A-480V switchgear	\$50,000.00	\$50,000.00	N/A	N/A	N/A
Replace generator transfer switch	\$22,000.00	\$22,000.00	N/A	N/A	N/A

UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	\$1,473,000.00	\$1,108,196.29	N/A	\$360,253.92	N/A
Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$6,236.88	This cost is for the equipment only. Installation costs will be included in wiring costs.	N/A	N/A
2" Rigid Conduit and Wiring (Cost per foot)	\$18,200.00	\$12,500.00	N/A	N/A	N/A
Other Electrical Service: Surge suppressor, UPS for control and transmitter electronics	\$6,500.00	\$6,500.00	N/A	N/A	N/A
Other -- Building Addition Size: 1500.0	\$1,800.00	\$1,800.00	Partition walls for security. ATC supplied cost.	\$1,350.00	"Main ATC I INV_460200 and cos estimate 110718.pr replaces previous versions invoice num 46020013
30 Ton system	\$166,000.00	\$158,000.00	N/A	\$96,991.00	N/A
Auxiliary Transmitter ULXTE-40	\$1,121,673.10	\$930,147.20		\$295,677.44	
208V electrical distribution panel	\$10,000.00	\$10,000.00	N/A	N/A	N/A

480V Transformer 112.5kVA	\$2,973.10	\$2,973.10	Equipment cost only. Installation is included in wiring costs.	N/A	N/A
UHF inside RF system including switching	\$91,000.00	\$91,000.00	N/A	\$22,110.04	N/A
15 Ton system	\$55,800.00	\$53,000.00	Widely cost estimate for a 15 ton cooling system	\$37,737.00	N/A
Other Electrical Service: Surge suppressor, UPS	\$4,500.00	\$4,500.00	N/A	N/A	N/A
2" Rigid Conduit and Wiring (Cost per foot)	\$10,400.00	\$6,250.00	N/A	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	\$947,000.00	\$762,424.10	N/A	\$235,830.40	N/A
Sub-total	\$4,137,999.86	\$3,181,863.23	N/A	\$1,425,013.72	N/A
Total for all systems	\$6,609,731.86	\$4,745,295.23	N/A	\$2,404,908.22	N/A

Components

Actual Information	
Description	File Name

UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW	<div> Component Description: Final invoice for Interim Transmitter including final change order and project freight. </div> <div> Amount: \$40,168.77 </div>
	<div> Component Description: 3/3 Progress payment on interim transmitter. Installation and proof will be billed on a fourth invoice. Quote added to invoice. </div> <div> Amount: \$153,957.33 </div>
	<div> Component Description: 1/3 down payment on ULXTE-24 Interim Transmitter. </div> <div> Amount: \$180,919.50 </div>
	<div> Component Description: 1/3 progress payment on interim transmitter. </div> <div> Amount: \$183,460.50 </div>
Studio to Transmitter Link	<div> Component Description: Installation and operation cost of fiber link to feed WFXT signal from the studio to the transmitter site. The invoice covers the period from installation in Sept., 2018 through the end of phase 4 operation. </div> <div> Amount: \$17,265.63 </div>

Electrical installation of transmitter	<p>Component Description: Invoice cost for electrical installation of the transmitter and cooling systems, and drilling of holes in exterior wall for electric and fluid connections to cooling equipment.</p> <p>Amount: \$20,474.98</p>
UHF inside RF system including switching	Information not provided.
2" Rigid Conduit and Wiring (Cost per foot)	<p>Component Description: 25% milestone 1 billing of line 3-C-1, 2" Rigid Conduit in the project cost estimate section III. B.1 Transmitters.</p> <p>Amount: \$1,250.00</p> <p>Component Description: 50% at billing milestone 2 of line 3-C-1, 2" Rigid Conduit in the project cost estimate section III. B.1 Transmitters.</p> <p>Amount: \$2,500.00</p>
Other Electrical Service: Surge Suppression, UPS for transmission and control systems.	Information not provided.
15 Ton system	Information not provided.

480V Electrical Sub-panel	<div> <div> Component Description: 25% milestone 1 billing of line 3-C-6, New Electrical Sub-panels in the project cost estimate section III. B.1 Transmitters. </div> <div> Amount: \$2,500.00 </div> </div> <div> <div> Component Description: 50% milestone 2 billing of line 3-C-6, New Electrical Sub-panels in the project cost estimate section III. B.1 Transmitters. </div> <div> Amount: \$5,000.00 </div> </div>
208V Electrical distribution panel	Information not provided.
Remote Control	<div> <div> Component Description: Software required for remote control of the interim transmitter. </div> <div> Amount: \$12,249.90 </div> </div> <div> <div> Component Description: Client and server computers for transmitter remote control. </div> <div> Amount: \$5,426.48 </div> </div>
75kVA transformer	Information not provided.

Ice Shield for HVAC equipment	Component Description:	Milestone 2 (of 3) payment for HVAC equipment ice shield at multi-user Main Site. This is line 3-C-6 in the project cost estimate section III. B.1 Transmitters.
	Amount:	\$2,000.00
	Component Description:	Milestone 1 (of 3) payment for HVAC equipment ice shield at multi-user Main Site. This is line 3-C-6 in the project cost estimate section III. B.1 Transmitters.
	Amount:	\$1,000.00

20 Ton HVAC for combiner	<div> <div> Component Description: Amount: </div> <div> Milestone 2 (of 3) payment for 20 Ton System at multi-user Main Site. This is line 3-C-2 in the project cost estimate section III.B.1 Transmitters. \$11,000.00 </div> </div> <div> <div> Component Description: Amount: </div> <div> This cost component line is unnecessary due to unlocking of invoice to make corrections to initial errant submissions. N/A </div> </div> <div> <div> Component Description: Amount: </div> <div> Milestone 1 (of 3) payment for 20 Ton System at multi-user Main Site. This is line 3-C-2 in the project cost estimate section III.B.1 Transmitters. \$5,500.00 </div> </div>
Replace 1000A-480V electrical service entrance wiring	Information not provided.
UHF inside RF system including switching	<div> <div> Component Description: Amount: </div> <div> 1/3 down payment of mask filter and RF accessories \$26,068.27 </div> </div>
208V distribution panel	Information not provided.

Replace 1000A-480V switchgear	Information not provided.
Replace generator transfer switch	Information not provided.
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	<div> <div> Component Description: </div> <div> 1/3 down payment of main transmitter system </div> </div> <div> <div> Amount: </div> <div> \$360,253.92 </div> </div>
Transformer 3 phase/480v - 150 KVA	Information not provided.
2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.
Other Electrical Service: Surge suppressor, UPS for control and transmitter electronics	Information not provided.

Other -- Building Addition
Size: 1500.0

Component Description:

Milestone 2 (of 3)
payment for
partition walls at
multi-user Main
Site. This is line 3-
C-3 in the project
cost estimate
section III.B.1
Transmitters.

Amount:

\$900.00

Component Description:

This cost
component line is
unnecessary due
to unlocking of
invoice to make
corrections to
initial errant
submissions.

Amount:

N/A

Component Description:

Milestone 1 (of 3)
payment for
partition walls at
multi-user Main
Site. This is line 3-
C-3 in the project
cost estimate
section III.B.1
Transmitters.

