



(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility **23960** | Service: **DTV** | Call **WSB-TV** | Channel: **32 (UHF)** |
ID: | Sign:
File **0000027561**
Number:
FRN: **0022439848** | Date **06/21**
Submitted: **/2019**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
GEORGIA TELEVISION, LLC Doing Business As: GEORGIA TELEVISION, LLC	Paul Briggs 1601 WEST PEACHTREE STREET, N.E. ATLANTA, GA 30309 United States	+1 (404) 897- 7000	Paul. Briggs@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
Gary Alexander <i>Director of Engineering</i> <i>Georgia Television</i> <i>Company, LLC</i>	Gary Alexander 1601 West Peachtree Street, N.E. Atlanta, GA 30309 United States	+1 (404) 897-2210	gary. alexander@wsbtv. 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.		No
Briefly describe transition plan		Move to American Tower interim site at 1800 Briarcliff road. Go on the air on our new frequency. Prepare our Willoughby Way tower and install new transmission equipment on primary Willoughby Way site and tower. Move back to Willoughby way.

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	used for maintenance outages
	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	diamond
	Year	2006
	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- 20AT
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	16.1 kW
	Justification for New Transmitter	Our current auxiliary transmitter cannot be re-tuned to the new frequency. We are proposing a new transmitter.

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

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	Yes
	Power	150 kVA
	Rigid Conduit and Wiring	Yes

	Size	3 inches
	Length	50.0 feet
	Other Electrical Service	Yes
	Description	Panel and breakers for new 208vac service
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	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
Mask Filter	Mask filter for output of transmitter
Additional services	Remove air cooled transmitter, mask filter, and dummy load
RF accessories	RF installation Kit.
Installation and Proof	Install and proof of performance

**Primary
Transmitter**

Add 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	CD-2
	Year	1998
	Type	Inductive Output Tube
	IOT Power Type	Two
	Power Capacity	50 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?	No
	Manufacturer	
	Model	ULXTE-90
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	53 kW
	Justification for New Transmitter	Current Tube transmitter cannot be re-tuned. Although tube transmitters are available, they are far more expensive to purchase and install. The attached quote from Comark doesn't include spare parts kits

**Primary
Transmitter**

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	Yes
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	Yes
	Power	300 kVA
	Rigid Conduit and Wiring	Yes
	Size	3 inches
	Length	50.0 feet
	Other Electrical Service	Yes
	Description	208VAC breakers and panel
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leasehold improvement?	Yes
	Size	250.0 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
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Spare Parts	We currently stock an array of spare parts for our Sigma, this would replace that inventory. Including spare boards, pump module and power supply
Install and Proof	Proof of performance, testing and tuning of new transmitter
Mask Filter	Filter system and accessories
Additional services	Removal of transmitter, mask filter, reject load, dummy load, cooling pipes, pump modules, flow meters, regulators, and dry coolers
RF accessories	RF switching and dummy load systems

**Interim
Transmitter**

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Interim
	Description of Use	N/A
	Change Type	Purchase
	Manufacturer	
	Model	ULXT-50
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	30 kW
	Justification for New Transmitter	New transmitter is needed while our facility is being rebuilt.

**Interim
Transmitter**

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	Yes
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	Yes
	Power	300 kVA
	Rigid Conduit and Wiring	Yes
	Size	3 inches
	Length	75.0 feet
	Other Electrical Service	Yes

	Description	Electrical for pump modules, HVAC, Loads, Generator, lighting, and UPS
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Type	Cooling Only
	Size	30 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leasehold improvement?	Yes
	Size	250.0 square feet
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filter 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
Install and proof	Installation services and proof of performance
Project management	150 / hour 160 hours
Mask Filter	Mask filter for RF input to combiner

Legal form 2100	CP application 2100 2100 license to cover app 2250 Prepare STA 3500 Filing fee 2100 \$325 Filing fee STA 190
Building improvements for Interim facility	Ice Bridge, concrete pad, utility outlets
IP hardware and firewall	Dedicated Hardware firewall for IP portion of redundant back-haul
Lease for interim facility	Mandatory 5 year lease for interim facility
Inner city relay	To get the signal from the studio to the new interim transmitter site a new inner city relay will be needed

Antennas

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

**Auxiliary
Antenna****Existing Antenna Information**

Section	Question	Response
Existing Antenna Description	Type of change	Purchase New
	Antenna Use	Auxiliary (Backup)
	Description of Use	Standby antenna
	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?	No
Existing 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	N/A
	Design power capacity in use	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	1000.0 kW

Manufacturer	
Model	TFU-30DSC-R O4
Year	1998

**Auxiliary
Antenna****New Antenna Costs**

Section	Question	Response
New Antenna Description	Use	Auxiliary (Backup)
	Description of Use	Standby antenna
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Ownership	Owned
	Owner	N/A
	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 Types	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)	1000.0 kW
	Manufacturer	

Model	16DSC-R 04
Year	2017
Justification for New Antenna	Our current single channel slotted antenna is not tunable. It is only good for channel 39.

