

PA-06-TX-4223-PW-00991(0) P	
Applicant Name:	Application Title:
HIDALGO (COUNTY)	HID008C - Damaged Roads / Asphalt Surface/ Caliche Base
Period of Performance Start:	Period of Performance End:
05-29-2015	11-29-2016

Bundle Reference # (Amendment #)	Date Awarded
PA-06-TX-4223-PW-00991(926)	01-26-2016

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	4223 - DR -TX	HID008C	215-99215-00	12-08-2015	C
APPLICANT: HIDALGO (COUNTY)			WORK COMPLETE AS OF:		
			11-20-2015 : 0 %		
Site 1 of 13					
DAMAGED FACILITY:			COUNTY: Hidalgo		
Site 01 Precinct # 4					
LOCATION:			LATITUDE:	LONGITUDE:	
PA-06-TX-4223-PW-00991(0): Site # 1 Lat.: 26.23761 Long.: -98.102791 Owassa Road between Tower Road and Alamo Road starting at 26.237610, -98.102791 and ending at 26.238449, -98.108813. See attached pictures labelled as Site 01 photos.			26.23761 26.238449	-98.102791 -98.108813	
Current Version:					
DAMAGE DESCRIPTION AND DIMENSIONS:					
PA-06-TX-4223-PW-00991(0): During the Declared event period, standing floodwaters at a depth of 2 Ft. submerged this section of paved roadway for a period of longer than Two (2) Weeks. Water saturated the base material (Caliche) and caused the road wear surface (Asphalt) to delaminate and separate from the Caliche Base material resulting in the need to replace the following: • Caliche - Dimensions 2001 Ft. long by 22 Ft. Wide by 0.9996 inch deep = 135.82 CY • Asphalt including emulsified tack coat - Dimensions 2001 Ft. long by 22 Ft. Wide by 1.5 inch deep = 203.81 CY This road, while in poor condition (prevalent Alligator Cracking) is nonetheless recommended as eligible damages, the rationale for this recommendation is based on the FEMA TAC Technical Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained adhered to the base material; and, intact in spite of exhibiting signs of poor condition with Alligator Cracking throughout. Had this damaged section of road not been submerged for a protracted period of time, the likelihood is it would have remained intact. However, The damages are not recommended as eligible - this road is classified as a Major Collector on TEXDOT functional use Maps					
Current Version:					
SCOPE OF WORK:					
PA-06-TX-4223-PW-00991(0): Work to Be Completed The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, In a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is					

attached to this Project, see "Signed Labor and Equipment Cert.pdf". This Scope of Work and associated estimated Costs are not recommended as eligible - this road is classified as a Major Collector on TEXDOT functional use Maps

Scope Items

Remove and Haul existing materials for repurposing to Applicants Storage Yard facility (Applicant will mill broken asphalt and Caliche for future use as patch materials):

- Caliche - Dimensions 2001 Ft. long by 22 Ft. Wide by 0.083 Ft. (1 inch) deep = 135.82 CY
- Asphalt Wear Surface - Dimensions 2001 Ft. long by 22 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 203.81 CY

Demo and Haul Away

Truck Loads	Dump Truck Hours	Hours Per Each of 5 Trucks
Caliche 10	9.70	
Asphalt 15	14.56	
Total 24	5	

Pick up materials from vendor locations and haul to site, Install and grade base (1 Inch deep Caliche) to existing 2" base (which will restore to a 3 Inch base that preexisted the event, Compact base, install Tack Coat (emulsified asphalt), install, and roll in wear surface (1-1/2 Inch of Hot Asphalt Wear Surface)

Mobilize Pick up and deliver material in place

Truck Loads	Dump Truck Hours	Hours Per Each of 5 Trucks
Caliche 9.70	9.70	
Asphalt 14.56	14.56	
Total 24	5	

Total Truck Hours Needed per truck (Demo and Install) 9.70

Estimated Costs

Material

- Caliche - Actual F/A Cost - Dimensions 2001 Ft. long by 22 Ft. Wide by 0.083 Ft. (1 inch) deep = 135.82 CY @ 3,500 Lbs/CY => 237.68 Tons @ \$3.25 = \$772.45
- Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 2001 Ft. long by 22 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 203.81 CY @ 4,212 Lbs. /CY => 429.21 Tons @ \$58.50/ton = \$25,109.05

Material picked up at vendors facility by F/A Equipment and Labor (Dump Trucks with 14 CY capacity each) and delivered to the jobsite - This item does not include F/A Equipment and Labor Costs - This item is for material cost only.

Equipment and Labor

- Using F/A Equipment (Grader with 14 Ft. Moldboard - FEMA CC 8332) and F/A Labor (actual hourly rate including fringes), grade base (Caliche) surface. - Dimensions 2001 Ft. long by 22 Ft. Wide by 0.083 Ft. (1 inch) deep

2.5 Hrs. Labor @ \$28.72 = \$71.80

2.5 Hrs. FA Equip @ \$84.00 = \$210.00

- Using F/A Equipment (Paver - FEMA CC 8432) and F/A Labor (actual hourly rate including fringes), install asphalt road surface. - Dimensions 2001 Ft. long by 22 Ft. Wide by 0.125 Ft. (1.5 inch) deep

5 Hrs. Labor @ \$20.06 = \$100.30

5 Hrs. FA Equip @ 135.00 = \$675.00

- Using F/A Equipment (Dump Truck # 1 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

9.7 Hrs. Labor @ \$20.80 = \$201.76

9.7 Hrs. FA Equip @ 75.00 = \$727.50

- Using F/A Equipment (Dump Truck # 2 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

9.7 Hrs. Labor @ \$20.80 = \$201.76

9.7 Hrs. FA Equip @ 75.00 = \$727.50

- Using F/A Equipment (Dump Truck # 3 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

9.7 Hrs. Labor @ \$20.80 = \$201.76

9.7 Hrs. FA Equip @ 75.00 = \$727.50

- Using F/A Equipment (Dump Truck # 4 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

9.7 Hrs. Labor @ \$20.80 = \$201.76

9.7 Hrs. FA Equip @ 75.00 = \$727.50

- Using F/A Equipment (Dump Truck # 5 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load,

haul and dump.

9.7 Hrs. Labor @ \$20.80 = \$201.76
9.7 Hrs. FA Equip @ 75.00 = \$727.50

- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801
2 Hrs. Labor @ \$17.89 = \$35.78
2 Hrs. FA Equip @ 19.95 = \$39.90

- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801
2 Hrs. Labor @ \$17.89 = \$35.78
2 Hrs. FA Equip @ 19.95 = \$39.90

- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 215 Ft. Dimensions 2001 Ft. long by 22 Ft. Wide by 0.208 Ft. (2.5 inch) deep
2.5 Hrs. Labor @ \$19.40 = \$48.50
2.5 Hrs. FA Equip @ 28.75 = \$71.88

- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 2001 Ft. long by 22 Ft. Wide by 0.208 Ft. (2.5 inch) deep
2 Hrs. Labor @ \$19.40 = \$38.80
2 Hrs. FA Equip @ 33.75 = \$67.50

- Using F/A Equipment (Front End Loader - 5 CY Capacity - FEMA CC 8395) and F/A Labor (actual hourly rate including fringes), scrape up road surface and load dump trucks. - Dimensions 2001 Ft. long by 22 Ft. Wide by 0.208 Ft. (2.5 inch) deep
6 Hrs. Labor @ \$21.21 = \$127.26
6 Hrs. FA Equip @ 74.50 = \$447.00

- Using F/A Equipment (Haul Truck with trailer- FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.
2 Hrs. Labor @ \$20.80 = \$41.60
2 Hrs. FA Equip @ 41.00 = \$82.00

- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Cliché and Asphalt for Tack Coating) to road base materials and surfaces.
5 Hrs. Labor @ \$20.80 = \$104.00
5 Hrs. FA Equip @ 51.25 = \$256.25

- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)
8 Hrs. Labor @ \$18.44 = \$147.52

- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)
8 Hrs. Labor @ \$20.28 = \$162.24

Summary of Estimated Costs

F/A Labor \$ 1,922.38
F/A Equipment \$5,526.93
F/A Materials \$25,881.50

Total this Project: \$33,330.81

End of SOW

Current Version:

Site 2 of 13			
DAMAGED FACILITY:		COUNTY: Hidalgo	
Site 02 Precinct # 4			
LOCATION:		LATITUDE:	LONGITUDE:
PA-06-TX-4223-PW-00991(0):		26.27425	-98.08549
Site # 2 Lat.: 26.27425 Long.: -98.08549 to Lat.: 26.27475 Long.: -98.0854 Orchid Street starting at first GPS coordinate and ending at Verbenia Street Stop Sign. See attached pictures labelled as Site 02 photos.		26.27475	-98.0854
Current Version:			
DAMAGE DESCRIPTION AND DIMENSIONS:			
PA-06-TX-4223-PW-00991(0):			

During the Declared event period, standing floodwaters at a depth of 2 Ft. submerged this section of paved roadway for a period of longer than Two (2) Weeks. Water saturated the base material (Caliche) and caused the road wear surface (Asphalt) to delaminate and separate from the Caliche Base material resulting in the need to replace the following:

- Caliche - Dimensions 215 Ft. long by 27 Ft. Wide by 0.083 Ft. (0.9996 inch) deep = 17.91 CY
- Asphalt Wear Surface - Dimensions 215 Ft. long by 27 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 26.88 CY

This road, while in poor condition (prevalent Alligator Cracking) is nonetheless recommended as eligible damages, the rationale for this recommendation is based on the FEMA TAC Technical Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained adhered to the base material; and, intact in spite of exhibiting signs of poor condition with Alligator Cracking throughout. Had this damaged section of road not been submerged for a protracted period of time, the likelihood is it would have remained intact. Therefore the damages are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).

Current Version:

SCOPE OF WORK:

PA-06-TX-4223-PW-00991(0):

Work to Be Completed

The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, In a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is attached to this Project, see "Signed Labor and Equipment Cert.pdf". This Scope of Work and associated estimated Costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items

Remove and Haul existing materials for repurposing to Applicants Storage Yard facility (Applicant will mill broken asphalt and Caliche for future use as patch materials):

- Caliche - Dimensions 215 Ft. long by 27 Ft. Wide by 0.083 Ft. (1 inch) deep = 17.91 CY
- Asphalt Wear Surface - Dimensions 215 Ft. long by 27 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 26.88 CY

Demo and Haul Away

Truck Loads	Dump Truck Hours	Hours Per Each of 1 Trucks
Caliche 1	1.28	
Asphalt 2	1.92	
Total 3	3.2	

Pick up materials from vendor locations and haul to site, Install and grade base (1 Inch deep Caliche) to existing 2" base (which will restore to a 3 Inch base that preexisted the event, Compact base, install Tack Coat (emulsified asphalt), install, and roll in wear surface (1-1/2 Inch of Hot Asphalt Wear Surface)

Mobilize Pick up and deliver material in place

Truck Loads	Dump Truck Hours	Hours Per Each of 1 Trucks
Caliche 1.28	1.28	
Asphalt 1.92	1.92	
Total 3	3.2	

Total Truck Hours Needed per truck (Demo and Install) 6.40

Estimated Costs

Material

- Caliche - Actual F/A Cost - Dimensions 215 Ft. long by 27 Ft. Wide by 0.083 Ft. (1 inch) deep = 17.91 CY @ 3,500 Lbs./CY => 31.34 Tons @ \$3.25 = \$101.86
- Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 215 Ft. long by 27 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 26.88 CY @ 4,212 Lbs./CY => 56.60 Tons @ \$58.50 = \$3,311.03