Amount:

\$450.00

30 Ton system	Component Description:		Deposit invoice for 30 ton HVAC system on main transmitter.
	Amount:		\$30,000.00
	Component Description:		Full cost of supplemental cooling required during construction.
	Amount:		\$1,965.00
	Component Description:		Final invoice for 30 ton HVAC system on main transmitter.
	Amount:		\$65,026.00
208V electrical distribution panel	Information not provided.		
480V Transformer 112.5kVA	Information not provided.		
UHF inside RF system including switching	Component Description:		1/3 of broken out mask filter and rf accessories costs
	Amount:		\$22,110.04
15 Ton system	Component Description:		Deposit invoice for 15 ton HVAC system on aux transmitter.
	Amount:		\$15,000.00
	Component Description:		Final invoice for 15 ton HVAC system on aux transmitter.
	Amount:		\$22,737.00

Other Electrical Service: Surge suppressor, UPS	Information not provided.	
2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	Component Description: Amount:	1/3 down payment on transmitter system. \$235,830.40

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 TFU-24WB-1-R C170	\$211,480.00	\$155,000.00		\$116,250.00	
Elbow complex, single channel, at antenna input, per 8 3/16. feedline (if needed)	\$15,250.00	\$12,000.00	Cost provided by ATC as part of the interim site project.	\$9,000.00	N/A
Sweep test of existing antenna	\$6,730.00	\$5,000.00	Cost provided by ATC as part of the interim site project.	\$3,750.00	N/A
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	\$189,500.00	\$138,000.00	N/A	\$103,500.00	N/A
Primary Antenna PEP56D	\$358,646.00	\$398,876.00		\$299,157.00	

New combiner, cost per channel (without antenna)	\$84,200.00	\$135,400.00	Dual chains of mask filter /combiner modules per Dielectric layout. Includes input power dividers, output switching, and eliminates need for mask filters.	\$101,550.00	Cost increase is due to intricate design of shared combiner system which will include mask filters for stations sharing the system. "Main ATC MS1 INV_460200136 and cost estimate 110718.pdf" replaces all previous versions of invoice number 460200136.
Combiner installation	\$7,000.00	\$7,000.00	Cost provided by ATC as part of the main site project. WFXT will be the primary user. WCVB, WBZ, WSBK, and WGBX will be interim/aux users.	\$5,250.00	"Main ATC MS1 INV_460200136 and cost estimate 110718.pdf" replaces all previous versions of invoice number 460200136.
Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed)	\$13,900.00	\$6,660.00	Updated cost provided by ATC.	\$4,995.00	"Main ATC MS1 INV_460200136 and cost estimate 110718.pdf" replaces all previous versions of invoice number 460200136.

Sweep test of existing antenna	\$6,730.00	\$3,000.00	Cost provided by ATC as part of the main site project. WFXT will be the primary user. WCVB, WBZ, WSBK, and WGBX will be interim/aux users.	\$2,250.00	"Main ATC MS1 INV_460200136 and cost estimate 110718.pdf" replaces all previous versions of invoice number 460200136.
UHF - High Power Top Mount Five Station broadband panel antenna elliptically or circularly polarized	\$246,816.00	\$246,816.00	Updated cost provided by ATC after final selection and pricing of antenna.	\$185,112.00	"Main ATC MS1 INV_460200136 and cost estimate 110718.pdf" replaces all previous versions of invoice number 460200136.
Sub-total	\$570,126.00	\$553,876.00	N/A	\$415,407.00	N/A
Total for all systems	\$6,609,731.86	\$4,745,295.23	N/A	\$2,404,908.22	N/A

Components

Actual Information	
Description	File Name

<p>Elbow complex, single channel, at antenna input, per 8 3/16. feedline (if needed)</p>	<table> <tr> <td data-bbox="715 98 1145 591"> <p>Component Description:</p> </td><td data-bbox="1153 98 1426 591"> <p>25% at billing milestone 1, line 3-C-2 Elbow Complex in ATC project cost estimate section III.B.2 Antenna Changes.</p> </td></tr> <tr> <td data-bbox="715 602 1145 1039"> <p>Amount:</p> </td><td data-bbox="1153 602 1426 1039"> <p>\$3,000.00</p> </td></tr> </table> <table> <tr> <td data-bbox="715 613 1145 949"> <p>Component Description:</p> </td><td data-bbox="1153 613 1426 949"> <p>50% at billing milestone 2, line 3-C-2 Elbow Complex in ATC project cost estimate section III.B.2 Antenna Changes.</p> </td></tr> <tr> <td data-bbox="715 960 1145 1039"> <p>Amount:</p> </td><td data-bbox="1153 960 1426 1039"> <p>\$6,000.00</p> </td></tr> </table>	<p>Component Description:</p>	<p>25% at billing milestone 1, line 3-C-2 Elbow Complex in ATC project cost estimate section III.B.2 Antenna Changes.</p>	<p>Amount:</p>	<p>\$3,000.00</p>	<p>Component Description:</p>	<p>50% at billing milestone 2, line 3-C-2 Elbow Complex in ATC project cost estimate section III.B.2 Antenna Changes.</p>	<p>Amount:</p>	<p>\$6,000.00</p>
<p>Component Description:</p>	<p>25% at billing milestone 1, line 3-C-2 Elbow Complex in ATC project cost estimate section III.B.2 Antenna Changes.</p>								
<p>Amount:</p>	<p>\$3,000.00</p>								
<p>Component Description:</p>	<p>50% at billing milestone 2, line 3-C-2 Elbow Complex in ATC project cost estimate section III.B.2 Antenna Changes.</p>								
<p>Amount:</p>	<p>\$6,000.00</p>								
<p>Sweep test of existing antenna</p>	<table> <tr> <td data-bbox="715 1050 1145 1543"> <p>Component Description:</p> </td><td data-bbox="1153 1050 1426 1543"> <p>25% at billing milestone 1, line 3-C-2 sweep test of existing line in ATC project cost estimate section III.B.2 Antenna Changes.</p> </td></tr> <tr> <td data-bbox="715 1554 1145 1986"> <p>Amount:</p> </td><td data-bbox="1153 1554 1426 1986"> <p>\$1,250.00</p> </td></tr> </table> <table> <tr> <td data-bbox="715 1565 1145 1901"> <p>Component Description:</p> </td><td data-bbox="1153 1565 1426 1901"> <p>50% at billing milestone 2, line 3-C-2 sweep test of existing line in ATC project cost estimate section III.B.2 Antenna Changes.</p> </td></tr> <tr> <td data-bbox="715 1912 1145 1986"> <p>Amount:</p> </td><td data-bbox="1153 1912 1426 1986"> <p>\$2,500.00</p> </td></tr> </table>	<p>Component Description:</p>	<p>25% at billing milestone 1, line 3-C-2 sweep test of existing line in ATC project cost estimate section III.B.2 Antenna Changes.</p>	<p>Amount:</p>	<p>\$1,250.00</p>	<p>Component Description:</p>	<p>50% at billing milestone 2, line 3-C-2 sweep test of existing line in ATC project cost estimate section III.B.2 Antenna Changes.</p>	<p>Amount:</p>	<p>\$2,500.00</p>
<p>Component Description:</p>	<p>25% at billing milestone 1, line 3-C-2 sweep test of existing line in ATC project cost estimate section III.B.2 Antenna Changes.</p>								
<p>Amount:</p>	<p>\$1,250.00</p>								
<p>Component Description:</p>	<p>50% at billing milestone 2, line 3-C-2 sweep test of existing line in ATC project cost estimate section III.B.2 Antenna Changes.</p>								
<p>Amount:</p>	<p>\$2,500.00</p>								

<p>UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized</p>	<table> <tr> <td data-bbox="705 100 1141 526"> <p>Component Description:</p> <p>Amount:</p> </td><td data-bbox="1141 100 1431 526"> <p>25% at billing milestone 1, line 3-B in ATC project cost estimate section III.B.2 Antenna Changes. \$34,500.00</p> </td></tr> <tr> <td data-bbox="705 526 1141 887"> <p>Component Description:</p> <p>Amount:</p> </td><td data-bbox="1141 526 1431 887"> <p>50% at billing milestone 2, line 3-B in ATC project cost estimate section III.B.2 Antenna Changes. \$69,000.00</p> </td></tr> </table>	<p>Component Description:</p> <p>Amount:</p>	<p>25% at billing milestone 1, line 3-B in ATC project cost estimate section III.B.2 Antenna Changes. \$34,500.00</p>	<p>Component Description:</p> <p>Amount:</p>	<p>50% at billing milestone 2, line 3-B in ATC project cost estimate section III.B.2 Antenna Changes. \$69,000.00</p>
<p>Component Description:</p> <p>Amount:</p>	<p>25% at billing milestone 1, line 3-B in ATC project cost estimate section III.B.2 Antenna Changes. \$34,500.00</p>				
<p>Component Description:</p> <p>Amount:</p>	<p>50% at billing milestone 2, line 3-B in ATC project cost estimate section III.B.2 Antenna Changes. \$69,000.00</p>				

