



(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility **25456** | Service: **DTV** | Call **WBZ-TV** | Channel: **20 (UHF)** |  
ID: | Sign:  
File **0000027825**  
Number:  
FRN: **0021079769** | Date **04/06**  
Submitted: **/2020**

## Applicant Information

### Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
<b>CBS TELEVISION LICENSES LLC</b> Doing Business As: CBS TELEVISION LICENSES LLC	Daniel G. Ryson 1725 DeSales St. NW Suite 501 Washington, DC 20036 United States	+1 (202) 457-4505	dryson@cbs.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
<b>Daniel G. Ryson</b> CBS	Daniel G. Ryson 1725 DeSales Street NW Suite 501 Washington, DC 20036 United States	+1 (202) 457-4074	dryson@cbs.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	American Tower will build an interim site in Needham, MA, including a broadband antenna and transmitter building to be used while building the permanent site in Needham Heights, MA

**Transmitters**

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

**Auxiliary  
Transmitter****Add Transmitter Information**

Section	Question	Response
<b>Existing Transmitter Description</b>	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	When Main TX Unavailable
	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
<b>Existing Transmitter Manufacturer and Type</b>	Manufacturer	
	Model	Diamond
	Year	2008
	Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	14 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?	No
	Manufacturer	
	Model	ULXTE-24
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	14.4 kW
	Justification for New Transmitter	Manufacturer Cannot Re- tune Existing Transmitter (see Exhibit 1).

**Auxiliary  
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	No
	Size	N/A
	Length	N/A
	Other Electrical Service	No
	Description	N/A

<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A
<b>Transmitter Building Addition/Modification or Leasehold Improvement</b>	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
<b>Channel 14 Costs</b>	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**  
Information not provided.

**Primary  
Transmitter**

**Existing Transmitter Information**

Section	Question	Response
<b>Existing Transmitter Description</b>	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
<b>Existing Transmitter Manufacturer and Type</b>	Manufacturer	
	Model	Sigma
	Year	1999
	Type	Inductive Output Tube
	IOT Power Type	Two
	Power Capacity	46 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-72
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	47.2 kW
	Justification for New Transmitter	GatesAir won't retune (see Exhibit 1). Non-upgraded IOT transmitter is more expensive (see Exhibit 2). Proposed transmitter is less expensive (See Exhibit 3).

**Primary  
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	No
	Size	N/A
	Length	N/A
	Other Electrical Service	Yes
	Description	Transformer and surge suppressor. See Exhibit 3 Item C.
<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A
<b>Transmitter Building Addition/Modification or Leasehold Improvement</b>	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
<b>Channel 14 Costs</b>	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**  
Information not provided.



**Interim  
Transmitter**

**New Transmitter Costs**

Section	Question	Response
<b>New Transmitter</b>	Use	Interim
	Description of Use	N/A
	Change Type	Purchase
	Manufacturer	
	Model	ULXTE-72
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	47.2 kW
	Justification for New Transmitter	Required to maintain WBZ-TV operations from Interim site while main antenna is rebuilt. See also Exhibit 4.

**Interim  
Transmitter**

**Other Transmitter Costs**

Section	Question	Response
<b>Electrical Service</b>	Service Entrance (3 phases 800A 208V)	Yes
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	Yes
	Power	500 kVA
	Rigid Conduit and Wiring	Yes
	Size	2 inches
	Length	200.0 feet

	Other Electrical Service	Yes
	Description	Various Electrical Service from attached GatesAir Estimate (see Exhibit 3).
<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	Yes
	Type	Cooling Only
	Size	20 tons
	Other Size	N/A
<b>Transmitter Building Addition/Modification or Leasehold Improvement</b>	Does the Transmitter Building require an addition, modification, other leasehold improvement?	Yes
	Size	1500.0 square feet
<b>Channel 14 Costs</b>	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
<b>Inside RF System</b>	Is an additional interior RF system required to support this interim transmitter?	No

**Interim Transmitter**

**Other Transmitter Cost Not Listed**

Name	Description
<b>100 Feet 4-Inch Conduit</b>	100 Feet 4-Inch Conduit
<b>Emergency Generator</b>	Primary site has an emergency generator. This cost replicates backup power at the interim site.

<b>New Sub Panels</b>	Four (4) new sub panels at approximately 200 amps each.
<b>Ice Shield</b>	For HVAC Equipment
<b>TX Room Electrical</b>	Various Electrical work. See proposal in Exhibit 22
<b>Core Drill Eight Holes</b>	Core Drill Eight Holes at Interim Transmitter Site

**Antennas**

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

**Primary  
Antenna**

**Existing Antenna Information**

Section	Question	Response
<b>Existing Antenna Description</b>	Type of change	Lease New
	Antenna Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Owner	American Tower Corporation
	Site	N/A
	Is the existing antenna shared with another station or stations?	Yes
	Is the existing antenna directional?	No
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	No
<b>Existing Antenna Manufacturer and Type</b>	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Top
	Polarization	Horizontal
	Type	Broadband Panel
	Number of Stations Supported	4
	Number of Panels	99
	Design power capacity in use	87.0 %
	Lower Limit	470.00 MHz
	Upper Limit	698.00 MHz
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	825.0 kW

	Manufacturer	
	Model	TAD-24UDA-5/60-MR
	Year	1999

**Facility ID's and Call Signs of all stations with whom the antenna is shared.**

Facility ID	Call Sign
65684	WCVB-TV
72098	WGBX-TV
73982	WSBK-TV

**Primary  
Antenna**

**New Antenna Costs**

Section	Question	Response
<b>New Antenna Description</b>	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Lease New
	Is this a request for upgraded equipment?	Yes
	Ownership	Leased
	Owner	American Tower Corporation
	Is antenna shared?	Yes
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
<b>New Antenna Manufacturer and Types</b>	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Type	Broadband Panel
	Number of Stations Supported	4
	Number of Panels/Bays	70
	Lower Limit	470.00 MHz
	Upper Limit	608.00 MHz
	Design power capacity in use	99.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power) .....	740.0 kW
	Manufacturer	
	Model	PEP70E

Year	2020
Justification for New Antenna	Top Mount Broadband antenna required to accommodate the new repack frequencies. This antenna will be a four-sided assembly mast. In use power capacity is unknown. Pre-transition antenna has 120 panels. See Exhibit 5A.

## Primary Antenna

### Other Antenna Costs

Section	Question	Response
<b>Combiner for Shared Antenna</b>	Do you need a Combiner for a Shared Antenna?	Yes
	Type	New
	Number of channels supported	4
	Frequencies of channels supported	Upper and lower frequency
	Frequency	470.0 MHz - 608.0 MHz
	Do you need a combiner output splitter /switcher for dual feed lines?	No
<b>Elbow Complex</b>	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Broadband



	Feed Line Size	8 3/16 inches inches
<b>Side Mount Brackets</b>	Do you require the separate purchase of side mount brackets for a high power antenna?	
<b>Pattern Scatter Analysis</b>	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
<b>Sweep Test</b>	Do you require the sweep testing of transmission line and antenna?	Yes

## Primary Antenna

### Other Antenna Cost Not Listed

Name	Description
<b>Install Combiner</b>	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. See Exhibit 5.

**Interim  
Antenna**

**New Antenna Costs**

Section	Question	Response
<b>New Antenna Description</b>	Use	Interim
	Description of Use	N/A
	Change Type	Lease New
	Ownership	Leased
	Owner	American Tower Corporation
	Is antenna shared?	Yes
	Is antenna directional?	Yes
	Will antenna be located on or in close proximity to an antenna farm?	No
<b>New Antenna Manufacturer and Type</b>	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	56
	Lower Limit	470.00 MHz
	Upper Limit	608.00 MHz
	Design power capacity in use	99.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	740.0 kW
	Manufacturer	
	Model	TUM-AP-O4-14/56H-2-T

Year	2018
Justification for New Antenna	Required for shared use by five stations at interim site. See Exhibit 4 for interim site justification.

