TDEM
THE TEXAS A&M UNIVERSITY SYSTEM

06/19/2024

Bruce Clements
Director of Emergency Management
Williamson County
710 South Main Street, Suite 301
Georgetown, TX, 78626

FIPS Number: 491-99491-00
UEI Number: C4BDCBLYNND6

RE: FEMA Public Assistance Grant 4705 – Severe Winter Storm Mara

Catalog of Federal Domestic Assistance (CFDA) Number 97.036
Federal Award Identification Number: 4705DRTXP00000001
FEMA Project Number: 723542
Project Title: Damages to facilities and equipment County-wide due to Winter Storm Mara
Period of Performance: 04/21/2023 to 10/21/2024

A FEMA Public Assistance subgrant has been awarded by Texas Division of Emergency Management (TDEM).

Project #: 156						
Version / Amendment	**Federal Award Date**	**Total Subgrant Amount**	**Federal Cost Share Percentage**	**Federal Funds Obligated**	**Local Cost Share Percentage**	**Local Cost Share Amount**
0	06/13/2024	$179,888.05	75.00%	$134,916.04	25.00%	$44,972.01

Please Note: This award is not for research or development as defined in 2 Code of Federal Regulations (C.F.R.) § 200.87.

No indirect costs are available with this award. Direct Administrative Costs are allowable as outlined in the project scope. Management costs are allowable under a separate award for disasters declared on or after August 1, 2017.

A copy of the approved scope of work can be viewed at the version tab in GMS for this project at https://grants.tdem.texas.gov and is also attached for your convenience. If your project contains 406 Mitigation Proposal, it will also be attached and available at the version tab.

Your project worksheet may or may not have environmental and historical considerations and

conditions that must be met. If your project has environmental and historical considerations, a copy of the Record of Environmental Consideration (REC) is attached and can be viewed at the version tab in GMS for this project as well.

The terms and conditions remain in effect as outlined in the original Grant Terms and Conditions, and any subsequent State amendments.

It is important that the Subrecipient read, understand, and comply with the scope of work and all terms and conditions. It is also vital that this information be disseminated to Subrecipient's staff and contractors that are involved in work related to administrative support or administration of the subgrant.

If changes are needed to the scope of the subaward, period of performance or costs associated to the subaward, the Subrecipient should immediately contact TDEM. No change will be considered made to the subaward until the Subrecipient is notified in writing by TDEM.

Should you wish to appeal any determination related to this project you must do so within 60 days of receipt of the notice of the action. If you elect to appeal, please submit your appeal with any documentation supporting your position directly to TDEM via the Grants Management System at https://grants.tdem.texas.gov within the allotted time. Here is the Project Appeal Job Aid for your guide Project Appeals Job Aid.

If you have any questions, please contact TDEM Recovery Coordinator, Matthew Weeks at (979) 204-3456 or email at matthew.weeks@tdem.texas.gov or you may contact the TDEM Support Affiliate, Alex Wiese, by phone at (314) 780-4041 or by email at alex.w.wiese@ey.com.

ATTACHMENTS: FEMA FORM 90-91, Record of Environmental Consideration, Hazard Mitigation Proposal

PA-06-TX-4705-PW-00156(0) P	
Applicant Name:	Application Title:
WILLIAMSON (COUNTY)	723542 - Damages to facilities and equipment County-wide due to Winter Storm Mara
Period of Performance Start:	Period of Performance End:
04-21-2023	10-21-2024

Bundle Reference # (Amendment #)	Date Awarded
PA-06-TX-4705-PW-00156(161)	06-13-2024

Subgrant Application - FEMA Form 90-91

Note: The Effective Cost Share for this application is 75%

FEDERAL EMERGENCY MANAGEMENT AGENCY
PROJECT WORKSHEET

DISASTER					PROJECT NO.	PA ID NO.	DATE	CATEGORY
FEMA	4705	-	DR	-TX	723542	491-99491-00	03-27-2024	E

APPLICANT: WILLIAMSON (COUNTY)	WORK COMPLETE AS OF: 03-27-2024 : 100 %

Site 1 of 9

DAMAGED FACILITY: Damage #1332987; Rabbit Hill Tower	COUNTY: Williamson

LOCATION: PA-06-TX-4705-PW-00156(0): 1050 Rabbit Hill Rd Georgetown, TX 78628 Current Version:	LATITUDE: 30.58675	LONGITUDE: -97.68217

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4705-PW-00156(0):
The Disaster #4705DR, which occurred between 1/30/2023 and 2/2/2023 , caused:
Damage #1332987; Rabbit Hill Tower
General Facility Information:
Facility Type: Vehicle or Equipment Only
Location Description: 1050 Rabbit Hill Rd Georgetown, TX 78628
GPS Latitude/Longitude: 30.58675, -97.68217
General Damage Information:
Date Damaged: 2/2/2023 to 2/14/2023
Cause of Damage: Thawing ice from winter storm fell off from radio tower onto components below.
Vehicle or Equipment Damage:
Equipment, 5.925-7.125 GHz Waveguide EW63 waveguard coaxial cable , 600 FT long, Thawing ice from winter storm fell off from radio tower onto components below., 100% work completed.
Equipment, 3 each of 5.925 -7.125 GHz, grey, CPR137G flange, round 6ft Antenna , Thawing ice from winter storm fell off from radio tower onto components below., 100% work completed.
Equipment, 1 each of Shelter awning , 2 FT long x 4 FT wide, Thawing ice from winter storm fell off from radio tower onto components below., 100% work completed.

Current Version:

SCOPE OF WORK:

PA-06-TX-4705-PW-00156(0):
1332987 Rabbit Hill Tower
Work Completed

The applicant utilized force account labor and contracts for the repairs to Rabbit Hill Tower to restore this facility.

Williams County

A. Provided labor for repairs to tower

1. Force account labor: 3 Laborer(s) 34.58 hours $1,951.46

Contract

A. Replaced 5.925-7.125 GHz Waveguide EW63 waveguard coaxial cable

B. Replaced 3 each of 5.925 -7.125 GHz, grey, CPR137G flange, round 6ft Antenna

C. Replaced 1 each of Shelter awning

1. Replacement parts and labor- Contract: $52,764.00

Work Completed Totals

1. Force Account Labor: 3 Laborer(s) 34.58 hours $1,951.46

2. Contracts: $52,764.00

Work Completed Total: $54,715.46

Project Notes:

1. In accordance with FEMA's 422 Simplified Procedures, the project scope and cost were developed based on Applicant provided Cost Summaries/Estimates and certified by the Applicant using the Small Permanent Work Project Certifications and Acknowledgements form located in the Essential Elements of Information.

2. The Damaged Date listed is outside the incident period, as this was when the ice formed melted, causing the damage to the towers.

Current Version:

Site 2 of 9

DAMAGED FACILITY:	COUNTY: Williamson	
Damage #1332988; Fire Lane Tower		
LOCATION:	LATITUDE: 30.52722	LONGITUDE: -97.86236
PA-06-TX-4705-PW-00156(0): 1302 Fire Ln Cedar Park, TX 78613		
Current Version:		

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4705-PW-00156(0):
Damage #1332988; Fire Lane Tower
General Facility Information:
Facility Type: Vehicle or Equipment Only
Location Description: 1302 Fire Ln Cedar Park, TX 78613
GPS Latitude/Longitude: 30.52722, -97.86236
General Damage Information:
Date Damaged: 2/2/2023 to 2/14/2023
Cause of Damage: Thawing ice from winter storm fell off from radio tower onto components below.
Vehicle or Equipment Damage:
Equipment, 1 each of 5.925 -7.125 GHz, grey, CPR137G flange, round 6ft Antenna , Thawing ice from winter storm fell off from radio tower onto components below., 100% work completed.
Equipment, 1 each of LED Security light, 6 IN long x 12 IN wide, Thawing ice from winter storm fell off from radio tower onto components below., 100% work completed.
Equipment, Waveguide EW63 waveguard coaxial cable , 560 FT long, Thawing ice from winter storm fell off from radio tower onto components below., 100% work completed.