New combiner, cost per channel (without antenna)	Component Description:	Milestone 2 (of 3) payment for our portion of multi-user RF combiner at multi-user Main Site. This is line 3-C-1 Combiners For Shared Antenna in the project cost estimate section III.B.2 Antenna Changes.
	Amount:	\$67,700.00
	Component Description:	This cost component line is unnecessary due to unlocking of invoice to make corrections to initial errant submissions.
	Amount:	N/A
	Component Description:	Milestone 1 (of 3) payment for our portion of multi-user RF combiner at multi-user Main Site. This is line 3-C-1 Combiners For Shared Antenna in the project cost estimate section III.B.2 Antenna Changes.
	Amount:	\$33,850.00

Combiner installation	<table> <tr> <td data-bbox="711 98 1145 495"> Component Description: </td><td data-bbox="1145 98 1430 495"> This cost component line is unnecessary due to unlocking of invoice to make corrections to initial errant submissions. </td></tr> <tr> <td data-bbox="711 495 1145 584"> Amount: </td><td data-bbox="1145 495 1430 584"> N/A </td></tr> <tr> <td data-bbox="711 584 1145 1144"> Component Description: </td><td data-bbox="1145 584 1430 1144"> Milestone 1 (of 3) payment for our portion of the combiner installation at multi-user Main Site. This is line 3-C-2 Combiner Installation in the project cost estimate section III.B.2 Antenna Changes. </td></tr> <tr> <td data-bbox="711 1144 1145 1234"> Amount: </td><td data-bbox="1145 1144 1430 1234"> \$1,750.00 </td></tr> <tr> <td data-bbox="711 1234 1145 1794"> Component Description: </td><td data-bbox="1145 1234 1430 1794"> Milestone 2 (of 3) payment for our portion of the combiner installation at multi-user Main Site. This is line 3-C-2 Combiner Installation in the project cost estimate section III.B.2 Antenna Changes. </td></tr> <tr> <td data-bbox="711 1794 1145 1883"> Amount: </td><td data-bbox="1145 1794 1430 1883"> \$3,500.00 </td></tr> </table>	Component Description:	This cost component line is unnecessary due to unlocking of invoice to make corrections to initial errant submissions.	Amount:	N/A	Component Description:	Milestone 1 (of 3) payment for our portion of the combiner installation at multi-user Main Site. This is line 3-C-2 Combiner Installation in the project cost estimate section III.B.2 Antenna Changes.	Amount:	\$1,750.00	Component Description:	Milestone 2 (of 3) payment for our portion of the combiner installation at multi-user Main Site. This is line 3-C-2 Combiner Installation in the project cost estimate section III.B.2 Antenna Changes.	Amount:	\$3,500.00
Component Description:	This cost component line is unnecessary due to unlocking of invoice to make corrections to initial errant submissions.												
Amount:	N/A												
Component Description:	Milestone 1 (of 3) payment for our portion of the combiner installation at multi-user Main Site. This is line 3-C-2 Combiner Installation in the project cost estimate section III.B.2 Antenna Changes.												
Amount:	\$1,750.00												
Component Description:	Milestone 2 (of 3) payment for our portion of the combiner installation at multi-user Main Site. This is line 3-C-2 Combiner Installation in the project cost estimate section III.B.2 Antenna Changes.												
Amount:	\$3,500.00												

Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed)

Component Description:

Milestone 1 (of 3) payment for our portion of multi-user elbow complex at broadband antenna at multi-user Main Site. This is line 3-C-2 Elbow Complex in the project cost estimate section III.B.2 Antenna Changes.

Amount:

\$1,665.00

Component Description:

Milestone 2 (of 3) payment for our portion of multi-user elbow complex at broadband antenna at multi-user Main Site. This is line 3-C-2 Elbow Complex in the project cost estimate section III.B.2 Antenna Changes.

Amount:

\$3,330.00

Component Description:

This cost component line is unnecessary due to unlocking of invoice to make corrections to initial errant submissions.

Amount:

N/A

Sweep test of existing antenna

Component Description:

Milestone 2 (of 3)
payment for our
portion of line and
antenna sweep
test at multi-user
Main Site. This is
line 3-C-2 Sweep
Test in the project
cost estimate
section III.B.2
Antenna Changes.

Amount:

\$1,500.00

Component Description:

Milestone 1 (of 3)
payment for our
portion of line and
antenna sweep
test at multi-user
Main Site. This is
line 3-C-2 Sweep
Test in the project
cost estimate
section III.B.2
Antenna Changes.

Amount:

\$750.00

<p>UHF - High Power Top Mount Five Station broadband panel antenna elliptically or circularly polarized</p>	<table> <tr> <td data-bbox="719 176 1023 210">Component Description:</td><td data-bbox="1158 176 1374 647">Milestone 2 (of 3) payment for our portion of multi-user BBA antenna at multi-user Main Site. This is line 3-B UHF High Power Top Mount in the project cost estimate section III.B.2 Antenna Changes.</td></tr> <tr> <td data-bbox="719 658 826 685">Amount:</td><td data-bbox="1158 658 1305 685">\$123,408.00</td></tr> </table>	Component Description:	Milestone 2 (of 3) payment for our portion of multi-user BBA antenna at multi-user Main Site. This is line 3-B UHF High Power Top Mount in the project cost estimate section III.B.2 Antenna Changes.	Amount:	\$123,408.00
Component Description:	Milestone 2 (of 3) payment for our portion of multi-user BBA antenna at multi-user Main Site. This is line 3-B UHF High Power Top Mount in the project cost estimate section III.B.2 Antenna Changes.				
Amount:	\$123,408.00				
	<table> <tr> <td data-bbox="719 792 1023 826">Component Description:</td><td data-bbox="1158 792 1374 1263">Milestone 1 (of 3) payment for our portion of multi-user BBA antenna at multi-user Main Site. This is line 3-B UHF High Power Top Mount in the project cost estimate section III.B.2 Antenna Changes.</td></tr> <tr> <td data-bbox="719 1274 826 1301">Amount:</td><td data-bbox="1158 1274 1292 1301">\$61,704.00</td></tr> </table>	Component Description:	Milestone 1 (of 3) payment for our portion of multi-user BBA antenna at multi-user Main Site. This is line 3-B UHF High Power Top Mount in the project cost estimate section III.B.2 Antenna Changes.	Amount:	\$61,704.00
Component Description:	Milestone 1 (of 3) payment for our portion of multi-user BBA antenna at multi-user Main Site. This is line 3-B UHF High Power Top Mount in the project cost estimate section III.B.2 Antenna Changes.				
Amount:	\$61,704.00				
	<table> <tr> <td data-bbox="719 1408 1023 1442">Component Description:</td><td data-bbox="1158 1408 1362 1722">This cost component line is unnecessary due to unlocking of invoice to make corrections to initial errant submissions.</td></tr> <tr> <td data-bbox="719 1733 826 1760">Amount:</td><td data-bbox="1158 1733 1203 1760">N/A</td></tr> </table>	Component Description:	This cost component line is unnecessary due to unlocking of invoice to make corrections to initial errant submissions.	Amount:	N/A
Component Description:	This cost component line is unnecessary due to unlocking of invoice to make corrections to initial errant submissions.				
Amount:	N/A				

Cost
Information

Transmission Line

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 Transmission Line	\$31,920.00	\$30,320.00		\$0.00	
Rigid Transmission Line - copper, 8 3 /16" broadband	\$31,920.00	\$30,320.00	N/A	N/A	N/A
Primary Transmission Line	\$872,500.00	\$280,000.00		\$180,000.00	
Rigid Transmission Line - copper, 7 3 /16" broadband	\$832,500.00	\$240,000.00	Updated cost provided by ATC.	\$180,000.00	"Main ATC MS INV_46020013 and cost estimate 110718.pdf" replaces all previous versions of invoice number 460200136.
Transmission line from transmitter to combiner	<i>\$40,000.00</i>	\$40,000.00	N/A	N/A	N/A
Sub-total	\$904,420.00	\$310,320.00	N/A	\$180,000.00	N/A
Total for all systems	\$6,609,731.86	\$4,745,295.23	N/A	\$2,404,908.22	N/A