## Interim Antenna

### Other Antenna Costs

Section	Question	Response
<b>Combiner for Shared Antenna</b>	Do you need a Combiner for a Shared Antenna?	Yes
	Type	New
	Number of channels supported	5
	Frequencies of channels supported	Upper and lower frequency
	Frequency	470.0 MHz - 608.0 MHz
	Do you need a combiner output splitter /switcher for dual feed lines?	No
<b>Elbow Complex</b>	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	B
	Feed Line Size	8 3/16 inches
<b>Side Mount Brackets</b>	Do you require the separate purchase of side mount brackets for an antenna?	No
<b>Pattern Scatter Analysis</b>	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
<b>Sweep Test</b>	Do you require the sweep testing of transmission line and antenna?	Yes

**Interim  
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. See Exhibit 16.

**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	Utilize Existing
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Owner	American Tower Corporation
	Site	N/A
	Is the existing transmission line shared with another station or stations?	Yes
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	Dielectric
	Type	Rigid
	Diameter	8 3/16 inches
	Other Diameter	N/A
	Segment Length	Broadband
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1440 feet per run

Facility ID's and Call Signs of all stations with whom the transmission line is shared.

Facility ID	Call Sign
72098	WGBX-TV
65684	WCVB-TV
73982	WSBK-TV

**Primary Transmission Line** **Other Transmission Line Expenses Not Listed**

Name	Description
Nitrogen Generator	Nitrogen Generator Upgrade. See Exhibit 15, Line 1-B-1.

**Interim Transmission Line** **New Transmission Line**

Section	Question	Response
New Transmission Line Costs	Use	Interim
	Description of Use	N/A
	Change Type	Lease New
	Type	Rigid
	Diameter	8 3/16 inches
	Segment Length	Broadband
	Other Segment Length	
	Number of parallel runs	2
	Length	1250 feet per run
	Justification for New Transmission Line	Two (2) 8-3 /16" Broadband rigid transmission lines, six (6) elbows (3 each line) and

a nitrogen generator for pressurization. Required for Interim antenna. See Exhibit 16.

**Interim  
Transmission Line**      **Other Transmission Line Expenses Not Listed**

Name	Description
Nitrogen Generator	Nitrogen Generator Upgrade. See Exhibit 16, Line 1-B-1.

**Tower Equipment And Rigging Costs**

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

**Auxiliary Tower**

**Add Tower**

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Auxiliary (Backup)
	Description of Use	Interim Use
	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
9639	WODS	FM
73238	WLVI	DTV
1901	WBZ-FM	FM
26897	WWBX	FM
6463	WFXT	DTV
23439	WBOS	FM

**Auxiliary  
Tower**

**Tower Modification Costs**

Section	Question	Response
<b>Engineering Study</b>	Please what type of engineering study is required, if any:	Study needed for documented tower
<b>Tower Reinforcements</b>	Please select whether tower reinforcements are needed:	Minor Reinforcements needed

**Auxiliary  
Tower**

**Tower Rigging Costs**

Section	Question	Response
<b>Tower Rigging Costs</b>	Complex Tower	Candelabra

<b>Helicopter Services Required</b>	Are helicopter services required?	No
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**Auxiliary  
Tower**

**Other Tower Expenses Not Listed**

<b>Name</b>	<b>Description</b>
<b>Interim Tower Rent</b>	Interim Tower Rent. See Exhibit 6.
<b>Construction Management</b>	Nine hours on Modification project management and fifteen hours for RF installation project management for a total of twenty days. See Exhibit 6.
<b>Tower Permit Packages</b>	Tower and ground equipment drawing package. Required for local approvals. See Exhibit 6.

## Primary Tower

### Existing Tower

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Is this tower consider Complex?	Candelabra
	Is this tower currently shared with any other stations?	Yes
	One or more FM, AM or TV radio broadcaster(s)	Yes
	Others Types of Users	No
	Is tower documented for structural analysis?	Yes
	Is tower compliant with Rev G?	Unknown
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1003433
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	42° 18' 37.0" N-
	Longitude (NAD83)	071° 14' 12.0" W-
	Overall Structure Height	1296.24 feet
	Support Structure Height	1192.24 feet
	Ground Elevation Above Mean Sea Level (AMSL)	152.89 feet
	Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
	Tower Owner	American Tower, LLC
	Date Constructed	01/01/1957

**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
10542	WKLB-FM	FM
73982	WSBK-TV	DTV
72099	WGBH-TV	DTV
18783	WYDN	DTV
65684	WCVB-TV	DTV
68241	WBUR-FM	FM
72098	WGBX-TV	DTV

**Primary  
Tower**

**Tower Modification Costs**

Section	Question	Response
<b>Engineering Study</b>	Please what type of engineering study is required, if any:	Study needed for documented tower
<b>Tower Reinforcements</b>	Please select whether tower reinforcements are needed:	Minor Reinforcements needed

**Primary  
Tower**

**Tower Rigging Costs**

Section	Question	Response
<b>Tower Rigging Costs</b>	Complex Tower	Candelabra
<b>Helicopter Services Required</b>	Are helicopter services required?	No

**Primary  
Tower**

**Other Tower Expenses Not Listed**

Name	Description
<b>Tower Permit Packages</b>	The generation of a construction drawing package for one (1) broadcasters /customers. See Exhibit 5.
<b>Tower Project Management</b>	(44) hours on Modification project management and RF installation project management.

**Outside  
Professional**

Section	Question	Response
<b>Services Costs Outside Project Management Services</b>	Do you require outside project management services?	Yes
	Number of Hours	250
	Explanation	Company lacks sufficient resources.
<b>Outside RF consulting Engineering Services</b>	Perform engineering study for new channel assignment and antenna development	Yes
	Prepare engineering section of Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare engineering section of Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	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
<b>Attorney and Other Outside Consulting Services</b>	Prepare and file Form FCC Construction Permit Application	No
	For Auxiliary Facility	N/A
	For Main Facility	N/A
	Prepare and file Form FCC License to Cover Application	No
	For Auxiliary Facility	N/A

	For Main Facility	N/A
	Prepare request for Special Temporary Authority	No
	Quantity	N/A
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	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	No
	Address transition timing and coordination issues w/ other stations and wireless providers	Yes
<b>RF Field Engineering Services</b>	Comprehensive coverage verification via field study	No
	RF exposure measurements	No
	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
<b>LocalPermits</b>	Prepare and submit forms for necessary electrical, building and other permits.
<b>RF System Test</b>	Testing of the combiners to ensure one frequency is tuned for optimal patterns. See Exhibits 5 and 6.

## Other Expenses

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



**Other  
Expenses**

**Other Expenses Not Listed**

Name	Description
<b>Site Security</b>	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. (See Exhibit 3.)
<b>Disconnect Transmitters</b>	Labor and expenses for disconnect and removal of existing transmitters. See Exhibit 3 Item F and Exhibit 9 Item F.
<b>Asbestos and Lead Paint Testing</b>	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. (See Exhibit 3.)
<b>Building Partition</b>	This cost is to provide permitting for building partition and electrical service installation in the shared space. This install is to provide security for broadcasters and sufficient power for transmitters. See Exhibit 3.
<b>Ice Shield for HVAC</b>	Ice protection for HVAC compressor units near tower in areas prone to ice and snow. See Exhibit 3.
<b>Public Hearing</b>	Public hearing to alter height of primary tower by changing top antenna. See Exhibit 2.
<b>Site Coordination Meeting</b>	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. See Exhibits 2 and 3.

## 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
<b>Interim Transmitter ULXTE-72</b>	<b>\$1,841,852.82</b>	<b>\$1,564,014.62</b>		<b>\$1,444,918.33</b>	
Core Drill Eight Holes	<i>\$2,360.00</i>	\$2,360.00	Core drill eight holes at interim transmitter site. Please see Exhibit 40 for quotation.	\$2,360.00	N/A
TX Room Electrical	<i>\$95,772.00</i>	\$95,772.00	Transmitter Room Electrical Work - Various. See proposal attached as Exhibit 39 (\$92,802) plus Exhibit 32 (\$2,970.00).	\$95,772.00	N/A
Ice Shield	<i>\$4,000.00</i>	\$4,000.00	Required to protect outdoor HVAC units.	\$3,000.00	N/A
New Sub Panels	<i>\$10,000.00</i>	\$10,000.00	Provide proper voltage and current for each additional transmitter, house power, HVAC, and ancillary equipment. See Exhibit 6.	\$7,500.00	N/A
100 Feet 4-Inch Conduit	<i>\$1,920.00</i>	\$1,920.00	100' L/F of 4" conduit and larger conductor. Brings in an additional 500 KVA for new transmitters,	\$1,440.00	N/A

			HVAC, Air handlers and house power. The existing power supply is inadequate for the new repack equipment. See Exhibit 6.		
Other -- Building Addition Size: 1500.0	<b>\$1,800.00</b>	\$1,800.00	This cost is to provide permitting for building partition and electrical service installation in the shared space. This install is to provide security for broadcasters and sufficient power for transmitters. See Exhibit 6.	\$1,350.00	N/A
Other -- HVAC Service Type: C Size:20 (Other)	<b>\$22,000.00</b>	\$22,000.00	20 ton HVAC split units to maintain operational temperatures. This is to supplement existing HVAC. Calculation for the HVAC size is calculated using the power of the three transmitters at 30% efficiency. See Exhibit 6.	\$16,500.00	N/A
Other Electrical Service: Various Electrical Service from attached	<b>\$12,998.82</b>	\$12,998.82	Transformer and surge suppressor required to support interim transmitter. See Exhibit 8, Item D.	\$12,998.82	N/A

GatesAir  
Estimate  
(see Exhibit  
3).