Material picked up at vendors facility by F/A Equipment and Labor (Dump Trucks with 14 CY capacity each) and delivered to the jobsite - This item does not include F/A Equipment and Labor Costs - This item is for material cost only

Equipment and Labor

- Using F/A Equipment (Grader with 14 Ft. Moldboard - FEMA CC 8332) and F/A Labor (actual hourly rate including fringes), grade base (Caliche) surface. - Dimensions 215 Ft. long by 27 Ft. Wide by 0.000 Ft. (0 inch) deep
1.4 Hrs. Labor @ \$28.72 = \$40.21
1.4 Hrs. FA Equip @ 84.00 = \$117.60

- Using F/A Equipment (Paver - FEMA CC 8432) and F/A Labor (actual hourly rate including fringes), apply asphalt road surface. -

Dimensions 215 Ft. long by 27 Ft. Wide by 0.125 Ft. (1.5 inch) deep

1.7 Hrs. Labor @ \$20.06 = \$34.10

1.7 Hrs. FA Equip @ 135.00 = \$229.50

- Using F/A Equipment (Dump Truck # 1 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

6.4 Hrs. Labor @ \$20.80 = \$133.12

6.4 Hrs. FA Equip @ 75.00 = \$480.00

- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801

2 Hrs. Labor @ \$17.89 = \$35.78

2 Hrs. FA Equip @ 19.95 = \$39.90

- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801

2 Hrs. Labor @ \$17.89 = \$35.78

2 Hrs. FA Equip @ 19.95 = \$39.90

- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 215 Ft. long by 27 Ft. Wide by 0.208 Ft. (2.5 inch) deep

1.4 Hrs. Labor @ \$19.40 = \$27.16

1.4 Hrs. FA Equip @ 28.75 = \$40.25

- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 215 Ft. long by 27 Ft. Wide by 0.208 Ft. (2.5 inch) deep

1.3 Hrs. Labor @ \$19.40 = \$25.22

1.3 Hrs. FA Equip @ 33.75 = \$43.88

- Using F/A Equipment (Front End Loader - 5 CY Capacity - FEMA CC 8395) and F/A Labor (actual hourly rate including fringes), scrape up road surface and load dump trucks. - Dimensions 215 Ft. long by 27 Ft. Wide by 0.208 Ft. (2.5 inch) deep

1.8 Hrs. Labor @ \$21.21 = \$38.18

1.8 Hrs. FA Equip @ 74.50 = \$134.10

- Using F/A Equipment (Haul Truck with trailer- FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.

2 Hrs. Labor @ \$20.80 = \$41.60

2 Hrs. FA Equip @ 41.00 = \$82.00

- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Cliché and Asphalt for Tack Coating) to road base materials and surfaces.

1.7 Hrs. Labor @ \$20.80 = \$35.36

1.7 Hrs. FA Equip @ 51.25 = \$87.13

- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

3.1 Hrs. Labor @ \$18.44 = \$57.16

- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

3.1 Hrs. Labor @ \$20.28 = \$62.87

Summary of Estimated Costs

F/A Labor \$566.54

F/A Equipment \$1294.25

F/A Materials \$3412.89

Total this Project: \$5273.68

Current Version:

Site 3 of 13

DAMAGED FACILITY:

COUNTY: Hidalgo

Site 03 Precinct # 4

LOCATION:

PA-06-TX-4223-PW-00991(0):

Site # 3 Lat.: 26.27458 Long.: -98.08369 to Lat.: 26.27495 Long.: -98.08712 on Verbena Rd. North of Iowa Rd East of Tower Rd. and ending at address 1505. See attached pictures labelled as Site 03 photos.

LATITUDE:

26.27458

26.27495

LONGITUDE:

-98.08369

-98.08712

Current Version:

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4223-PW-00991(0):

During the Declared event period, standing floodwaters at a depth of 2 Ft. submerged this section of paved roadway for a period of longer than Two (2) Weeks. Water saturated the base material (Caliche) and caused the road wear surface (Asphalt) to delaminate and separate from the Caliche Base material resulting in the need to replace the following:

- Caliche - Dimensions 1138 Ft. long by 27 Ft. Wide by 0.083 Ft. (1 inch) deep = 94.80
- CY Asphalt Wear Surface - Dimensions 1138 Ft. long by 27 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 142.25 CY

This road, while in poor condition (prevalent Alligator Cracking) is nonetheless recommended as eligible damages, the rationale for this recommendation is based on the FEMA TAC Technical Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained adhered to the base material; and, intact in spite of exhibiting signs of poor condition with Alligator Cracking throughout. Had this damaged section of road not been submerged for a protracted period of time, the likelihood is it would have remained intact. Therefore the damages are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).

Current Version:

SCOPE OF WORK:

PA-06-TX-4223-PW-00991(0):

Work to Be Completed

The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, In a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is attached to this Project, see "Signed Labor and Equipment Cert.pdf". This Scope of Work and associated estimated Costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items

Remove and Haul existing materials for repurposing to Applicants Storage Yard facility (Applicant will mill broken asphalt and Caliche for future use as patch materials):

- Caliche - Dimensions 1138 Ft. long by 27 Ft. Wide by 0.083 Ft. (1 inch) deep = 94.80 CY
- Asphalt Wear Surface - Dimensions 1138 Ft. long by 27 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 142.25 CY

Demo and Haul Away

	Truck Loads	Dump Truck Hours	Hours Per Each of 5 Trucks
Caliche	7	6.77	
Asphalt	10	10.16	
Total	17	3.4	

Pick up materials from vendor locations and haul to site, Install and grade base (1 Inch deep Caliche) to existing 2" base (which will restore to a 3 Inch base that preexisted the event, Compact base, install Tack Coat (emulsified asphalt), install, and roll in wear surface (1-1/2 Inch of Hot Asphalt Wear Surface)

Mobilize Pick up and deliver material in place

	Truck Loads	Dump Truck Hours	Hours Per Each of 5 Trucks
Caliche	6.77	6.77	
Asphalt	10.16	10.16	
Total	17	3.4	

Total Truck Hours Needed per truck 6.8

Estimated Costs

Material

- Caliche - Actual F/A Cost - Dimensions 1138 Ft. long by 27 Ft. Wide by 0.083 Ft. (1 inch) deep = 94.80 CY @ 3,500 Lbs. /CY => 165.89 Tons @ \$3.25 = \$539.15
- Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 1138 Ft. long by 27 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 142.25 CY @ 4,212 Lbs. /CY => 299.58 Tons @ \$58.50 = \$17,525.34

Material picked up at vendors facility by F/A Equipment and Labor (Dump Trucks with 14 CY capacity each) and delivered to the jobsite - This item does not include F/A Equipment and Labor Costs - This item is for material cost only

Equipment and Labor

- Using F/A Equipment (Grader with 14 Ft. Moldboard - FEMA CC 8332) and F/A Labor (actual hourly rate including fringes), grade base (Caliche) surface. - Dimensions 1138 Ft. long by 27 Ft. Wide by 0.083 Ft. (1 inch) deep
2.8 Hrs. Labor @ \$28.72 = \$80.42
2.8 Hrs. FA Equip @ 84.00 = \$235.20
- Using F/A Equipment (Paver - FEMA CC 8432) and F/A Labor (actual hourly rate including fringes), apply asphalt road surface. - Dimensions 1138 Ft. long by 27 Ft. Wide by 0.125 Ft. (1.5 inch) deep.
4.5 Hrs. Labor @ \$20.06 = \$90.27

4.5 Hrs. FA Equip @ 135.00 = \$607.50

- Using F/A Equipment (Dump Truck # 1 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

6.8 Hrs. Labor @ \$20.80 = \$141.44

6.8 Hrs. FA Equip @ 75.00 = \$510.00

- Using F/A Equipment (Dump Truck # 2 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

6.8 Hrs. Labor @ \$20.80 = \$141.44

6.8 Hrs. FA Equip @ 75.00 = \$510.00

- Using F/A Equipment (Dump Truck # 3 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump

6.8 Hrs. Labor @ \$20.80 = \$141.44

6.8 Hrs. FA Equip @ 75.00 = \$510.00

- Using F/A Equipment (Dump Truck # 4 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

6.8 Hrs. Labor @ \$20.80 = \$141.44

6.8 Hrs. FA Equip @ 75.00 = \$510.00

- Using F/A Equipment (Dump Truck # 5 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump

6.8 Hrs. Labor @ \$20.80 = \$141.44

6.8 Hrs. FA Equip @ 75.00 = \$510.00

- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801

2 Hrs. Labor @ \$17.89 = \$35.78

2 Hrs. FA Equip @ 19.95 = \$39.90

- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801

2 Hrs. Labor @ \$17.89 = \$35.78

2 Hrs. FA Equip @ 19.95 = \$39.90

- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 1138 Ft. long by 27 Ft. Wide by 0.208 Ft. (2.5 Inch) deep

2.8 Hrs. Labor @ \$19.40 = \$54.32

2.8 Hrs. FA Equip @ 28.75 = \$80.50

- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 1138 Ft. long by 27 Ft. Wide by 0.208 Ft. (2.4996 inch) deep

2.4 Hrs. Labor @ \$19.40 = \$46.56

2.4 Hrs. FA Equip @ 33.75 = \$81.00

- Using F/A Equipment (Front End Loader - 5 CY Capacity - FEMA CC 8395) and F/A Labor (actual hourly rate including fringes), scrape up road surface and load dump trucks. - Dimensions 1138 Ft. long by 27 Ft. Wide by 0.208 Ft. (2.4996 inch) deep

5.2 Hrs. Labor @ \$21.21 = \$110.29

5.2 Hrs. FA Equip @ 74.50 = \$387.40

- Using F/A Equipment (Haul Truck with trailer- FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.

2 Hrs. Labor @ \$20.80 = \$41.60

2Hrs. FA Equip @ 41.00 = \$82.00

- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Cliché and Asphalt for Tack Coating) to road base materials and surfaces.

4.5 Hrs. Labor @ \$20.80 = \$93.60

4.5 Hrs. FA Equip @ 51.25 = \$230.63

- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

7.6 Hrs. Labor @ \$18.44 = \$140.14

- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

7.6 Hrs. Labor @ \$20.28 = \$154.13

Summary of Estimated Costs

F/A Labor \$1590.09

F/A Equipment \$4334.03

F/A Materials \$18064.49

Total this Project: \$23988.61

Current Version:

Site 4 of 13

DAMAGED FACILITY:

COUNTY: Hidalgo

Site 04 Precinct # 4

LOCATION:

LATITUDE:

26.27428

26.27462

LONGITUDE:

-98.08414

-98.084155

PA-06-TX-4223-PW-00991(0):

Site # 4 Lat.: 26.274620 Long -98.084155 to Lat.: 26.274280 Long.: -98.084140 Jasmine Rd starting at Stop sign at Verbenia and ending at address 1613. See attached pictures labelled as Site 04 photos.

Current Version:

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4223-PW-00991(0):

During the Declared event period, standing floodwaters at a depth of 2 Ft. submerged this section of paved roadway for a period of longer than Two (2) Weeks. Water saturated the base material (Caliche) and caused the road wear surface (Asphalt) to delaminate and separate from the Caliche Base material resulting in the need to replace the following:

- Caliche - Dimensions 143 Ft. long by 27 Ft. Wide by 0.083 Ft. (1 inch) deep = 11.91 CY
- Asphalt Wear Surface - Dimensions 143 Ft. long by 27 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 17.88 CY

This road, while in poor condition (prevalent Alligator Cracking) is nonetheless recommended as eligible damages, the rationale for this recommendation is based on the FEMA TAC Technical Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained adhered to the base material; and, intact in spite of exhibiting signs of poor condition with Alligator Cracking throughout. Had this damaged section of road not been submerged for a protracted period of time, the likelihood is it would have remained intact. Therefore the damages are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).