Components

Actual Information Description	File Name
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Rigid Transmission Line - copper, 8 3/16" broadband	Information not provided.	
Rigid Transmission Line - copper, 7 3/16" broadband	<p>Component Description:</p> <p>Milestone 2 (of 3) payment for our portion of multi-user transmission line at multi-user Main Site. This is line 3-A New Transmission Line Costs in the project cost estimate section III. B.2 Transmission Line Changes.</p> <p>Amount:</p> <p>\$120,000.00</p> <p>Component Description:</p> <p>Milestone 1 (of 3) payment for our portion of multi-user transmission line at multi-user Main Site. This is line 3-A New Transmission Line Costs in the project cost estimate section III. B.2 Transmission Line Changes.</p> <p>Amount:</p> <p>\$60,000.00</p> <p>Component Description:</p> <p>This cost component line is unnecessary due to unlocking of invoice to make corrections to initial errant submissions.</p> <p>Amount:</p> <p>N/A</p>	
Transmission line from transmitter to combiner	Information not provided.	

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	\$618,700.00	\$337,240.00		\$252,930.00	
GTOWER					
Construction project management	<i>\$4,000.00</i>	\$4,000.00	Cost provided by ATC as part of the main site project. WFXT will be the primary user. WCVB, WBZ, WSBK, and WGBX will be interim/aux users.	\$3,000.00	"Main ATC M: INV_4602001 and cost estimate 110718.pdf" replaces all previous versions of invoice numb 460200136
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$176,400.00	Cost provided by ATC as part of the main site project. WFXT will be the primary user. WCVB, WBZ, WSBK, and WGBX will be interim/aux users.	\$132,300.00	"Main ATC M: INV_4602001 and cost estimate 110718.pdf" replaces all previous versions of invoice numb 460200136

Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	\$26,300.00	\$7,440.00	Cost provided by ATC as part of the main site project. WFXT will be the primary user. WCVB, WBZ, WSBK, and WGBX will be interim/aux users.	\$5,580.00	"Main ATC M: INV_4602001 and cost estimate 110718.pdf" replaces all previous versions of invoice numb 460200136
Tower Permit Drawing Package	\$4,700.00	\$4,700.00	Cost provided by ATC as part of the main site project. WFXT will be the primary user. WCVB, WBZ, WSBK, and WGBX will be interim/aux users.	\$3,525.00	"Main ATC M: INV_4602001 and cost estimate 110718.pdf" replaces all previous versions of invoice numb 460200136

Ground and Building A and E Permit Drawing Package	\$4,700.00	\$4,700.00	Cost provided by ATC as part of the main site project. WFXT will be the primary user. WCVB, WBZ, WSBK, and WGBX will be interim/aux users.	\$3,525.00	"Main ATC MS1 INV_4602001 and cost estimate 110718.pdf" replaces all previous versions of invoice numb 460200136
Minor tower reinforcement /modifications	\$158,000.00	\$140,000.00	Updated cost based on results of final design and structural analysis of installation.	\$105,000.00	Cost increase after review of tower and work required to install broadband antenn on this share use site. "Main ATC MS1 INV_4602001 and cost estimate 110718.pdf" replaces all previous versions of invoice numb 460200136
Sub-total	\$618,700.00	\$337,240.00	N/A	\$252,930.00	N/A
Total for all systems	\$6,609,731.86	\$4,745,295.23	N/A	\$2,404,908.22	N/A

Components

Actual Information Description	File Name
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Construction project
management

Component Description:

Milestone 1 (of 3)
payment for our
portion of project
management by
American Tower
Corp. at multi-user
Main Site. This is
line 3-D-1
Construction
Project
Management in the
project cost
estimate section III.
B.2 Tower
Equipment and
Rigging Costs.

Amount:

\$1,000.00

Component Description:

Milestone 2 (of 3)
payment for our
portion of project
management by
American Tower
Corp. at multi-user
Main Site. This is
line 3-D-1
Construction
Project
Management in the
project cost
estimate section III.
B.2 Tower
Equipment and
Rigging Costs.

Amount:

\$2,000.00

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

Component Description:

Milestone 2 (of 3) payment for our portion of tower rigging for the complex candelabra tower at multi-user Main Site. This is line 3-C-1 Complex Tower in the project cost estimate section III. B.2 Tower Equipment and Rigging Costs.

Amount:

\$88,200.00

Component Description:

Milestone 1 (of 3) payment for our portion of tower rigging for the complex candelabra tower at multi-user Main Site. This is line 3-C-1 Complex Tower in the project cost estimate section III. B.2 Tower Equipment and Rigging Costs.

Amount:

\$44,100.00

Component Description:

This cost component line is unnecessary due to unlocking of invoice to make corrections to initial errant submissions.

Amount:

N/A

Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study	Component Description:	This cost component line is unnecessary due to unlocking of invoice to make corrections to initial errant submissions.
	Amount:	N/A
	Component Description:	Milestone 1 (of 3) payment for our portion of tower documentation at multi-user Main Site. This is line 3-A-1 Tower Mapping in the project cost estimate section III. B.2 Tower Equipment and Rigging Costs.
	Amount:	\$1,860.00
	Component Description:	Milestone 2 (of 3) payment for our portion of tower documentation at multi-user Main Site. This is line 3-A-1 Tower Mapping in the project cost estimate section III. B.2 Tower Equipment and Rigging Costs.
	Amount:	\$3,720.00

Tower Permit Drawing
Package

Component Description:

Milestone 1 (of 3)
payment for our
portion of tower
permit drawing
package at multi-
user Main Site.
This is line 3-D-1
Tower Permit
Drawing Package
in the project cost
estimate section III.
B.2 Tower
Equipment and
Rigging Costs.
\$1,175.00

Amount:

Component Description:

This cost
component line is
unnecessary due
to unlocking of
invoice to make
corrections to initial
errant submissions.
N/A

Amount:

Component Description:

Milestone 2 (of 3)
payment for our
portion of tower
permit drawing
package at multi-
user Main Site.
This is line 3-D-1
Tower Permit
Drawing Package
in the project cost
estimate section III.
B.2 Tower
Equipment and
Rigging Costs.
\$2,350.00

Amount:

Ground and Building A and
E Permit Drawing Package

Component Description:

Milestone 2 (of 3)
payment for our
portion of building
drawings at multi-
user Main Site.
This is line 3-D-1
Ground and
Building drawings
in the project cost
estimate section III.
B.2 Tower
Equipment and
Rigging Costs.

Amount:

\$2,350.00

Component Description:

Milestone 1 (of 3)
payment for our
portion of building
drawings at multi-
user Main Site.
This is line 3-D-1
Ground and
Building drawings
in the project cost
estimate section III.
B.2 Tower
Equipment and
Rigging Costs.

Amount:

\$1,175.00

Component Description:

This cost
component line is
unnecessary due
to unlocking of
invoice to make
corrections to initial
errant submissions.