2" Rigid Conduit and Wiring (Cost per foot)	\$5,200.00	\$1,000.00	This cost includes 200 L/F of 2" conduit and conductor to supply HVAC, Air handlers and House power. The existing power supply is inadequate for the additional power demands of the new repack equipment. See Exhibit 6.	\$750.00	N/A
Transformer 3 phase /480v - 500 KVA	\$48,400.00	\$9,200.00	Install additional 500 KVA transformer for new tenant space to operate transmitter, heat exchangers and other equipment on the new repack frequency into the broadband antenna. See Exhibit 6.	\$6,900.00	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$7,260.00	New Switchgear required accommodate the repack equipment and new 500 KVA transformer. The existing service does not have sufficient capacity to support transmitters. See Exhibit 6.	\$5,445.00	N/A

Service entrance 3 phase/800 amp/208 volt	\$14,400.00	\$2,740.00	Install 3 phase, 800 amp, 480 VAC in existing common area of the building being changed to a shared space for one transmitter which currently does not support the required power capacity. See Exhibit 6.	\$2,055.00	N/A
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	\$1,473,000.00	\$1,281,161.80	Please see Exhibit 8, Items A, B, D, and E plus Heat Exchanger Unistrut Frame, Exhibit 20.	\$1,188,847.51	N/A
Emergency Generator	<b>\$111,802.00</b>	\$111,802.00	Interim Tower Generator. See Exhibit 33 for lease. Includes \$100,000 connection fee and \$1,686 rent for an assumed 7 months.	\$100,000.00	N/A
<b>Primary Transmitter ULXTE-72</b>	<b>\$1,485,998.82</b>	<b>\$1,312,554.72</b>		<b>\$1,295,661.27</b>	
Other Electrical Service: Transformer and surge suppressor. See Exhibit 3 Item C.	<b>\$12,998.82</b>	\$12,998.82	Transformer and surge suppressor. Required for proper operation of transmitter. See Exhibit 3, Item D.	\$12,998.82	N/A
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	\$1,473,000.00	\$1,299,555.90	See Exhibit 3, Items A, B, C, and E	\$1,282,662.45	N/A

<b>Auxiliary Transmitter ULXTE-24</b>	<b>\$546,334.94</b>	<b>\$545,084.94</b>		<b>\$461,018.86</b>	
Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$24,300.00	N/A	\$2,503.03	N/A
UHF - Air Cooled Solid State Transmitter 14.4 kW	<b>\$520,784.94</b>	\$520,784.94	Proposed transmitter is a like-for-like replacement of existing transmitter. An estimate is provided as Exhibit 9. Category D (Electrical) is listed separately.	\$458,515.83	N/A
<b>Sub-total</b>	\$3,874,186.58	\$3,421,654.28	N/A	\$3,201,598.46	N/A
<b>Total for all systems</b>	\$7,731,248.63	\$4,480,248.90	N/A	\$3,832,533.78	N/A

## Components

Actual Information	
Description	File Name
Core Drill Eight Holes	<p><b>Component Description:</b> Core drill eight holes. Please see Exhibit 40 for quote.</p> <p><b>Amount:</b> \$2,360.00</p>
TX Room Electrical	<p><b>Component Description:</b> Interim Site Electrical Work. Form 399 won't accept ampersand in company name.</p> <p><b>Amount:</b> \$2,970.00</p>

	<p><b>Component Description:</b></p> <p>Progress Payment Requisition 2 for WBZ Interim Transmitter Electrical. Form 399 won't take an ampersand in company name.</p> <p><b>Amount:</b></p> <p>\$39,600.00</p>	
	<p><b>Component Description:</b></p> <p>Progress Payment Requisition 3 for WBZ Interim Transmitter Electrical. Form 399 won't take an ampersand in company name.</p> <p><b>Amount:</b></p> <p>\$10,334.10</p>	
	<p><b>Component Description:</b></p> <p>Various Electrical Work, Requisition #1. Note: Form 399 will not accept a vendor name with an ampersand.</p> <p><b>Amount:</b></p> <p>\$42,867.90</p>	
Ice Shield	<p><b>Component Description:</b></p> <p>Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Ice Shield, Exhibit 6, 3-C-6.</p> <p><b>Amount:</b></p> <p>\$14,400.00</p> <p><b>Amount:</b></p> <p>\$1,000.00</p>	

	<p><b>Component Description:</b></p> <p>Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Ice Shield, Exhibit 6, 3-C-6.</p> <p><b>Amount:</b></p> <p>\$2,000.00</p>
New Sub Panels	<p><b>Component Description:</b></p> <p>Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Electrical Sub Panels, Exhibit 6, 3-C-6.</p> <p><b>Amount:</b></p> <p>\$2,500.00</p> <p><b>Component Description:</b></p> <p>Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Electrical Sub Panels, Exhibit 6, 3-C-6.</p> <p><b>Amount:</b></p> <p>\$5,000.00</p>
100 Feet 4-Inch Conduit	<p><b>Component Description:</b></p> <p>Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 4-inch conduit, Exhibit 6, 3-C-1.</p> <p><b>Amount:</b></p> <p>\$960.00</p>



	<p><b>Component Description:</b></p> <p>Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 4-inch conduit, Exhibit 6, 3-C-1.</p> <p><b>Amount:</b></p> <p>\$480.00</p>
Other -- Building Addition Size: 1500.0	<p><b>Component Description:</b></p> <p>Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Building Addition, Exhibit 6, 3-C-3.</p> <p><b>Amount:</b></p> <p>\$450.00</p> <p><b>Component Description:</b></p> <p>Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Building Addition, Exhibit 6, 3-C-3.</p> <p><b>Amount:</b></p> <p>\$900.00</p>
Other -- HVAC Service Type: C Size:20 (Other)	<p><b>Component Description:</b></p> <p>Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 20-Ton HVAC, Exhibit 6, 3-C-2.</p> <p><b>Amount:</b></p> <p>\$11,000.00</p>

	<p><b>Component Description:</b></p> <p>Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 20-Ton HVAC, Exhibit 6, 3-C-2.</p> <p><b>Amount:</b></p> <p>\$5,500.00</p>
Other Electrical Service: Various Electrical Service from attached GatesAir Estimate (see Exhibit 3).	<p><b>Component Description:</b></p> <p>Invoice is for Interim Transmitter (See Exhibit 8 Items A, B, C, and D plus Exhibit 21). This dollar amount is for Electrical - Exhibit 8 Item D. The remainder is shown in the transmitter cost category.</p> <p><b>Amount:</b></p> <p>\$12,998.82</p>
2" Rigid Conduit and Wiring (Cost per foot)	<p><b>Component Description:</b></p> <p>Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 2-inch conduit, Exhibit 6, 3-C-1.</p> <p><b>Amount:</b></p> <p>\$500.00</p>

	<p><b>Component Description:</b></p> <p>Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 2-inch conduit, Exhibit 6, 3-C-1.</p> <p><b>Amount:</b></p> <p>\$250.00</p>
Transformer 3 phase/480v - 500 KVA	<p><b>Component Description:</b></p> <p>Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 500 KVA Transformer, Exhibit 6, 3-C-1.</p> <p><b>Amount:</b></p> <p>\$2,300.00</p> <p><b>Component Description:</b></p> <p>Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 500 KVA Transformer, Exhibit 6, 3-C-1.</p> <p><b>Amount:</b></p> <p>\$4,600.00</p>
Switchgear - industrial 800 amp	