Current Version:

SCOPE OF WORK:

PA-06-TX-4705-PW-00156(0):

1332988 Fire Lane Tower
Work Completed

The applicant utilized force account labor and contracts for the repairs to Fire Lane Tower to restore this facility.

Williams County

A. Provided labor for repairs to tower

1. Force account labor: 3 Laborer(s) 34.58 hours $1,951.47

Contract

A. Replaced 1 each of 5.925 -7.125 GHz, grey, CPR137G flange, round 6ft Antenna

B. Replaced 1 each of LED Security light

C. Replaced Waveguide EW63 waveguard coaxial cable, 560 FT long

1. Replacement parts and labor- Contract: $27,863.00

Work Completed Totals

1. Force Account Labor: 3 Laborer(s) 34.58 hours $1,951.47

2. Contracts: $27,863.00

Work Completed Total: $29,814.47

Current Version:

Site 3 of 9

DAMAGED FACILITY: Damage #1332989; Carlson Tower	COUNTY: Williamson	
LOCATION: PA-06-TX-4705-PW-00156(0): 151 Carlson Rd, Georgetown, TX Current Version:	LATITUDE: 30.62326	LONGITUDE: -97.64268

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4705-PW-00156(0):
Damage #1332989; Carlson Tower
General Facility Information:
Facility Type: Vehicle or Equipment Only
Location Description: 151 Carlson Rd, Georgetown, TX
GPS Latitude/Longitude: 30.62326, -97.64268
General Damage Information:
Date Damaged: 2/2/2023 to 2/14/2023
Cause of Damage: Thawing ice from winter storm fell off from radio tower onto components below.
Vehicle or Equipment Damage:
Equipment, 15 SF of fiberglass panel, 3 FT long x 5 FT wide, Thawing ice from winter storm fell off from radio tower onto components below., 100% work completed.

Current Version:

SCOPE OF WORK:

PA-06-TX-4705-PW-00156(0):
1332989 Carlson Tower
Work Completed

The applicant utilized force account labor and contracts for the repairs to Carlson Tower to restore this facility to its pre-disaster design, function and capacity (in-kind) within the existing footprint.

Williams County

A. Provided labor for repairs to tower

1. Force account labor: 3 Laborer(s) 34.58 hours $1,951.47

Contract

A. Replaced 15 SF of fiberglass panel

1. Replacement parts and labor- Contract: $5,059.00

Work Completed Totals

1. Force Account Labor: 3 Laborer(s) 34.58 hours $1,951.47

2. Contracts: $5,059.00

Work Completed Total: $7,010.47

Current Version:

Site 4 of 9

DAMAGED FACILITY: Damage #1332990; Cougar Country Tower	COUNTY: Williamson	
LOCATION: PA-06-TX-4705-PW-00156(0): 1900 Cougar Country Rd Cedar Park, TX 78613 Current Version:	LATITUDE: 30.52817	LONGITUDE: -97.86133

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4705-PW-00156(0):
Damage #1332990; Cougar Country Tower
General Facility Information:
Facility Type: Vehicle or Equipment Only
Location Description: 1900 Cougar Country Rd Cedar Park, TX 78613
GPS Latitude/Longitude: 30.52817, -97.86133
General Damage Information:
Date Damaged: 2/2/2023 to 2/14/2023
Cause of Damage: Thawing ice from winter storm fell off from radio tower onto components below.
Vehicle or Equipment Damage:
Equipment, 1 each of Fiberglass panel, 2 FT long x 3 FT wide, Thawing ice from winter storm fell off from radio tower onto components below., 100% work completed.
Equipment, 2 each of 5.925 -7.125 GHz, grey, CPR137G flange, round 6ft Antenna , Thawing ice from winter storm fell off from radio tower onto components below., 100% work completed.
Equipment, Waveguide EW63 waveguard coaxial cable , 500 FT long, Thawing ice from winter storm fell off from radio tower onto components below., 100% work completed.

Current Version:

SCOPE OF WORK:

PA-06-TX-4705-PW-00156(0):
1332990 Cougar Country Tower
Work Completed

The applicant utilized force account labor and contracts for the repairs to Cougar Country Tower to restore this facility.

Williams County

A. Provided labor for repairs to tower

1. Force account labor: 3 Laborer(s) 34.58 hours $1,951.47

Contract

A. Replaced 1 each of Fiberglass panel

B. Replaced 2 each of 5.925 -7.125 GHz, grey, CPR137G flange, round 6ft Antenna

C. Replaced Waveguide EW63 waveguard coaxial cable, 500 FT long

1. Replacement parts and labor- Contract: $37,053.00

Work Completed Totals

1. Force Account Labor: 3 Laborer(s) 34.58 hours $1,951.47

2. Contracts: $37,053.00

Work Completed Total: $39,004.47

Current Version:

Site 5 of 9

DAMAGED FACILITY:	COUNTY: Williamson	
Damage #1332991; Tower Rd Tower		
LOCATION:	LATITUDE:	LONGITUDE:
PA-06-TX-4705-PW-00156(0): 2141 Tower Road Liberty Hill, TX 78642	30.67604	-97.81325
Current Version:		

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4705-PW-00156(0):
Damage #1332991; Tower Rd Tower
General Facility Information:
Facility Type: Vehicle or Equipment Only
Location Description: 2141 Tower Road Liberty Hill, TX 78642
GPS Latitude/Longitude: 30.67604, -97.81325
General Damage Information:
Date Damaged: 2/2/2023 to 2/14/2023
Cause of Damage: Thawing ice from winter storm fell off from radio tower onto components below.
Vehicle or Equipment Damage:
Equipment, 1 each of 3/4in Flextight conduit Conduit, 6 FT long, Thawing ice from winter storm fell off from radio tower onto components below., 100% work completed.
Equipment, barb wire Fence, 20 FT long, Thawing ice from winter storm fell off from radio tower onto components below., 100% work completed.
Equipment, 2 each of 5.925 -7.125 GHz, grey, CPR137G flange, round 6ft Antenna , Thawing ice from winter storm fell off from radio tower onto components below., 100% work completed.
Equipment, Waveguide EW63 waveguard coaxial cable , 430 FT long, Thawing ice from winter storm fell off from radio tower onto components below., 100% work completed.

Current Version:

SCOPE OF WORK:

PA-06-TX-4705-PW-00156(0):
1332991 Tower Rd Tower
Work Completed

The applicant utilized force account labor and contracts for the repairs to Tower Road Tower to restore this facility.

Williams County

A. Provided labor for repairs to tower

1. Force account labor: 3 Laborer(s) 34.58 hours $1,951.47

Contract

A. Replaced 1 each of 3/4in Flextight conduit Conduit, 6 FT long

B. Replaced barb wire Fence, 20 FT long

C. Replaced 2 each of 5.925 -7.125 GHz, grey, CPR137G flange, round 6ft Antenna

D. Replaced Waveguide EW63 waveguard coaxial cable , 430 FT long

1. Replacement parts and labor- Contract: $45,577.00

Work Completed Totals

1. Force Account Labor: 3 Laborer(s) 34.58 hours $1,951.47

2. Contracts: $45,577.00

Work Completed Total: $47,528.47

Current Version:

Site 6 of 9

DAMAGED FACILITY: Damage #1332992; Liberty Hill Tower	COUNTY: Williamson	
LOCATION: PA-06-TX-4705-PW-00156(0): 5251 County Road 200 Liberty Hill, TX 78642 Current Version:	LATITUDE: 30.74718	LONGITUDE: -97.94334

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4705-PW-00156(0):
Damage #1332992; Liberty Hill Tower
General Facility Information:
Facility Type: Vehicle or Equipment Only
Location Description: 5251 County Road 200 Liberty Hill, TX 78642
GPS Latitude/Longitude: 30.74718, -97.94334
General Damage Information:
Date Damaged: 2/2/2023 to 2/14/2023
Cause of Damage: Thawing ice from winter storm fell off from radio tower onto components below.
Vehicle or Equipment Damage:
Equipment, 1 each of fiberglass panel, 2 FT long x 3 FT wide, Thawing ice from winter storm fell off from radio tower onto components below., 100% work completed.
Equipment, 1 each of 5.925 -7.125 GHz, grey, CPR137G flange, round 6ft Antenna , Thawing ice from winter storm fell off from radio tower onto components below., 100% work completed.
Equipment, Waveguide EW63 wave guard coaxial cable, 610 FT long, Thawing ice from winter storm fell off from radio tower onto components below., 100% work completed.