Amount:

N/A

Minor tower reinforcement
/modifications

Component Description:

Milestone 1 (of 3)
payment for our
portion of structural
modifications at
multi-user Main
Site. This is line 3-
A-2 Major Tower
Reinforcement
/Modifications in
the project cost
estimate section III.
B.2 Tower
Equipment and
Rigging Costs.
\$35,000.00

Amount:

Component Description:

Milestone 2 (of 3)
payment for our
portion of structural
modifications at
multi-user Main
Site. This is line 3-
A-2 Major Tower
Reinforcement
/Modifications in
the project cost
estimate section III.
B.2 Tower
Equipment and
Rigging Costs.
\$70,000.00

Amount:

Component Description:

This cost
component line is
unnecessary due
to unlocking of
invoice to make
corrections to initial
errant submissions.
N/A

Amount:

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 Cost Justification
Outside Professional Services	\$186,095.00	\$170,210.00		\$29,595.00	
RF System Test	<i>\$5,000.00</i>	\$5,000.00	Updated reduced cost based on revised estimate from ATC.	\$3,750.00	Budget w reduced fr initial 39 submission to a revis cost estim "Main ATC INV_46020 and cos estimat 110718.p replaces previou versions invoice nur 4602001
Site Coordination Meeting	<i>\$2,500.00</i>	\$2,500.00	Updated cost based on actual coordination meeting cost.	\$1,875.00	"Main ATC INV_46020 and cos estimat 110718.p replaces previou versions invoice nur 4602001

Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	\$10,520.00	\$2,500.00	Cost provided by ATC as part of the main site project. WFXT will be the primary user. WCVB, WBZ, WSBK, and WGBX will be interim /aux users.	\$1,875.00	"Main ATC INV_46020 and cos estimat 110718.p replaces previou versions invoice nur 4602001
Project management of the transition	\$15,010.00	\$18,960.00	Cost for management of both the interim and main tower projects.	\$14,220.00	"Main ATC INV_46020 and cos estimat 110718.p replaces previou versions invoice nur 4602001
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	Cost provided by ATC as part of the main site project. WFXT will be the primary user. WCVB, WBZ, WSBK, and WGBX will be interim /aux users.	\$1,875.00	"Main ATC INV_46020 and cos estimat 110718.p replaces previou versions invoice nur 4602001

ATC Perform engineering study for new channel assignment and antenna development	\$5,000.00	\$5,000.00	Cost provided by ATC as part of the main site project. WFXT will be the primary user. WCVB, WBZ, WSBK, and WGBX will be interim /aux users.	\$3,750.00	"Main ATC INV_46020 and cost estimate 110718.p replaces previous versions invoice number 4602001
RF Exposure Measurements	\$21,050.00	\$20,000.00	N/A	N/A	N/A
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,500.00	N/A	N/A	N/A
Attorney Fees - Negotiation of lease and other matters for shared locations	\$4,210.00	\$4,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	N/A	N/A

Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	\$4,210.00	\$4,000.00	N/A	N/A	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	\$1,500.00	N/A	N/A	N/A
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$3,000.00	Updated cost provided by ATC.	\$2,250.00	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A

RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	\$2,105.00	\$2,000.00	N/A	N/A	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
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Sub-total	\$186,095.00	\$170,210.00	N/A	\$29,595.00	N/A
Total for all systems	\$6,609,731.86	\$4,745,295.23	N/A	\$2,404,908.22	N/A

Components

Actual Information	
Description	File Name
RF System Test	<p>Component Description: This cost component line is unnecessary due to unlocking of invoice to make corrections to initial errant submissions.</p> <p>Amount: N/A</p>

	Component Description:	This cost component line is unnecessary due to unlocking of invoice to make corrections to initial errant submissions.
	Amount:	N/A
	Component Description:	Milestone 1 (of 3) payment for our portion of RF system testing at multi-user Main Site. This is line 1-B-1 RF System Test in the project cost estimate section III.B.5 Outside Professional Services.
	Amount:	\$1,250.00
	Component Description:	Milestone 2 (of 3) payment for our portion of RF system testing at multi-user Main Site. This is line 1-B-1 RF System Test in the project cost estimate section III.B.5 Outside Professional Services.
	Amount:	\$2,500.00
Site Coordination Meeting		

Component Description:	Milestone 2 (of 3) payment for our portion of coordination meeting for multi- user Main Site. This is line 1-B-1 Site Coordination Meeting in the project cost estimate section III. B.5 Outside Professional Services.
Amount:	\$1,250.00

Component Description:	This cost component line is unnecessary due to unlocking of invoice to make corrections to initial errant submissions.
Amount:	N/A

Component Description:	This cost component line is unnecessary due to unlocking of invoice to make corrections to initial errant submissions.
Amount:	N/A

Component Description:

Milestone 1 (of 3)
payment for our
portion of
coordination
meeting for multi-
user Main Site.
This is line 1-B-1
Site Coordination
Meeting in the
project cost
estimate section III.
B.5 Outside
Professional
Services.
\$625.00

Amount:

<p>Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet</p>	<table> <tr> <td data-bbox="695 87 1114 824"> <p>Component Description:</p> </td><td data-bbox="1114 87 1426 824"> <p>Milestone 2 (of 3) payment for our portion of environmental assessment at multi-user Main Site. This is line 1-A-3 Environmental Assessment in the project cost estimate section III. B.5 Outside Professional Services.</p> </td></tr> <tr> <td data-bbox="695 824 1114 1518"> <p>Amount:</p> </td><td data-bbox="1114 824 1426 1518"> <p>\$1,250.00</p> </td></tr> <tr> <td data-bbox="695 87 1114 1518"> <p>Component Description:</p> </td><td data-bbox="1114 87 1426 1518"> <p>Milestone 1 (of 3) payment for our portion of environmental assessment at multi-user Main Site. This is line 1-A-3 Environmental Assessment in the project cost estimate section III. B.5 Outside Professional Services.</p> </td></tr> <tr> <td data-bbox="695 1518 1114 2132"> <p>Amount:</p> </td><td data-bbox="1114 1518 1426 2132"> <p>\$625.00</p> </td></tr> </table>	<p>Component Description:</p>	<p>Milestone 2 (of 3) payment for our portion of environmental assessment at multi-user Main Site. This is line 1-A-3 Environmental Assessment in the project cost estimate section III. B.5 Outside Professional Services.</p>	<p>Amount:</p>	<p>\$1,250.00</p>	<p>Component Description:</p>	<p>Milestone 1 (of 3) payment for our portion of environmental assessment at multi-user Main Site. This is line 1-A-3 Environmental Assessment in the project cost estimate section III. B.5 Outside Professional Services.</p>	<p>Amount:</p>	<p>\$625.00</p>
<p>Component Description:</p>	<p>Milestone 2 (of 3) payment for our portion of environmental assessment at multi-user Main Site. This is line 1-A-3 Environmental Assessment in the project cost estimate section III. B.5 Outside Professional Services.</p>								
<p>Amount:</p>	<p>\$1,250.00</p>								
<p>Component Description:</p>	<p>Milestone 1 (of 3) payment for our portion of environmental assessment at multi-user Main Site. This is line 1-A-3 Environmental Assessment in the project cost estimate section III. B.5 Outside Professional Services.</p>								
<p>Amount:</p>	<p>\$625.00</p>								
<p>Project management of the transition</p>									

Component Description:	25% Interim Site milestone 1 (of 3) payment for our portion of American Tower's project management. This is line 1-A-1 Project Management in the project cost estimate section III. B.5 Outside Professional Services.
Amount:	\$2,370.00

Component Description:	Main Site milestone 1 (of 3) payment for our portion of American Tower's project management. This is line 1-A-1 Project Management in the project cost estimate section III. B.5 Outside Professional Services.
Amount:	\$2,370.00

Component Description:	This cost component line is unnecessary due to unlocking of invoice to make corrections to initial errant submissions.
Amount:	N/A

Component Description:	50% Interim Site milestone 2 (of 3) payment for our portion of American Tower's project management. This is line 1-A-1 Project Management in the project cost estimate section III. B.5 Outside Professional Services.
Amount:	\$4,740.00

Component Description:	This cost component line is unnecessary due to unlocking of invoice to make corrections to initial errant submissions.
Amount:	N/A

Component Description:	Main Site milestone 2 (of 3) payment for our portion of American Tower's project management. This is line 1-A-1 Project Management in the project cost estimate section III. B.5 Outside Professional Services.
Amount:	\$4,740.00

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

Component Description:

Milestone 1 (of 3)
payment for our
portion of ATC
transition timing
coordination at
multi-user Main
Site. This is line 1-
A-1 Address
Transition Timing
and Coordination
in the project cost
estimate section III.
B.5 Outside
Professional
Services.

