

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

			•			
Facility	51349	Service: DTV	Call	WBEC-TV	Channel: 25 (UHF)	
ID:			Sign:			
File	000002	8912				
Number:						
FRN: 000	5852249	Date	01/02			
		Submitted:	/2019			

Applicant Name, Type, and Contact Information

Information

Applicant	Address	Phone	Email	Applicant Type
THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA Doing Business As: THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA	Chuck Griffin C/O BECON 6600 SW NOVA DRIVE FORT LAUDERDALE, FL 33317 United States	+1 (754) 321- 1000	chuck. griffin@browardschools. com	Government Entity

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Ontact Name and Information

Contact Information	Applicant	Address	Phone	Email
	Evan D Carb <i>Attorney</i> <i>Law Offices of Evan D</i> <i>Carb, PLLC</i>	Evan Carb 1200 New Hampshire Avenue, NW Suite 600 Washington, DC 20036 United States	+1 (202) 293- 2555	Carblaw@verizon. net

Broadcaster	Question	Response
Information and Transition Plan	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	The transition plan is to replace the existing channel 40 system with a new channel 25 antenna system, transmission line, and transmitters. All of the equipment will be owned and operated by SBBC.

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

Auxiliary	Add Transmitter Information					
Transmitter	Section	Question	Response			
	Existing Transmitter Description	Type of change	Purchase New			
		Use	Auxiliary (Backup)			
		Description of Use	Previous Analog Converted to Digital Backup			
		Ownership	Owned			
		Owner	N/A			
		Site	N/A			
		Is this transmitter currently shared with another station?	No			
		Is this transmitter currently in operating condition?	Yes			
	Existing Transmitter	Manufacturer				
	Manufacturer and Type	Model	Quantum QDCN2			
		Year	2006			
		Туре	Inductive Output Tube			
		IOT Power Type	Тwo			
		Power Capacity	60 kW			

Add Transmitter Information

Auxiliary	New Transmitter Costs					
Transmitter	Section	Question	Response			
	New Transmitter	Use	Auxiliary (Backup)			
		Change Type	Purchase New			
		Is this a request for upgraded equipment?	No			
		Manufacturer				
		Model	THU9evo			
		Transmitter Type	Solid State			
		Solid State Cooling	Liquid Cooled			
		Solid State Power capacity	19 kW			
		Justification for New Transmitter	Our existing auxiliary transmitter is no longer supported, and cannot be retuned. A new auxiliary transmitter is required for transition. The auxiliary transmitter will be used in the interim on channel 40, then retuned to channel 25 when complete.			

Auxiliary	Other Transmitter Costs				
Transmitter	Section	Question	Response		
	Electrical Service	Service Entrance (3 phases 800A 208V)	Yes		
		Switchgear (industrial 800 amp)	Yes		
		Transformer (480V)	No		
		Power	N/A		
		Rigid Conduit and Wiring	No		
		Size	N/A		
		Length	N/A		
		Other Electrical Service	No		
		Description	N/A		
	HVAC Service	Does the replacement transmitter require HVAC Service?	No		
		Туре	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 leashold 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	Other Transmitter Cost Not Listed				
Transmitter	Name	Description			
	Indoor RF decommissioning and disposal	In ceiling indoor RF decommissioning and disposal			

Auxiliary transmitter retuning and commissioning	Retune and commission auxiliary transmitter. Transmitter will be used as auxiliary on channel 40 during transition, then retuned to new channel 25 when complete to become a backup to the main.
Decommissioning and disposal of	Decommission and dispose of existing
Acrodyne backup transmitter	Acrodyne Quantum backup transmitter

Primary	Existing Transmitter Information				
Transmitter	Section	Question	Response		
	Existing Transmitter Description	Type of change	Purchase New		
		Use	Primary (Main)		
		Description of Use	N/A		
		Ownership	Owned		
		Owner	N/A		
		Site	N/A		
		Is this transmitter currently shared with another station?	No		
		Is this transmitter currently in operating condition?	Yes		
	Existing Transmitter	Manufacturer			
	Manufacturer and Type	Model	Quantum QDCN2		
		Year	2006		
		Туре	Inductive Output Tube		
		IOT Power Type	Тwo		
		Power Capacity	60 kW		

Existing Transmitter Information

Primary	New Transmitter Costs			
Transmitter	Section	Question	Response	
	New Transmitter	Use	Primary (Main)	
		Change Type	Purchase New	
		Is this a request for upgraded equipment?	No	
		Manufacturer		
		Model	THU9evo	
		Transmitter Type	Solid State	
		Solid State Cooling	Liquid Cooled	
		Solid State Power capacity	37 kW	
		Justification for New Transmitter	Our current Acrodyne transmitter has been discontinued, the company is out of business, and the model is no longer supported. We are unable to retune our existing transmitter. We are therefore required to purchase a new transmitter.	