	<table> <tr> <td data-bbox="711 98 1145 510"><b>Component Description:</b></td><td data-bbox="1145 98 1430 510">Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 800A Switchgear, Exhibit 6, 3-C-1.</td></tr> <tr> <td data-bbox="711 510 1145 600"><b>Amount:</b></td><td data-bbox="1145 510 1430 600">\$1,815.00</td></tr> <tr> <td data-bbox="711 600 1145 1106"><b>Component Description:</b></td><td data-bbox="1145 600 1430 1106">Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 800A Switchgear, Exhibit 6, 3-C-1.</td></tr> <tr> <td data-bbox="711 1106 1145 1196"><b>Amount:</b></td><td data-bbox="1145 1106 1430 1196">\$3,630.00</td></tr> </table>	<b>Component Description:</b>	Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 800A Switchgear, Exhibit 6, 3-C-1.	<b>Amount:</b>	\$1,815.00	<b>Component Description:</b>	Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 800A Switchgear, Exhibit 6, 3-C-1.	<b>Amount:</b>	\$3,630.00
<b>Component Description:</b>	Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 800A Switchgear, Exhibit 6, 3-C-1.								
<b>Amount:</b>	\$1,815.00								
<b>Component Description:</b>	Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 800A Switchgear, Exhibit 6, 3-C-1.								
<b>Amount:</b>	\$3,630.00								
Service entrance 3 phase /800 amp/208 volt	<table> <tr> <td data-bbox="711 1106 1145 1644"><b>Component Description:</b></td><td data-bbox="1145 1106 1430 1644">Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 800A Service Entrance, Exhibit 6, 3-C-1.</td></tr> <tr> <td data-bbox="711 1644 1145 1733"><b>Amount:</b></td><td data-bbox="1145 1644 1430 1733">\$1,370.00</td></tr> <tr> <td data-bbox="711 1733 1145 2132"><b>Component Description:</b></td><td data-bbox="1145 1733 1430 2132">Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 800A Service Entrance, Exhibit 6, 3-C-1.</td></tr> <tr> <td data-bbox="711 2132 1145 2222"><b>Amount:</b></td><td data-bbox="1145 2132 1430 2222">\$685.00</td></tr> </table>	<b>Component Description:</b>	Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 800A Service Entrance, Exhibit 6, 3-C-1.	<b>Amount:</b>	\$1,370.00	<b>Component Description:</b>	Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 800A Service Entrance, Exhibit 6, 3-C-1.	<b>Amount:</b>	\$685.00
<b>Component Description:</b>	Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 800A Service Entrance, Exhibit 6, 3-C-1.								
<b>Amount:</b>	\$1,370.00								
<b>Component Description:</b>	Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 800A Service Entrance, Exhibit 6, 3-C-1.								
<b>Amount:</b>	\$685.00								

UHF - Liquid Cooled Solid  
State Transmitter 35 - 50 kW

**Component Description:**

Interim  
Transmitter Down  
Payment

**Amount:**

\$435,088.75

**Component Description:**

Interim  
Transmitter  
Progress Payment.

**Amount:**

\$430,755.41

**Component Description:**

Invoice is for  
Interim  
Transmitter (See  
Exhibit 8 Items A,  
B, C, and D plus  
Exhibit 21). This  
dollar amount is  
total invoice  
amount minus  
100% of Electrical  
- Exhibit 8 Item D,  
shown in a  
different cost  
category.

**Amount:**

\$323,003.35

Emergency Generator

**Component Description:**

Generator  
Connection Fee.  
Please see Exhibit  
33 for lease.

**Amount:**

\$100,000.00

Other Electrical Service:  
Transformer and surge  
suppressor. See Exhibit 3  
Item C.

	<p><b>Component Description:</b></p> <p>Invoice is for Primary Transmitter Final Payment Before Shipment. This electrical component is listed separately from the rest of the transmitter.</p> <p><b>Amount:</b></p> <p>\$12,998.82</p>
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	<p><b>Component Description:</b></p> <p>Transmitter Installation, Proof, and misc parts. See Exhibit 28 (\$92,314.35 plus \$929.18). Freight shown separately.</p> <p><b>Amount:</b></p> <p>\$93,243.53</p> <p><b>Component Description:</b></p> <p>Please see Exhibit 31.</p> <p><b>Amount:</b></p> <p>\$313,338.41</p> <p><b>Component Description:</b></p> <p>Primary Transmitter Down Payment</p> <p><b>Amount:</b></p> <p>\$449,676.77</p> <p><b>Component Description:</b></p> <p>Primary Transmitter Final Payment Before Shipment. Includes all but Electrical (Item D) which is listed separately.</p> <p><b>Amount:</b></p> <p>\$426,403.74</p>
Transformer 3 phase/480v - 150 KVA	

	<b>Component Description:</b>	Invoice is split among three cost categories. See Exhibit 24. Corrected typo in dollar amount March 21, 2019.
	<b>Amount:</b>	\$1,408.79
	<b>Component Description:</b>	Invoice is for transmitter, mask filter, RF accessories, and electrical. This cost is just electrical. See Exhibit 25.
	<b>Amount:</b>	\$1,094.24
UHF - Air Cooled Solid State Transmitter 14.4 kW	<b>Component Description:</b>	Invoice for transmitter, mask filter, RF accessories, and electrical shown separately. See Exhibit 25.
	<b>Amount:</b>	\$119,512.45
	<b>Component Description:</b>	Invoice for transmitter, electrical, and old transmitter removal is split among three cost categories. See Exhibit 24.
	<b>Amount:</b>	\$163,999.61
	<b>Component Description:</b>	Auxiliary Transmitter Down Payment
	<b>Amount:</b>	\$175,003.77





## 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 TUM-AP-O4-14/56H-2-T	\$196,667.00	\$231,787.00		\$125,567.00	
Combiner Installation	<i>\$10,000.00</i>	\$10,000.00	Installation of dual chain combiner. See Exhibit 16 Line 3-C-2 for this cost estimate.	\$5,250.00	N/A
Sweep test of existing antenna	\$6,730.00	\$3,000.00	See Exhibit 6.	\$2,250.00	N/A
UHF - High Power Top Mount Five Station broadband panel antenna elliptically or circularly polarized	<i>\$76,787.00</i>	\$76,787.00	New Dielectric 14 bay, 56 elements total, 1 assembly mast. See Exhibit 16.	\$62,417.00	N/A
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 and output switching to allow	\$50,250.00	N/A

transmitter  
alignment  
/testing not  
otherwise  
available.  
Eliminates  
need for  
mask filter.  
See Exhibit  
16 Line 3-C-  
1.

Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)	\$18,950.00	\$6,600.00	Two (2) Elbow complex for the input of the new Broadband antenna. See Exhibit 16.	\$5,400.00	N/A
<b>Primary Antenna PEP70E</b>	<b>\$1,211,130.00</b>	<b>\$266,362.50</b>		<b>\$170,581.87</b>	
Install Combiner	<b>\$11,250.00</b>	\$11,250.00	Installation cost of the new combiner. Required to replace existing combiner and support required multi-station antenna. See Exhibit 15.	\$6,562.50	N/A
Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)	\$18,950.00	\$10,000.00	Elbow complex for top mount antenna being used for repacked stations. See Exhibit 15.	\$6,750.00	N/A
New combiner, cost per channel	\$84,200.00	\$91,500.00	Constant impedance waveguide modules, and	\$56,250.00	N/A

(without  
antenna)

/or dual  
chains of 4  
directional  
filter modules  
per Dielectric  
layout.  
Eliminates  
need for  
transmitter  
mask filter.  
See Exhibit  
15.