Amount:

\$625.00

Component Description:

Milestone 2 (of 3)
payment for our
portion of ATC
transition timing
coordination at
multi-user Main
Site. This is line 1-
A-1 Address
Transition Timing
and Coordination
in the project cost
estimate section III.
B.5 Outside
Professional
Services.

Amount:

\$1,250.00

<p>ATC Perform engineering study for new channel assignment and antenna development</p>	<table> <tr> <td data-bbox="710 168 1109 761"> <p>Component Description:</p> </td><td data-bbox="1141 168 1412 761"> <p>Milestone 1 (of 3) payment for our portion of ATC engineering on multi-user BBA antenna at multi-user Main Site. This is line 1-A-2 Perform Engineering Study in the project cost estimate section III. B.5 Outside Professional Services.</p> </td></tr> <tr> <td data-bbox="710 761 1109 817"> <p>Amount:</p> </td><td data-bbox="1141 761 1412 817"> <p>\$1,250.00</p> </td></tr> <tr> <td data-bbox="710 907 1109 1500"> <p>Component Description:</p> </td><td data-bbox="1141 907 1412 1500"> <p>Milestone 2 (of 3) payment for our portion of ATC engineering on multi-user BBA antenna at multi-user Main Site. This is line 1-A-2 Perform Engineering Study in the project cost estimate section III. B.5 Outside Professional Services.</p> </td></tr> <tr> <td data-bbox="710 1500 1109 1556"> <p>Amount:</p> </td><td data-bbox="1141 1500 1412 1556"> <p>\$2,500.00</p> </td></tr> </table>	<p>Component Description:</p>	<p>Milestone 1 (of 3) payment for our portion of ATC engineering on multi-user BBA antenna at multi-user Main Site. This is line 1-A-2 Perform Engineering Study in the project cost estimate section III. B.5 Outside Professional Services.</p>	<p>Amount:</p>	<p>\$1,250.00</p>	<p>Component Description:</p>	<p>Milestone 2 (of 3) payment for our portion of ATC engineering on multi-user BBA antenna at multi-user Main Site. This is line 1-A-2 Perform Engineering Study in the project cost estimate section III. B.5 Outside Professional Services.</p>	<p>Amount:</p>	<p>\$2,500.00</p>
<p>Component Description:</p>	<p>Milestone 1 (of 3) payment for our portion of ATC engineering on multi-user BBA antenna at multi-user Main Site. This is line 1-A-2 Perform Engineering Study in the project cost estimate section III. B.5 Outside Professional Services.</p>								
<p>Amount:</p>	<p>\$1,250.00</p>								
<p>Component Description:</p>	<p>Milestone 2 (of 3) payment for our portion of ATC engineering on multi-user BBA antenna at multi-user Main Site. This is line 1-A-2 Perform Engineering Study in the project cost estimate section III. B.5 Outside Professional Services.</p>								
<p>Amount:</p>	<p>\$2,500.00</p>								
<p>RF Exposure Measurements</p>	<p>Information not provided.</p>								
<p>Comprehensive coverage verification via field study, if needed</p>	<p>Information not provided.</p>								
<p>Attorney Fees - Prepare and File request for Special Temporary Authorization</p>	<p>Information not provided.</p>								

Attorney Fees - Negotiation of lease and other matters for shared locations	Information not provided.
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	Information not provided.
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Information not provided.
Prepare request for Special Temporary Authorization	Information not provided.
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	Information not provided.

Perform engineering study for new channel assignment and antenna development	<div> Component Description: 25% at billing milestone 1, line 1-A-2 in ATC project cost estimate section III.B.5 Outside Professional Services. </div> <div> Amount: \$750.00 </div>
	<div> Component Description: 50% at billing milestone 2, line 1-A-2 in ATC project cost estimate section III.B.5 Outside Professional Services. </div> <div> Amount: \$1,500.00 </div>
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	Information not provided.
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Information not provided.
Prepare and or review reimbursement form	Information not provided.

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	\$192,391.00	\$191,786.00		\$101,962.50	
Main Site Public Hearing	<i>\$400.00</i>	\$400.00	Cost for representation at any required public hearings.	\$300.00	"Main ATC INV_460200 and co estima 110718.1 replaces previous versions invoice nu 460200"
Main Site Security During Install	<i>\$3,600.00</i>	\$3,600.00	Cost to provide security of construction supplies and equipment.	\$2,700.00	"Main ATC INV_460200 and co estima 110718.1 replaces previous versions invoice nu 460200"
Main Site Asbestos and Lead Tests	<i>\$1,800.00</i>	\$1,800.00	Cost for testing of any material required during construction.	\$1,350.00	"Main ATC INV_460200 and co estima 110718.1 replaces previous versions invoice nu 460200"

Equipment Delivery and Handling Charges	\$3,000.00	\$3,000.00	ATC estimated \$3,000 for Main site	\$2,250.00	"Main ATC INV_460200' and co estima 110718.1 replaces previous versions invoice nu 460200'
Local Zoning	\$750.00	\$750.00	Cost provided by ATC as part of the main site project. WFXT will be the primary user. WCVB, WBZ, WSBK, and WGBX will be interim/aux users.	\$375.00	"Main ATC INV_460200' and co estima 110718.1 replaces previous versions invoice nu 460200'
Main Site Structural Engineering Study	\$5,700.00	\$5,700.00	Cost to determine required upgrades and structural enhancements to tower as a result of the work and installation of new antennas.	\$4,275.00	"Main ATC INV_460200' and co estima 110718.1 replaces previous versions invoice nu 460200'
Interim Site Nitrogen System Upgrade	\$3,000.00	\$3,000.00	ATC provided cost for site shared nitrogen generation system.	N/A	N/A
Interim Site transition timing and coordination	\$2,000.00	\$2,000.00	N/A	\$1,500.00	N/A

Interim Site Tower Permit Drawing Package	\$4,700.00	\$4,700.00	N/A	\$3,525.00	N/A
Interim Site Site Coordination Meeting	\$960.00	\$960.00	Updated cost based on updated cost estimate from ATC.	\$720.00	N/A
Interim Site RF System Test	\$3,000.00	\$3,000.00	N/A	\$2,250.00	N/A
Interim Site Public Hearing	\$240.00	\$240.00	N/A	\$180.00	N/A
Interim Site Lease	\$57,600.00	\$57,600.00	N/A	\$43,200.00	N/A
Interim Site Ground and Building Permit Drawings	\$4,700.00	\$4,700.00	N/A	\$3,525.00	N/A
Interim Site Equipment Delivery and Handling Costs	\$3,000.00	\$3,000.00	N/A	\$2,250.00	N/A
Interim Site Construction Project Management	\$3,000.00	\$3,000.00	Updated cost based on revised estimate from ATC.	\$2,250.00	N/A
Interim Site Building Permits	\$750.00	\$750.00	N/A	\$562.50	N/A
MVPD Notification of Channel Change	\$2,001.00	\$2,001.00	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	\$8,000.00	\$8,000.00	External locked storage container to store equipment during construction.	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$20,000.00	\$20,000.00	\$5,000 ATC estimate, plus \$15,000 estimate for recycling and removal of oil-filled power supplies, tubes, and other equipment.	\$3,750.00	"Main ATC INV_46020 and co estima 110718.1 replaces previous versions invoice number 460200"
FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$190.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 minor change CP application	\$1,110.00	\$1,070.00	N/A	N/A	N/A
Interim Site Tower Rigging	\$33,000.00	\$33,000.00	N/A	\$24,750.00	N/A

Main Site Nitrogen System	\$3,000.00	\$3,000.00	ATC provided cost for site shared nitrogen generation system.	\$2,250.00	A nitrog generator added to project sc after initia submission to a proj oversight ATC. "M ATC M: INV_4602(and co estima 110718.1 replaces previou versions invoice nu 460200'
Sub-total	\$192,391.00	\$191,786.00	N/A	\$101,962.50	N/A
Total for all systems	\$6,609,731.86	\$4,745,295.23	N/A	\$2,404,908.22	N/A