Auxiliary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No
	Type	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Single Channel
	Feed Line Size	6 1/8 inches inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	Yes
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	Yes

Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes
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**Auxiliary
Antenna**

Other Antenna Cost Not Listed

Name	Description
freight	freight
Trans Test	Trans Test 6-75

Primary Antenna

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	Purchase 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?	No
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	No
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)	1000.0 kW

Manufacturer	
Model	TFU- 30GTH-R O4D39
Year	1996

Primary
Antenna

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	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	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)	1000.0 kW
	Manufacturer	

Model	TFU-27ETT-R 04
Year	2018
Justification for New Antenna	Our current single channel slotted antenna is not tunable. It is only good for channel 39.

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No
	Type	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
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
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**Primary
Antenna**

Other Antenna Cost Not Listed

Name	Description
Freight	Freight costs to ship to Atlanta
Mounting Adapter	Wedding cake mounting adapter

**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
	Is antenna shared?	Yes
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	Yes
New Antenna Manufacturer and Type	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Top
	Polarization	Elliptical
	Type	Broadband Panel
	Number of Stations Supported	4
	Number of Panels/Bays	14
	Lower Limit	430.00 MHz
	Upper Limit	600.00 MHz
	Design power capacity in use	69.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	1000.0 kW
	Manufacturer	
	Model	TUM-AP-O4-14/56H-2-T

Year	2017
Justification for New Antenna	Minimizing OTA disruption for the nine existing and one new TV customer operating on the Briarcliff 2 site, ensuring that we meet the Phase 5 cut-over completion date, and minimizing the overall project costs.

Interim 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	4
	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?	B

	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

Enter a list of RF channel numbers.

RF Channel Number
36
19
18
32

**Interim
Antenna**

Other Antenna Cost Not Listed

Name	Description
Combiner Installation	Removal and installation of new combiner module

Transmission Line

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

Auxiliary **Add Transmission Line**
Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Aux line feeding Dielectric aux antenna
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmission currently shared with any other 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	825 feet per run

**Auxiliary
Transmission Line**

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Auxiliary (Backup)
	Description of Use	Short line to hook up new shorter Aux antenna
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	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	20 feet per run
	Justification for New Transmission Line	Line segment to hook up new shorter antenna with existing line

**Auxiliary
Transmission Line**

Other Transmission Line Expenses Not Listed

Name	Description
Rigid transmission line	1 20' 6-75 line with swivel end to be determined during install

**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	20'
	Other Segment Length	
	Number of parallel runs	2
	Length	1275 feet per run
	Justification for New Transmission Line	2550 Refurbished line with connectors replaced. This will serve as input to new broad band antenna being installed for repacked broadcasters

**Interim
Transmission Line**

Other Transmission Line Expenses Not Listed

Name	Description
Refurbish existing line	Refurbish (new connectors existing line)

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	Owned
	Is this tower consider Complex?	No
	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	Yes
	Is tower documented for structural analysis?	Yes
	Is tower compliant with Rev G?	No
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1031790
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	33° 45' 51.7" N-
	Longitude (NAD83)	084° 21' 41.7" W-
	Overall Structure Height	1074.79 feet
	Support Structure Height	898.94 feet
	Ground Elevation Above Mean Sea Level (AMSL)	973.09 feet

	Structure Type	TOWER - Free Standing or Guyed Structure
	Tower Owner	Georgia Television, LLC
	Date Constructed	03/31/1957

**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
73978	WSB-FM	FM

Other Types of Users

Users
ATT cellular

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:	Major Reinforcements needed

**Primary
Tower**

Tower Rigging Costs

Section	Question	Response
Tower Rigging Costs	Complex Tower	N/A
Helicopter Services Required	Are helicopter services required?	No

**Primary
Tower**

Other Tower Expenses Not Listed

Name	Description
Antenna replacement and Mast replacement	Rig tower remove antennas and replace with new antennas. Replace undocumented mast
Structural mods	Horizontal girts, diagonals and over 200 bolts and holes. Reinforce guy stations, replace Mast.
Reinforce guy anchors	The soil around the guy anchors is not sufficiently dense to support a "G" rated tower.

**Outside
Professional**

Section	Question	Response
Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	200
	Explanation	Supervisor for 5 weeks to oversee the interim transmission site and main site projects.
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	Yes
	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	Yes
	Number of Days	5
	Justification	Interference studies for adjacent channel market (Macon)

Outside Professional Services Costs
Other Professional Services Expenses Not Listed

Name	Description
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Consultant services

Consultant services to recommend and determine antenna, transmitter, antenna, interference and coverage areas