Current Version:

SCOPE OF WORK:

PA-06-TX-4705-PW-00156(0):
1332992 Liberty Hill Tower
Work Completed

The applicant utilized force account labor and contracts for the repairs to Liberty Hill Tower to restore this facility.

Williams County

A. Provided labor for repairs to tower

1. Force account labor: 3 Laborer(s) 34.58 hours $1,951.47

Contract

A. Replaced 1 each of fiberglass panel, 2 FT long x 3 FT wide

B. Replaced 1 each of 5.925 -7.125 GHz, grey, CPR137G flange, round 6ft Antenna

C. Replaced Waveguide EW63 wave guard coaxial cable, 610 FT long

1. Replacement parts and labor- Contract: $27,025.00

Work Completed Totals

1. Force Account Labor: 3 Laborer(s) 34.58 hours $1,951.47

2. Contracts: $27,025.00

Work Completed Total: $28,976.47

Current Version:

Site 7 of 9

DAMAGED FACILITY: Damage #1332993; Granger Tower	COUNTY: Williamson	
LOCATION: PA-06-TX-4705-PW-00156(0): 5690 County Rd 327 Granger, TX 76530 Current Version:	LATITUDE: 30.71944	LONGITUDE: -97.50741

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4705-PW-00156(0):
Damage #1332993; Granger Tower
General Facility Information:
Facility Type: Vehicle or Equipment Only
Location Description: 5690 County Rd 327 Granger, TX 76530
GPS Latitude/Longitude: 30.71944, -97.50741
General Damage Information:
Date Damaged: 2/2/2023 to 2/14/2023
Cause of Damage: Thawing ice from winter storm fell off from radio tower onto components below.
Vehicle or Equipment Damage:
Equipment, 2 each of 5.925 -7.125 GHz, grey, CPR137G flange, round 6ft Antenna, Thawing ice from winter storm fell off from radio tower onto components below, 100% work completed.
Equipment, Waveguide EW63 waveguard coaxial cable , 560 FT long, Thawing ice from winter storm fell off from radio tower onto components below, 100% work completed.

Current Version:

SCOPE OF WORK:

PA-06-TX-4705-PW-00156(0):
1332993 Granger Tower
Work Completed

The applicant utilized force account labor and contracts for the repairs to Granger Tower to restore this facility.

Williams County

A. Provided labor for repairs to tower

1. Force account labor: 3 Laborer(s) 34.58 hours $1,951.47

Contract

A. Replaced 2 each of 5.925 -7.125 GHz, grey, CPR137G flange, round 6ft Antenna

B. Replaced Waveguide EW63 waveguard coaxial cable , 560 FT long

1. Replacement parts and labor- Contract: $37,869.00

Work Completed Totals

1. Force Account Labor: 3 Laborer(s) 34.58 hours $1,951.47

2. Contracts: $37,869.00

Work Completed Total: $39,820.47

Current Version:

Site 8 of 9

DAMAGED FACILITY: Damage #1332994; Thrall Tower	COUNTY: Williamson	
LOCATION: PA-06-TX-4705-PW-00156(0): 7800 County Rd 424 Thrall, TX 76578 Current Version:	LATITUDE: 30.57599	LONGITUDE: -97.29278

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4705-PW-00156(0):
Damage #1332994; Thrall Tower
General Facility Information:
Facility Type: Vehicle or Equipment Only
Location Description: 7800 County Rd 424 Thrall, TX 76578
GPS Latitude/Longitude: 30.57599, -97.29278
General Damage Information:
Date Damaged: 2/2/2023 to 2/14/2023
Cause of Damage: Thawing ice from winter storm fell off from radio tower onto components below.
Vehicle or Equipment Damage:
Equipment, 1 each of Polypropylyn Shelter roof, 1 FT long x 1 FT wide, Thawing ice from winter storm fell off from radio tower onto components below, 100% work completed.
Equipment, Waveguide EW63 waveguard coaxial cable , 560 FT long, Thawing ice from winter storm fell off from radio tower onto components below, 100% work completed.
Equipment, 7/8in Heliax AVA Coaxial Cable, 500 FT long, Thawing ice from winter storm fell off from radio tower onto components below, 100% work completed.

Current Version:

SCOPE OF WORK:

PA-06-TX-4705-PW-00156(0):
1332994 Thrall Tower
Work Completed

The applicant utilized force account labor and contracts for the repairs to Thrall Tower to restore this facility.

Williams County

A. Provided labor for repairs to tower

1. Force account labor: 3 Laborer(s) 34.58 hours $1,951.47

Contract

A. Replaced 1 each of Polypropylyn Shelter roof

B. Replaced Waveguide EW63 waveguard coaxial cable , 560 FT long

C. Equipment, 7/8in Heliax AVA Coaxial Cable, 500 FT long

1. Replacement parts and labor- Contract: $18,997.00

Work Completed Totals

1. Force Account Labor: 3 Laborer(s) 34.58 hours $1,951.47

2. Contracts: $18,997.00

Work Completed Total: $20,948.47

Current Version:

Site 9 of 9

DAMAGED FACILITY:	COUNTY: Williamson	
Damage #1332995; Taylor Tower		
LOCATION: PA-06-TX-4705-PW-00156(0): 104 Coupland Rd Taylor, TX 76574 Current Version:	LATITUDE: 30.55224	LONGITUDE: -97.40636

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4705-PW-00156(0):
Damage #1332995; Taylor Tower
General Facility Information:
Facility Type: Vehicle or Equipment Only
Location Description: 104 Coupland Rd Taylor, TX 76574
GPS Latitude/Longitude: 30.55224, -97.40636
General Damage Information:
Date Damaged: 2/2/2023 to 2/14/2023
Cause of Damage: Thawing ice from winter storm fell off from radio tower onto components below.
Vehicle or Equipment Damage:
Equipment, Waveguide EW63 waveguard coaxial cable, 310 FT long, Thawing ice from winter storm fell off from radio tower onto components below, 100% work completed.

Current Version:

SCOPE OF WORK:

PA-06-TX-4705-PW-00156(0):
1332995 Taylor Tower
Work Completed

The applicant utilized force account labor and contracts for the repairs to Taylor Tower to restore this facility.

Williams County

A. Provided labor for repairs to tower

1. Force account labor: 3 Laborer(s) 34.58 hours $1,951.47

Contract

A. Replaced Waveguide EW63 waveguard coaxial cable, 310 FT long

1. Replacement parts and labor- Contract: $15,051.00

Work Completed Totals

1. Force Account Labor: 3 Laborer(s) 34.58 hours $1,951.47

2. Contracts: $15,051.00

Work Completed Total: $17,002.47

Current Version:

Does the Scope of Work change the pre-disaster conditions at the site? ☐ Yes ☑ No	Special Considerations included? ☑ Yes ☐ No
Hazard Mitigation proposal included? ☑ Yes ☐ No	Is there insurance coverage on this facility? ☑ Yes ☐ No