Current Version:

SCOPE OF WORK:

PA-06-TX-4223-PW-00991(0):

Work to Be Completed

The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, In a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is attached to this Project, see "Signed Labor and Equipment Cert.pdf". This Scope of Work and associated estimated Costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items

Remove and Haul existing materials for repurposing to Applicants Storage Yard facility (Applicant will mill broken asphalt and Caliche for future use as patch materials):

- Caliche - Dimensions 143 Ft. long by 27 Ft. Wide by 0.083 Ft. (1 inch) deep = 11.91 CY
- Asphalt Wear Surface - Dimensions 143 Ft. long by 27 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 17.88 CY

Demo and Haul Away

	Truck Loads	Dump Truck Hours	Hours Per Each of 1 Trucks
Caliche	0.85	0.85	
Asphalt	1.28	1.28	
Total	2.13	2.13	

Pick up materials from vendor locations and haul to site, Install and grade base (1 Inch deep Caliche) to existing 2" base (which will restore to a 3 Inch base that preexisted the event, Compact base, install Tack Coat (emulsified asphalt), install, and roll in wear surface (1-1/2 Inch of Hot Asphalt Wear Surface)

Mobilize Pick up and deliver material in place

	Truck Loads	Dump Truck Hours	Hours Per Each of 1 Trucks
Caliche	0.85	0.85	
Asphalt	1.28	1.28	
Total	2.13	2.13	

Total Truck Hours Needed per truck (Demo and Install) 4.30

Estimated Costs

Material

- Caliche - Actual F/A Cost - Dimensions 143 Ft. long by 27 Ft. Wide by 0.083 Ft. (1 inch) deep = 11.91 CY @ 3,500 Lbs. /CY => 20.85 Tons @ \$3.25 = \$67.75
- Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 143 Ft. long by 27 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 17.88 CY @ 4,212 Lbs./CY => 37.64 Tons @ \$58.50 = \$2,202.22

Material picked up at vendors facility by F/A Equipment and Labor (Dump Trucks with 14 CY capacity each) and delivered to the jobsite - This item does not include F/A Equipment and Labor Costs - This item is for material cost only

Equipment and Labor

- Using F/A Equipment (Grader with 14 Ft. Moldboard - FEMA CC 8332) and F/A Labor (actual hourly rate including fringes), grade base (Caliche) surface. - Dimensions 143 Ft. long by 27 Ft. Wide by 0.083 Ft. (1 inch) deep
1.3 Hrs. Labor @ \$28.72 = \$37.34
1.3 Hrs. FA Equip @ 84.00 = \$109.20
- Using F/A Equipment (Paver - FEMA CC 8432) and F/A Labor (actual hourly rate including fringes), apply asphalt road surface. - Dimensions 143 Ft. long by 27 Ft. Wide by 0.125 Ft. (1.5 inch) deep
1.5 Hrs. Labor @ \$20.06 = \$30.09
1.5 Hrs. FA Equip @ 135.00 = \$202.50
- Using F/A Equipment (Dump Truck # 1 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.
4.3 Hrs. Labor @ \$20.80 = \$89.44
4.3 Hrs. FA Equip @ 75.00 = \$322.50
- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801
2 Hrs. Labor @ \$17.89 = \$35.78
2 Hrs. FA Equip @ 19.95 = \$39.90
- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801
2 Hrs. Labor @ \$17.89 = \$35.78
2 Hrs. FA Equip @ 19.95 = \$39.90
- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 143 Ft. long by 27 Ft. Wide by 0.208 Ft. (2.5) deep
1.3 Hrs. Labor @ \$19.40 = \$25.22
1.3 Hrs. FA Equip @ 28.75 = \$37.38
- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 143 Ft. long by 27 Ft. Wide by 0.208 Ft. (2.5 inch) deep
1.2 Hrs. Labor @ \$19.40 = \$23.28
1.2 Hrs. FA Equip @ 33.75 = \$40.50
- Using F/A Equipment (Front End Loader - 5 CY Capacity - FEMA CC 8395) and F/A Labor (actual hourly rate including fringes), scrape up road surface and load dump trucks. - Dimensions 143 Ft. long by 27 Ft. Wide by 0.208 Ft. (2.5 Inch) deep
1.6 Hrs. Labor @ \$21.21 = \$33.94
1.6 Hrs. FA Equip @ 74.50 = \$119.20
- Using F/A Equipment (Haul Truck with trailer- FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.
2 Hrs. Labor @ \$20.80 = \$41.60
2 Hrs. FA Equip @ 41.00 = \$82.00
- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Cliché and Asphalt for Tack Coating) to road base materials and surfaces.
1.5 Hrs. Labor @ \$20.80 = \$31.20
1.5 Hrs. FA Equip @ 51.25 = \$76.88
- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)
2.8 Hrs. Labor @ \$18.44 = \$51.63
- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)
2.8 Hrs. Labor @ \$20.28 = \$56.78

Summary of Estimated Costs

F/A Labor \$492.08
F/A Equipment \$1069.95
F/A Materials \$2269.97

Total this Project: \$3831.99

Current Version:

Site 5 of 13

DAMAGED FACILITY:

COUNTY: Hidalgo

Site 05 Precinct # 4

LOCATION:

PA-06-TX-4223-PW-00991(0):

Site # 5 Lat.: 26.24691 Long.: -98.11716 to Lat.: 26.25022 Long.: -98.11804 Raven Circle East starting at stop sign at Alberta Road and ending at address 4009. See attached pictures labelled as Site 05 photos.

LATITUDE:

26.24691
26.25022

LONGITUDE:

-98.11716
-98.11804

Current Version:

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4223-PW-00991(0):

During the Declared event period, standing floodwaters at a depth of 2 Ft. submerged this section of paved roadway for a period of longer than Two (2) Weeks. Water saturated the base material (Caliche) and caused the road wear surface (Asphalt) to delaminate and separate from the Caliche Base material resulting in the need to replace the following:

- Caliche - Dimensions 1538 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 132.86 CY
- Asphalt Wear Surface - Dimensions 1538 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 199.37 CY

This road, while in poor condition (prevalent Alligator Cracking) is nonetheless recommended as eligible damages, the rationale for this recommendation is based on the FEMA TAC Technical Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained adhered to the base material; and, intact in spite of exhibiting signs of poor condition with Alligator Cracking throughout. Had this damaged section of road not been submerged for a protracted period of time, the likelihood is it would have remained intact. Therefore the damages are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).

Current Version:

SCOPE OF WORK:

PA-06-TX-4223-PW-00991(0):

Work to Be Completed

The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, In a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is attached to this Project, see "Signed Labor and Equipment Cert.pdf". This Scope of Work and associated estimated Costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items

Remove and Haul existing materials for repurposing to Applicants Storage Yard facility (Applicant will mill broken asphalt and Caliche for future use as patch materials):

- Caliche - Dimensions 1538 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 132.86 CY
- Asphalt Wear Surface - Dimensions 1538 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 199.37 CY

Demo and Haul Away

	Truck Loads	Dump Truck Hours	Hours Per Each of 5 Trucks
Caliche	9.49	9.49	
Asphalt	14.24	14.24	
Total	23.73	4.75	

Pick up materials from vendor locations and haul to site, Install and grade base (1 Inch deep Caliche) to existing 2" base (which will restore to a 3 Inch base that preexisted the event, Compact base, install Tack Coat (emulsified asphalt), install, and roll in wear surface (1-1/2 Inch of Hot Asphalt Wear Surface)

Mobilize Pick up and deliver material in place

	Truck Loads	Dump Truck Hours	Hours Per Each of 5 Trucks
Caliche	9.49	9.49	
Asphalt	14.24	14.24	
Total	23.7	4.7	

Total Truck Hours Needed per truck (Demo and Install) 9.50

Estimated Costs

Material

- Caliche - Actual F/A Cost - Dimensions 1538 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 132.86 CY @ 3,500 Lbs. / CY => 232.51 Tons @ \$3.25 = \$755.64

- Asphalt - including emulsified tack coat - Actual F/A Cost - Dimensions 1538 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 199.37 CY @ 4,212 Lbs. /CY => 419.87 Tons @ \$58.50 = \$24,562.63

Material picked up at vendors facility by F/A Equipment and Labor (Dump Trucks with 14 CY capacity each) and delivered to the jobsite - This item does not include F/A Equipment and Labor Costs - This item is for material cost only

Equipment and Labor

- Using F/A Equipment (Grader with 14 Ft. Moldboard - FEMA CC 8332) and F/A Labor (actual hourly rate including fringes), grade base (Caliche) surface. - Dimensions 1538 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep

3.5 Hrs. Labor @ \$28.72 = \$100.52

3.5 Hrs. FA Equip @ 84.00 = \$294.00

- Using F/A Equipment (Paver - FEMA CC 8432) and F/A Labor (actual hourly rate including fringes), apply asphalt road surface. - Dimensions 1538 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep

5.9 Hrs. Labor @ \$20.06 = \$118.35

5.9 Hrs. FA Equip @ 135.00 = \$796.50

- Using F/A Equipment (Dump Truck # 1 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

9.5 Hrs. Labor @ \$20.80 = \$197.60

9.5 Hrs. FA Equip @ 75.00 = \$712.50

- Using F/A Equipment (Dump Truck # 2 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

9.5 Hrs. Labor @ \$20.80 = \$197.60

9.5 Hrs. FA Equip @ 75.00 = \$712.50

- Using F/A Equipment (Dump Truck # 3 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

9.5 Hrs. Labor @ \$20.80 = \$197.60

9.5 Hrs. FA Equip @ 75.00 = \$712.50

- Using F/A Equipment (Dump Truck # 4 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

9.5 Hrs. Labor @ \$20.80 = \$197.60

9.5 Hrs. FA Equip @ 75.00 = \$712.50

- Using F/A Equipment (Dump Truck # 5 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

9.5 Hrs. Labor @ \$20.80 = \$197.60

9.5 Hrs. FA Equip @ 75.00 = \$712.50

- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801

2 Hrs. Labor @ \$17.89 = \$35.78

2 Hrs. FA Equip @ 19.95 = \$39.90

- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801

2 Hrs. Labor @ \$17.89 = \$35.78

2 Hrs. FA Equip @ 19.95 = \$39.90

- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 1538 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep

3.5 Hrs. Labor @ \$19.40 = \$67.90

3.5 Hrs. FA Equip @ 28.75 = \$100.63

- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 1538 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep

3 Hrs. Labor @ \$19.40 = \$58.20

3 Hrs. FA Equip @ 33.75 = \$101.25

- Using F/A Equipment (Front End Loader - 5 CY Capacity - FEMA CC 8395) and F/A Labor (actual hourly rate including fringes), scrape up road surface and load dump trucks. - Dimensions 1538 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep

6.9 Hrs. Labor @ \$21.21 = \$146.35

6.9 Hrs. FA Equip @ 74.50 = \$514.05

- Using F/A Equipment (Haul Truck with trailer- FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.

2 Hrs. Labor @ \$20.80 = \$41.60

2Hrs. FA Equip @ 41.00 = \$82.00

- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Cliché and Asphalt for Tack Coating) to road base materials and surfaces.

5.9 Hrs. Labor @ \$20.80 = \$122.72

5.9 Hrs. FA Equip @ 51.25 = \$302.38

- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

9.9 Hrs. Labor @ \$18.44 = \$182.56

- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

9.9 Hrs. Labor @ \$20.28 = \$200.77

Summary of Estimated Costs

F/A Labor \$2098.53

F/A Equipment \$5833.10

F/A Materials \$25318.27

Total this Project: \$33249.90

Current Version:

Site 6 of 13

DAMAGED FACILITY:

COUNTY: Hidalgo

Site 06 Precinct # 4

LOCATION:

LATITUDE:

LONGITUDE:

26.247245

-98.118637

26.250136

-98.118109

PA-06-TX-4223-PW-00991(0):

Site # 6 Lat.: 26.247245 Long -98.118637 to Lat.: 26.250136 Long -98.118109 Robin Lane starting at the Stop sign at Alberta Road and ending at the stop sign at Raven Circle. See attached pictures labelled as Site 06 photos.