Components

Actual Information	
Description	File Name

Main Site Public Hearing	<div> <div> Component Description: </div> <div> ATC Milestone 2 invoice line 1-B-1 public hearing in the project cost estimate section III. B.6 Other Expenses. </div> </div> <div> Amount: </div> <div> \$200.00 </div> <div> <div> Component Description: </div> <div> ATC Milestone 1 invoice line 1-B-1 public hearing in the project cost estimate section III. B.6 Other Expenses. </div> </div> <div> Amount: </div> <div> \$100.00 </div>
Main Site Security During Install	<div> <div> Component Description: </div> <div> ATC Milestone 1 invoice line 1-B-1 Site Security during construction in the project cost estimate section III. B.6 Other Expenses. </div> </div> <div> Amount: </div> <div> \$900.00 </div> <div> <div> Component Description: </div> <div> ATC Milestone 2 invoice line 1-B-1 Site Security during construction in the project cost estimate section III. B.6 Other Expenses. </div> </div> <div> Amount: </div> <div> \$1,800.00 </div>

Main Site Asbestos and Lead Tests	Component Description:	ATC Milestone 2 billing of 50% of total on line 1-B-1 testing for asbestos and lead paint in the project cost estimate section III.B.6 Other Expenses. \$900.00
	Amount:	
	Component Description:	ATC Milestone 1 billing of 25% of total on line 1-B-1 testing for asbestos and lead paint in the project cost estimate section III.B.6 Other Expenses. \$450.00
	Amount:	

Equipment Delivery and
Handling Charges

Component Description:

Milestone 1 (of 3)
payment for our
portion of ATC
equipment
handling and
delivery at multi-
user Main Site.
This is line 1-A-4
Equipment
Delivery in the
project cost
estimate section III.
B.6 Other
Expenses.
\$750.00

Amount:

Component Description:

Milestone 2 (of 3)
payment for our
portion of ATC
equipment
handling and
delivery at multi-
user Main Site.
This is line 1-A-4
Equipment
Delivery in the
project cost
estimate section III.
B.6 Other
Expenses.
\$1,500.00

Amount:

Component Description:

This cost
component line is
unnecessary due
to unlocking of
invoice to make
corrections to
initial errant
submissions.
N/A

Amount:

Local Zoning

Component Description:

Milestone 2 (of 3)
payment for our
portion of building
permits at multi-
user Main Site.
This is line 1-A-3
Obtain Building
Permits in the
project cost
estimate section III.
B.6 Other
Expenses.

Amount:

\$375.00

Component Description:

Milestone 1 (of 3)
payment for our
portion of building
permits at multi-
user Main Site.
This is line 1-A-3
Obtain Building
Permits in the
project cost
estimate section III.
B.6 Other
Expenses.

Amount:

\$187.50

Component Description:

This cost
component line is
unnecessary due
to unlocking of
invoice to make
corrections to
initial errant
submissions.

Amount:

N/A

Main Site Structural Engineering Study	<div> <div>Component Description:</div> <div>ATC Milestone 2 invoice line 3-A-1 structural engineering load study for main tower in the project cost estimate section III. B.4 Tower Equipment and Rigging Costs.</div> </div> <div> <div>Amount:</div> <div>\$2,850.00</div> </div>
	<div> <div>Component Description:</div> <div>ATC Milestone 1 invoice line 3-A-1 structural engineering load study for main tower in the project cost estimate section III. B.4 Tower Equipment and Rigging Costs.</div> </div> <div> <div>Amount:</div> <div>\$1,425.00</div> </div>
Interim Site Nitrogen System Upgrade	Information not provided.

Interim Site transition timing and coordination	<div data-bbox="703 174 1430 645"> <div data-bbox="703 174 1023 208">Component Description:</div> <div data-bbox="1157 174 1430 604">25% at billing milestone 1, line 1-A-1 Address transition timing and coordination in ATC project cost estimate section III.B.5 Outside Professional Services.</div> <div data-bbox="703 613 826 645">Amount:</div> <div data-bbox="1157 613 1254 645">\$500.00</div> </div> <div data-bbox="703 752 1430 1223"> <div data-bbox="703 752 1023 786">Component Description:</div> <div data-bbox="1157 752 1430 1182">50% at billing milestone 2, line 1-A-1 Address transition timing and coordination in ATC project cost estimate section III.B.5 Outside Professional Services.</div> <div data-bbox="703 1191 826 1223">Amount:</div> <div data-bbox="1157 1191 1275 1223">\$1,000.00</div> </div>
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Interim Site Tower Permit Drawing Package	<table> <tr> <td data-bbox="703 94 1133 627">Component Description:</td><td data-bbox="1133 94 1430 627">25% at billing milestone 1, line 3-D-1 Tower Permit Drawing Package in ATC project cost estimate section III.B.4 Tower Equipment and Rigging Costs.</td></tr> <tr> <td data-bbox="703 627 1133 672">Amount:</td><td data-bbox="1133 627 1430 672">\$1,175.00</td></tr> <tr> <td data-bbox="703 672 1133 1124">Component Description:</td><td data-bbox="1133 672 1430 1124">50% at billing milestone 2, line 3-D-1 Tower Permit Drawing Package in ATC project cost estimate section III.B.4 Tower Equipment and Rigging Costs.</td></tr> <tr> <td data-bbox="703 1124 1133 1164">Amount:</td><td data-bbox="1133 1124 1430 1164">\$2,350.00</td></tr> </table>	Component Description:	25% at billing milestone 1, line 3-D-1 Tower Permit Drawing Package in ATC project cost estimate section III.B.4 Tower Equipment and Rigging Costs.	Amount:	\$1,175.00	Component Description:	50% at billing milestone 2, line 3-D-1 Tower Permit Drawing Package in ATC project cost estimate section III.B.4 Tower Equipment and Rigging Costs.	Amount:	\$2,350.00
Component Description:	25% at billing milestone 1, line 3-D-1 Tower Permit Drawing Package in ATC project cost estimate section III.B.4 Tower Equipment and Rigging Costs.								
Amount:	\$1,175.00								
Component Description:	50% at billing milestone 2, line 3-D-1 Tower Permit Drawing Package in ATC project cost estimate section III.B.4 Tower Equipment and Rigging Costs.								
Amount:	\$2,350.00								

Interim Site Site Coordination Meeting	Component Description:	25% at billing milestone 1, line 1- B-1 Site Coordination Meeting in ATC project cost estimate section III. B.5 Outside Professional Services.
	Amount:	\$240.00
	Component Description:	50% at billing milestone 2, line 1- B-1 Site Coordination Meeting in ATC project cost estimate section III. B.5 Outside Professional Services.
	Amount:	\$480.00