PROJECT COST

ITEM	CODE	NARRATIVE	QUANTITY/UNIT	UNIT PRICE	COST
		*** Version 0 ***			
		Work Completed			
1	9001	Contract	1/LS	$ 52,764.00	$ 52,764.00
2	9007	Labor	1/LS	$ 1,951.46	$ 1,951.46
3	9001	Contract	1/LS	$ 27,863.00	$ 27,863.00
4	9007	Labor	1/LS	$ 1,951.47	$ 1,951.47
5	9001	Contract	1/LS	$ 5,059.00	$ 5,059.00
6	9007	Labor	1/LS	$ 1,951.47	$ 1,951.47
7	9001	Contract	1/LS	$ 37,053.00	$ 37,053.00
8	9007	Labor	1/LS	$ 1,951.47	$ 1,951.47
9	9001	Contract	1/LS	$ 45,577.00	$ 45,577.00
10	9007	Labor	1/LS	$ 1,951.47	$ 1,951.47
11	9001	Contract	1/LS	$ 27,025.00	$ 27,025.00
12	9007	Labor	1/LS	$ 1,951.47	$ 1,951.47
13	9007	Labor	1/LS	$ 1,951.47	$ 1,951.47
14	9001	Contract	1/LS	$ 37,869.00	$ 37,869.00
15	9007	Labor	1/LS	$ 1,951.47	$ 1,951.47
16	9001	Contract	1/LS	$ 18,997.00	$ 18,997.00
17	9007	Labor	1/LS	$ 1,951.47	$ 1,951.47
18	9001	Contract	1/LS	$ 15,051.00	$ 15,051.00
19	0000	Insurance Adjustments - 5900/5901	0/LS	$ 0.00	$ 0.00
		*** Version 0 ***			
20	5900	Deduct Actual Insurance Proceeds	1/LS	$ -171,701.30	$ -171,701.30
21	5901	Deduct Anticipated Insurance Proceeds	1/LS	$ -70,556.70	$ -70,556.70
22	0909	Hazard Mitigation Proposal	1/LS	$ 137,324.83	$ 137,324.83
				TOTAL COST	$ 179,888.05
				Version Project Cost	$ 179,888.05

PREPARED BY Thomas A Downs	TITLE PDMG	SIGNATURE
APPLICANT REP. Pamela Navarrette	TITLE Assistant Financial Director	SIGNATURE

View Application

FEDERAL EMERGENCY MANAGEMENT AGENCY

RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

Project PA-06-TX-4705-PW-00156

Title: 723542 - Damages to facilities and equipment County-wide due to Winter Storm Mara

NEPA DETERMINATION

Non Compliant Flag: No
EA Draft Date:
EA Final Date:
EA Public Notice Date:
EA Fonsi
Level: CATEX
EIS Notice of Intent
EIS ROD Date:
Comment

Williamson County, CAT E, 100% complete.

The applicant utilized force account labor and contracts for the repairs on several communication towers. The repairs consisted of the replacement of:
A. Replaced 925-7.125 GHz Waveguide EW63 wave guard coaxial cable.
B. Replaced 5.925 -7.125 GHz, grey, CPR137G flange, round 6ft Antenna.
C. Replaced Shelter awning.
D. Replaced LED Security light.
E. Replaced fiberglass panel.
F. Replaced Polypropylene Shelter roof.

Also replaced barb wire Fence, 20 FT long (GPS Latitude/Longitude: 30.67604, -97.81325). For details, specific amounts and locations see SOW.

A Hazard Mitigation Proposal was added to the project. The mitigation proposal consisted of the installation of Ice Shields to deflect falling ice on nine (9) towers within Williamson County. For locations see the DDD and for details repairs refer to the Mitigation Proposal at GM.

This project has been determined to be Categorically Excluded from the need to prepare either an Environmental Impact Statement or Environmental Assessment in accordance with FEMA Instruction 108-1-1 and DHS Instruction 023-01-001-01; CATEX (#N7, E1). Particular attention should be given to the project conditions before and during project implementation. Failure to comply with these conditions may jeopardize federal assistance including funding.

- lomene - 03/28/2024 21:14:09 GMT

CATEX CATEGORIES

Catex Category Code	Description	Selected
*n7	(*n7) Federal Assistance for Structure and Facility Upgrades. Federal assistance for the reconstruction, elevation, retrofitting, upgrading to current codes and standards, and improvements of pre-existing facilities in existing developed areas with substantially completed infrastructure, when the immediate project area has already been disturbed, and when those actions do not alter basic functions, do not exceed capacity of other system components, or modify intended land use. This category does not include actions within or affecting streams or stream banks or actions seaward of the limit of moderate wave action (or V zone when the limit of moderate wave action has not been identified).	Yes
e1	(e1) Construction, installation, operation, maintenance, and removal of utility and communication systems (such as mobile antennas, data processing cable, and similar electronic equipment) that use existing rights-of-way, easements, utility distribution systems, and/or facilities. This is limited to activities with towers where the resulting total height does not exceed 200 feet and where the FCC would not require an EA or EIS for the acquisition, installation, operation or maintenance.	Yes

EXTRAORDINARY

RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

Project PA-06-TX-4705-PW-00156

Title: 723542 - Damages to facilities and equipment County-wide due to Winter Storm Mara

Extraordinary Circumstance Code	Description	Selected ?
	No Extraordinary Circumstances were selected	

ENVIRONMENTAL LAW / EXECUTIVE ORDER

Environmental Law/ Executive Order	Status	Description	Comment
Clean Air Act (CAA)	Completed	Project will not result in permanent air emissions - Review concluded	
Coastal Barrier Resources Act (CBRA)	Completed	Project is not on or connected to CBRA Unit or otherwise protected area - Review concluded	
Clean Water Act (CWA)	Completed	Project would not affect any water of the U.S. - Review concluded	
Coastal Zone Management Act (CZMA)	Completed	Project is not located in a coastal zone area and does not affect a coastal zone area - Review concluded	
Executive Order 11988 - Floodplains	Completed	No effect on floodplain/flood levels and project outside floodplain - Review concluded	Barb wire Fence, (GPS Latitude/Longitude: 30.67604, -97.81325). Per Flood Insurance Rate Map (FIRM) panel 48491C0275E, dated on 9/26/2008, the project is located outside the 100-year floodplain, special flood hazard area and the activity does not adversely affect floodplain values. - lomene - 03/28/2024 20:54:33 GMT
Executive Order 11990 - Wetlands	Completed	No effects on wetlands and project outside wetlands - Review concluded	Barb wire Fence, (GPS Latitude/Longitude: 30.67604, -97.81325). A review of the National Wetland Inventory (NWI) online mapper, accessed on 03/28/2024, for the site indicates that the area is not located within, nor does it affect a designated wetland. - lomene - 03/28/2024 20:55:49 GMT
Executive Order 12898 - Environmental Justice for Low Income and Minority Populations	Completed	Low income or minority population in or near project area	No minority or low-income populations were identified through submitted project documentation, public involvement, state EJ community lists or maps, or EJSCREEN reports for the project area. Therefore, no additional review for potential EJ concerns is required. - lomene - 03/28/2024 20:11:46 GMT
	Completed	No disproportionately high and adverse impact on low income or minority population - Review concluded	
Endangered Species Act (ESA)	Completed	Listed species and/or designated critical habitat present in areas affected directly or indirectly by the federal action	The scope of work for this project does not require U.S. Fish and Wildlife Service (USFWS) consultation. FEMA notified USFWS of disaster activities on May 2, 2023. - lomene - 03/28/2024 20:03:48 GMT

RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

Project PA-06-TX-4705-PW-00156

Title: 723542 - Damages to facilities and equipment County-wide due to Winter Storm Mara

Environmental Law/ Executive Order	Status	Description	Comment
	Completed	No effect to species or designated critical habitat (See comments for justification) - Review concluded	
Farmland Protection Policy Act (FPPA)	Completed	Project does not affect designated prime or unique farmland - Review concluded	
Fish and Wildlife Coordination Act (FWCA)	Not Applicable	Project does not affect, control, or modify a waterway/body of water - Review concluded	
Migratory Bird Treaty Act (MBTA)	Completed	Project located within a flyway zone	
	Completed	Project does not have potential to take migratory birds - Review concluded	
Magnuson-Stevens Fishery Conservation and Management Act (MSA)	Completed	Project not located in or near Essential Fish Habitat - Review concluded	
National Historic Preservation Act (NHPA)	Completed	Applicable executed Programmatic Agreement. Activity meets Programmatic Allowance (enter date and # in comments) - Review concluded	The scope of work has been reviewed and meets the criteria in Appendix B - Programmatic Allowances, Tier II; D.1.a. and D.3.c. of FEMA's Programmatic Agreement (PA) dated March 16, 2022. In accordance with this PA, FEMA is not required to determine the National Register eligibility of properties where work performed meets the Appendix B criteria. - eludeman - 03/28/2024 19:48:15 GMT
Wild and Scenic Rivers Act (WSR)	Completed	Project is not along and does not affect Wild and Scenic River - Review concluded	

CONDITIONS

Standard Conditions:

Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.