Current Version:

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4223-PW-00991(0):

During the Declared event period, standing floodwaters at a depth of 2 Ft. submerged this section of paved roadway for a period of longer than Two (2) Weeks. Water saturated the base material (Caliche) and caused the road wear surface (Asphalt) to delaminate and separate from the Caliche Base material resulting in the need to replace the following:

- Caliche - Dimensions 1084 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 93.64 CY
- Asphalt Wear Surface - Dimensions 1084 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 140.52 CY

This road, while in poor condition (prevalent Alligator Cracking) is nonetheless recommended as eligible damages; the rationale for this recommendation is based on the FEMA TAC Technical Specialists' Inspection; assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained adhered to the base material; and, intact in spite of exhibiting signs of poor condition with Alligator Cracking throughout. Had this damaged section of road not been submerged for a protracted period of time, the likelihood is it would have remained intact. Therefore the damages are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).

Current Version:

SCOPE OF WORK:

PA-06-TX-4223-PW-00991(0):

Work to Be Completed

The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, In a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is attached to this Project, see "Signed Labor and Equipment Cert.pdf". This Scope of Work and associated estimated Costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items

Remove and Haul existing materials for repurposing to Applicants Storage Yard facility (Applicant will mill broken asphalt and Caliche for future use as patch materials):

- Caliche - Dimensions 1084 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 93.64 CY
- Asphalt Wear Surface - Dimensions 1084 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 140.52 CY

Demo and Haul Away

Truck Loads Dump Truck Hours Hours Per Each of 3 Trucks

Caliche	7	6.69
Asphalt	10	10.04
Total	16.73	5.58

Pick up materials from vendor locations and haul to site, Install and grade base (1 Inch deep Caliche) to existing 2" base (which will restore to a 3 Inch base that preexisted the event, Compact base, install Tack Coat (emulsified asphalt), install, and roll in wear surface (1-1/2 Inch deep of Hot Asphalt Wear Surface)

Mobilize Pick up and deliver material in place

	Truck Loads	Dump Truck Hours	Hours Per	Each of 3 Trucks
Caliche	7	6.69		
Asphalt	10	10.04		
Total	16.73	5.58		

Total Truck Hours Needed per truck (Demo and Install) 11.2

Estimated Costs

Material

- Caliche - Actual F/A Cost - Dimensions 1084 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 93.64 CY @ 3,500 Lbs./CY => 163.87 Tons @ \$3.25 = \$532.59
- Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 1084 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 140.52 CY @ 4,212 Lbs. /CY => 295.93 Tons @ \$58.50 = \$17,312.02

Material picked up at vendors facility by F/A Equipment and Labor (Dump Trucks with 14 CY capacity each) and delivered to the jobsite - This item does not include F/A Equipment and Labor Costs - This item is for material cost only

Equipment and Labor

- Using F/A Equipment (Grader with 14 Ft. Moldboard - FEMA CC 8332) and F/A Labor (actual hourly rate including fringes), grade road base (Caliche) surface. - Dimensions 1084 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep
2.8 Hrs. Labor @ \$28.72 = \$80.42
2.8 Hrs. FA Equip @ 84.00 = \$235.20

- Using F/A Equipment (Paver - FEMA CC 8432) and F/A Labor (actual hourly rate including fringes), apply asphalt road surface. - Dimensions 1084 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep
4.5 Hrs. Labor @ \$20.06 = \$90.27
4.5 Hrs. FA Equip @ 135.00 = \$607.50

- Using F/A Equipment (Dump Truck # 1 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.
11.2 Hrs. Labor @ \$20.80 = \$232.96
11.2 Hrs. FA Equip @ 75.00 = \$840.00

- Using F/A Equipment (Dump Truck # 2 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.
11.2 Hrs. Labor @ \$20.80 = \$232.96
11.2 Hrs. FA Equip @ 75.00 = \$840.00

- Using F/A Equipment (Dump Truck # 3 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.
11.2 Hrs. Labor @ \$20.80 = \$232.96
11.2 Hrs. FA Equip @ 75.00 = \$840.00

- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801
2 Hrs. Labor @ \$17.89 = \$35.78
2 Hrs. FA Equip @ 19.95 = \$39.90

- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801
2 Hrs. Labor @ \$17.89 = \$35.78
2 Hrs. FA Equip @ 19.95 = \$39.90

- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 1084 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep
2.8 Hrs. Labor @ \$19.40 = \$54.32
2.8 Hrs. FA Equip @ 28.75 = \$80.50

- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 1084 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep

2.4 Hrs. Labor @ \$19.40 = \$46.56
 2.4 Hrs. FA Equip @ 33.75 = \$81.00

- Using F/A Equipment (Front End Loader - 5 CY Capacity - FEMA CC 8395) and F/A Labor (actual hourly rate including fringes), scrape up road surface and load dump trucks. - Dimensions 1084 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep
 5.2 Hrs. Labor @ \$21.21 = \$110.29
 5.2 Hrs. FA Equip @ 74.50 = \$387.40

- Using F/A Equipment (Haul Truck with trailer- FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.
 2 Hrs. Labor @ \$20.80 = \$41.60
 2Hrs. FA Equip @ 41.00 = \$82.00

- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Cliché and Asphalt for Tack Coating) to road base materials and surfaces.
 4.5 Hrs. Labor @ \$20.80 = \$93.60
 4.5 Hrs. FA Equip @ 51.25 = \$230.63

- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)
 7.6 Hrs. Labor @ \$18.44 = \$140.14

- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)
 7.6 Hrs. Labor @ \$20.28 = \$154.13

Summary of Estimated Costs

F/A Labor \$1,581.77
 F/A Equipment \$4,304.03
 F/A Materials \$17,844.61

Total this Project: \$23,730.40

Current Version:

Site 7 of 13

DAMAGED FACILITY:

Site 07 Precinct # 4

COUNTY: Hidalgo

LOCATION:

PA-06-TX-4223-PW-00991(0):
 Site # 7 Lat.: 26.24692 Long.: -98.11724 to Lat.: 26.24661 Long.: -98.11728 Nicole Drive starting at the Stop sign at Alberta Road and continuing south 100 LF to the Dead End Sign at address 519. See attached pictures labelled as Site 07 photos.

LATITUDE:
 26.24661
 26.24692

LONGITUDE:
 -98.11728
 -98.11724

Current Version:

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4223-PW-00991(0):
 During the Declared event period, standing floodwaters at a depth of 2 Ft. submerged this section of paved roadway for a period of longer than Three (3) Weeks. Water saturated the base material (Caliche) and caused the road wear surface (Asphalt) to delaminate and separate from the Caliche Base material resulting in the need to replace the following:

- Caliche - Dimensions 100 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 8.64 CY
- Asphalt Wear Surface - Dimensions 100 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 12.96 CY

This road, while in poor condition (prevalent Alligator Cracking) is nonetheless recommended as eligible damages, the rational for this recommendation is based on the FEMA TAC Technical Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained adhered to the base material; and, intact in spite of exhibiting signs of poor condition with Alligator Cracking throughout. Had this damaged section of road not been submerged for a protracted period of time, the likelihood is it would have remained intact. Therefore the damages at are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).

Current Version:

SCOPE OF WORK:

PA-06-TX-4223-PW-00991(0):
 Work to Be Completed
 The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material

requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, In a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is attached to this Project, see "Signed Labor and Equipment Cert.pdf". This Scope of Work and associated estimated Costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items

Remove and Haul existing materials for repurposing to Applicants Storage Yard facility (Applicant will mill broken asphalt and Caliche for future use as patch materials):

- Caliche - Dimensions 100 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 8.64 CY
- Asphalt Wear Surface - Dimensions 100 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 12.96 CY

Demo and Haul Away

Truck Loads	Dump Truck Hours	Hours Per Each of 1 Trucks
Caliche 1	0.62	
Asphalt 1	0.93	
Total 1.5	2	

Pick up materials from vendor locations and haul to site, Install and grade base (1 Inch deep Caliche) to existing 2" base (which will restore to a 3 Inch base that preexisted the event, Compact base, install Tack Coat (emulsified asphalt), install, and roll in wear surface (1-1/2 Inch of Hot Asphalt Wear Surface)

Mobilize Pick up and deliver material in place

Truck Loads	Dump Truck Hours	Hours Per Each of 1 Trucks
Caliche 0.62	0.62	
Asphalt 0.93	0.93	
Total 1.5	2	

Total Truck Hours Needed per truck (Demo and Install) 4.00

Estimated Costs

Material

- Caliche - Actual F/A Cost - Dimensions 100 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 8.64 CY @ 3,500 Lbs. /CY => 15.12 Tons @ \$3.25 = \$49.13
- Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 100 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 12.96 CY @ 4,212 Lbs. / CY => 27.30 Tons @ \$58.50 = \$1,597.05

Material picked up at vendors facility by F/A Equipment and Labor (Dump Trucks with 14 CY capacity each) and delivered to the jobsite - This item does not include F/A Equipment and Labor Costs - This item is for material cost only.

Equipment and Labor

- Using F/A Equipment (Grader with 14 Ft. Moldboard - FEMA CC 8332) and F/A Labor (actual hourly rate including fringes), grade base (Caliche) surface. - Dimensions 100 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep
1.2 Hrs. Labor @ \$28.72 = \$34.46
1.2 Hrs. FA Equip @ 84.00 = \$100.80
- Using F/A Equipment (Paver - FEMA CC 8432) and F/A Labor (actual hourly rate including fringes), install asphalt road surface. - Dimensions 100 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep
1.4 Hrs. Labor @ \$20.06 = \$28.08
1.4 Hrs. FA Equip @ 135.00 = \$189.00
- Using F/A Equipment (Dump Truck # 1 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.
4Hrs. Labor @ \$20.80 = \$83.20
4 Hrs. FA Equip @ 75.00 = \$300.00
- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801
2 Hrs. Labor @ \$17.89 = \$35.78
2 Hrs. FA Equip @ 19.95 = \$39.90
- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801
2 Hrs. Labor @ \$17.89 = \$35.78
2 Hrs. FA Equip @ 19.95 = \$39.90
- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 100 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep
1.2 Hrs. Labor @ \$19.40 = \$23.28
1.2 Hrs. FA Equip @ 28.75 = \$34.50
- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and

smooth base and road surfaces. - Dimensions 100 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep

1.2 Hrs. Labor @ \$19.40 = \$23.28

1.2 Hrs. FA Equip @ 33.75 = \$40.50

- Using F/A Equipment (Front End Loader - 5 CY Capacity - FEMA CC 8395) and F/A Labor (actual hourly rate including fringes), scrape up road surface and load dump trucks. - Dimensions 100 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.4996 inch) deep

1.4 Hrs. Labor @ \$21.21 = \$29.69

1.4 Hrs. FA Equip @ 74.50 = \$104.30

- Using F/A Equipment (Haul Truck with trailer- FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.

2 Hrs. Labor @ \$20.80 = \$41.60

2Hrs. FA Equip @ 41.00 = \$82.00

- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Cliché and Asphalt for Tack Coating) to road base materials and surfaces.