Sweep test of existing antenna	\$6,730.00	\$5,000.00	N/A	\$3,750.00	N/A
UHF - High Power Top Mount (200-1000 kW), Four Station broadband panel antenna, elliptically or circularly polarized	\$1,090,000.00	\$148,612.50	RFS PEP70E Top Mount Broadband antenna, required to accommodate the new repack frequencies. See Exhibit 35.	\$97,269.37	N/A
<b>Sub-total</b>	\$1,407,797.00	\$498,149.50	N/A	\$296,148.87	N/A
<b>Total for all systems</b>	\$7,731,248.63	\$4,480,248.90	N/A	\$3,832,533.78	N/A

## Components

### Actual Information

#### Description

#### File Name

Combiner Installation

	<table> <tr> <td data-bbox="711 98 1145 510"><b>Component Description:</b></td><td data-bbox="1145 98 1428 510">Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Combiner Installation, Exhibit 6, 3-C-2.</td></tr> <tr> <td data-bbox="711 510 1145 600"><b>Amount:</b></td><td data-bbox="1145 510 1428 600">\$3,500.00</td></tr> <tr> <td data-bbox="711 600 1145 1012"><b>Component Description:</b></td><td data-bbox="1145 600 1428 1012">Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Combiner Installation, Exhibit 6, 3-C-2.</td></tr> <tr> <td data-bbox="711 1012 1145 1106"><b>Amount:</b></td><td data-bbox="1145 1012 1428 1106">\$1,750.00</td></tr> </table>	<b>Component Description:</b>	Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Combiner Installation, Exhibit 6, 3-C-2.	<b>Amount:</b>	\$3,500.00	<b>Component Description:</b>	Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Combiner Installation, Exhibit 6, 3-C-2.	<b>Amount:</b>	\$1,750.00
<b>Component Description:</b>	Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Combiner Installation, Exhibit 6, 3-C-2.								
<b>Amount:</b>	\$3,500.00								
<b>Component Description:</b>	Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Combiner Installation, Exhibit 6, 3-C-2.								
<b>Amount:</b>	\$1,750.00								
Sweep test of existing antenna	<table> <tr> <td data-bbox="711 1106 1145 1644"><b>Component Description:</b></td><td data-bbox="1145 1106 1428 1644">Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Sweep Line/Antenna, Exhibit 6, 3-C-1.</td></tr> <tr> <td data-bbox="711 1644 1145 1733"><b>Amount:</b></td><td data-bbox="1145 1644 1428 1733">\$750.00</td></tr> <tr> <td data-bbox="711 1733 1145 2132"><b>Component Description:</b></td><td data-bbox="1145 1733 1428 2132">Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Sweep Line/Antenna, Exhibit 6, 3-C-1.</td></tr> <tr> <td data-bbox="711 2132 1145 2222"><b>Amount:</b></td><td data-bbox="1145 2132 1428 2222">\$1,500.00</td></tr> </table>	<b>Component Description:</b>	Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Sweep Line/Antenna, Exhibit 6, 3-C-1.	<b>Amount:</b>	\$750.00	<b>Component Description:</b>	Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Sweep Line/Antenna, Exhibit 6, 3-C-1.	<b>Amount:</b>	\$1,500.00
<b>Component Description:</b>	Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Sweep Line/Antenna, Exhibit 6, 3-C-1.								
<b>Amount:</b>	\$750.00								
<b>Component Description:</b>	Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Sweep Line/Antenna, Exhibit 6, 3-C-1.								
<b>Amount:</b>	\$1,500.00								

UHF - High Power Top Mount Five Station broadband panel antenna elliptically or circularly polarized	<p><b>Component Description:</b></p> <p><b>Amount:</b></p>	<p>Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Antenna, Exhibit 6, 3-B.</p> <p>\$20,805.50</p>
	<p><b>Component Description:</b></p> <p><b>Amount:</b></p>	<p>Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Antenna, Exhibit 6, 3-B.</p> <p>\$41,611.50</p>
New combiner, cost per channel (without antenna)	<p><b>Component Description:</b></p> <p><b>Amount:</b></p>	<p>Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Interim Combiner, Exhibit 6, 3-C-1</p> <p>\$33,500.00</p>
	<p><b>Component Description:</b></p> <p><b>Amount:</b></p>	<p>Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Interim Combiner, Exhibit 6, 3-C-1.</p> <p>\$16,750.00</p>
Elbow complex, broadband,		

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

**Component Description:**

Invoice is 25%  
Down Payment for  
\$115,297.75 ATC  
total estimated  
cost. (See Exhibit  
6). This amount is  
25% of Elbow  
Complex, Exhibit  
6, 3-C-2.

**Amount:**

\$1,800.00

**Component Description:**

Invoice is 50%  
Down Payment for  
\$230,591.50 ATC  
total estimated  
cost. (See Exhibit  
6). This amount is  
50% of Elbow  
Complex, Exhibit  
6, 3-C-2.

**Amount:**

\$3,600.00

Install Combiner

**Component Description:**

Invoice is for  
Milestone 2  
Payment at  
Primary site. This  
cost is for the  
primary combiner  
50% progress  
payment. Please  
see Exhibit 44.

**Amount:**

\$4,375.00

	<p><b>Component Description:</b></p> <p>Invoice is for Milestone 1 Payment at Primary site. This cost is for the primary combiner 25% down payment minus costs for E-Pol. Please see Exhibit 35A.</p> <p><b>Amount:</b></p> <p>\$2,187.50</p>
Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)	<p><b>Component Description:</b></p> <p>Invoice is for Milestone 1 Payment at Primary site. This cost is for the primary antenna elbow complex 25% down payment minus costs for E-Pol. Please see Exhibit 35A.</p> <p><b>Amount:</b></p> <p>\$2,250.00</p> <p><b>Component Description:</b></p> <p>Invoice is for Milestone 2 Payment at Primary site. This cost is for the primary antenna elbow complex 50% progress payment minus costs for E-Pol. Please see Exhibit 44.</p> <p><b>Amount:</b></p> <p>\$4,500.00</p>
New combiner, cost per channel (without antenna)	

	<table> <tr> <td data-bbox="703 87 1023 504"><b>Component Description:</b></td><td data-bbox="1023 87 1426 504">Invoice is for Milestone 2 Payment at Primary site. This cost is for the primary combiner 50% down payment. Please see Exhibit 44.</td></tr> <tr> <td data-bbox="703 504 1023 593"><b>Amount:</b></td><td data-bbox="1023 504 1426 593">\$37,500.00</td></tr> <tr> <td data-bbox="703 593 1023 1010"><b>Component Description:</b></td><td data-bbox="1023 593 1426 1010">Invoice is for Milestone 1 Payment at Primary site. This cost is for the primary combiner 25% down payment. Please see Exhibit 35A.</td></tr> <tr> <td data-bbox="703 1010 1023 1104"><b>Amount:</b></td><td data-bbox="1023 1010 1426 1104">\$18,750.00</td></tr> </table>	<b>Component Description:</b>	Invoice is for Milestone 2 Payment at Primary site. This cost is for the primary combiner 50% down payment. Please see Exhibit 44.	<b>Amount:</b>	\$37,500.00	<b>Component Description:</b>	Invoice is for Milestone 1 Payment at Primary site. This cost is for the primary combiner 25% down payment. Please see Exhibit 35A.	<b>Amount:</b>	\$18,750.00
<b>Component Description:</b>	Invoice is for Milestone 2 Payment at Primary site. This cost is for the primary combiner 50% down payment. Please see Exhibit 44.								
<b>Amount:</b>	\$37,500.00								
<b>Component Description:</b>	Invoice is for Milestone 1 Payment at Primary site. This cost is for the primary combiner 25% down payment. Please see Exhibit 35A.								
<b>Amount:</b>	\$18,750.00								
Sweep test of existing antenna	<table> <tr> <td data-bbox="703 1104 1023 1655"><b>Component Description:</b></td><td data-bbox="1023 1104 1426 1655">Invoice is for Milestone 2 Payment at Primary site. This cost is for the primary antenna system sweep test 50% progress payment minus costs for E-Pol. Please see Exhibit 44.</td></tr> <tr> <td data-bbox="703 1655 1023 2134"><b>Amount:</b></td><td data-bbox="1023 1655 1426 2134">\$2,500.00</td></tr> </table>	<b>Component Description:</b>	Invoice is for Milestone 2 Payment at Primary site. This cost is for the primary antenna system sweep test 50% progress payment minus costs for E-Pol. Please see Exhibit 44.	<b>Amount:</b>	\$2,500.00				
<b>Component Description:</b>	Invoice is for Milestone 2 Payment at Primary site. This cost is for the primary antenna system sweep test 50% progress payment minus costs for E-Pol. Please see Exhibit 44.								
<b>Amount:</b>	\$2,500.00								