Other Expenses

Section	Question	Response
AM Pattern Disturbance	Is an Impact Study needed?	No
	Is Remediation needed?	No
Facility Expenses	Name	N/A
	Other Distributed Transmission System Expenses Not listed	N/A
	Name	N/A
	Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
Permit and Filing Costs	Local Zoning	Yes
	Non-zoning permits	Yes
	BLM or NFS Coordination	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 Complex tower	This candelabra is classified as a complex structure. The costs include removal of 1 antenna w/ feedline (Dielectric TFU-32GTH ch42 fed w/ 7-3/16" coax) and 1 support pedestal on ESE arbor; 1 antenna (TLP-16 former FLO) on NW arm. Antenna is located 10
Interim plumbing work for dry coolers	Installation costs associated with mounting and soldering cooling pipes for liquid cooled transmitter
Interim Ice bridge for outdoor equipment	Ice bridge to shield HVAC and generator equipment from falling ice see attachment "Ice Bridge and concrete FCC submittal.pdf"
Interim Project management	Interim cost provided by American Tower and represent a fraction shared by 4 tenants. Project management fee for pre-construction services
Interim RF exposure measurements	Interim cost provided by American Tower and represent a fraction shared by 4 tenants Post-construction measurements have customarily been required or conducted.
Interim Tower permit drawing package	The generation of a permitting drawing package for one (1) broadcasters /customers.
Interim construction manager	Interim cost provided by American Tower and represent a fraction shared by 4 tenants. (80) hours on Modification project management and RF installation project management for a total of twenty (30) days.
Interim delivery and handling fees	Interim cost provided by American Tower and represent a fraction shared by 4 tenants. This could cover forklifts, labor and costs incurred for the unloading of line, antenna delivery and/or other building material.

Interim engineering study for channel assignment	Interim cost provided by American Tower and represent a fraction shared by 4 tenants. Perform engineering study for new channel assignment and antenna development
Interim ground and building permits	Interim cost provided by American Tower and represent a fraction shared by 4 tenants. The generation of a permitting drawing package for one (1) broadcasters /customers.
Interim site Concrete foundations	Concrete foundations for HVAC, Dry coolers and Generator "Ice Bridge and concrete FCC submittal.pdf"
Interim site RF system test	Testing of the combiner to ensure all frequencies are tuned for optimal patterns.
Interim site coordination meeting	Interim cost provided by American Tower and represent a fraction shared by 4 tenants. Site coordination meetings with all broadcasters, contractors and vendors involved with the site project.
Interim site security and theft prevention	Interim cost provided by American Tower and represent a fraction shared by 4 tenants. Site security for installatiion and storage of Transmission line and materials for 9 days X 12 hours. This is due to the material value
Interim tower load study	Interim cost provided by American Tower and represent a fraction shared by 4 tenants. Structural analysis to access the structural capacity and modifications needed to accommodate the repacked equipment.
Interim tower mapping	Interim cost provided by American Tower and represent a fraction shared by 4 tenants. Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study
Interim tower reinforcement	Interim cost provided by American Tower and represent a fraction shared by 4 tenants for tower reinforcement

Interim transistion timing coordination	Interim cost provided by American Tower and represent a fraction shared by 4 tenants. Coordination and transition planning with all parties onsite and management of the timelines and schedules occurring during the repack.
Interim transition timing and coordination issues	Coordination and transition planning with all parties onsite and management of the timelines and schedules occurring during the repack.
Interim Plumbing for Dry coolers	Installation costs associated with mounting and soldering cooling pipes for liquid cooled transmitter

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 ULXT-50	\$2,322,835.68	\$2,128,439.89		\$665,824.49	
Inner city relay	<i>\$133,270.70</i>	\$133,270.70	N/A	N/A	N/A
Lease for interim facility	<i>\$570,000.00</i>	\$570,000.00	N/A	N/A	N/A
IP hardware and firewall	<i>\$2,878.40</i>	\$2,878.40	N/A	N/A	N/A
Building improvements for Interim facility	<i>\$85,000.00</i>	\$85,000.00	N/A	N/A	N/A
Legal form 2100	<i>\$7,250.00</i>	\$7,250.00	N/A	N/A	N/A
Mask Filter	<i>\$58,755.17</i>	\$58,755.17	N/A	\$40,818.28	N/A
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	\$947,000.00	\$790,451.97	N/A	\$549,141.30	N/A
Service entrance 3 phase/800 amp/208 volt	\$14,400.00	\$13,700.00	N/A	N/A	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	N/A	N/A
Transformer 3 phase/480v - 300 KVA	\$36,800.00	\$9,277.24	N/A	\$6,445.06	N/A

3" Rigid Conduit and Wiring (Cost per foot)	\$3,900.00	\$3,675.00	N/A	N/A	N/A
Other Electrical Service: Electrical for pump modules, HVAC, Loads, Generator, lighting, and UPS	\$93,700.00	\$93,700.00	N/A	\$0.00	N/A
Other -- HVAC Service Type: C Size:30 (Other)	\$87,000.00	\$87,000.00	N/A	N/A	N/A
Other -- Building Addition Size: 250.0	\$10,000.00	\$10,000.00	N/A	N/A	N/A
UHF inside RF system including switching	\$147,500.00	\$140,000.00	N/A	\$25,526.58	N/A
Project management	\$24,000.00	\$24,000.00	N/A	N/A	N/A
Install and proof	\$63,181.41	\$63,181.41	N/A	\$43,893.27	N/A
Primary Transmitter ULXTE-90	\$2,172,701.64	\$1,504,693.12		\$516,131.31	
UHF - Liquid Cooled Solid State Transmitter 52 - 61 kW	\$1,788,000.00	\$1,146,542.66	N/A	\$414,041.92	N/A