Electrical Service	Service Entrance (3 phases 800A 208V)	Yes
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A
	Other Electrical Service	No
	Description	N/A
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Туре	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 leashold 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

Primary Transmitter	Other Transmitter Cost Not Listed		
	Name	Description	
	Bid specifications and preparation	State Law and School Board Policy require such expenditures to be handled through a competitive bid process.	
	Primary transmitter decommissioning and disposal	Decommissioning and disposal of Acrodyne Quantum primary transmitter.	

Antennas Section		Question	Response
Antenna Rela	ated Expenses	Do you have antenna related expenses?	Yes

Primary	Existing Antenna Information			
Antenna	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?	Yes	
		Is antenna in operating condition?	Yes	
		Is antenna located on or in close proximity to an antenna farm?	Yes	
	Existing Antenna Manufacturer and Type	Class	Full Power	
		Mounting	Top Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Horizontal	
		Туре	Broadband Panel	
		Number of Stations Supported	1	
		Number of Panels	24	
		Design power capacity in use	50.0 %	
		Lower Limit	626.00 MHz	
		Upper Limit	770.00 MHz	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	1000.0 kW	

Manufacturer	
Model	ETU- P2H12-(40- 63)
Year	2006

Antenna	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?	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	Top Mount
		Antenna position in stack	Not in Stack
		Polarization	Horizontal
		Туре	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)	734.0 kW
		Manufacturer	

Model	TFU-17ETT- R BP290
Year	2018
Justification for New Antenna	Existing broadband panel was designed for analog channel 63 and digital channel 40. According to manufacturer a new antenna is required for channel 25 operation.

Primary Other Antenna Costs

Antenna	Section	Question	Response
	Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No
		Туре	
		Number of channels supported	N/A
		Frequencies of channels supported	N/A
		Frequency	N/A
Elbow Complex	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?	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

Other Antenna Cost Not Listed

Primary

Antenna	Name	Description
	Bid specification and preparation	State Law and School Board policy require such expenditures be handled through a competitive bid process.

Interim	New Antenna Costs			
Antenna	Section	Question	Response	
	New Antenna Description	Use	Interim	
		Description of Use	N/A	
		Change Type	Purchase New	
		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	Class	Full Power	
	Manufacturer and Type	Mounting	Side Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Horizontal	
		Туре	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)	200.0 kW	
		Manufacturer		
		Model	TFU- 16DSB-J	
		Year	2018	

Justification for New Antenna

Interim Antenna	Other Antenna Costs			
	Section	Question	Response	
	Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes	
		Broadband or Single Channel?	S	
		Feed Line Size	6 1/8 inches	
	Side Mount Brackets	Do you require the separate purchase of side mount brackets for an antenna?	Yes	
	Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	Yes	
	Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes	

Interim Other Antenna Cost Not Listed

Antenna Information not provided.

Transmissior	n Seffien	Question	Response
	Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

ransmissio	Section	Question	Response
	Existing Transmission Line Description	Type of change	Purchase New
		Use	Primary (Main)
		Description of Use	N/A
		Ownership	Owned
		Owner	N/A
		Site	N/A
		Is the existing transmission line shared with another station or stations?	No
		Is Transmission Line in operating condition?	Yes
	Existing Transmission	Manufacturer	
	Line Manufacturer and Type	Туре	Rigid
		Diameter	6 1/8 inches
		Other Diameter	N/A
		Segment Length	Broadband
		Other Segment Length	N/A
		Number of parallel runs	2
		Length	1150 feet per run

Primary Existing Transmission Line

Primary	New Transmission Line		
Transmissio	n Line Section	Question	Response
	New Transmission Line Costs	Use	Primary (Main)
		Description of Use	N/A
		Change Type	Purchase New
		Is this a request for upgraded equipment?	No
		Туре	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	1150 feet per run
		Justification for New Transmission Line	Existing line designed for analog channel 63 and digital channel 40 operation. Per manufacturer, a new line is required for channel 25 operation.