	<p><b>Component Description:</b></p> <p>Invoice is for Milestone 1 Payment at Primary site. This cost is for the primary antenna system sweep test 25% down payment minus costs for E-Pol. Please see Exhibit 35A.</p> <p><b>Amount:</b></p> <p>\$1,250.00</p>
UHF - High Power Top Mount (200-1000 kW), Four Station broadband panel antenna, elliptically or circularly polarized	<p><b>Component Description:</b></p> <p>Invoice is for Milestone 2 Payment at Primary site. This cost is for the primary antenna 50% progress payment minus costs for E-Pol. Please see Exhibit 44.</p> <p><b>Amount:</b></p> <p>\$64,846.25</p> <p><b>Component Description:</b></p> <p>Invoice is for Milestone 1 Payment at Primary site. This cost is for the primary antenna 25% down payment minus costs for E-Pol. Please see Exhibit 35A.</p> <p><b>Amount:</b></p> <p>\$32,423.12</p>

## 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
<b>Interim Transmission Line</b>	<b>\$1,000,500.00</b>	<b>\$99,672.57</b>		<b>\$54,351.22</b>	
Nitrogen Generator	<i>\$3,000.00</i>	\$3,000.00	Nitrogen Generator Upgrade. See Exhibit 16, Line 1-B-1.	N/A	N/A
Rigid Transmission Line - copper, 8 3/16" broadband	\$997,500.00	\$96,672.57	Material cost for two (2) 83 /16" Broadband rigid transmission lines, six (6) elbows (3 each line) and a nitrogen generator. Cost shared with other stations. See Exhibit 16 (\$84,900.00). Also see Exhibit 37 (11,772.57).	\$54,351.22	N/A
<b>Primary Transmission Line</b>	<b>\$3,000.00</b>	<b>\$3,000.00</b>		<b>\$0.00</b>	
Nitrogen Generator	<i>\$3,000.00</i>	\$3,000.00	Nitrogen Generator Upgrade. See Exhibit 15, Line 1-B-1.	N/A	N/A

<b>Sub-total</b>	\$1,003,500.00	\$102,672.57	N/A	\$54,351.22	N/A
<b>Total for all systems</b>	\$7,731,248.63	\$4,480,248.90	N/A	\$3,832,533.78	N/A

## Components

Actual Information	
Description	File Name
Nitrogen Generator	Information not provided.
Rigid Transmission Line - copper, 8 3/16" broadband	<p><b>Component Description:</b> Additional transmission lines within transmitter room. Installation and freight invoiced separately.</p> <p><b>Amount:</b> \$6,069.72</p> <p><b>Component Description:</b> Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Interim Transmission Line, Exhibit 6, 3-A.</p> <p><b>Amount:</b> \$32,187.50</p> <p><b>Component Description:</b> Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Interim Transmission Line, Exhibit 6, 3-A.</p> <p><b>Amount:</b> \$16,094.00</p>
Nitrogen Generator	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
<b>Primary Tower GTOWER</b>	<b>\$606,250.00</b>	<b>\$122,660.00</b>		<b>\$62,126.25</b>	
Tower Permit Packages	<i>\$9,400.00</i>	\$9,400.00	Construction drawing packages for tower and ground construction. Required for local permits. See Exhibit 5.	\$7,050.00	N/A
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$74,250.00	This tower has stacked antennas and is classified as a complex structure. The cost includes the installation of the new antenna, refurbishing of two (2) transmission Lines, any required transmission brackets. See Exhibit 15.	\$42,000.00	N/A
Structural engineering tower load study for well documented tower	\$12,600.00	\$8,760.00	Structural tower mapping to ensure the proper structural information is relayed to engineering for proposed	\$3,326.25	N/A

repack  
equipment.  
Rigorous  
Structural  
analysis to  
access the  
structural  
capacity and  
modifications  
needed. See  
Exhibit 15 3-A-  
1.

Minor tower reinforcement /modifications	\$158,000.00	\$25,000.00	It is expected that the additional loads imposed on the tower by the new appurtenances required for the repack project will cause the tower to fail. The structural failure is expected to be in the minor category. See Exhibit 5.	\$7,500.00	N/A
Tower Project Management	<b>\$5,250.00</b>	\$5,250.00	(44) hours on tower modification project management and RF installation project management. See Exhibit 15.	\$2,250.00	N/A
<b>Auxiliary Tower GTOWER</b>	<b>\$664,100.00</b>	<b>\$164,487.50</b>		<b>\$126,815.63</b>	
Interim Tower Rent	<b>\$57,600.00</b>	\$57,600.00	Interim Tower Rent - For Market Repack	\$43,200.00	N/A

			Period. See Exhibit 6, 1-B-1.		
Tower Permit Packages	<b>\$9,400.00</b>	\$9,400.00	Prepare tower, building, and ground drawings for local permits and approvals. Required to support required modifications needed for repack. See Exhibit 6.	\$7,050.00	N/A
Construction Management	<b>\$5,500.00</b>	\$5,500.00	(9) hours on Modification project management and (15) hours for RF installation project management for a total of twenty (20) days. See Exhibit 5A.	\$4,125.00	asdf
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$55,900.00	This candelabra is classified as complex structure. The cost includes the installation of the new antenna, two transmission lines and tower brackets for additional transmission lines. See Exhibit 16.	\$45,375.00	N/A
Structural engineering	\$12,600.00	\$11,087.50	Mapping and Rigorous	\$8,315.63	N/A

tower load  
study for well  
documented  
tower

Structural  
analysis to  
access the  
structural  
capacity and  
modifications  
needed to  
accommodate  
the repacked  
equipment.  
See Exhibit 5A  
Item 3-A-1  
(\$6,200 for  
mapping;  
\$4887.50 for  
structural  
engineering)

Minor tower reinforcement /modifications	\$158,000.00	\$25,000.00	It is expected that the additional loads imposed on the tower by new repack equipment will cause the tower to fail. Minor reinforcement is necessary. See Exhibit 5A.	\$18,750.00	N/A
<b>Sub-total</b>	\$1,270,350.00	\$287,147.50	N/A	\$188,941.88	N/A
<b>Total for all systems</b>	\$7,731,248.63	\$4,480,248.90	N/A	\$3,832,533.78	N/A

## Components

Actual Information	
Description	File Name
Tower Permit Packages	



	<table> <tr> <td data-bbox="707 98 1018 510"> <p><b>Component Description:</b></p> </td><td data-bbox="1018 98 1426 510"> <p>Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Tower and Building Permits, Exhibit 6, 3-D-1.</p> </td></tr> <tr> <td data-bbox="707 510 1018 622"> <p><b>Amount:</b></p> </td><td data-bbox="1018 510 1426 622"> <p>\$4,700.00</p> </td></tr> <tr> <td data-bbox="707 622 1018 1106"> <p><b>Component Description:</b></p> </td><td data-bbox="1018 622 1426 1106"> <p>Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Tower and Building Permits, Exhibit 6, 3-D-1.</p> </td></tr> <tr> <td data-bbox="707 1106 1018 1218"> <p><b>Amount:</b></p> </td><td data-bbox="1018 1106 1426 1218"> <p>\$2,350.00</p> </td></tr> </table>	<p><b>Component Description:</b></p>	<p>Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Tower and Building Permits, Exhibit 6, 3-D-1.</p>	<p><b>Amount:</b></p>	<p>\$4,700.00</p>	<p><b>Component Description:</b></p>	<p>Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Tower and Building Permits, Exhibit 6, 3-D-1.</p>	<p><b>Amount:</b></p>	<p>\$2,350.00</p>
<p><b>Component Description:</b></p>	<p>Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Tower and Building Permits, Exhibit 6, 3-D-1.</p>								
<p><b>Amount:</b></p>	<p>\$4,700.00</p>								
<p><b>Component Description:</b></p>	<p>Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Tower and Building Permits, Exhibit 6, 3-D-1.</p>								
<p><b>Amount:</b></p>	<p>\$2,350.00</p>								
<p>Complex Tower (includes, for example, those with candelabras and/or stacked antennas)</p>	<table> <tr> <td data-bbox="707 1106 1018 1653"> <p><b>Component Description:</b></p> </td><td data-bbox="1018 1106 1426 1653"> <p>Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of pro-rata Tower Rigging, Exhibit 6, 3-C-1.</p> </td></tr> <tr> <td data-bbox="707 1653 1018 1765"> <p><b>Amount:</b></p> </td><td data-bbox="1018 1653 1426 1765"> <p>\$28,000.00</p> </td></tr> <tr> <td data-bbox="707 1765 1018 2130"> <p><b>Component Description:</b></p> </td><td data-bbox="1018 1765 1426 2130"> <p>Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of pro-rata Tower Rigging, Exhibit 6, 3-C-1.</p> </td></tr> <tr> <td data-bbox="707 2130 1018 2240"> <p><b>Amount:</b></p> </td><td data-bbox="1018 2130 1426 2240"> <p>\$14,000.00</p> </td></tr> </table>	<p><b>Component Description:</b></p>	<p>Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of pro-rata Tower Rigging, Exhibit 6, 3-C-1.</p>	<p><b>Amount:</b></p>	<p>\$28,000.00</p>	<p><b>Component Description:</b></p>	<p>Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of pro-rata Tower Rigging, Exhibit 6, 3-C-1.</p>	<p><b>Amount:</b></p>	<p>\$14,000.00</p>
<p><b>Component Description:</b></p>	<p>Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of pro-rata Tower Rigging, Exhibit 6, 3-C-1.</p>								
<p><b>Amount:</b></p>	<p>\$28,000.00</p>								
<p><b>Component Description:</b></p>	<p>Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of pro-rata Tower Rigging, Exhibit 6, 3-C-1.</p>								
<p><b>Amount:</b></p>	<p>\$14,000.00</p>								