Service entrance 3 phase/800 amp/208 volt	\$14,400.00	\$13,700.00	N/A	N/A	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	N/A	N/A
Transformer 3 phase/480v - 300 KVA	\$36,800.00	\$12,998.82	N/A	\$4,694.16	N/A
3" Rigid Conduit and Wiring (Cost per foot)	\$2,600.00	\$2,450.00	N/A	N/A	N/A
Other Electrical Service: 208VAC breakers and panel	\$8,000.00	\$8,000.00	N/A	N/A	N/A
Other -- Building Addition Size: 250.0	\$15,000.00	\$15,000.00	N/A	N/A	N/A
RF accessories	\$78,580.16	\$78,580.16	N/A	\$28,377.03	N/A
Additional services	\$20,124.00	\$20,124.00	N/A	\$7,267.22	N/A
Mask Filter	\$75,142.85	\$75,142.85	N/A	\$27,135.75	N/A
Install and Proof	\$83,846.06	\$83,846.06	N/A	\$30,278.67	N/A
Spare Parts	\$12,008.57	\$12,008.57	N/A	\$4,336.56	N/A
Auxiliary Transmitter ULXTE-20AT	\$857,362.46	\$528,254.27		\$167,210.29	
Additional services	\$14,433.30	\$14,433.30	N/A	\$5,199.67	N/A

UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW	\$684,000.00	\$376,737.36	N/A	\$135,721.51	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	N/A	N/A
Transformer 3 phase/480v - 150 KVA	\$25,550.00	\$5,754.45	N/A	\$2,073.07	N/A
3" Rigid Conduit and Wiring (Cost per foot)	\$2,600.00	\$2,450.00	N/A	N/A	N/A
Other Electrical Service: Panel and breakers for new 208vac service	\$25,360.00	\$25,360.00	N/A	N/A	N/A
RF accessories	\$6,289.90	\$6,289.90	N/A	\$2,265.97	N/A
Installation and Proof	\$33,913.38	\$33,913.38	N/A	\$12,217.46	N/A
Mask Filter	\$27,015.88	\$27,015.88	N/A	\$9,732.61	N/A
Sub-total	\$5,352,899.78	\$4,161,387.28	N/A	\$1,349,166.09	N/A
Total for all systems	\$9,909,962.78	\$6,401,533.63	N/A	\$1,653,199.90	N/A

Components

Actual Information	
Description	File Name
Inner city relay	Information not provided.
Lease for interim facility	Information not provided.
IP hardware and firewall	Information not provided.

Building improvements for Interim facility	Information not provided.	
Legal form 2100	Information not provided.	
Mask Filter	Component Description: Amount:	Pre-shipment deposit for Mask filter for input to combiner \$19,585.06 Component Description: Amount:
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	Component Description: Amount:	Pre-shipment deposit for for Interim Transmitter \$263,483.99 Component Description: Amount:
Service entrance 3 phase /800 amp/208 volt	Information not provided.	
Switchgear - industrial 800 amp	Information not provided.	

Transformer 3 phase/480v - 300 KVA	Component Description:		Pre-shipment deposit for Transformer, surge suppressor, and filter
	Amount:		\$3,092.41
	Component Description:		Transformer, surge suppressor, and filter
	Amount:		\$3,352.65
3" Rigid Conduit and Wiring (Cost per foot)	Information not provided.		
Other Electrical Service: Electrical for pump modules, HVAC, Loads, Generator, lighting, and UPS	Information not provided.		
Other -- HVAC Service Type: C Size:30 (Other)	Information not provided.		
Other -- Building Addition Size: 250.0	Information not provided.		
UHF inside RF system including switching	Component Description:		RF installation kit
	Amount:		\$13,278.65
	Component Description:		Pre-shipment deposit for RF installation kit for the transmitter
	Amount:		\$12,247.93
Project management	Information not provided.		

Install and proof	Component Description:	Pre-shipment deposit for Installation of the transmitter and proof of performance testing
	Amount:	\$21,060.47
	Component Description:	Deposit for Installation of the transmitter and proof of performance testing
	Amount:	\$22,832.80
UHF - Liquid Cooled Solid State Transmitter 52 - 61 kW	Component Description:	Gates Air Main replacement transmitter deposit.
	Amount:	\$414,041.92
Service entrance 3 phase /800 amp/208 volt	Information not provided.	
Switchgear - industrial 800 amp	Information not provided.	
Transformer 3 phase/480v - 300 KVA	Component Description:	Transformer, filter, and surge suppressor,
	Amount:	\$4,694.16
3" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
Other Electrical Service: 208VAC breakers and panel	Information not provided.	
Other -- Building Addition Size: 250.0	Information not provided.	