This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize federal funding.

FEDERAL EMERGENCY MANAGEMENT AGENCY

RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

Project PA-06-TX-4705-PW-00156

Title: 723542 - Damages to facilities and equipment County-wide due to Winter Storm Mara

If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.

FEMA

Public Assistance
Hazard Mitigation Proposal

For template instructions, turn paragraph marks on. Press "¶" or "Ctrl/Shift/+/8"

Applicant Name	Williamson County	GM Project #	723542	HMP Date	March 5, 2024
Site Name	Cougar Country Tower				
DR-	DR4705 – Texas	DI#	1332990		
HMP Writer and Title:	Kirk Lensgraf 406 TFL				

This HMP is based on the following Grants Manager project report, see attachment.

PRJ_Report_723542_20240305pdf

Select Work Completed Status: Select One

I. Related Damaged Items to be Protected

During the declared incident period of January 30, 2023, through February 2, 2023, the applicant was impacted by thawing ice from winter storm resulting in the following damaged items that will be mitigated. As a direct result of this event, falling ice damaged antenna components..

Total repair cost of damaged elements being protected by the HMP at this site*= $ 39,004.47

*Before Cost Estimating Format (CEF) factors if a large project.

Comments: Enter Text

II. Hazard Mitigation Proposal (HMP) Scope of Work

Mitigation consists of…installing ice shields.

The mitigation measures will reduce the risk of future damage by: deflecting ice away from components.

III. Hazard Mitigation Proposal (HMP) Cost: Worksheet

A. Cost of items if the HMP is approved=	$19,194.71
B. Cost of items deducted from the repair scope of work (SOW)=	0
C. Net Hazard Mitigation Cost (before CEF factors) =	$19,194.71
D. Is there a CEF?	☐Yes ☒No
E. Net Hazard Mitigation Cost (after CEF factors)=	Insert Ratio.
F. What is the CEF ratio (CEF Total Cost/Base Cost)?	Insert Text.

Comments: Enter Text

FEMA

Hazard Mitigation Proposal Cost: Summary

Net Hazard Mitigation Cost =	**$19,194.71**
See attachment(s).	Cougar Country Tower RTT Ice Shield Install.pdf / Cougar Country Tower Tessco Ice Shield Purchase.pdf

Comments: Enter Text

IV. Cost Effectiveness Calculation

(Net HMP Cost/Total Repair Cost of the damaged portions of the facility for which the mitigation measure applies) x 100

$ 19,194.71	/	$ 39,004.71	x 100 =	49.21 %	≤ 100%

The Benefit-Cost Analysis (BCA) ratio is Insert Ratio or N/A ≥ 1.0

V. HMP Cost-Effectiveness

The mitigation measures meet the cost effectiveness criteria based on:

a) Mitigation cost is within 15% of the total eligible repair cost of the facility or facilities for which the mitigation measure applies. In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 June 2020, Chapter 8. Section IV. A, this mitigation measure does not exceed 15 percent of the eligible repair cost and is considered to be cost-effective.

b) Mitigation measure is listed in Appendix J and is within 100% of the total eligible repair cost of the facility or facilities for which the mitigation applies.
In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 June 2020, Chapter 8. Section IV and Appendix J. Section Insert appropriate text from Appendix J, this mitigation measure does not exceed 100 percent of the eligible repair cost and is considered to be cost-effective.

c) Mitigation measure is cost-effective through a benefit-cost analysis (BCA)
In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 Chapter 8. Section IV, FEMA considers mitigation measures to be cost-effective if the Recipient or Applicant demonstrates through an acceptable benefit-cost analysis (BCA) methodology that the measure is cost-effective.
See attachment labeled DR-####_Applicant Name_WO XXXXX_DI XXXXXX_BCA.pdf

VI. Compliances and Assurances

For 'work to be completed,' this HMP is for estimating purposes only. If the site's final placement and configuration are different than the preliminary estimate, the Applicant should submit a change in scope request. This HMP is subject to further review prior to award.
The Applicant is responsible for final design, placement, configuration, procurement, permits and compliance with all regulatory codes and standards.
Eligibility and funding for the mitigation at this site on this project will be subject to the compliance of all environmental laws, regulations, and executive orders applicable to the site(s).

HMP Notes

1. The mitigation proposal estimates were generated using applicant supplied documents.

FEMA

Public Assistance
Hazard Mitigation Proposal

For template instructions, turn paragraph marks on. Press "¶" or "Ctrl/Shift/+/8"

Applicant Name	Williamson County	GM Project #	723542	HMP Date	March 20, 2024

Site Name: Fire Lane Tower

DR- DR4705 – Texas DI# 1332988

HMP Writer and Title: Kirk Lensgraf 406 TFL

This HMP is based on the following Grants Manager project report, see attachment.

PRJ_Report_723542_20240305pdf

Select Work Completed Status: Select One

I. Related Damaged Items to be Protected

During the declared incident period of January 30, 2023, through February 2, 2023, the applicant was impacted by thawing ice from winter storm resulting in the following damaged items that will be mitigated. As a direct result of this event, falling ice damaged antenna components..

Total repair cost of damaged elements being protected by the HMP at this site*= $ 29,814.47

*Before Cost Estimating Format (CEF) factors if a large project.

Comments: Enter Text

II. Hazard Mitigation Proposal (HMP) Scope of Work

Mitigation consists of…in stalling ice shields.

The mitigation measures will reduce the risk of future damage by: deflecting ice away from components.

III. Hazard Mitigation Proposal (HMP) Cost: Worksheet

A. Cost of items if the HMP is approved=	14,828.14
B. Cost of items deducted from the repair scope of work (SOW)=	0
C. Net Hazard Mitigation Cost (before CEF factors) =	14,828.14
D. Is there a CEF?	☐Yes ☒No
E. Net Hazard Mitigation Cost (after CEF factors)=	Insert Ratio.
F. What is the CEF ratio (CEF Total Cost/Base Cost)?	Insert Text.

Comments: Enter Text

FEMA

Hazard Mitigation Proposal Cost: Summary

Net Hazard Mitigation Cost =	**$14,828.14**
See attachment(s).	Fire Lane Tower RTT Ice Shield install.pdf / Fire Lane Tower Tessco Ice Shield Purchase.pdf

Comments: Applicant provided documents

IV. Cost Effectiveness Calculation

(Net HMP Cost/Total Repair Cost of the damaged portions of the facility for which the mitigation measure applies) x 100

$ 14,828.14	/	$ 29,814.47	x 100 =	49.73 %	≤ 100%

The Benefit-Cost Analysis (BCA) ratio is Insert Ratio or N/A ≥ 1.0

V. HMP Cost-Effectiveness

The mitigation measures meet the cost effectiveness criteria based on:

a) Mitigation cost is within 15% of the total eligible repair cost of the facility or facilities for which the mitigation measure applies. In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 June 2020, Chapter 8. Section IV. A, this mitigation measure does not exceed 15 percent of the eligible repair cost and is considered to be cost-effective.

b) Mitigation measure is listed in Appendix J and is within 100% of the total eligible repair cost of the facility or facilities for which the mitigation applies.
In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 June 2020, Chapter 8. Section IV and Appendix J. Section Insert appropriate text from Appendix J, this mitigation measure does not exceed 100 percent of the eligible repair cost and is considered to be cost-effective.

c) Mitigation measure is cost-effective through a benefit-cost analysis (BCA)
In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 Chapter 8. Section IV, FEMA considers mitigation measures to be cost-effective if the Recipient or Applicant demonstrates through an acceptable benefit-cost analysis (BCA) methodology that the measure is cost-effective.
See attachment labeled DR-####_Applicant Name_WO XXXXX_DI XXXXXX_BCA.pdf

VI. Compliances and Assurances

For 'work to be completed,' this HMP is for estimating purposes only. If the site's final placement and configuration are different than the preliminary estimate, the Applicant should submit a change in scope request. This HMP is subject to further review prior to award.
The Applicant is responsible for final design, placement, configuration, procurement, permits and compliance with all regulatory codes and standards.
Eligibility and funding for the mitigation at this site on this project will be subject to the compliance of all environmental laws, regulations, and executive orders applicable to the site(s).