Structural engineering  
tower load study for well  
documented tower

**Component Description:**

Invoice is 50%  
Down Payment for  
\$230,591.50 ATC  
total estimated  
cost. (See Exhibit  
6). This amount is  
50% of Tower  
Mapping PLUS  
Tower Structural  
Engineering. See  
Exhibit 6, 3-A-1  
(50% of \$2480 plus  
\$1,955).

**Amount:**

\$2,217.50

**Component Description:**

Invoice is 25%  
Down Payment for  
\$115,297.75 ATC  
total estimated  
cost. (See Exhibit  
6). This amount is  
25% of Tower  
Mapping PLUS  
Tower Structural  
Engineering. See  
Exhibit 6, 3-A-1  
(25% of \$2480 plus  
\$1,955).

**Amount:**

\$1,108.75

Minor tower reinforcement  
/modifications

**Component Description:**

Invoice is 50%  
Down Payment for  
\$230,591.50 ATC  
total estimated  
cost. (See Exhibit  
6). This amount is  
50% of Tower  
Reinforcement,  
Exhibit 6, 3-A-2.

**Amount:**

\$5,000.00

	<p><b>Component Description:</b></p> <p>Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Tower Reinforcement, Exhibit 6, 3-A-2.</p> <p><b>Amount:</b></p> <p>\$2,500.00</p>
Tower Project Management	<p><b>Component Description:</b></p> <p>Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Construction Project Management, Exhibit 6, 3-D-1.</p> <p><b>Amount:</b></p> <p>\$1,500.00</p> <p><b>Component Description:</b></p> <p>Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Construction Project Management, Exhibit 6, 3-D-1.</p> <p><b>Amount:</b></p> <p>\$750.00</p>
Interim Tower Rent	

	<b>Component Description:</b>	Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Tower Rent, Exhibit 6, 1-B-1.
	<b>Amount:</b>	\$28,800.00
	<b>Component Description:</b>	Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Tower Rent, Exhibit 6, 1-B-1.
	<b>Amount:</b>	\$14,400.00
Tower Permit Packages	<b>Component Description:</b>	Pro rata cost for tower and building permit drawings. Please see Exhibit 44.
	<b>Amount:</b>	\$4,700.00
	<b>Component Description:</b>	Pro rata cost for tower and building permit drawings. Please see Exhibit 35A.
	<b>Amount:</b>	\$2,350.00
Construction Management		

	<b>Component Description:</b>	Pro rata cost for construction project management. Please see Exhibit 35A.
	<b>Amount:</b>	\$1,375.00
	<b>Component Description:</b>	Pro rata cost for construction project management. Please see Exhibit 44.
	<b>Amount:</b>	\$2,750.00
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	<b>Component Description:</b>	Pro rata cost for rigging a complex tower. Please see Exhibit 35A.
	<b>Amount:</b>	\$15,125.00
	<b>Component Description:</b>	Pro rata cost for rigging a complex tower. Please see Exhibit 44.
	<b>Amount:</b>	\$30,250.00
Structural engineering tower load study for well documented tower	<b>Component Description:</b>	Tower mapping (\$3,100) and structural (\$2,443.75). Please see Exhibit 44.
	<b>Amount:</b>	\$5,543.75
	<b>Component Description:</b>	Tower mapping (\$1,550) and structural (\$1,221.88). Please see Exhibit 35A.
	<b>Amount:</b>	\$2,771.88

Minor tower reinforcement  
/modifications

**Component Description:**

WBZ-TV pro rata  
cost for tower  
reinforcement.  
Please see Exhibit  
35A.

**Amount:**

\$6,250.00

**Component Description:**

WBZ-TV pro rata  
cost for tower  
reinforcement.  
Please see Exhibit  
44.

**Amount:**

\$12,500.00

## 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
<b>Outside Professional Services</b>	<b>\$69,985.00</b>	<b>\$72,500.00</b>		<b>\$35,220.00</b>	
RF System Test	<i>\$8,000.00</i>	\$8,000.00	Testing of the combiner to ensure one frequency is tuned for optimal patterns. See Exhibits 5 and 6.	\$6,187.50	N/A
LocalPermits	<i>\$1,500.00</i>	\$1,500.00	Prepare and submit applications for electrical, building and other required permits required for installation of repack equipment. See Exhibits 5 and 6.	\$562.50	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

Prepare request for Special Temporary Authorization	\$2,050.00	\$1,500.00	N/A	N/A	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
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$3,000.00	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$10,500.00	Please see Exhibit 5A (\$5,500) and Exhibit 6 (\$5,000)	\$7,875.00	N/A
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$5,000.00	Transition timing is necessary at two sites. See quotes provided as Exhibits 5 and 6.	\$3,375.00	N/A
Project management of the transition	\$39,500.00	\$37,500.00	Company lacks internal resources.	\$14,220.00	N/A
<b>Sub-total</b>	\$69,985.00	\$72,500.00	N/A	\$35,220.00	N/A
<b>Total for all systems</b>	\$7,731,248.63	\$4,480,248.90	N/A	\$3,832,533.78	N/A



## Components

Actual Information Description	File Name
RF System Test	<div> <b>Component Description:</b> Pro rata charge for RF System test. Please see Exhibit 44.         </div> <div> <b>Amount:</b> \$2,750.00         </div>
	<div> <b>Component Description:</b> Prepare coverage maps of new facilities. Please see Exhibit 36.         </div> <div> <b>Amount:</b> \$187.50         </div>
	<div> <b>Component Description:</b> Pro rata charge for RF System test. Please see Exhibit 35A.         </div> <div> <b>Amount:</b> \$1,375.00         </div>
	<div> <b>Component Description:</b> Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of RF System Test, Exhibit 6, 1-B-1.         </div> <div> <b>Amount:</b> \$625.00         </div>

	<p><b>Component Description:</b> Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of RF System Test, Exhibit 6, 1-B-1.</p> <p><b>Amount:</b> \$1,250.00</p>
LocalPermits	<p><b>Component Description:</b> Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Building Permits, Exhibit 6, 1-A-3.</p> <p><b>Amount:</b> \$375.00</p> <p><b>Component Description:</b> Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Building Permits, Exhibit 6, 1-A-3.</p> <p><b>Amount:</b> \$187.50</p>
Attorney Fees - Negotiation of lease and other matters for shared locations	Information not provided.
Prepare request for Special Temporary Authorization	Information not provided.
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.

Prepare engineering section of FCC Form 2100 (main), Construction Permit Application

**Component Description:**

Coordinate "work around" to solve concerns regarding Canadian coordination.

**Amount:**

\$550.00

**Component Description:**

Preliminary Engineering and CP Application, Engineering Section.

**Amount:**

\$2,450.00

Perform engineering study for new channel assignment and antenna development

**Component Description:**

Engineering - Antenna Development. Please see Exhibit 44.

**Amount:**

\$2,750.00

**Component Description:**

Engineering - Antenna Development. Please see Exhibit 35A.

**Amount:**

\$1,375.00

**Component Description:**

Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Engineering Antenna Development, Exhibit 6, 1-A-2.