Other Transmission Line Expenses Not Listed Transmission

Interim	New Transmission Line			
Transmissio	n Line Section	Question	Response	
	New Transmission Line	Use	Interim	
	Costs	Description of Use	N/A	
		Change Type	Purchase New	
		Туре	Flexible Air	
		Diameter	4 inches	
		Segment Length	N/A	
		Other Segment Length		
		Number of parallel runs	1	
		Length	1150 feet per run	
		Justification for New Transmission Line	New interim transmission	
			line required for side	
			mounted	
			interim	
			antenna operation.	

Interim Other Transmission Line Expenses Not Listed

Transmission home tion not provided.

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

Primary Existing Tower

rimary			
ower	Section	Question	Response
	Existing Tower Description	Type of change	Move Equipment
		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	Yes
		Is tower documented for structural analysis?	Unknown
		Is tower compliant with Rev G?	Yes
	Existing Tower	Do you have a tower registration number?	Yes
	Structure Registration	ASR Number	1224225
	Coordinates (NAD83 (Latitude (NAD83)	25° 59' 10.0" N
North America of 1983))	North American Datum of 1983))	Longitude (NAD83)	080° 11' 36.3" W-
		Overall Structure Height	1019.02 feet
		Support Structure Height	942.90 feet
		Ground Elevation Above Mean Sea Level (AMSL)	11.15 feet

Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
Tower Owner	American Towers, LLC.
Date Constructed	10/12/2001

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
29567	WSFS	FM
29547	WSBS-CD	DTV
48608	WPXM-TV	DTV
4366	WIMP-CD	DTV
11965	WBGG-FM	FM
63154	WTVJ	DTV
67193	WMIB	FM
51349	WBEC-TV	DTV
51978	WMIA-FM	FM
51979	WZTU	FM
60536	WAMI-DT	DTV
41381	WHYI-FM	FM
64971	WSCV	DTV

Other Types of Users

Users

WTXI-LD	
W17DG-D	
W24DE-D	
W288DD	
WFUN-LD	

Tower Rigging Costs Primary Tower

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

Other Tower Expenses Not Listed Primary Tower

Name	Description
American Tower Modification Costs	American Tower Modification costs including reinforcement

Outside Professional	Section	Question	Response
	Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	242
		Explanation	Outside project management services are required for bid preparation, vendor coordination, equipment removal and installations, planning, modifications, and proof of performance. These service are not available in house.
	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	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	2

	Do you have Distributed Transmission System engineering services?	N/A
	Critical Facility	N/A
	Terrain-Shielded Facility	N/A
Attorney and Other Outside Consulting	Prepare and file Form FCC Construction Permit Application	Yes
Services	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	2
	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	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	42

Justification	Retuning
	demodulator
	/ decoders a
	schools in
	Broward
	County
	currently
	receiving
	WBEC off ai
	and
	distributing t
	classrooms.

Outside Other Professional Services Expenses Not Listed

Professional	Services Costs	Description
	1876 related financial assistance	Counsel asked to help compile needed information and set up representatives and account types, prepare brief for CFO Interface with FCC on questions of accounts & procedures and completing form 1876. Estimate 13 @ \$300
	Monitor and Advise School Board on Repack	Advise School Board As Repack Team member, track all repack releases, prepare memos & brief staff, GC and Board on content, impact, implications, requirements, forms & timing. Raise concerns questions with FCC. Estimate 25 @ \$300
	Site Survey	Transmitter Manufacturer Site Survey to develop a transition plan, scope of work, equipment and electrical requirements and modifications.
	School Board Supplemental Matters Affecting Repack	Monitor, Analyze, and brief School Board on policies re bid procurement. Review, approval & signatory for TV matters. Ensure compliance during equipment research. Coordination of repack. Reconfigure FRN to maintain multi department access. 25 @\$300

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

	Other Expenses Not Listed			
lame	Description			
Bid Specification and Preparation	State Law and School Board Policy require expenditures such as electrical and tower work handled through a competitive bid process.			