1.4 Hrs. Labor @ \$20.80 = \$29.12

1.4 Hrs. FA Equip @ 51.25 = \$71.75

- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

2.6 Hrs. Labor @ \$18.44 = \$47.94

- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

2.6 Hrs. Labor @ \$20.28 = \$52.73

Summary of Estimated Costs

F/A Labor \$464.95

F/A Equipment \$1,002.65

F/A Materials \$1,646.18

Total this Project: \$3,113.79

Current Version:

Site 8 of 13

DAMAGED FACILITY:

Site 08 Precinct # 4

COUNTY: Hidalgo

LOCATION:

PA-06-TX-4223-PW-00991(0):

Site # 8 Lat.: 26.24883 Long.: -98.11285 to Lat.: 26.24896 Long.: -98.11352 Hudson Street starting at Eclipse Street and traveling west 256 LF to address 514. See attached pictures labelled as Site 08 photos.

LATITUDE:

26.24883

26.24896

LONGITUDE:

-98.11285

-98.11352

Current Version:

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4223-PW-00991(0):

During the Declared event period, standing floodwaters at a depth of 3 Ft. submerged this section of paved roadway for a period of longer than Two (2) Weeks. Water saturated the base material (Caliche) and caused the road wear surface (Asphalt) to delaminate and separate from the Caliche Base material resulting in the need to replace the following:

- Caliche - Dimensions 256 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 22.11 CY

- Asphalt Wear Surface - Dimensions 256 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 33.19 CY

This road, while in poor condition is nonetheless recommended as eligible damages, the rationale for this recommendation is based on the FEMA TAC Technical Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained adhered to the base material; and, intact in spite of exhibiting signs of poor condition with Alligator Cracking throughout. Had this damaged section of road not been submerged for a protracted period of time, the likelihood is it would have remained intact. Therefore the damages are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).

Current Version:

SCOPE OF WORK:

PA-06-TX-4223-PW-00991(0):

Work to Be Completed

The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume

using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, in a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is attached to this Project, see "Signed Labor and Equipment Cert.pdf". This Scope of Work and associated estimated Costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items

Remove and Haul existing materials for repurposing to Applicants Storage Yard facility (Applicant will mill broken asphalt and Caliche for future use as patch materials):

- Caliche - Dimensions 256 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 Inch) deep = 22.11 CY
- Asphalt Wear Surface - Dimensions 256 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 33.19 CY

Demo and Haul Away

	Truck Loads	Dump Truck Hours	Hours Per Each of 2 Trucks
Caliche	2	1.58	
Asphalt	2	2.37	
Total	4	2	

Pick up materials from vendor locations and haul to site, Install and grade base (1 Inch deep Caliche) to existing 2" base (which will restore to a 3 Inch base that preexisted the event, Compact base, install Tack Coat (emulsified asphalt), install, and roll in wear surface (1-1/2 Inch of Hot Asphalt Wear Surface)

Mobilize Pick up and deliver material in place

	Truck Loads	Dump Truck Hours	Hours Per Each of 2 Trucks
Caliche	1.58	1.58	
Asphalt	2.37	2.37	
Total	4	2	

Total Truck Hours Needed per truck (Demo and Install) 4.00

Estimated Costs

Material

- Caliche - Actual F/A Cost - Dimensions 256 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 22.11 CY @ 3,500 Lbs. /CY => 38.70 Tons @ \$3.25 = \$125.78
- Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 256 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 33.19 CY @ 4,212 Lbs./CY => 69.89 Tons @ \$58.50 = \$4,088.45

Material picked up at vendors facility by F/A Equipment and Labor (Dump Trucks with 14 CY capacity each) and delivered to the jobsite - This item does not include F/A Equipment and Labor Costs - This item is for material cost only.

Equipment and Labor

- Using F/A Equipment (Grader with 14 Ft. Moldboard - FEMA CC 8331) and F/A Labor (actual hourly rate including fringes), grade base (Caliche) surface. - Dimensions 256 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep
1.5 Hrs. Labor @ \$28.72 = \$43.08
1.5 Hrs. FA Equip @ 84.00 = \$126.00
- Using F/A Equipment (Paver - FEMA CC 8432) and F/A Labor (actual hourly rate including fringes), install asphalt road surface. - Dimensions 256 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep
1.9 Hrs. Labor @ \$20.06 = \$38.11
1.9 Hrs. FA Equip @ 135.00 = \$256.50
- Using F/A Equipment (Dump Truck # 1 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.
4 Hrs. Labor @ \$20.80 = \$83.20
4 Hrs. FA Equip @ 75.00 = \$300.00
- Using F/A Equipment (Dump Truck # 2 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.
4 Hrs. Labor @ \$20.80 = \$83.20
4 Hrs. FA Equip @ 75.00 = \$300.00
- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801
2 Hrs. Labor @ \$17.89 = \$35.78
2 Hrs. FA Equip @ 19.95 = \$39.90
- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801
2 Hrs. Labor @ \$17.89 = \$35.78
2 Hrs. FA Equip @ 19.95 = \$39.90
- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 256 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep

1.5 Hrs. Labor @ \$19.40 = \$29.10
 1.5 Hrs. FA Equip @ 28.75 = \$43.13

- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 256 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep

1.4 Hrs. Labor @ \$19.40 = \$27.16
 1.4 Hrs. FA Equip @ 33.75 = \$47.25

- Using F/A Equipment (Front End Loader - 5 CY Capacity - FEMA CC 8395) and F/A Labor (actual hourly rate including fringes), scrape up road surface and load dump trucks. - Dimensions 256 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep

2 Hrs. Labor @ \$21.21 = \$42.42
 2 Hrs. FA Equip @ 74.50 = \$149.00

- Using F/A Equipment (Haul Truck with trailer- FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.

2 Hrs. Labor @ \$20.80 = \$41.60
 2 Hrs. FA Equip @ 41.00 = \$82.00

- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Cliché and Asphalt for Tack Coating) to road base materials and surfaces.

1.9 Hrs. Labor @ \$20.80 = \$39.52
 1.9 Hrs. FA Equip @ 51.25 = \$97.38

- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

3.4 Hrs. Labor @ \$18.44 = \$62.70

- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

3.4 Hrs. Labor @ \$20.28 = \$68.95

Summary of Estimated Costs

F/A Labor \$630.60
 F/A Equipment \$1481.05
 F/A Materials \$4214.22

Total this Project: \$ 6325.88

Current Version:

Site 9 of 13

DAMAGED FACILITY:

COUNTY: Hidalgo

Site 09 Precinct # 4

LOCATION:

PA-06-TX-4223-PW-00991(0):
 Site # 9 Lat.: 26.251225 Long.: -98.113344 to Lat.: 26.25061 Long.: -98.11343 Eclipse Street starting at Anchor Street and travelling South and ending at address 4612. See attached pictures labelled as Site 09 photos.

LATITUDE:
 26.250698
 26.251225

LONGITUDE:
 -98.113428
 -98.113344

Current Version:

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4223-PW-00991(0):
 During the Declared event period, standing floodwaters at a depth of 2.5 Ft. submerged this section of paved roadway for a period of longer than Two (2) Weeks. Water saturated the base material (Caliche) and caused the road wear surface (Asphalt) to delaminate and separate from the Caliche Base material resulting in the need to replace the following:

- Caliche - Dimensions 184 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 15.89 CY
- Asphalt Wear Surface - Dimensions 184 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 23.85 CY

This road, while in poor condition is nonetheless recommended as eligible damages, the rationale for this recommendation is based on the FEMA TAC Technical Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained adhered to the base material; and, intact in spite of exhibiting signs of fair condition throughout. Had this damaged section of road not been submerged for a protracted period of time, the likelihood is it would have remained intact. Therefore the damages are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).

Current Version:

SCOPE OF WORK:

PA-06-TX-4223-PW-00991(0):
 Work to Be Completed

The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, In a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is attached to this Project, see "Signed Labor and Equipment Cert.pdf". This Scope of Work and associated estimated Costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items

Remove and Haul existing materials for repurposing to Applicants Storage Yard facility (Applicant will mill broken asphalt and Caliche for future use as patch materials):

- Dimensions 184 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 15.89 CY
- Asphalt Wear Surface - Dimensions 184 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 23.85 CY

Demo and Haul Away

Truck Loads	Dump Truck Hours	Hours Per Each of 2 Trucks
Caliche 1.14	1.14	
Asphalt 1.70	2.00	
Total 3.14	2	

Pick up materials from vendor locations and haul to site, Install and grade base (1 Inch deep Caliche) to existing 2" base (which will restore to a 3 Inch base that preexisted the event, Compact base, install Tack Coat (emulsified asphalt), install, and roll in wear surface (1-1/2 Inch of Hot Asphalt Wear Surface)

Mobilize Pick up and deliver material in place

Truck Loads	Dump Truck Hours	Hours Per Each of 2 Trucks
Caliche 1.14	1.14	
Asphalt 1.70	2.00	
2		

Total Truck Hours Needed per truck (Demo and Install) 4.00

Estimated Costs

Material

- Caliche - Actual F/A Cost - Dimensions 184 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 15.89 CY @ 3,500 Lbs. /CY => 27.82 Tons @ \$3.25 = \$90.40
- Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 184 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 23.85 CY @ 4,212 Lbs. /CY => 50.23 Tons @ \$58.50 = \$2,938.57

Material picked up at vendors facility by F/A Equipment and Labor (Dump Trucks with 14 CY capacity each) and delivered to the jobsite - This item does not include F/A Equipment and Labor Costs - This item is for material cost only.

Equipment and Labor

- Using F/A Equipment (Grader with 14 Ft. Moldboard - FEMA CC 8331) and F/A Labor (actual hourly rate including fringes), grade base (Caliche) surface. - Dimensions 184 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep

1.3 Hrs. Labor @ \$28.72 = \$37.34

1.3 Hrs. FA Equip @ 84.00 = \$109.20

- Using F/A Equipment (Paver - FEMA CC 8432) and F/A Labor (actual hourly rate including fringes), install asphalt road surface. - Dimensions 184 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep

1.6 Hrs. Labor @ \$20.06 = \$32.10

1.6 Hrs. FA Equip @ 135.00 = \$216.00

- Using F/A Equipment (Dump Truck # 1 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

4 Hrs. Labor @ \$20.80 = \$83.20

4 Hrs. FA Equip @ 75.00 = \$300.00

- Using F/A Equipment (Dump Truck # 2 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

4 Hrs. Labor @ \$20.80 = \$83.20

4 Hrs. FA Equip @ 75.00 = \$300.00

- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801

2 Hrs. Labor @ \$17.89 = \$35.78

2 Hrs. FA Equip @ 19.95 = \$39.90

- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801
2 Hrs. Labor @ \$17.89 = \$35.78
2 Hrs. FA Equip @ 19.95 = \$39.90
- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 184 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep
1.3 Hrs. Labor @ \$19.40 = \$25.22
1.3 Hrs. FA Equip @ 28.75 = \$37.38
- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 184 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep
1.3 Hrs. Labor @ \$19.40 = \$25.22
1.3 Hrs. FA Equip @ 33.75 = \$43.88
- Using F/A Equipment (Front End Loader - 5 CY Capacity - FEMA CC 8395) and F/A Labor (actual hourly rate including fringes), scrape up road surface and load dump trucks. - Dimensions 184 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep
1.8 Hrs Labor @ \$21.21 = \$38.18
1.8 Hrs FA Equip @ 74.50 = \$134.10
- Using F/A Equipment (Haul Truck with trailer- FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.
2 Hrs. Labor @ \$20.80 = \$41.60
2 Hrs. FA Equip @ 41.00 = \$82.00
- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Cliché and Asphalt for Tack Coating) to road base materials and surfaces.
1.6 Hrs. Labor @ \$20.80 = \$33.28
1.6 Hrs. FA Equip @ 51.25 = \$82.00
- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)
3 Hrs. Labor @ \$18.44 = \$55.32
- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)
3 Hrs. Labor @ \$20.28 = \$60.84

Summary of Estimated Costs

F/A Labor \$587.05
F/A Equipment \$1384.35
F/A Materials \$3028.97

Current Version:

Site 10 of 13

DAMAGED FACILITY:

COUNTY: Hidalgo

Site 10AB Precinct # 4

LOCATION:

LATITUDE:

LONGITUDE:

PA-06-TX-4223-PW-00991(0):

Site # 10A starting at Lat.: 26.256500 Long.: -98.117010 and ending at Lat.: 26.254396 Long.: -98.117404 on Ansley Street between Kelsey Drive and Trenton Road. See attached pictures labelled as Site 10AB photos.