Interim Site RF System Test	<table> <tr> <td data-bbox="710 96 1145 645">Component Description:</td><td data-bbox="1149 96 1426 645">25% at billing milestone 1, line 1-B-1 RF System Test in ATC project cost estimate section III. B.5 Outside Professional Services.</td></tr> <tr> <td data-bbox="710 649 1145 712">Amount:</td><td data-bbox="1149 649 1426 712">\$750.00</td></tr> <tr> <td data-bbox="710 716 1145 1122">Component Description:</td><td data-bbox="1149 716 1426 1122">50% at billing milestone 2, line 1-B-1 RF System Test in ATC project cost estimate section III. B.5 Outside Professional Services.</td></tr> <tr> <td data-bbox="710 1126 1145 1189">Amount:</td><td data-bbox="1149 1126 1426 1189">\$1,500.00</td></tr> </table>	Component Description:	25% at billing milestone 1, line 1-B-1 RF System Test in ATC project cost estimate section III. B.5 Outside Professional Services.	Amount:	\$750.00	Component Description:	50% at billing milestone 2, line 1-B-1 RF System Test in ATC project cost estimate section III. B.5 Outside Professional Services.	Amount:	\$1,500.00
Component Description:	25% at billing milestone 1, line 1-B-1 RF System Test in ATC project cost estimate section III. B.5 Outside Professional Services.								
Amount:	\$750.00								
Component Description:	50% at billing milestone 2, line 1-B-1 RF System Test in ATC project cost estimate section III. B.5 Outside Professional Services.								
Amount:	\$1,500.00								
Interim Site Public Hearing	<table> <tr> <td data-bbox="710 1126 1145 1608">Component Description:</td><td data-bbox="1149 1126 1426 1608">50% at billing milestone 2, line 1-B-1 Public Hearing in ATC project cost estimate section III.B.6 Other Expenses.</td></tr> <tr> <td data-bbox="710 1612 1145 1675">Amount:</td><td data-bbox="1149 1612 1426 1675">\$120.00</td></tr> <tr> <td data-bbox="710 1680 1145 1986">Component Description:</td><td data-bbox="1149 1680 1426 1986">25% at billing milestone 1, line 1-B-1 Public Hearing in ATC project cost estimate section III.B.6 Other Expenses.</td></tr> <tr> <td data-bbox="710 1991 1145 2054">Amount:</td><td data-bbox="1149 1991 1426 2054">\$60.00</td></tr> </table>	Component Description:	50% at billing milestone 2, line 1-B-1 Public Hearing in ATC project cost estimate section III.B.6 Other Expenses.	Amount:	\$120.00	Component Description:	25% at billing milestone 1, line 1-B-1 Public Hearing in ATC project cost estimate section III.B.6 Other Expenses.	Amount:	\$60.00
Component Description:	50% at billing milestone 2, line 1-B-1 Public Hearing in ATC project cost estimate section III.B.6 Other Expenses.								
Amount:	\$120.00								
Component Description:	25% at billing milestone 1, line 1-B-1 Public Hearing in ATC project cost estimate section III.B.6 Other Expenses.								
Amount:	\$60.00								

Interim Site Lease		
	Component Description:	25% at billing milestone 1, line 1-B-1 ATC one-time tower rental during repack in ATC project cost estimate section III. B.6 Other Expenses.
	Amount:	\$14,400.00
	Component Description:	50% at billing milestone 2, line 1-B-1 ATC one-time tower rental during repack in ATC project cost estimate section III. B.6 Other Expenses.
	Amount:	\$28,800.00

Interim Site Ground and Building Permit Drawings	<div> Component Description: 25% at billing milestone 1, line 3-D-1 Ground & Building A&E Drawings in ATC project cost estimate section III. B.4 Tower Equipment and Rigging Costs. </div> <div> Amount: \$1,175.00 </div>
	<div> Component Description: 50% at billing milestone 2, line 3-D-1 Ground & Building A&E Drawings in ATC project cost estimate section III. B.4 Tower Equipment and Rigging Costs. </div> <div> Amount: \$2,350.00 </div>
Interim Site Equipment Delivery and Handling Costs	<div> Component Description: 25% at billing milestone 1, line 1-A-4 in ATC project cost estimate section III.B.6 Other Expenses. </div> <div> Amount: \$750.00 </div> <div> Component Description: 50% at billing milestone 2, line 1-A-4 in ATC project cost estimate section III.B.6 Other Expenses. </div> <div> Amount: \$1,500.00 </div>

Interim Site Construction Project Management	<div> Component Description: 25% at billing milestone 1, line 3-D-1 Construction Project Management in ATC project cost estimate section III. B.4 Tower Equipment and Rigging Costs. </div> <div> Amount: \$750.00 </div>
	<div> Component Description: 50% at billing milestone 2, line 3-D-1 Construction Project Management in ATC project cost estimate section III. B.4 Tower Equipment and Rigging Costs. </div> <div> Amount: \$1,500.00 </div>
Interim Site Building Permits	<div> Component Description: 50% at billing milestone 2, line 1-A-3 in ATC project cost estimate section III.B.6 Other Expenses. </div> <div> Amount: \$375.00 </div> <div> Component Description: 25% at billing milestone 1, line 1-A-3 in ATC project cost estimate section III.B.6 Other Expenses. </div> <div> Amount: \$187.50 </div>
MVPD Notification of Channel Change	Information not provided.

Develop and air announcement of upcoming channel change	Information not provided.								
Equipment Storage	Information not provided.								
Disposal Costs (for equipment and other waste, net of any salvage value)	<table> <tr> <td>Component Description:</td><td>Milestone 2 (of 3) payment for our portion of disposal costs at multi-user Main Site. This is line 1-A-4 Disposal Cost in the project cost estimate section III. B.6 Other Expenses.</td></tr> <tr> <td>Amount:</td><td>\$2,500.00</td></tr> <tr> <td>Component Description:</td><td>Milestone 1 (of 3) payment for our portion of disposal costs at multi-user Main Site. This is line 1-A-4 Disposal Cost in the project cost estimate section III. B.6 Other Expenses.</td></tr> <tr> <td>Amount:</td><td>\$1,250.00</td></tr> </table>	Component Description:	Milestone 2 (of 3) payment for our portion of disposal costs at multi-user Main Site. This is line 1-A-4 Disposal Cost in the project cost estimate section III. B.6 Other Expenses.	Amount:	\$2,500.00	Component Description:	Milestone 1 (of 3) payment for our portion of disposal costs at multi-user Main Site. This is line 1-A-4 Disposal Cost in the project cost estimate section III. B.6 Other Expenses.	Amount:	\$1,250.00
Component Description:	Milestone 2 (of 3) payment for our portion of disposal costs at multi-user Main Site. This is line 1-A-4 Disposal Cost in the project cost estimate section III. B.6 Other Expenses.								
Amount:	\$2,500.00								
Component Description:	Milestone 1 (of 3) payment for our portion of disposal costs at multi-user Main Site. This is line 1-A-4 Disposal Cost in the project cost estimate section III. B.6 Other Expenses.								
Amount:	\$1,250.00								
FCC Filing Fees - Special Temporary Authorization request	Information not provided.								
FCC Filing Fees - Form 2100 license to cover application	Information not provided.								
DTV Medical Facility Notification	Information not provided.								
FCC Filing Fees - Form 2100 minor change CP application	Information not provided.								

Interim Site Tower Rigging	<div data-bbox="715 174 1380 488"> <p>Component Description: 25% at billing milestone 1, line 3-C-1 in ATC project cost estimate section III.B.4 Tower Equipment and Rigging Costs.</p> <p>Amount: \$8,250.00</p> </div> <div data-bbox="715 593 1380 907"> <p>Component Description: 50% at billing milestone 2, line 3-C-1 in ATC project cost estimate section III.B.4 Tower Equipment and Rigging Costs.</p> <p>Amount: \$16,500.00</p> </div>
Main Site Nitrogen System	<div data-bbox="715 1046 1380 1440"> <p>Component Description: ATC Milestone 2 billing at 50% of invoice line 1-B-1 Nitrogen Generator in the project cost estimate section III. B.6 Other Expenses.</p> <p>Amount: \$1,500.00</p> </div> <div data-bbox="715 1543 1380 1937"> <p>Component Description: ATC Milestone 1 billing at 25% of invoice line 1-B-1 Nitrogen Generator in the project cost estimate section III. B.6 Other Expenses.</p> <p>Amount: \$750.00</p> </div>

Cost Information	Grand Total		
		Predetermined Cost Estimate	Estimated Cost
			Actual Cost
	Total for all systems	\$6,609,731.86	\$4,745,295.23
			\$2,404,908.22

Reimbursement Status	Question	Response
	The facility has ceased operating on its pre-auction channel.	No
	Construction of final facilities or all necessary modifications are complete.	No
	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

Certification	Section	Question	Response
	Submission of Estimated Expenses Statements	<p>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.</p>	
		<ol style="list-style-type: none"> 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.

<p>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.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p>Sean Anker <i>Director of Engineering</i></p> <p>11/08/2018</p>

Certification	Section	Question	Response
	Submission of Actual Cost Documentation Statements	<p>WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS 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 AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).</p>	
		<ol style="list-style-type: none"> 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. 2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct. 3. 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.

<p>8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.</p> <p>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.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p>Sean Anker <i>Director of Engineering</i></p> <p>11/08/2018</p>

Attachments