Transmitters

Cost Information

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	Ac Ju
Primary Transmitter THU9evo	\$1,554,100.00	\$1,478,500.00		\$962,340.00	
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	\$1,473,000.00	\$1,400,000.00	N/A	\$956,340.00	
Primary transmitter decommissioning and disposal	\$22,500.00	\$22,500.00	Acrodyne Quantum Transmitter decommissioning and disposal	N/A	
Service entrance 3 phase/800 amp /208 volt	\$14,400.00	\$13,700.00	N/A	N/A	
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	N/A	
Bid specifications and preparation	\$6,000.00	\$6,000.00	State Law and School Board Policy requires this expenditure be handled through a competitive bid process.	\$6,000.00	
Auxiliary Transmitter THU9evo	\$806,100.00	\$780,440.00		\$704,079.80	
Decommissioning and disposal of Acrodyne backup transmitter	\$22,500.00	\$22,500.00	Decommissioning and disposal of Acrodyne Quantum backup transmitter.	\$21,139.80	

Auxiliary transmitter retuning and commissioning	\$25,000.00	\$25,000.00	Retune and commission interim transmitter to become backup transmitter.	N/A	
Indoor RF decommissioning and disposal	\$22,000.00	\$22,000.00	N/A	\$22,000.00	
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	N/A	
UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW	\$684,000.00	\$660,940.00	Final cost was more than what we estimated, original estimate was not based on actual quotes due to county school board procurement procedures we must follow.	\$660,940.00	Fin wa tha esti or es wa bas a quo to to b proc proc fr
Service entrance 3 phase/800 amp /208 volt	\$14,400.00	\$13,700.00	N/A	N/A	
Sub-total	\$2,360,200.00	\$2,258,940.00	N/A	\$1,666,419.80	
Total for all systems	\$4,221,509.33	\$3,888,127.19	N/A	\$2,397,546.80	

Components

Actual Information	
Description	File Name

UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	Component Description: Amount:	WBEC main transmitter 20% final invoice \$191,268.00
	Component Description: Amount:	WBEC main transmitter 50% down before ship \$478,170.00
	Component Description: Amount:	30% Downpayment R&S THU9EVO-24 main transmitter \$286,902.00
Primary transmitter decommissioning and disposal	Information not provided.	
Service entrance 3 phase /800 amp/208 volt	Information not provided.	
Switchgear - industrial 800 amp	Information not provided.	
Bid specifications and preparation	Component Description:	Main and Auxiliary Transmitter Procurement assistance
	Amount:	\$6,000.00
Decommissioning and disposal of Acrodyne backup transmitter	Component Description:	Backup transmitter decommissioning and disposal
Auxiliary transmitter retuning and commissioning	Amount: Information not provided.	\$21,139.80

Indoor RF decommissioning and disposal	Component Description: Amount:	Indoor RF decommissioning and disposal \$22,000.00
Switchgear - industrial 800 amp	Information not provided.	
UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW	Component Description: Amount:	WBEC Aux transmitter 30% downpayment \$158,379.00
	Component Description: Amount:	WBEC Rohde AUX antenna 20% final payment invoice \$105,586.00
	Component Description: Amount:	WBEC backup transmitter installation \$133,010.00
	Component Description: Amount:	WBEC Aux transmitter 50% down prior to ship \$263,965.00
Service entrance 3 phase /800 amp/208 volt	Information not provided.	

Antennas

Cost Information

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

Description Interim Antenna TFU-16DSB- J	Predetermined Cost Estimate \$426,440.00	Estimated Cost \$256,623.86	Estimated Cost Justification	Actual Cost \$46,396.36	Actual Cost Justification
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
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$22,000.00	N/A	\$9,112.50	N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$11,700.00	N/A	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$5,760.00	N/A

UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	\$189,500.00	\$180,000.00	N/A	N/A	N/A
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	\$189,500.00	\$31,523.86	***System Notice: Estimate adjusted and locked because line has been superseded.	\$31,523.86	N/A
Primary Antenna TFU-17ETT- R BP290	\$272,030.00	\$259,100.00		\$151,539.00	
Bid specification and preparation	\$6,000.00	\$6,000.00	State Law and School Board Policy requires this expenditure be handled through a competitive bid process.	\$6,000.00	N/A
Sweep test of existing	\$6,730.00	\$6,400.00	N/A	\$5,760.00	N/A
antenna			N/A	\$130,511.24	N/A

Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$11,700.00	N/A	\$9,267.76	N/A
Sub-total	\$698,470.00	\$515,723.86	N/A	\$197,935.36	N/A
Total for all systems	\$4,221,509.33	\$3,888,127.19	N/A	\$2,397,546.80	N/A

Actual Information Description	File Name	
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.	
Side mount brackets for high power antennas (if not included in antenna base cost)	Component Description: Amount:	45% prior to ship heavy custom mounts \$4,556.25
	Component Description: Amount:	45% down with order heavy custom mounts \$4,556.25
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	Information not provided.	