RF accessories	Component Description: Amount:	RF accessories \$28,377.03
Additional services	Component Description: Amount:	disassembly of old channel 39 transmission system \$7,267.22
Mask Filter	Component Description: Amount:	Mask Filter \$27,135.75
Install and Proof	Component Description: Amount:	Proof of performance \$30,278.67
Spare Parts	Component Description: Amount:	Spare parts to replace existing spare parts kit. Power supplies, pump module and circuit boards \$4,336.56
Additional services	Component Description: Amount:	Additional service (de-install) \$5,199.67
UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW	Component Description: Amount:	Aux Transmitter \$135,721.51
Switchgear - industrial 800 amp	Information not provided.	

Transformer 3 phase/480v - 150 KVA	Component Description: Aux transmitter transformer and filter Amount: \$2,073.07
3" Rigid Conduit and Wiring (Cost per foot)	Information not provided.
Other Electrical Service: Panel and breakers for new 208vac service	Information not provided.
RF accessories	Component Description: RF accessories for aux transmitter Amount: \$2,265.97
Installation and Proof	Component Description: Installation and Proof of aux transmitter Amount: \$12,217.46
Mask Filter	Component Description: Mask filter for transmitter output Amount: \$9,732.61

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	\$1,209,780.00	\$164,290.00		\$35,322.37	
UHF - High Power Top Mount (200-1000 kW), Four Station broadband panel antenna, elliptically or circularly polarized	\$1,090,000.00	\$65,390.00	N/A	\$16,347.37	N/A
Sweep test of existing antenna	\$6,730.00	\$5,000.00	N/A	\$0.00	N/A
New combiner, cost per channel (without antenna)	\$84,200.00	\$66,000.00	N/A	\$16,500.00	N/A
Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)	\$18,950.00	\$18,000.00	N/A	\$0.00	N/A
Combiner Installation	<i>\$9,900.00</i>	\$9,900.00	N/A	\$2,475.00	N/A

Primary Antenna TFU-27ETT-R 04	\$314,550.00	\$256,270.35		\$108,764.10	
Freight	\$9,000.00	\$9,000.00	N/A	N/A	N/A
Mounting Adapter	\$25,620.00	\$25,620.00	N/A	\$11,529.00	N/A
Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed)	\$13,900.00	\$12,383.00	N/A	\$5,572.35	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$2,880.00	N/A
UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized	\$247,000.00	\$197,295.00	N/A	\$88,782.75	N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$5,572.35	***System Notice: Estimate adjusted and locked because line has been superseded.***	\$0.00	The antenna has a 7" input. I mistakenly indicated a 6" adapter on the original 399
Auxiliary Antenna 16DSC-R 04	\$173,283.00	\$163,966.00		\$67,934.70	
Trans Test	\$2,118.00	\$2,118.00	N/A	\$953.10	N/A

Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$5,000.00	N/A	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$2,880.00	N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$10,298.00	N/A	\$4,634.10	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$16,425.00	N/A	\$7,391.25	N/A
freight	\$8,000.00	\$8,000.00	N/A	N/A	N/A
UHF - High Power, Side Mount, basic slot antenna, 1000 kW input, directional,, horizontally polarized	\$115,725.00	\$115,725.00	N/A	\$52,076.25	N/A
Sub-total	\$1,697,613.00	\$584,526.35	N/A	\$212,021.17	N/A

Total for all systems	\$9,909,962.78	\$6,401,533.63	N/A	\$1,653,199.90	N/A
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Components

Actual Information	
Description	File Name
UHF - High Power Top Mount (200-1000 kW), Four Station broadband panel antenna, elliptically or circularly polarized	<p>Component Description: As described in section 3-A of the ATC invoice attached to this request. Four station broadband panel antenna, elliptically or circularly polarized. Reduced 1 cent to account for ATC rounding problem</p> <p>Amount: \$16,347.37</p>
Sweep test of existing antenna	Information not provided.
New combiner, cost per channel (without antenna)	<p>Component Description: As described in section 3-C-1 of the ATC invoice attached to this request. New combiner, cost per channel (without antenna)</p> <p>Amount: \$16,500.00</p>
Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)	<p>Component Description: Elbow complex for antenna input</p> <p>Amount: \$5,572.35</p>

Combiner Installation	<p>Component Description: As described in section 3-C-2 of the ATC invoice attached to this request. Installation of combiner.</p> <p>Amount: \$2,475.00</p>
Freight	Information not provided.
Mounting Adapter	<p>Component Description: Wedding cake mounting adapter to go onto new or existing pole</p> <p>Amount: \$11,529.00</p>
Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed)	<p>Component Description: Elbow complex at input of antenna. This displaces the elbow complex for the 6" line</p> <p>Amount: \$5,572.35</p>
Sweep test of existing antenna	<p>Component Description: Sweep Test</p> <p>Amount: \$2,880.00</p>
UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized	<p>Component Description: Payment for main antenna</p> <p>Amount: \$88,782.75</p>

Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	Component Description: Amount:	Please disregard as the required elbow complex (7") is taken care of in another line \$5,572.35
Trans Test	Component Description: Amount:	Trans Test 6-75 \$953.10
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.	
Sweep test of existing antenna	Component Description: Amount:	Sweep of antenna deposit \$2,880.00
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	Component Description: Amount:	Elbow complex \$4,634.10
Side mount brackets for high power antennas (if not included in antenna base cost)	Component Description: Amount:	antenna mounting bracket down payment \$7,391.25
freight	Information not provided.	
UHF - High Power, Side Mount, basic slot antenna, 1000 kW input, directional,, horizontally polarized	Component Description: Amount:	Payment for side mounted AUX \$52,076.25

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	\$900,813.00	\$15,973.00		\$3,990.75	
Rigid Transmission Line - copper, 8 3/16"	\$884,850.00	\$10.00	N/A	N/A	N/A
Refurbish existing line	<i>\$15,963.00</i>	\$15,963.00	N/A	\$3,990.75	N/A
Auxiliary Transmission Line	\$5,759.00	\$5,619.00		\$773.55	
Rigid Transmission Line - copper, 6 1/8"	\$4,040.00	\$3,900.00	N/A	N/A	N/A
Rigid transmission line	<i>\$1,719.00</i>	\$1,719.00	N/A	\$773.55	N/A
Sub-total	\$906,572.00	\$21,592.00	N/A	\$4,764.30	N/A
Total for all systems	\$9,909,962.78	\$6,401,533.63	N/A	\$1,653,199.90	N/A

Components

Actual Information Description	File Name
Rigid Transmission Line - copper, 8 3/16"	Information not provided.

Refurbish existing line	<p>Component Description: As described in section 3-A of the ATC invoice attached to this request. Refurbish existing line</p> <p>Amount: \$3,990.75</p>
Rigid Transmission Line - copper, 6 1/8"	Information not provided.
Rigid transmission line	<p>Component Description: Line and swivel to hook up new shorter aux antenna</p> <p>Amount: \$773.55</p>

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 TOWER	\$1,377,800.00	\$1,139,800.00		\$11,700.00	
Major tower reinforcement /modifications	\$421,000.00	\$394,800.00	N/A	N/A	N/A
Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	\$26,300.00	\$25,000.00	N/A	\$11,700.00	N/A
Structural mods	\$0.00	\$0.00	N/A	N/A	N/A
Tall Tower (greater than 500')	\$210,500.00	\$0.00	N/A	N/A	N/A
Antenna replacement and Mast replacement	\$600,000.00	\$600,000.00	N/A	N/A	N/A
Reinforce guy anchors	\$120,000.00	\$120,000.00	N/A	N/A	N/A
Sub-total	\$1,377,800.00	\$1,139,800.00	N/A	\$11,700.00	N/A
Total for all systems	\$9,909,962.78	\$6,401,533.63	N/A	\$1,653,199.90	N/A

Components

Actual Information	
Description	File Name
Major tower reinforcement /modifications	Information not provided.
Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study	<div> <div>Component Description:</div> <div>Payment for Inspection & Mapping and Structural Analysis for WSB-TV's 865.25ft-14ft Face-Guyed Tower Atlanta, GA</div> </div> <div> <div>Amount:</div> <div>\$11,700.00</div> </div>
Structural mods	Information not provided.
Tall Tower (greater than 500')	Information not provided.
Antenna replacement and Mast replacement	Information not provided.
Reinforce guy anchors	Information not provided.

**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	\$230,895.00	\$150,650.00		\$23,700.00	
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$15,000.00	N/A	N/A	N/A
Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	\$10,520.00	\$10,000.00	N/A	N/A	N/A
NEPA Section 106 environmental review, if needed	\$6,310.00	\$6,000.00	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
Project management of the transition	\$31,600.00	\$30,000.00	N/A	N/A	N/A
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	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
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), 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, License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A
Prepare request for Special Temporary Authorization	\$2,050.00	\$1,500.00	N/A	N/A	N/A
Additional Field Engineering Service, 5 Days	\$10,000.00	\$10,000.00	N/A	N/A	N/A
Consultant services	\$24,400.00	\$24,400.00	N/A	\$23,700.00	N/A

RF Exposure Measurements	\$21,050.00	\$15,000.00	N/A	N/A	N/A
Sub-total	\$230,895.00	\$150,650.00	N/A	\$23,700.00	N/A
Total for all systems	\$9,909,962.78	\$6,401,533.63	N/A	\$1,653,199.90	N/A

Components

Actual Information	
Description	File Name
Comprehensive coverage verification via field study, if needed	Information not provided.
Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	Information not provided.
NEPA Section 106 environmental review, if needed	Information not provided.
Attorney Fees - Prepare and File request for Special Temporary Authorization	Information not provided.
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.
Project management of the transition	Information not provided.