Site # 10B Lat.: 26.256552 Long.: -98.116868 Ansley Drive at the intersection of Kelsey Drive. See attached pictures labelled as Site 10AB photos.

26.254396
26.2565
26.256552

-98.117404
-98.11701
-98.116868

Current Version:

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4223-PW-00991(0):

During the Declared event period, standing floodwaters at a depth of 2 Ft. submerged this section of paved roadway for a period of longer than Three (3) Weeks. Water saturated the base material (Caliche) and caused the road wear surface (Asphalt) to delaminate and separate from the Caliche Base material resulting in the need to replace the following:

Site 10A

- Caliche - Dimensions 783 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 67.64 CY
- Asphalt Wear Surface - Dimensions 783 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 101.50 CY

Site 10B

- Caliche - Dimensions 100 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 8.64 CY
- Asphalt Wear Surface - Dimensions 100 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 12.96 CY

This road, while in fair condition is nonetheless recommended as eligible damages, the rationale for this recommendation is based on the FEMA TAC Technical Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained adhered to the base material; and, intact in spite of exhibiting signs of fair condition throughout. Had this damaged section of road not been submerged for a protracted period of time, the likelihood is it would have remained intact. Therefore the damages are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).

Current Version:

SCOPE OF WORK:

PA-06-TX-4223-PW-00991(0):

Work to Be Completed

The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, in a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is attached to this Project, see "Signed Labor and Equipment Cert.pdf". This Scope of Work and associated estimated Costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items

Remove and Haul existing materials for repurposing to Applicants Storage Yard facility (Applicant will mill broken asphalt and Caliche for future use as patch materials):

- 10A Caliche - Dimensions 783 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 67.64 CY
- 10B Caliche - Dimensions 100 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 8.64 CY
- 10A Asphalt Wear Surface - Dimensions 783 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 101.50 CY
- 10B Asphalt Wear Surface - Dimensions 100 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 12.96 CY

Demo and Haul Away

	Truck Loads	Dump Truck Hours	Hours Per Each of 3 Trucks
Caliche	5.45	6.00	
Asphalt	8.18	8.18	
Total	14.2	4.7	

Pick up materials from vendor locations and haul to site, Install and grade base (1 Inch deep Caliche) to existing 2" base (which will restore to a 3 Inch base that preexisted the event, Compact base, install Tack Coat (emulsified asphalt), install, and roll in wear surface (1-1/2 Inch of Hot Asphalt Wear Surface)

Mobilize Pick up and deliver material in place

	Truck Loads	Dump Truck Hours	Hours Per Each of 3 Trucks
Caliche	5.45	6.00	
Asphalt	8.18	8.18	
Total	14.2	4.7	

Total Truck Hours Needed per truck (Demo and Install) 9.50

Estimated Costs

Material

- 10A Caliche - Actual F/A Cost - Dimensions 783 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 67.64 CY @ 3,500 Lbs. /CY => 118.37 Tons @ \$3.25 = \$384.70
- 10B Caliche - Actual F/A Cost - Dimensions 100 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 8.64 CY @ 3,500 Lbs. /CY => 15.12 Tons @ \$3.25 = \$49.13
- 10A Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 783 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 101.50 CY @ 4,212 Lbs. /CY => 213.76 Tons @ \$58.50 = \$12,504.90
- 10B Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 100 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 12.96 CY @ 4,212 Lbs. /CY => 27.30 Tons @ \$58.50 = \$1,597.05

Material picked up at vendors facility by F/A Equipment and Labor (Dump Trucks with 14 CY capacity each) and delivered to the jobsite - This item does not include F/A Equipment and Labor Costs - This item is for material cost only.

Equipment and Labor for 10A and 10B combined

- Using F/A Equipment (Grader with 14 Ft. Moldboard - FEMA CC 8331) and F/A Labor (actual hourly rate including fringes), grade base (Caliche) surface. - Dimensions 883 Ft. long by 28 Ft. Wide by 0.083 Ft. (0.9996 inch) deep

2.5 Hrs. Labor @ \$28.72 = \$71.80

2.5 Hrs. FA Equip @ 84.00 = \$210.00

- Using F/A Equipment (Paver - FEMA CC 8432) and F/A Labor (actual hourly rate including fringes), install asphalt road surface. - Dimensions 883 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep.

3.9 Hrs. Labor @ \$20.06 = \$78.23

3.9 Hrs. FA Equip @ 135.00 = \$526.50

- Using F/A Equipment (Dump Truck # 1 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

9.5 Hrs. Labor @ \$20.80 = \$197.60

9.5 Hrs. FA Equip @ 75.00 = \$712.50

- Using F/A Equipment (Dump Truck # 2 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

9.5 Hrs. Labor @ \$20.80 = \$197.60

9.5 Hrs. FA Equip @ 75.00 = \$712.50

- Using F/A Equipment (Dump Truck # 3 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

9.5 Hrs. Labor @ \$20.80 = \$197.60

9.5 Hrs. FA Equip @ 75.00 = \$712.50

- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801

2 Hrs. Labor @ \$17.89 = \$35.78

2 Hrs. FA Equip @ 19.95 = \$39.90

- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801

2 Hrs. Labor @ \$17.89 = \$35.78

2 Hrs. FA Equip @ 19.95 = \$39.90

- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 883 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep

2.5 Hrs. Labor @ \$19.40 = \$48.50

2.5 Hrs. FA Equip @ 28.75 = \$71.88

- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 883 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep

2.2 Hrs. Labor @ \$19.40 = \$42.68

2.2 Hrs. FA Equip @ 33.75 = \$74.25

- Using F/A Equipment (Front End Loader - 5 CY Capacity - FEMA CC 8395) and F/A Labor (actual hourly rate including fringes), scrape up road surface and load dump trucks. - Dimensions 883 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep

4.4 Hrs. Labor @ \$21.21 = \$93.32

4.4 Hrs. FA Equip @ 74.50 = \$327.80

- Using F/A Equipment (Haul Truck with trailer- FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.

2 Hrs. Labor @ \$20.80 = \$41.60

2 Hrs. FA Equip @ 41.00 = \$82.00

- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Cliché and Asphalt for Tack Coating) to road base materials and surfaces.

3.9 Hrs. Labor @ \$20.80 = \$81.12

3.9 Hrs. FA Equip @ 51.25 = \$199.88

- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

6.5 Hrs. Labor @ \$18.44 = \$119.867

- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

6.5 Hrs. Labor @ \$20.28 = \$131.82

Summary of Estimated Costs

F/A Labor \$1373.30

F/A Equipment \$3709.60

F/A Materials \$14535.78

Total this Project: \$ 19618.68

Current Version:

Site 11 of 13

DAMAGED FACILITY:

Site 11 Precinct # 4

COUNTY: Hidalgo

LOCATION:

PA-06-TX-4223-PW-00991(0):

Site # 11 Lat.: 26.254194 Long.: -98.115993 to Lat.: 26.255987 Long.: -98.115677 Trey drive between Trenton road and Kelsey Drive travelling North and ending at address 4008. See attached pictures labelled as Site 11 photos.

LATITUDE:

26.254194
26.255987

LONGITUDE:

-98.115993
-98.115677

Current Version:

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4223-PW-00991(0):

During the Declared event period, standing floodwaters at a depth of 2 Ft. submerged this section of paved roadway for a period of longer than Two (2) Weeks. Water saturated the base material (Caliche) and caused the road wear surface (Asphalt) to delaminate and separate from the Caliche Base material resulting in the need to replace the following:

- Caliche - Dimensions 660 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 57.01 CY
- Asphalt Wear Surface - Dimensions 660 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 85.56 CY

This road, while in fair condition is nonetheless recommended as eligible damages, the rationale for this recommendation is based on the FEMA TAC Technical Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained adhered to the base material; and, intact in spite of exhibiting signs of fair condition throughout. Had this damaged section of road not been submerged for a protracted period of time, the likelihood is it would have remained intact. Therefore the damages are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).

Current Version:

SCOPE OF WORK:

PA-06-TX-4223-PW-00991(0):

Work to Be Completed

The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, in a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is attached to this Project, see "Signed Labor and Equipment Cert.pdf". This Scope of Work and associated estimated Costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items

Remove and Haul existing materials for repurposing to Applicants Storage Yard facility (Applicant will mill broken asphalt and Caliche for future use as patch materials):

- Caliche - Dimensions 660 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 57.01 CY
- Asphalt Wear Surface - Dimensions 660 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 85.56 CY

Demo and Haul Away

Truck Loads	Dump Truck Hours	Hours Per Each of 3 Trucks
Caliche 4	4.07	
Asphalt 6	6.11	
Total 10.2	3.4	

Pick up materials from vendor locations and haul to site, Install and grade base (1 Inch deep Caliche) to existing 2" base (which will restore to a 3 Inch base that preexisted the event, Compact base, install Tack Coat (emulsified asphalt), install, and roll in wear surface (1-1/2 Inch of Hot Asphalt Wear Surface)

Mobilize Pick up and deliver material in place

Truck Loads	Dump Truck Hours	Hours Per Each of 3 Trucks
Caliche 4.07	4.07	
Asphalt 6.11	6.11	
Total 10.2	3.4	

Total Truck Hours Needed per truck (Demo and Install) 7.00

Estimated Costs

Material

- Caliche - Actual F/A Cost - Dimensions 660 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 57.01 CY @ 3,500 Lbs. /CY => 99.77 Tons @ \$3.25 = \$324.27
- Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 660 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 85.56 CY @ 4,212 Lbs. /CY => 180.18 Tons @ \$58.50 = \$10,540.53

Material picked up at vendors facility by F/A Equipment and Labor (Dump Trucks with 14 CY capacity each) and delivered to the jobsite -

This item does not include F/A Equipment and Labor Costs - This item is for material cost only.

Equipment and Labor

- Using F/A Equipment (Grader with 14 Ft. Moldboard - FEMA CC 8331) and F/A Labor (actual hourly rate including fringes), grade base (Caliche) surface. - Dimensions 660 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep

2.1 Hrs. Labor @ \$28.72 = \$60.31

2.1 Hrs. FA Equip @ 84.00 = \$176.40

- Using F/A Equipment (Paver - FEMA CC 8432) and F/A Labor (actual hourly rate including fringes), install asphalt road surface. - Dimensions 660 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep

3.1 Hrs. Labor @ \$20.06 = \$62.19

3.1 Hrs. FA Equip @ 135.00 = \$418.50

- Using F/A Equipment (Dump Truck # 1 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

7 Hrs. Labor @ \$20.80 = \$145.60

7 Hrs. FA Equip @ 75.00 = \$525.00

- Using F/A Equipment (Dump Truck # 2 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

7 Hrs. Labor @ \$20.80 = \$145.60

7 Hrs. FA Equip @ 75.00 = \$525.00

- Using F/A Equipment (Dump Truck # 3 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

7 Hrs. Labor @ \$20.80 = \$145.60

7 Hrs. FA Equip @ 75.00 = \$525.00

- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801

2 Hrs. Labor @ \$17.89 = \$35.78

2 Hrs. FA Equip @ 19.95 = \$39.90

- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801

2 Hrs. Labor @ \$17.89 = \$35.78

2 Hrs. FA Equip @ 19.95 = \$39.90

- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 660 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep

2.1 Hrs. Labor @ \$19.40 = \$40.74

2.1 Hrs. FA Equip @ 28.75 = \$60.38

- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 660 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep

1.9 Hrs. Labor @ \$19.40 = \$36.86

1.9 Hrs. FA Equip @ 33.75 = \$64.13

- Using F/A Equipment (Front End Loader - 5 CY Capacity - FEMA CC 8395) and F/A Labor (actual hourly rate including fringes), scrape up road surface and load dump trucks. - Dimensions 660 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep

3.6 Hrs. Labor @ \$21.21 = \$76.36

3.6 Hrs. FA Equip @ 74.50 = \$268.20

- Using F/A Equipment (Haul Truck with trailer- FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.