Sweep test of existing antenna	Component Description:	45% down with order repack
	Amount:	sweep \$2,880.00
	Component Description:	45% prior to ship repack sweep
	Amount:	\$2,880.00
UHF - Lower Power Side Mount, One station - 200- 500 kW, horizontally polarized	Information not provided.	
UHF - Lower Power Side		
Mount, One station - 200- 500 kW, horizontally	Component Description:	45% down with order side mount
polarized		AUX antenna
	Amount:	\$15,761.93
	Component Description:	45% prior to ship
		side mount AUX
	Amount:	antenna \$15,761.93
	Amount.	\$13,701.93
Bid specification and preparation	Common out Description:	Main and Auvilian
	Component Description:	Main and Auxiliary Antenna
		Procurement
	A	assistance
	Amount:	\$6,000.00
Sweep test of existing antenna		
	Component Description: Amount:	Reack sweep
	Amount:	\$2,880.00
	Component Description:	45% down with
		order
	Amount:	\$2,880.00

UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized	Component Description:	45% down with order UHF high power top mount
	Amount:	antenna \$65,255.62
	Component Description:	UHF - HIGH
		POWER TOP MOUNT antenna
		45%prior ship
	Amount:	\$65,255.62
Elbow complex, single		
channel, at antenna input, per 6 1/8. feedline (if	Component Description:	ELBOW
needed)		COMPLEX,
noododj		SINGLE
		CHANNEL AT
		ANTENNA INPUT FOR 6-1/8" 75
		OHM.
	Amount:	\$4,633.88
	Component Description:	45% down with
		order Elbow
		complex
	Amount:	\$4,633.88

Transmission Line

Cost Information

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	\$85,100.00	\$80,500.00		\$61,143.34	
Flexible Air Transmission Line - dielectric, 4"	\$85,100.00	\$80,500.00	N/A	\$61,143.34	N/A
Primary Transmission Line	\$232,300.00	\$220,800.00		\$143,932.32	
Rigid Transmission Line - copper, 6 1/8"	\$232,300.00	\$220,800.00	N/A	\$143,932.32	N/A
Sub-total	\$317,400.00	\$301,300.00	N/A	\$205,075.66	N/A
Total for all systems	\$4,221,509.33	\$3,888,127.19	N/A	\$2,397,546.80	N/A

Actual Information Description	File Name	
Flexible Air Transmission Line - dielectric, 4"	Component Description: Amount:	45% with order flexible transmission line \$30,571.67
	Component Description:	45% down with order flexible
	Amount:	transmission line \$30,571.67

Amount:/8 75 OHM 1209FT \$70,419.51Component Description:45% before ship RIGID TRANSMISSION LINE - COPPER 6-1 /8" 75 OHM EIA - 1209 FTAmount:\$70,419.51Component Description:45% with order Rigid transmission line copper T/L 6-75 EIA length 15 to 20' fixed FLG Amount:Component Description:45% before ship RigiD TRANSMISSION LINE - COPPER 7/L 6-75 EIA Length 15 to 20' fixed FLG Amount:Component Description:45% before ship RigiD TRANSMISSION LINE COPPER T/L 6-75 EIA LENGTH 15' TO 20' FIXED FLG Amount:	Rigid Transmission Line - copper, 6 1/8"	Component Description:	45% down with order Rigid transmission line 6 1
RIGID TRANSMISSION LINE - COPPER 6-1 /8" 75 OHM EIA - 1209 FTAmount:\$70,419.51Component Description:45% with order Rigid transmission line copper T/L 6-75 EIA length 15 to 20' fixed FLGAmount:\$1,546.65Component Description:45% before ship RIGID 		Amount:	
Component Description: 45% with order Rigid transmission line copper T/L 6-75 EIA length 15 to 20' fixed FLG Amount: \$1,546.65 Component Description: 45% before ship RIGID TRANSMISSION LINE COPPER T/L 6-75 EIA LENGTH 15' TO 20' FIXED FLG		Component Description:	RIGID TRANSMISSION LINE - COPPER 6-1 /8" 75 OHM EIA -
Rigid transmission line copper T/L 6-75 EIA length 15 to 20' fixed FLG \$1,546.65 Component Description: 45% before ship RIGID TRANSMISSION LINE COPPER T/L 6-75 EIA LENGTH 15' TO 20' FIXED FLG		Amount:	\$70,419.51
Component Description:45% before shipRIGIDRIANSMISSIONLINE COPPER T/L6-75 EIA LENGTH15' TO 20' FIXEDFLG		Component Description:	Rigid transmission line copper T/L 6-75 EIA length 15 to 20'
RIGID TRANSMISSION LINE COPPER T/L 6-75 EIA LENGTH 15' TO 20' FIXED FLG		Amount:	\$1,546.65
Amount: \$1,546.65		Component Description:	RIGID TRANSMISSION LINE COPPER T/L 6-75 EIA LENGTH 15' TO 20' FIXED
		Amount:	