Prepare and or review reimbursement form	Information not provided.
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.
Perform engineering study for new channel assignment and antenna development	Information not provided.
Prepare engineering section of FCC Form 2100 (main), Construction Permit 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), License to Cover Application	Information not provided.
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	Information not provided.
Prepare request for Special Temporary Authorization	Information not provided.
Additional Field Engineering Service, 5 Days	Information not provided.
Consultant services	<p>Component Description: Consulting services to WSB for the period December 1 2016 through December 31 2017</p> <p>Amount: \$23,700.00</p>
RF Exposure Measurements	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	\$344,183.00	\$343,578.00		\$51,848.34	
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	\$4,250.00	N/A
Interim delivery and handling fees	<i>\$8,333.00</i>	\$8,333.00	N/A	\$3,378.33	N/A
Interim site Concrete foundations	<i>\$32,785.00</i>	\$32,785.00	Concrete foundation for generator, outdoor equipment, and ice bridge. See attachment "Ice Bridge and concrete FCC submittal.pdf"	\$0.00	We contracted with JP construction to provide concrete foundations for the generator and cooling equipment. As they dug the footing for the second foundation they encountered poorly compacted soil and water issues. An additional \$7,430 was needed to fi

Interim Plumbing for Dry coolers	\$5,000.00	\$5,000.00	Hired a local plumber to pipe transmitter cooler lines after Gates Air install team was delayed.	N/A	N/A
Interim plumbing work for dry coolers	\$3,383.00	\$3,383.00	Installation costs associated with mounting and soldering cooling pipes for liquid cooled transmitter	\$0.00	Gates Air has delayed the installation. We have hired a local plumber to help with the installation. This is the projected cost
Interim transmission line sweep	\$1,250.00	\$1,250.00	***System Notice: Estimate adjusted and locked because line has been superseded. ***	\$1,250.00	N/A
Interim transition timing and coordination issues	\$2,500.00	\$2,500.00	N/A	\$625.00	N/A
Interim transition timing coordination	\$2,500.00	\$2,500.00	N/A	\$2,370.00	N/A
Interim tower reinforcement	\$35,000.00	\$35,000.00	N/A	\$8,750.00	N/A
Interim tower mapping	\$8,267.00	\$8,267.00	N/A	\$2,066.67	N/A

Interim tower load study	\$6,517.00	\$6,517.00	N/A	\$1,629.17	N/A
Interim site security and theft prevention	\$1,800.00	\$1,800.00	N/A	\$450.00	N/A
Interim site coordination meeting	\$2,500.00	\$2,500.00	N/A	\$625.00	N/A
Interim ground and building permits	\$4,700.00	\$4,700.00	N/A	\$1,175.00	N/A
Interim engineering study for channel assignment	\$5,000.00	\$5,000.00	N/A	\$1,250.00	N/A
Interim construction manager	\$10,000.00	\$10,000.00	N/A	\$2,500.00	N/A
Interim Tower permit drawing package	\$4,700.00	\$4,700.00	N/A	\$1,175.00	N/A
Interim RF exposure measurements	\$5,000.00	\$5,000.00	N/A	\$1,250.00	N/A
Interim Project management	\$9,480.00	\$9,480.00	N/A	\$0.00	N/A

Interim Ice bridge for outdoor equipment	\$96,775.00	\$96,775.00	Ice bridge to protect outdoor equipment (Generator, HVAC compressors, and transmitter heat exchangers) See attachment " Ice Bridge and concrete FCC submittal.pdf"	N/A	N/A
Interim Complex tower	\$35,000.00	\$35,000.00	N/A	\$17,000.00	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	\$7,500.00	\$7,500.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	\$12,000.00	\$12,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$6,000.00	\$6,000.00	N/A	\$666.67	N/A
Non-zoning permits	\$1,501.00	\$1,501.00	N/A	N/A	N/A

Local Zoning	\$1,501.00	\$1,501.00	N/A	\$187.50	N/A
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
FCC Filing Fees - Form 2100 minor change CP application	\$1,110.00	\$1,070.00	N/A	N/A	N/A
Interim site RF system test	\$5,000.00	\$5,000.00	N/A	\$1,250.00	N/A
Sub-total	\$344,183.00	\$343,578.00	N/A	\$51,848.34	N/A
Total for all systems	\$9,909,962.78	\$6,401,533.63	N/A	\$1,653,199.90	N/A

Components

Actual Information	
Description	File Name
DTV Medical Facility Notification	<p>Component Description: notification of medical facilities of upcoming frequency change</p> <p>Amount: \$4,250.00</p>

Interim delivery and handling fees	<div> <div> Component Description: </div> <div> Moving costs to move Transmitter and components to interim transmitter site </div> </div> <div> Amount: </div> <div> \$1,295.00 </div> <div> Component Description: </div> <div> As described in section 1-A-4 of the ATC invoice attached to this request. Equipment Delivery and Handling Charges (Cost per customer) </div> <div> Amount: </div> <div> \$2,083.33 </div>
Interim site Concrete foundations	<div> <div> Component Description: </div> <div> This this is for the soil remediation </div> </div> <div> Amount: </div> <div> \$7,500.00 </div> <div> Component Description: </div> <div> Invoice for Concrete foundations at interim transmitter site @ American Tower site located at 1800 </div> <div> Amount: </div> <div> \$34,613.50 </div>
Interim Plumbing for Dry coolers	Information not provided.
Interim plumbing work for dry coolers	Information not provided.