HMP Notes

1. The mitigation proposal estimates were generated using applicant provided estimates.

FEMA

Public Assistance
Hazard Mitigation Proposal

For template instructions, turn paragraph marks on. Press "¶" or "Ctrl/Shift/+/8"

Applicant Name	Williamson County	GM Project #	723542	HMP Date	March 20, 2024

Site Name: Granger Tower

DR- DR4705 – Enter Text DI# 1332993

HMP Writer and Title: Kirk Lensgraf 406 TFL

This HMP is based on the following Grants Manager project report, see attachment.

PRJ_Report_723542_20240305pdf

Select Work Completed Status: Work to be Completed

I. Related Damaged Items to be Protected

During the declared incident period of January 30, 2023, through February 2, 2023, the applicant was impacted by thawing ice from winter storm resulting in the following damaged items that will be mitigated. As a direct result of this event, falling ice damaged antenna components..

Total repair cost of damaged elements being protected by the HMP at this site*= $ 39,820.47

*Before Cost Estimating Format (CEF) factors if a large project.

Comments: Enter Text

II. Hazard Mitigation Proposal (HMP) Scope of Work

Mitigation consists of…installing ice shields.

The mitigation measures will reduce the risk of future damage by: deflecting ice away from components.

III. Hazard Mitigation Proposal (HMP) Cost: Worksheet

A. Cost of items if the HMP is approved=	$14,828.14
B. Cost of items deducted from the repair scope of work (SOW)=	0
C. Net Hazard Mitigation Cost (before CEF factors) =	14,828.14
D. Is there a CEF?	☐Yes ☒No
E. Net Hazard Mitigation Cost (after CEF factors)=	N/A
F. What is the CEF ratio (CEF Total Cost/Base Cost)?	Insert Ratio

Comments: Enter Text

FEMA

Hazard Mitigation Proposal Cost: Summary

Net Hazard Mitigation Cost =	**$14,828.14**
See attachment(s).	Granger Tower RTT Ice Shield Install.pdf / Granger Tower Tessco Ice Shield Purchase.pdf

Comments: Enter Text

IV. Cost Effectiveness Calculation

(Net HMP Cost/Total Repair Cost of the damaged portions of the facility for which the mitigation measure applies) x 100

$ 14,828.14	/	$ 39,820.47	x 100 =	37.23 %	≤ 100%

The Benefit-Cost Analysis (BCA) ratio is N/A ≥ 1.0

V. HMP Cost-Effectiveness

The mitigation measures meet the cost effectiveness criteria based on:

a) Mitigation cost is within 15% of the total eligible repair cost of the facility or facilities for which the mitigation measure applies. In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 June 2020, Chapter 8. Section IV. A, this mitigation measure does not exceed 15 percent of the eligible repair cost and is considered to be cost-effective.

b) Mitigation measure is listed in Appendix J and is within 100% of the total eligible repair cost of the facility or facilities for which the mitigation applies.
In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 June 2020, Chapter 8. Section IV and Appendix J. Section Insert appropriate text from Appendix J, this mitigation measure does not exceed 100 percent of the eligible repair cost and is considered to be cost-effective.

c) Mitigation measure is cost-effective through a benefit-cost analysis (BCA)
In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 Chapter 8. Section IV, FEMA considers mitigation measures to be cost-effective if the Recipient or Applicant demonstrates through an acceptable benefit-cost analysis (BCA) methodology that the measure is cost-effective.
See attachment labeled DR-####_Applicant Name_WO XXXXX_DI XXXXXX_BCA.pdf

VI. Compliances and Assurances

For 'work to be completed,' this HMP is for estimating purposes only. If the site's final placement and configuration are different than the preliminary estimate, the Applicant should submit a change in scope request. This HMP is subject to further review prior to award.
The Applicant is responsible for final design, placement, configuration, procurement, permits and compliance with all regulatory codes and standards.
Eligibility and funding for the mitigation at this site on this project will be subject to the compliance of all environmental laws, regulations, and executive orders applicable to the site(s).

HMP Notes

1. The mitigation proposal estimates were generated using applicant supplied estimates.

FEMA

Public Assistance
Hazard Mitigation Proposal

For template instructions, turn paragraph marks on. Press "¶" or "Ctrl/Shift/+/8"

Applicant Name	Williamson County	GM Project #	723542	HMP Date	March 20, 2024

Site Name: Tower Road Tower

DR- DR4705 – Enter Text DI# 1332991

HMP Writer and Title: Kirk Lensgraf 406 TFL

This HMP is based on the following Grants Manager project report, see attachment.

PRJ_Report_723542_20240305pdf

Select Work Completed Status: Select One

I. Related Damaged Items to be Protected

During the declared incident period of January 30, 2023, through February 2, 2023, the applicant was impacted by thawing ice from winter storm resulting in the following damaged items that will be mitigated. As a direct result of this event, falling ice damaged antenna components..

Total repair cost of damaged elements being protected by the HMP at this site*= $ 47,528.47

*Before Cost Estimating Format (CEF) factors if a large project.

Comments: Enter Text

II. Hazard Mitigation Proposal (HMP) Scope of Work

Mitigation consists of…installing ice shields.

The mitigation measures will reduce the risk of future damage by: deflecting ice away from components.

III. Hazard Mitigation Proposal (HMP) Cost: Worksheet

A. Cost of items if the HMP is approved=	$14,828.14
B. Cost of items deducted from the repair scope of work (SOW)=	0
C. Net Hazard Mitigation Cost (before CEF factors) =	14,828.14
D. Is there a CEF?	☐Yes ☒No
E. Net Hazard Mitigation Cost (after CEF factors)=	Insert Ratio.
F. What is the CEF ratio (CEF Total Cost/Base Cost)?	Insert Ratio

Comments: Enter Text

FEMA

Hazard Mitigation Proposal Cost: Summary

Net Hazard Mitigation Cost =	**$ 14,828.14**
See attachment(s).	Tower Road Tower RTT Ice Shield install.pdf / Tower Road Tower Tessco Ice Shield Purchase.pdf

Comments: Enter Text

IV. Cost Effectiveness Calculation

(Net HMP Cost/Total Repair Cost of the damaged portions of the facility for which the mitigation measure applies) x 100

$ 14,828.14	/	$ 47,528.47	x 100 =	31.19 %	≤ 100%

The Benefit-Cost Analysis (BCA) ratio is Insert Ratio or N/A ≥ 1.0

V. HMP Cost-Effectiveness

The mitigation measures meet the cost effectiveness criteria based on:

a) Mitigation cost is within 15% of the total eligible repair cost of the facility or facilities for which the mitigation measure applies. In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 June 2020, Chapter 8. Section IV. A, this mitigation measure does not exceed 15 percent of the eligible repair cost and is considered to be cost-effective.

b) Mitigation measure is listed in Appendix J and is within 100% of the total eligible repair cost of the facility or facilities for which the mitigation applies.
In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 June 2020, Chapter 8. Section IV and Appendix J. Section Insert appropriate text from Appendix J, this mitigation measure does not exceed 100 percent of the eligible repair cost and is considered to be cost-effective.

c) Mitigation measure is cost-effective through a benefit-cost analysis (BCA)
In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 Chapter 8. Section IV, FEMA considers mitigation measures to be cost-effective if the Recipient or Applicant demonstrates through an acceptable benefit-cost analysis (BCA) methodology that the measure is cost-effective.
See attachment labeled DR-####_Applicant Name_WO XXXXX_DI XXXXXX_BCA.pdf

VI. Compliances and Assurances

For 'work to be completed,' this HMP is for estimating purposes only. If the site's final placement and configuration are different than the preliminary estimate, the Applicant should submit a change in scope request. This HMP is subject to further review prior to award.
The Applicant is responsible for final design, placement, configuration, procurement, permits and compliance with all regulatory codes and standards.
Eligibility and funding for the mitigation at this site on this project will be subject to the compliance of all environmental laws, regulations, and executive orders applicable to the site(s).