Tower Equipment and Rigging Costs

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower GTOWER	\$485,313.33	\$464,313.33		\$276,215.98	
American Tower Modification Costs	\$64,313.3 3	\$64,313.33	American Tower Cost Estimates attached	N/A	N/A
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$400,000.00	N/A	\$276,215.98	N/A
Sub-total	\$485,313.33	\$464,313.33	N/A	\$276,215.98	N/A
Total for all systems	\$4,221,509.33	\$3,888,127.19	N/A	\$2,397,546.80	N/A

Actual Information Description	File Name
American Tower Modification Costs	Information not provided.

Complex Tower (includes, for example, those with candelabras and/or stacked	Component Description:	45% down with order AUX Install
antennas)		services
	Amount:	\$45,794.99
	Component Description:	45% prior to ship
		Aux install
		services
	Amount:	\$45,794.99
	Component Description	45% down with
	Component Description:	order main
		antenna install
		services
	Amount:	\$92,313.00
	Component Description:	45% 2nd
	component Description.	payment main
		antenna install
	Amount:	\$92,313.00

Outside Professional Services

Cost Information

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

Description Outside Professional Services	Predetermined Cost Estimate \$263,536.00	Estimated Cost \$253,450.00	Estimated Cost Justification	Actual Cost \$40,650.00	Actual C Justifica
School Board Supplemental Matters Affecting Repack	\$7,500.00	\$7,500.00	Advise School Board As Repack Team member, track all repack releases, prepare memos & brief staff, GC and Board on content, implications, requirements, forms & timing. Raise concerns questions with FCC. Estimate 25 @ \$300	N/A	N/A
Site Survey	\$18,500.00	\$18,500.00	Site Survey including architectural drawings, electrical design, and documentation of all existing and new equipment changes necessary for transition.	\$28,250.00	Actual c was greate than original estimat

Monitor and	\$7,500.00	\$7,500.00	Monitor,	N/A	N/A
Advise School			Analyze, and		
Board on			brief School		
Repack			Board on		
			policies re bid		
			procurement.		
			Review,		
			approval &		
			signatory for TV		
			matters. Ensure		
			compliance		
			during		
			equipment		
			research.		
			Coordination of		
			repack.		
			Reconfigure		
			FRN to		
			maintain multi		
			department		
			access. 25		
			@\$300		
1876 related	\$3,900.00	\$3,900.00	Compile	N/A	N/A
financial			needed		
assistance			information,		
			identify		
			representatives,		
			representatives, prepare brief		
			prepare brief		
			prepare brief for CFO		
			prepare brief for CFO Interface with		
			prepare brief for CFO Interface with FCC on		
			prepare brief for CFO Interface with FCC on questions of		
			prepare brief for CFO Interface with FCC on questions of accounts &		
			prepare brief for CFO Interface with FCC on questions of accounts & procedures for		
			prepare brief for CFO Interface with FCC on questions of accounts & procedures for public entity		
			prepare brief for CFO Interface with FCC on questions of accounts & procedures for public entity with one large		
			prepare brief for CFO Interface with FCC on questions of accounts & procedures for public entity with one large main account.		