**Amount:**

\$2,500.00

	<p><b>Component Description:</b> Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Engineering Antenna Development, Exhibit 6, 1-A-2.</p> <p><b>Amount:</b> \$1,250.00</p>
Address transition timing and coordination issues w/ other stations and wireless	<p><b>Component Description:</b> Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Address Transition Timing, Exhibit 6, 1-A-1.</p> <p><b>Amount:</b> \$1,250.00</p> <p><b>Component Description:</b> Pro rata fee for addressing transition timing. Please see Exhibit 35A.</p> <p><b>Amount:</b> \$500.00</p> <p><b>Component Description:</b> Pro rata fee for addressing transition timing. Please see Exhibit 44.</p> <p><b>Amount:</b> \$1,000.00</p>

	<p><b>Component Description:</b></p> <p>Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Address Transition Timing, Exhibit 6, 1-A-1.</p> <p><b>Amount:</b></p> <p>\$625.00</p>
Project management of the transition	<p><b>Component Description:</b></p> <p>American Tower outside project management. Please see Exhibit 35A.</p> <p><b>Amount:</b></p> <p>\$2,370.00</p> <p><b>Component Description:</b></p> <p>American Tower outside project management. Please see Exhibit 44.</p> <p><b>Amount:</b></p> <p>\$4,740.00</p> <p><b>Component Description:</b></p> <p>Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Outside Project Management, Exhibit 6, 1-A-1.</p> <p><b>Amount:</b></p> <p>\$2,370.00</p>

**Component Description:**

Invoice is 50%  
Down Payment for  
\$230,591.50 ATC  
total estimated  
cost. (See Exhibit  
6). This amount is  
50% of Outside  
Project  
Management,  
Exhibit 6, 1-A-1.  
\$4,740.00

**Amount:**

## 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
<b>Other Expenses</b>	<b>\$105,430.05</b>	<b>\$98,125.05</b>		<b>\$56,273.35</b>	
Site Coordination Meeting	<i>\$2,000.00</i>	\$2,000.00	Site coordination meeting with other broadcasters, contractors, vendors, and tower landlord. See Exhibit 15.	\$1,320.00	N/A
Public Hearing	<i>\$840.00</i>	\$840.00	Public hearing cost (See Exhibits 5A \$440 and 6 \$400.)	\$630.00	N/A
Ice Shield for HVAC	<i>\$4,000.00</i>	\$4,000.00	Ice protection for HVAC compressor split units placed in close proximity of tower in areas prone to ice and snow. (See Exhibit 6)	N/A	N/A
Building Partition	<i>\$1,800.00</i>	\$1,800.00	This cost is to provide permitting for building partition and electrical service installation in the shared	N/A	N/A

			space. This install is to provide security for broadcasters and sufficient power for transmitters. (See Exhibit 6.)		
Asbestos and Lead Paint Testing	<b>\$1,800.00</b>	\$1,800.00	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. (See Exhibit 6.)	\$1,350.00	N/A
Disconnect Transmitters	<b>\$37,945.05</b>	\$37,945.05	Disconnect and Remove to Staging Area the WBZ-TV Main and Auxiliary Transmitters. See Exhibit 3 Item F (\$23,475.60) and Exhibit 42 (\$14,469.45).	\$19,280.55	N/A
Site Security	<b>\$3,600.00</b>	\$3,600.00	Site security for installation	\$2,700.00	N/A



			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. (See Exhibit 6.)		
MVPD Notification of Channel Change	<b>\$1,000.00</b>	\$1,000.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	<b>\$39,200.00</b>	\$39,200.00	Delivery of three transmitter and tower equipment required for repack. See Exhibits 3, 8, 9, and 15.	\$26,180.30	N/A
Non-zoning permits	<b>\$1,500.00</b>	\$1,500.00	Per estimates. See Exhibits 5 and 6.	\$562.50	N/A
FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$190.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$4,250.00	See Exhibit 7. (Note: Corrected cost typo March 21, 2019)	\$4,250.00	N/A

<b>Sub-total</b>	\$105,430.05	\$98,125.05	N/A	\$56,273.35	N/A
<b>Total for all systems</b>	\$7,731,248.63	\$4,480,248.90	N/A	\$3,832,533.78	N/A

## Components

<b>Actual Information</b>	
<b>Description</b>	<b>File Name</b>
Site Coordination Meeting	<b>Component Description:</b>
	Site coordination meetings. Please see Exhibit 35A.
	<b>Amount:</b>
	\$440.00
	<b>Component Description:</b>
	Site coordination meetings. Please see Exhibit 44.
	<b>Amount:</b>
	\$880.00
Public Hearing	<b>Component Description:</b>
	Public hearing costs. Please see Exhibit 35A.
	<b>Amount:</b>
	\$110.00
	<b>Component Description:</b>
	Public hearing costs. Please see Exhibit 44.
	<b>Amount:</b>
	\$220.00
	<b>Component Description:</b>
	Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Public Hearing, Exhibit 6, 1-B-1.
	<b>Amount:</b>
	\$100.00

	<p><b>Component Description:</b></p> <p>Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Public Hearing, Exhibit 6, 1-B-1.</p> <p><b>Amount:</b></p> <p>\$200.00</p>
Ice Shield for HVAC	Information not provided.
Building Partition	Information not provided.
Asbestos and Lead Paint Testing	<p><b>Component Description:</b></p> <p>Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Asbestos and Lead Paint Testing, Exhibit 6, 1-B-1.</p> <p><b>Amount:</b></p> <p>\$900.00</p> <p><b>Component Description:</b></p> <p>Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Asbestos and Lead Paint Testing, Exhibit 6, 1-B-1.</p> <p><b>Amount:</b></p> <p>\$450.00</p>
Disconnect Transmitters	

	<p><b>Component Description:</b> Uninstall Auxiliary Transmitter. Please see Exhibit 42 for quotation.</p> <p><b>Amount:</b> \$14,469.45</p>
	<p><b>Component Description:</b> Invoice is split among three cost categories. See Exhibit 24.</p> <p><b>Amount:</b> \$4,811.10</p>
Site Security	<p><b>Component Description:</b> Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Site Security, Exhibit 6, 1-B-1.</p> <p><b>Amount:</b> \$1,800.00</p> <p><b>Component Description:</b> Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Site Security, Exhibit 6, 1-B-1.</p> <p><b>Amount:</b> \$900.00</p>
MVPD Notification of Channel Change	Information not provided.
Equipment Delivery and Handling Charges	<p><b>Component Description:</b> WBZ-TV Main Transmitter Freight.</p> <p><b>Amount:</b> \$19,805.30</p>

	<b>Component Description:</b>	Equipment delivery and handling. Please see Exhibit 35A.
	<b>Amount:</b>	\$1,375.00
	<b>Component Description:</b>	Equipment delivery and handling. Please see Exhibit 44.
	<b>Amount:</b>	\$2,750.00
	<b>Component Description:</b>	Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Tower equipment and delivery, Exhibit 6, 1-A-4.
	<b>Amount:</b>	\$1,500.00
	<b>Component Description:</b>	Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Tower equipment and delivery, Exhibit 6, 1-A-4.
	<b>Amount:</b>	\$750.00
Non-zoning permits	<b>Component Description:</b>	Pro rata cost for building permits. Please see Exhibit 35A.
	<b>Amount:</b>	\$187.50

	<p><b>Component Description:</b> Pro rata cost for building permits. Please see Exhibit 44.</p> <p><b>Amount:</b> \$375.00</p>
FCC Filing Fees - Special Temporary Authorization request	Information not provided.
DTV Medical Facility Notification	<p><b>Component Description:</b> Health Care Notification. See quote in Exhibit 7.</p> <p><b>Amount:</b> \$4,250.00</p>

**Cost  
Information****Grand Total**

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$7,731,248.63	\$4,480,248.90	\$3,832,533.78

**Reimbursement Status**

Question	Response
The facility has ceased operating on its pre-auction channel.	Yes
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"> <li>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.</li> <li>2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> <li>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.</li> <li>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</li> </ol>	



signal of a  
broadcaster that  
changes channels  
(MVPD).

5. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.

**Andrew J Siegel**  
*Assistant Secretary*

04/06/2020

Certification	Section	Question	Response
	Submission of Actual Cost Documentation Statements	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).	
		<ol style="list-style-type: none"> <li>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.</li> <li>2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.</li> <li>3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> <li>4. The above-named entity acknowledges the submission of the information herein</li> </ol>	

creates no obligation on the part of the government to pay any amount.

5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD) .
6. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.
8. The above-named entity acknowledges that overpayments or payments in error

	<p>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><b>Andrew J Siegel</b>  <i>Assistant Secretary</i></p> <p>04/06/2020</p>

## Attachments