2 Hrs. Labor @ \$20.80 = \$41.60

2 Hrs. FA Equip @ 41.00 = \$82.00

- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Cliché and Asphalt for Tack Coating) to road base materials and surfaces.

3.1 Hrs. Labor @ \$20.80 = \$64.48

3.1 Hrs. FA Equip @ 51.25 = \$158.88

- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

5.4 Hrs. Labor @ \$18.44 = \$99.58

- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

5.4 Hrs. Labor @ \$20.28 = \$109.51

Summary of Estimated Costs

F/A Labor \$1099.98

F/A Equipment \$2883.28

F/A Materials \$10864.80

Total this Project: \$ 14848.06

Current Version:

Site 12 of 13

DAMAGED FACILITY:

COUNTY: Hidalgo

Site 12 Precinct # 4

LOCATION:

LATITUDE:

LONGITUDE:

PA-06-TX-4223-PW-00991(0):

Site # 12 Lat.: 26.25451 Long.: -98.11868 to Lat.: 26.25616 Long.: -98.11845 Hollis drive Between Trenton Road and Kelsey Drive travelling north and ending at address 4008. See attached pictures labelled as Site 12 photos.

26.25451

-98.11868

26.25616

-98.11845

Current Version:

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4223-PW-00991(0):

During the Declared event period, standing floodwaters at a depth of 2 Ft. submerged this section of paved roadway for a period of longer than Two (2) Weeks. Water saturated the base material (Caliche) and caused the road wear surface (Asphalt) to delaminate and separate from the Caliche Base material resulting in the need to replace the following:

- Caliche - Dimensions 590 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 50.97 CY
- Asphalt Wear Surface Dimensions 590 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 76.48 CY

This road, while in poor condition is nonetheless recommended as eligible damages, the rationale for this recommendation is based on the FEMA TAC Technical Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained adhered to the base material; and, intact in spite of exhibiting signs of poor condition with Alligator Cracking throughout. Had this damaged section of road not been submerged for a protracted period of time, the likelihood is it would have remained intact. Therefore the damages are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).

Current Version:

SCOPE OF WORK:

PA-06-TX-4223-PW-00991(0):

Work to Be Completed

The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, In a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is attached to this Project, see "Signed Labor and Equipment Cert.pdf". This Scope of Work and associated estimated Costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items

Remove and Haul existing materials for repurposing to Applicants Storage Yard facility (Applicant will mill broken asphalt and Caliche for future use as patch materials):

- Caliche - Dimensions 590 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 50.97 CY
- Asphalt Wear Surface Dimensions 590 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 76.48 CY

Demo and Haul Away

Truck Loads	Dump Truck Hours	Hours Per Each of 2 Trucks
Caliche 4	3.64	
Asphalt 5	5.46	
Total	9.10	4.6

Pick up materials from vendor locations and haul to site, Install and grade base (1 Inch deep Caliche) to existing 2" base (which will restore to a 3 Inch base that preexisted the event, Compact base, install Tack Coat (emulsified asphalt), install, and roll in wear surface (1-1/2 Inch of Hot Asphalt Wear Surface)

Mobilize Pick up and deliver material in place

Truck Loads	Dump Truck Hours	Hours Per Each of 2 Trucks
Caliche 3.64	3.64	
Asphalt 5.46	5.46	
Total	9.10	4.6

Total Truck Hours Needed per truck (Demo and Install) 9.00

Estimated Costs

Material

- Caliche - Actual F/A Cost - Dimensions 590 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep = 50.97 CY @ 3,500 Lbs./CY => 89.19 Tons @ \$3.25 = \$289.88
- Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 590 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 76.48 CY @ 4,212 Lbs./CY => 161.07 Tons @ \$58.50 = \$9,422.60

Material picked up at vendors facility by F/A Equipment and Labor (Dump Trucks with 14 CY capacity each) and delivered to the jobsite - This item does not include F/A Equipment and Labor Costs - This item is for material cost only.

Equipment and Labor

- Using F/A Equipment (Grader with 14 Ft. Moldboard - FEMA CC 8331) and F/A Labor (actual hourly rate including fringes), grade base (Caliche) surface. - Dimensions 590 Ft. long by 28 Ft. Wide by 0.083 Ft. (1 inch) deep
2 Hrs. Labor @ \$28.72 = \$57.44
2 Hrs. FA Equip @ \$84.00 = \$168.00
- Using F/A Equipment (Paver - FEMA CC 8432) and F/A Labor (actual hourly rate including fringes), install asphalt road surface. - Dimensions 590 Ft. long by 28 Ft. Wide by 0.125 Ft. (1.5 inch) deep.
2 Hrs. Labor @ \$20.06 = \$40.12
2 Hrs. FA Equip @ 135.00 = \$270.00
- Using F/A Equipment (Dump Truck # 1 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.
9 Hrs. Labor @ \$20.80 = \$187.20
9 Hrs. FA Equip @ 75.00 = \$675.00
- Using F/A Equipment (Dump Truck # 2 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.
9 Hrs. Labor @ \$20.80 = \$187.20
9 Hrs. FA Equip @ 75.00 = \$675.00
- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801
2 Hrs. Labor @ \$17.89 = \$35.78
2 Hrs. FA Equip @ 19.95 = \$39.90
- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801
2 Hrs. Labor @ \$17.89 = \$35.78
2 Hrs. FA Equip @ 19.95 = \$39.90
- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 590 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep
2 Hrs. Labor @ \$19.40 = \$38.80
2 Hrs. FA Equip @ 28.75 = \$57.50
- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 590 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep
1.8 Hrs. Labor @ \$19.40 = \$34.92
1.8 Hrs. FA Equip @ 33.75 = \$60.75
- Using F/A Equipment (Front End Loader - 5 CY Capacity - FEMA CC 8395) and F/A Labor (actual hourly rate including fringes), scrape up road surface and load dump trucks. - Dimensions 590 Ft. long by 28 Ft. Wide by 0.208 Ft. (2.5 inch) deep
3.3 Hrs. Labor @ \$21.21 = \$69.99
3.3 Hrs. FA Equip @ 74.50 = \$245.85
- Using F/A Equipment (Haul Truck with trailer- FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.
2 Hrs. Labor @ \$20.80 = \$41.60
2 Hrs. FA Equip @ 41.00 = \$82.00
- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Cliché and Asphalt for Tack Coating) to road base materials and surfaces.
2.9 Hrs. Labor @ \$20.80 = \$60.32
2.9 Hrs. FA Equip @ 51.25 = \$148.63
- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)
5.1 Hrs. Labor @ \$18.44 = \$94.04
- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)
5.1 Hrs. Labor @ \$20.28 = \$103.43

Summary of Estimated Costs

F/A Labor \$986.63
 F/A Equipment \$2462.53
 F/A Materials \$9712.47

Total this Project: \$ 13161.62

Current Version:

Site 13 of 13

DAMAGED FACILITY:

Site 13ABCD Precinct # 4

COUNTY: Hidalgo

LOCATION:

PA-06-TX-4223-PW-00991(0):

Site # 13A Lat.: 26.250390 Long.: -98.089190 Trenton Road - Multiple damaged sites between Jam Square East and Raul Longoria Road as follows: Sites 13A, 13B, 13C, and 13D - This Road section ends at Raul Longoria Road. See attached pictures labelled as Site 13A photos.

Site # 13B Lat.: 26.250660 Long.: -98.090890 Trenton Road between Jam Square East and Raul Longoria Road. See attached pictures labelled as Site 13B photos.

Site # 13C Lat.: 26.251840 Long.: -98.099570 Trenton Road between Jam Square East and Raul Longoria Road. See attached pictures labelled as Site 13C photos.

Site # 13D Lat.: 26.255140 Long.: -98.123090 Trenton Road between Jam Square East and Raul Longoria Road. See attached pictures labelled as Site 13D photos.

LATITUDE:

26.25039
 26.25066
 26.25184
 26.25514

LONGITUDE:

-98.08919
 -98.09089
 -98.09957
 -98.12309

Current Version:

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4223-PW-00991(0):

During the Declared event period, standing floodwaters at a depth of 2.5 Ft. submerged this section of paved roadway for a period of longer than Three (3) Weeks. Water saturated the base material (Caliche) and caused the road wear surface (Asphalt) to delaminate and separate from the Caliche Base material resulting in the need to replace the following:

- 13A Caliche - Dimensions 100 Ft. long by 22 Ft. Wide by 0.083 Ft. (1 inch) deep = 6.79 CY
- 13B Caliche - Dimensions 100 Ft. long by 22 Ft. Wide by 0.083 Ft. (1 inch) deep = 6.79 CY
- 13C Caliche - Dimensions 100 Ft. long by 22 Ft. Wide by 0.083 Ft. (1 inch) deep = 6.79 CY
- 13D Caliche - Dimensions 100 Ft. long by 22 Ft. Wide by 0.083 Ft. (1 inch) deep = 6.79 CY
- 13A Asphalt Wear Surface - Dimensions 100 Ft. long by 22 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 10.19 CY
- 13B Asphalt Wear Surface - Dimensions 100 Ft. long by 22 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 10.19 CY
- 13C Asphalt Wear Surface - Dimensions 100 Ft. long by 22 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 10.19 CY
- 13D Asphalt Wear Surface - Dimensions 100 Ft. long by 22 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 10.19 CY

This road, while in fair condition is nonetheless recommended as eligible damages, the rationale for this recommendation is based on the FEMA TAC Technical Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained adhered to the base material; and, intact in spite of exhibiting signs of fair condition throughout. Had this damaged section of road not been submerged for a protracted period of time, the likelihood is it would have remained intact. Therefore the damages are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).