HMP Notes

1. The mitigation proposal estimates were generated using applicant provided estimates.

FEMA

Public Assistance
Hazard Mitigation Proposal

For template instructions, turn paragraph marks on. Press "¶" or "Ctrl/Shift/+/8"

Applicant Name	Williamson County	GM Project #	723542	HMP Date	March 20, 2024
Site Name	Liberty Hill Tower				
DR-	DR4705 – Texas	DI#	1332992		
HMP Writer and Title:	Kirk Lensgraf 406 TFL				

This HMP is based on the following Grants Manager project report, see attachment.

PRJ_Report_723542_20240305pdf

Select Work Completed Status: Work to be Completed

I. Related Damaged Items to be Protected

During the declared incident period of January 30, 2023, through February 2, 2023, the applicant was impacted by thawing ice from winter storm resulting in the following damaged items that will be mitigated. As a direct result of this event, falling ice damaged antenna components..

Total repair cost of damaged elements being protected by the HMP at this site*= $ 28,976.47

*Before Cost Estimating Format (CEF) factors if a large project.

Comments: N/A

II. Hazard Mitigation Proposal (HMP) Scope of Work

Mitigation consists of…installing ice shields.

The mitigation measures will reduce the risk of future damage by: deflecting ice away from components.

III. Hazard Mitigation Proposal (HMP) Cost: Worksheet

A. Cost of items if the HMP is approved=	$14,828.14
B. Cost of items deducted from the repair scope of work (SOW)=	0
C. Net Hazard Mitigation Cost (before CEF factors) =	$14,828.14
D. Is there a CEF?	☐Yes ☒No
E. Net Hazard Mitigation Cost (after CEF factors)=	N/A
F. What is the CEF ratio (CEF Total Cost/Base Cost)?	Insert Ratio

Comments: Enter Text

FEMA

Hazard Mitigation Proposal Cost: Summary

Net Hazard Mitigation Cost =	**$14,828.14**
See attachment(s).	Liberty Hill Tower RTT Ice Shield Install.pdf / Liberty Hill Tower Tessco Ice Shield Purchase.pdf

Comments: Enter Text

IV. Cost Effectiveness Calculation

(Net HMP Cost/Total Repair Cost of the damaged portions of the facility for which the mitigation measure applies) x 100

$ 14,828.14	/	$ 28,976.47	x 100 =	51.17 %	≤ 100%

The Benefit-Cost Analysis (BCA) ratio is N/A ≥ 1.0

V. HMP Cost-Effectiveness

The mitigation measures meet the cost effectiveness criteria based on:

a) Mitigation cost is within 15% of the total eligible repair cost of the facility or facilities for which the mitigation measure applies. In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 June 2020, Chapter 8. Section IV. A, this mitigation measure does not exceed 15 percent of the eligible repair cost and is considered to be cost-effective.

b) Mitigation measure is listed in Appendix J and is within 100% of the total eligible repair cost of the facility or facilities for which the mitigation applies.
In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 June 2020, Chapter 8. Section IV and Appendix J. Section Insert appropriate text from Appendix J, this mitigation measure does not exceed 100 percent of the eligible repair cost and is considered to be cost-effective.

c) Mitigation measure is cost-effective through a benefit-cost analysis (BCA)
In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 Chapter 8. Section IV, FEMA considers mitigation measures to be cost-effective if the Recipient or Applicant demonstrates through an acceptable benefit-cost analysis (BCA) methodology that the measure is cost-effective.
See attachment labeled DR-####_Applicant Name_WO XXXXX_DI XXXXXX_BCA.pdf

VI. Compliances and Assurances

For 'work to be completed,' this HMP is for estimating purposes only. If the site's final placement and configuration are different than the preliminary estimate, the Applicant should submit a change in scope request. This HMP is subject to further review prior to award.
The Applicant is responsible for final design, placement, configuration, procurement, permits and compliance with all regulatory codes and standards.
Eligibility and funding for the mitigation at this site on this project will be subject to the compliance of all environmental laws, regulations, and executive orders applicable to the site(s).

HMP Notes

1. The mitigation proposal estimates were generated using applicant supplied estimates.

FEMA

Public Assistance
Hazard Mitigation Proposal

For template instructions, turn paragraph marks on. Press "¶" or "Ctrl/Shift/+/8"

Applicant Name	Williamson County	GM Project #	723542	HMP Date	March 5, 2024

Site Name: Rabbit Hill Tower

DR- DR4705 – Enter Text DI# 1332987

HMP Writer and Title: Kirk Lensgraf 406 TFL

This HMP is based on the following Grants Manager project report, see attachment.

PRJ_Report_723542_20240305pdf

Select Work Completed Status: Select One

I. Related Damaged Items to be Protected

During the declared incident period of January 30, 2023, through February 2, 2023, the applicant was impacted by thawing ice from winter storm resulting in the following damaged items that will be mitigated. As a direct result of this event, falling ice damaged antenna components and shelter awning below...

Total repair cost of damaged elements being protected by the HMP at this site*= $ 54,715.46

*Before Cost Estimating Format (CEF) factors if a large project.

Comments: Applicant is proposing Ice Sheilds to deflect falling ice.

II. Hazard Mitigation Proposal (HMP) Scope of Work

Mitigation consists of…installing ice shields above antennas and related components..

The mitigation measures will reduce the risk of future damage by: deflecting ice away from components.

III. Hazard Mitigation Proposal (HMP) Cost: Worksheet

A. Cost of items if the HMP is approved=	29,161.28
B. Cost of items deducted from the repair scope of work (SOW)=	Insert Cost or '0' for no deduction
C. Net Hazard Mitigation Cost (before CEF factors) =	Insert Ratio.
D. Is there a CEF?	☐Yes ☒No
E. Net Hazard Mitigation Cost (after CEF factors)=	Insert Ratio.
F. What is the CEF ratio (CEF Total Cost/Base Cost)?	Insert Text.

Comments: Enter Text

FEMA

Hazard Mitigation Proposal Cost: Summary

Net Hazard Mitigation Cost =	**$ 29,161.28**
See attachment(s).	Rabbit Hill Tower Tessco ice shield purchase.pdf / Rabbit Hill Tower RTT ice shield install.pdf

Comments: Enter Text

IV. Cost Effectiveness Calculation

(Net HMP Cost/Total Repair Cost of the damaged portions of the facility for which the mitigation measure applies) x 100

$ 29,161.28	/	$ 54,715.46	x 100 =	53.29 %	≤ 100%

The Benefit-Cost Analysis (BCA) ratio is Insert Ratio or N/A ≥ 1.0

V. HMP Cost-Effectiveness

The mitigation measures meet the cost effectiveness criteria based on:

a) Mitigation cost is within 15% of the total eligible repair cost of the facility or facilities for which the mitigation measure applies. In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 June 2020, Chapter 8. Section IV. A, this mitigation measure does not exceed 15 percent of the eligible repair cost and is considered to be cost-effective.

b) Mitigation measure is listed in Appendix J and is within 100% of the total eligible repair cost of the facility or facilities for which the mitigation applies.
In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 June 2020, Chapter 8. Section IV and Appendix J. Section Insert appropriate text from Appendix J, this mitigation measure does not exceed 100 percent of the eligible repair cost and is considered to be cost-effective.

c) Mitigation measure is cost-effective through a benefit-cost analysis (BCA)
In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 Chapter 8. Section IV, FEMA considers mitigation measures to be cost-effective if the Recipient or Applicant demonstrates through an acceptable benefit-cost analysis (BCA) methodology that the measure is cost-effective.
See attachment labeled DR-####_Applicant Name_WO XXXXX_DI XXXXXX_BCA.pdf

VI. Compliances and Assurances

For 'work to be completed,' this HMP is for estimating purposes only. If the site's final placement and configuration are different than the preliminary estimate, the Applicant should submit a change in scope request. This HMP is subject to further review prior to award.
The Applicant is responsible for final design, placement, configuration, procurement, permits and compliance with all regulatory codes and standards.
Eligibility and funding for the mitigation at this site on this project will be subject to the compliance of all environmental laws, regulations, and executive orders applicable to the site(s).