Additional Field Engineering Service, 42 Days	\$42,000.00	\$42,000.00	Engineering cost to retune demodulators / decoders at 231 schools in Broward County currently receiving WBEC off air and distributing to classrooms.	N/A	N/A
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$7,360.00	\$7,000.00	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 - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	N/A	N/A

Prepare request for Special Temporary Authorization	\$4,100.00	\$3,000.00	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
Project management of the transition	\$38,236.00	\$36,300.00	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	\$2,400.00	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$7,000.00	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
RF Exposure Measurements	\$21,050.00	\$20,000.00	N/A	N/A	N/A

Sub-total	\$263,536.00	\$253,450.00	N/A	\$40,650.00	N/A
Total for all systems	\$4,221,509.33	\$3,888,127.19	N/A	\$2,397,546.80	N/A

Actual Information Description	File Name	
School Board Supplemental Matters Affecting Repack	Information not provided.	
Site Survey	Component Description: Amount:	WBEC full site survey \$28,250.00
Monitor and Advise School Board on Repack	Information not provided.	
1876 related financial assistance	Information not provided.	
Additional Field Engineering Service, 42 Days	Information not provided.	
Comprehensive coverage verification via field study, 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 - Prepare and File FCC Form 2100 (main), Construction Permit Application	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.	
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	Component Description:	Address transition timing and coordination issues w/ other stations and American Tower \$2,400.00
Perform engineering study for new channel assignment and antenna development	Component Description:	Engineering study for new channel assignment and antenna development
	Amount:	\$7,000.00
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Component Description:	Prepare engineering section of FCC Form 2100 (main)
	Amount:	Construction Permit Applicatior \$3,000.00

Other Expenses

Cost Information

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 Cos Justificatio
Other Expenses	\$96,590.00	\$94,400.00		\$11,250.00	
Bid Specification and Preparation	\$6,000.00	\$6,000.00	State Law and School Board Policy require expenditures such as electrical and tower work to be handled through a competitive bid process.	\$6,000.00	N/A
MVPD Notification of Channel Change	\$2,400.00	\$2,400.00	legal costs for project. 8@ \$300	N/A	N/A
Develop and air announcement of upcoming channel change	\$2,500.00	\$2,500.00	Develop public service announcement on behalf of school district to notify public of upcoming channel change	N/A	N/A
Equipment Delivery and Handling Charges	\$25,000.00	\$25,000.00	Cost for delivery, temporary staging, and storage of equipment during installation.	N/A	N/A

Disposal Costs (for equipment and other waste, net of any salvage value)	\$22,500.00	\$22,500.00	Cost for removal and disposal of all necessary equipment and waste.	\$5,250.00	N/A
Local Zoning	\$25,000.00	\$25,000.00	Bidding and permitting required for electrical work at transmit site. Requires architectural drawings, and licensed certifications.	N/A	N/A
FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$0.00	Non- Commercial Station	N/A	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$0.00	Non- Commercial Station	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 minor change CP application	\$1,110.00	\$0.00	Non- Commercial Station	N/A	N/A
Sub-total	\$96,590.00	\$94,400.00	N/A	\$11,250.00	N/A
Total for all systems	\$4,221,509.33	\$3,888,127.19	N/A	\$2,397,546.80	N/A

Actual Information	
Description	File Name

Bid Specification and Preparation	Component Description:	Procurement assistance with tower and electrical work
	Amount:	related to repack. \$6,000.00
MVPD Notification of Channel Change	Information not provided.	
Develop and air announcement of upcoming channel change	Information not provided.	
Equipment Delivery and Handling Charges	Information not provided.	
Disposal Costs (for equipment and other waste, net of any salvage value)	Component Description: Amount:	Backup transmitter indoor RF hazardous waste disposal \$5,250.00
Local Zoning	Information not provided.	
FCC Filing Fees - Special Temporary Authorization request	Information not provided.	
FCC Filing Fees - Form 2100 license to cover application	Information not provided.	
DTV Medical Facility Notification	Information not provided.	
FCC Filing Fees - Form 2100 minor change CP application	Information not provided.	

Cost Information	Grand Total			
		Predetermined Cost Estimate	Estimated Cost	Actual Cost
	Total for all systems	\$4,221,509.33	\$3,888,127.19	\$2,397,546.80

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

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

8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.	
I declare, under penalty of perjury, that I am an authorized representative of the above- named applicant for the Authorization(s) specified above.	Charles Griffin Engineering Manager 01/02/2019

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

	The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission. 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.	
an aut name	are, under penalty of perjury, that I am thorized representative of the above- d applicant for the Authorization(s) ied above.	Charles Griffin Engineering Manager
		01/02/2019

Attachments