Interim transmission line sweep	<p>Component Description: As described in section 3-C-2 of the ATC invoice attached to this request Sweep test of transmission line and antenna</p> <p>Amount: \$1,250.00</p>
Interim transition timing and coordination issues	<p>Component Description: As described in section 1-A-1 of the ATC invoice attached to this request Coordination and transition planning with all parties onsite and management of the timelines and schedules occurring during the repack</p> <p>Amount: \$625.00</p>
Interim transistion timing coordination	<p>Component Description: As described in section 1-A-1 of the ATC invoice attached to this request Project management fee for pre-construction services to support the transition of one (1) broadcasters.</p> <p>Amount: \$2,370.00</p>

Interim tower reinforcement	<p>Component Description: As described in section 3-A-2 of the ATC invoice attached to this request. Major tower reinforcement /modifications (Labor and materials)</p> <p>Amount: \$8,750.00</p>
Interim tower mapping	<p>Component Description: As described in section 3-A-1 of the ATC invoice attached to this request. Tower mapping for an undocumented /poorly documented tower.</p> <p>Amount: \$2,066.67</p>
Interim tower load study	<p>Component Description: As described in section 3-A-1 of the ATC invoice attached to this request. Structural engineering tower load study for a documented tower with candelabra</p> <p>Amount: \$1,629.17</p>

Interim site security and theft prevention	<p>Component Description: As described in section 1-B-1 of the ATC invoice attached to this request. Site Security Company during construction for theft prevention and vandalism</p> <p>Amount: \$450.00</p>
Interim site coordination meeting	<p>Component Description: As described in section 1-B-1 of the ATC invoice attached to this request. Site coordination meetings with all broadcasters, contractors and vendors involved with the site project</p> <p>Amount: \$625.00</p>
Interim ground and building permits	<p>Component Description: As described in section 3-D-1 of the ATC invoice attached to this request. Ground & Building A&E Permit Drawing Package (Cost per customer)</p> <p>Amount: \$1,175.00</p>

Interim engineering study for channel assignment	<p>Component Description: As described in section 1-A-2 of the ATC invoice attached to this request. Perform engineering study for new channel assignment and antenna development (Cost per customer)</p> <p>Amount: \$1,250.00</p>
Interim construction manager	<p>Component Description: As described in section 3-D-1 of the ATC invoice attached to this request. Construction project management (Tower Modification reinforcements and facilities)</p> <p>Amount: \$2,500.00</p>
Interim Tower permit drawing package	<p>Component Description: As described in section 3-D-1 of the ATC invoice attached to this request. Tower Permit Drawing Package (Cost per customer)</p> <p>Amount: \$1,175.00</p>

Interim RF exposure measurements	<p>Component Description: As described in section 1-A-4 of the ATC invoice attached to this request. RF Exposure Measurements or sites where post construction measurements have customarily been required or conducted</p> <p>Amount: \$1,250.00</p>
Interim Project management	<p>Component Description: Project management of the transition Cost per hour per customer. American Tower has had this approved</p> <p>Amount: \$2,370.00</p>
Interim Ice bridge for outdoor equipment	Information not provided.
Interim Complex tower	<p>Component Description: As described in section 3-C-1 of the ATC invoice attached to this request. Complex Tower (includes, e. g., towers with candelabras and or stacked antennas)</p> <p>Amount: \$17,000.00</p>
MVPD Notification of Channel Change	Information not provided.

Develop and air announcement of upcoming channel change	Information not provided.
Equipment Storage	Information not provided.
Equipment Delivery and Handling Charges	Information not provided.
Disposal Costs (for equipment and other waste, net of any salvage value)	<div> <div> Component Description: </div> <div> As described in section 1-A-4 of the ATC invoice attached to this request. Disposal of antenna(s) and other materials removed from tower as needed. Dumpster and garbage removal from interim site during construction </div> </div> <div> Amount: </div> <div> \$666.67 </div>
Non-zoning permits	Information not provided.
Local Zoning	<div> <div> Component Description: </div> <div> As described in section 1-A-3 of the ATC invoice attached to this request. Obtain building permits from local zoning authorities </div> </div> <div> Amount: </div> <div> \$187.50 </div>
FCC Filing Fees - Special Temporary Authorization request	Information not provided.
FCC Filing Fees - Form 2100 license to cover application	Information not provided.

FCC Filing Fees - Form 2100 minor change CP application	Information not provided.
Interim site RF system test	<div> <div> Component Description: </div> <div> As described in section 1-B-1 of the ATC invoice attached to this request. Testing of the combiner to ensure all frequencies are tuned for optimal patterns. </div> </div> <div> <div> Amount: </div> <div> \$1,250.00 </div> </div>

**Cost
Information**

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$9,909,962.78	\$6,401,533.63	\$1,653,199.90

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>gary Robert alexander , Mr. . <i>Director of Engineering</i></p> <p>06/21/2019</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>gary Robert alexander , Mr. . <i>Director of Engineering</i></p> <p>06/21/2019</p>

Attachments