HMP Notes

1. The mitigation proposal estimates were generated using applicant provided estimates.

FEMA

Public Assistance
Hazard Mitigation Proposal

For template instructions, turn paragraph marks on. Press "¶" or "Ctrl/Shift/+/8"

Applicant Name	Williamson County	GM Project #	723542	HMP Date	March 20, 2024

Site Name: Thrall Tower

DR- DR4705 – Texas DI# 1332994

HMP Writer and Title: Kirk Lensgraf 406 TFL

This HMP is based on the following Grants Manager project report, see attachment.

PRJ_Report_723542_20240305pdf

Select Work Completed Status: Work to be Completed

I. Related Damaged Items to be Protected

During the declared incident period of January 30, 2023, through February 2, 2023, the applicant was impacted by thawing ice from winter storm resulting in the following damaged items that will be mitigated. As a direct result of this event, falling ice damaged antenna components..

Total repair cost of damaged elements being protected by the HMP at this site*= $ 20,948.47

*Before Cost Estimating Format (CEF) factors if a large project.

Comments: Enter Text

II. Hazard Mitigation Proposal (HMP) Scope of Work

Mitigation consists of…installing ice shields.

The mitigation measures will reduce the risk of future damage by: deflecting ice away from components.

III. Hazard Mitigation Proposal (HMP) Cost: Worksheet

A. Cost of items if the HMP is approved=	$14,828.14
B. Cost of items deducted from the repair scope of work (SOW)=	0
C. Net Hazard Mitigation Cost (before CEF factors) =	$14,828.14
D. Is there a CEF?	☐Yes ☒No
E. Net Hazard Mitigation Cost (after CEF factors)=	N/A
F. What is the CEF ratio (CEF Total Cost/Base Cost)?	Insert Ratio

Comments: Enter Text

FEMA

Hazard Mitigation Proposal Cost: Summary

Net Hazard Mitigation Cost =	**$14,828.14**
See attachment(s).	Thrall Tower RTT Ice Shield Install.pdf / Thrall Tower Tessco Ice Shield Purchase.pdf

Comments: Enter Text

IV. Cost Effectiveness Calculation

(Net HMP Cost/Total Repair Cost of the damaged portions of the facility for which the mitigation measure applies) x 100

$ 14,828.14	/	$ 20,948.47	x 100 =	70.78 %	≤ 100%

The Benefit-Cost Analysis (BCA) ratio is Insert Ratio or N/A ≥ 1.0

V. HMP Cost-Effectiveness

The mitigation measures meet the cost effectiveness criteria based on:

a) Mitigation cost is within 15% of the total eligible repair cost of the facility or facilities for which the mitigation measure applies. In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 June 2020, Chapter 8. Section IV. A, this mitigation measure does not exceed 15 percent of the eligible repair cost and is considered to be cost-effective.

b) Mitigation measure is listed in Appendix J and is within 100% of the total eligible repair cost of the facility or facilities for which the mitigation applies.
In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 June 2020, Chapter 8. Section IV and Appendix J. Section Insert appropriate text from Appendix J, this mitigation measure does not exceed 100 percent of the eligible repair cost and is considered to be cost-effective.

c) Mitigation measure is cost-effective through a benefit-cost analysis (BCA)
In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 Chapter 8. Section IV, FEMA considers mitigation measures to be cost-effective if the Recipient or Applicant demonstrates through an acceptable benefit-cost analysis (BCA) methodology that the measure is cost-effective.
See attachment labeled DR-####_Applicant Name_WO XXXXX_DI XXXXXX_BCA.pdf

VI. Compliances and Assurances

For 'work to be completed,' this HMP is for estimating purposes only. If the site's final placement and configuration are different than the preliminary estimate, the Applicant should submit a change in scope request. This HMP is subject to further review prior to award.
The Applicant is responsible for final design, placement, configuration, procurement, permits and compliance with all regulatory codes and standards.
Eligibility and funding for the mitigation at this site on this project will be subject to the compliance of all environmental laws, regulations, and executive orders applicable to the site(s).

HMP Notes

1. The mitigation proposal estimates were generated using applicant supplied estimates.

FEMA

Public Assistance
Hazard Mitigation Proposal

For template instructions, turn paragraph marks on. Press "¶" or "Ctrl/Shift/+/8"

Applicant Name	Williamson County	GM Project #	723542	HMP Date	March 20, 2024

Site Name: Taylor Tower

DR- DR4705 – Texas DI# 1332995

HMP Writer and Title: Kirk Lensgraf 406 TFL

This HMP is based on the following Grants Manager project report, see attachment.

PRJ_Report_723542_20240305pdf

Select Work Completed Status: Work to be Completed

I. Related Damaged Items to be Protected

During the declared incident period of January 30, 2023, through February 2, 2023, the applicant was impacted by thawing ice from winter storm resulting in the following damaged items that will be mitigated. As a direct result of this event, falling ice damaged antenna components..

Total repair cost of damaged elements being protected by the HMP at this site*= $ 17,002.47

*Before Cost Estimating Format (CEF) factors if a large project.

Comments: N/A

II. Hazard Mitigation Proposal (HMP) Scope of Work

Mitigation consists of…installing ice shields.

The mitigation measures will reduce the risk of future damage by: deflecting ice away from components.

III. Hazard Mitigation Proposal (HMP) Cost: Worksheet

A. Cost of items if the HMP is approved=	14,828.14
B. Cost of items deducted from the repair scope of work (SOW)=	0
C. Net Hazard Mitigation Cost (before CEF factors) =	$14,828.14
D. Is there a CEF?	☐Yes ☒No
E. Net Hazard Mitigation Cost (after CEF factors)=	N/A
F. What is the CEF ratio (CEF Total Cost/Base Cost)?	Insert Ratio

Comments: Enter Text

FEMA

Hazard Mitigation Proposal Cost: Summary

Net Hazard Mitigation Cost =	**$ 14,828.14**
See attachment(s).	Taylor Tower RTT Ice Shield install.pdf / Taylor Tower Tessco Ice Shield purchase.pdf

Comments: Enter Text

IV. Cost Effectiveness Calculation

(Net HMP Cost/Total Repair Cost of the damaged portions of the facility for which the mitigation measure applies) x 100

$ 14,828.14	/	$ 17,002.47	x 100 =	87.21 %	≤ 100%

The Benefit-Cost Analysis (BCA) ratio is Insert Ratio or N/A ≥ 1.0

V. HMP Cost-Effectiveness

The mitigation measures meet the cost effectiveness criteria based on:

a) Mitigation cost is within 15% of the total eligible repair cost of the facility or facilities for which the mitigation measure applies. In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 June 2020, Chapter 8. Section IV. A, this mitigation measure does not exceed 15 percent of the eligible repair cost and is considered to be cost-effective.

b) Mitigation measure is listed in Appendix J and is within 100% of the total eligible repair cost of the facility or facilities for which the mitigation applies.
In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 June 2020, Chapter 8. Section IV and Appendix J. Section Insert appropriate text from Appendix J, this mitigation measure does not exceed 100 percent of the eligible repair cost and is considered to be cost-effective.

c) Mitigation measure is cost-effective through a benefit-cost analysis (BCA)
In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 Chapter 8. Section IV, FEMA considers mitigation measures to be cost-effective if the Recipient or Applicant demonstrates through an acceptable benefit-cost analysis (BCA) methodology that the measure is cost-effective.
See attachment labeled DR-####_Applicant Name_WO XXXXX_DI XXXXXX_BCA.pdf

VI. Compliances and Assurances

For 'work to be completed,' this HMP is for estimating purposes only. If the site's final placement and configuration are different than the preliminary estimate, the Applicant should submit a change in scope request. This HMP is subject to further review prior to award.
The Applicant is responsible for final design, placement, configuration, procurement, permits and compliance with all regulatory codes and standards.
Eligibility and funding for the mitigation at this site on this project will be subject to the compliance of all environmental laws, regulations, and executive orders applicable to the site(s).

HMP Notes

1. The mitigation proposal estimates were generated using applicant supplied estimates.