Current Version:

SCOPE OF WORK:

PA-06-TX-4223-PW-00991(0):

Work to Be Completed

The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, In a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is attached to this Project, see "Signed Labor and Equipment Cert.pdf". This Scope of Work and associated estimated Costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items

Remove and Haul existing materials for repurposing to Applicants Storage Yard facility (Applicant will mill broken asphalt and Caliche for future use as patch materials):

- 13A Caliche - Dimensions 100 Ft. long by 22 Ft. Wide by 0.083 Ft. (1 inch) deep = 6.79 CY
- 13B Caliche - Dimensions 100 Ft. long by 22 Ft. Wide by 0.083 Ft. (1 inch) deep = 6.79 CY
- 13C Caliche - Dimensions 100 Ft. long by 22 Ft. Wide by 0.083 Ft. (1 inch) deep = 6.79 CY
- 13D Caliche - Dimensions 100 Ft. long by 22 Ft. Wide by 0.083 Ft. (1 inch) deep = 6.79 CY

13A Asphalt Wear Surface - Dimensions 100 Ft. long by 22 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 10.19 CY
 13B Asphalt Wear Surface - Dimensions 100 Ft. long by 22 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 10.19 CY
 13C Asphalt Wear Surface - Dimensions 100 Ft. long by 22 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 10.19 CY
 13D Asphalt Wear Surface - Dimensions 100 Ft. long by 22 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 10.19 CY

Demo and Haul Away

Truck Loads	Dump Truck Hours	Hours Per Each of 2 Trucks
Caliche 2	2.0	
Asphalt 3	3.0	
Total 5.0	3	

Pick up materials from vendor locations and haul to site, Install and grade base (1 Inch deep Caliche) to existing 2" base (which will restore to a 3 Inch base that preexisted the event, Compact base, install Tack Coat (emulsified asphalt), install, and roll in wear surface (1-1/2 Inch of Hot Asphalt Wear Surface)

Mobilize Pick up and deliver material in place

Truck Loads	Dump Truck Hours	Hours Per Each of 2 Trucks
Caliche 2	2.0	
Asphalt 3	3.0	
Total 5.0	3	

Total Truck Hours Needed per truck (Demo and Install) 6.00

Estimated Costs

Material

- 13 A Caliche - Actual F/A Cost - Dimensions 100 Ft. long by 22 Ft. Wide by 0.083 Ft. (1 inch) deep = 6.79 CY @ 3,500 Lbs./CY => 11.88 Tons @ \$3.25 = \$38.60
- 13 B Caliche - Actual F/A Cost - Dimensions 100 Ft. long by 22 Ft. Wide by 0.083 Ft. (1 inch) deep = 6.79 CY @ 3,500 Lbs./CY => 11.88 Tons @ \$3.25 = \$38.60
- 13 C Caliche - Actual F/A Cost - Dimensions 100 Ft. long by 22 Ft. Wide by 0.083 Ft. (1 inch) deep = 6.79 CY @ 3,500 Lbs./CY => 11.88 Tons @ \$3.25 = \$38.60
- 13 D Caliche - Actual F/A Cost - Dimensions 100 Ft. long by 22 Ft. Wide by 0.083 Ft. (1 inch) deep = 6.79 CY @ 3,500 Lbs./CY => 11.88 Tons @ \$3.25 = \$38.60
- 13A Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 100 Ft. long by 22 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 10.19 CY @ 4,212 Lbs./CY => 21.45 Tons @ \$58.50 = \$1,254.83
- 13B Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 100 Ft. long by 22 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 10.19 CY @ 4,212 Lbs./CY => 21.45 Tons @ \$58.50 = \$1,254.83
- 13C Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 100 Ft. long by 22 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 10.19 CY @ 4,212 Lbs./CY => 21.45 Tons @ \$58.50 = \$1,254.83
- 13D Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 100 Ft. long by 22 Ft. Wide by 0.125 Ft. (1.5 inch) deep = 10.19 CY @ 4,212 Lbs./CY => 21.45 Tons @ \$58.50 = \$1,254.83

Material picked up at vendors facility by F/A Equipment and Labor (Dump Trucks with 14 CY capacity each) and delivered to the jobsite - This item does not include F/A Equipment and Labor Costs - This item is for material cost only.

Equipment and Labor for Sites A,B,C,D combined

- Using F/A Equipment (Grader with 14 Ft. Moldboard - FEMA CC 8331) and F/A Labor (actual hourly rate including fringes), grade base (Caliche) surface. - Dimensions 400 Ft. long by 22 Ft. Wide by 0.083 Ft. (1 inch) deep
 1.5 Hrs. Labor @ \$28.72 = \$43.08
 1.5 Hrs. FA Equip @ 84.00 = \$126.00
- Using F/A Equipment (Paver - FEMA CC 8432) and F/A Labor (actual hourly rate including fringes), install asphalt road surface. - Dimensions 400 Ft. long by 22 Ft. Wide by 0.125 Ft. (1.5 inch) deep.
 2 Hrs. Labor @ \$20.06 = \$40.12
 2 Hrs. FA Equip @ 135.00 = \$270.00
- Using F/A Equipment (Dump Truck # 1 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.
 6 Hrs. Labor @ \$20.80 = \$124.80
 6 Hrs. FA Equip @ 75.00 = \$450.00
- Using F/A Equipment (Dump Truck # 2 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.
 6 Hrs. Labor @ \$20.80 = \$124.80
 6 Hrs. FA Equip @ 75.00 = \$450.00
- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801
 2 Hrs. Labor @ \$17.89 = \$35.78
 2 Hrs. FA Equip @ 19.95 = \$39.90
- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801

2 Hrs. Labor @ \$17.89 = \$35.78
 2 Hrs. FA Equip @ 19.95 = \$39.90

- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 400 Ft. long by 22 Ft. Wide by 0.208 Ft. (2.5 inch) deep

1.5 Hrs. Labor @ \$19.40 = \$29.10
 1.5 Hrs. FA Equip @ 28.75 = \$43.13

- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 400 Ft. long by 22 Ft. Wide by 0.208 Ft. (2.5 inch) deep

1.4 Hrs. Labor @ \$19.40 = \$27.16
 1.4 Hrs. FA Equip @ 33.75 = \$47.25

- Using F/A Equipment (Front End Loader - 5 CY Capacity - FEMA CC 8395) and F/A Labor (actual hourly rate including fringes), scrape up road surface and load dump trucks. - Dimensions 400 Ft. long by 22 Ft. Wide by 0.208 Ft. (2.5 inch) deep

2.2 Hrs. Labor @ \$21.21 = \$46.66
 2.2 Hrs. FA Equip @ 74.50 = \$163.90

- Using F/A Equipment (Haul Truck with trailer- FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.

2 Hrs. Labor @ \$20.80 = \$41.60
 2 Hrs. FA Equip @ 41.00 = \$82.00

- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Cliché and Asphalt for Tack Coating) to road base materials and surfaces.

2 Hrs. Labor @ \$20.80 = \$41.60
 2 Hrs. FA Equip @ 51.25 = \$102.50

- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

3.6 Hrs. Labor @ \$18.44 = \$66.38

- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

3.6 Hrs. Labor @ \$20.28 = \$73.01
 Summary of Estimated Costs

F/A Labor \$729.87
 F/A Equipment \$1814.58
 F/A Materials \$5173.71

Total this Project: \$ 7718.16
 End of SOW

Project Notes:

-- DIRECT ADMINISTRATIVE COSTS (ESTIMATED): Direct Administrative Costs (Sub Grantee) 9901 has been estimated from the DAC Spreadsheet (Attached). These costs were calculated based on the total project value. The Sub Grantee has been notified that back-up documentation will be requested at close-out which supports all costs incurred for assistance in formulating or administering this project assistance grant.

-- FEDERAL AID ROADS: Project Specialist has validated that none of the sites in this project are listed on the Federal Functional Classification System as Major Collectors, Minor Arterials, Principal Arterials, or Interstate, receiving federal funding.

-- ROAD PROJECTS (FIRMette Requirement): Any road being repaired to pre-disaster design, function, capacity that does not include a hazard mitigation proposal, will not require a FIRMette. If any work to repair the road requires work outside the original footprint a FIRMette will be required.

-- SMALL PROJECTS, ANY CATEGORY: For small projects FEMA pays based on the actual or estimated cost in order to expedite the funds (Digest pg. 121.) FEMA does not perform final inspections on small projects; however, the state must certify compliance. The applicant does have the ability to request a small project netting (appeal) if/when significant net small over-runs occur. This process will involve a review of all documentation for all small projects and an adjustment will be made for the total actual eligible dollars spent (over-run/under-run). A final Project Worksheet will then be required in EMMIE to capture all the eligible PA costs for the small projects.

-- SMALL PROJECT CHANGE REQUEST: Change requests to small project worksheets will not be approved unless there is a change in the approved scope of work. This change must be approved prior to the construction. If after completion of all small projects the applicant incurs a significant net small project overrun, the applicant must file an appeal within 60 day of completion of the applicant's last small project. All requests must be submitted through the grantee.

-- WORK TO BE COMPLETED: Upon completion, this site will be returned to its original design, function, and capacity within the original footprint. Acquiring all necessary Federal, State, and local permits is required for Federal Funding. Noncompliance with this requirement may jeopardize the receipt of Federal funds.

-- PROCUREMENT: The Applicant was advised by FEMA PAC and/or Project Specialist that in the seeking of proposals and letting of contracts for eligible work, the Applicant must comply with its Local, State and/or Federal procurement laws, regulations, and procedures as required by 2 CFR 317-326.

-- RECORD RETENTION: As described in 2 CFR 200.33 Sub Grantee must maintain all work-related records for a period of three (3) years from Sub Grantee closure (final payment), all records relative this project worksheet are subject to examination and audit by the State,

FEMA and the Comptroller General of the United States and must reflect work related to disaster specific costs.

-- PERMITS: Federal Funding is contingent upon acquiring all necessary Federal, State and Local permits. Noncompliance with this requirement may jeopardize the receipt of federal funds. The applicant is responsible for obtaining all required permits prior to the commencement of work.

-- ENVIRONMENTAL AND HISTORIC PRESERVATION: Applicant must comply with all applicable environmental and historic preservation laws. Federal funding is contingent upon acquiring all necessary Federal, State and Local permits. Noncompliance with this requirement may jeopardize the receipt of federal funds.

-- CHANGES TO SCOPE OF WORK DESCRIBED IN THIS PW/SA (SUBGRANT APPLICATION): The applicant shall comply with all applicable codes and standards in the completion of eligible work to repair or replace damaged public facilities. Any change to the approved scope of work on a Project Worksheet (PW/SA) must be reported and approved before work begins. Failure to report changes may jeopardize Federal and State funding. In the case of a change in scope of work, the applicant should immediately notify Wendell Allen, Section Administrator, Texas Department of Emergency Management prior to starting work.

-- INSURANCE REVIEW: The applicant is aware that all projects are subject to an insurance review as stated in 44 C.F.R. Sections 206.252 and 206.253. If applicable, an insurance determination will be made either as anticipated proceeds or actual proceeds in accordance with the applicant's insurance policy which may affect the total amount of the project. Approval of this project may result in an obtain /maintain insurance requirement. The Sub Grantee must comply with insurance reviewer terms and conditions upon receipt of sub-grant from the State.

-- COST BASIS FOR LABOR, EQUIPMENT AND MATERIALS: Costs used to formulate this project were based on: [select all that apply and include data dates]

- Unit Costs provided by Applicant - Force Account Labor Rates (including Fringes)

- FEMA cost codes - For Force3 Account Equipment

- Local material cost - Force Account Material Costs

-- AUDIT STATEMENT: All documentation related to this project worksheet is subject to audit and must reflect disaster - related work and project - specific cost. The applicant has been advised of responsibility to maintain supporting documentation (records). The type of records to be maintained is specified in FEMA policy 2 CFR Subpart F, Audit Requirements. Records must be maintained for three 3 years from the date the last project was completed or from the date final payment was received, whichever is later.

-- 75% FEDERAL FUNDING: In accordance with FEMA policy 9523.9 and current disaster declaration determinations, this project worksheet will be funded with the Federal Cost share at 75% of all eligible costs.

-- By accepting this grant the Applicant to the best of their ability acknowledges that all damages described within this Sub-grant Application and all associated costs being claimed were a direct result of the declared event, and in connection with the incident period of 05/04/2015 thru 06/22/2015 with the exception of requests for alternate or improved projects.

-- HAZARD MITIGATION PROPOSAL: Hazard Mitigation under section 406 has been considered for this project and due to the type of work or project, effective mitigation is not feasible within the requirements of 44 CFR 206.226(c).

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 To Be Completed			
1	9888	Site 1 Site 01 Precinct # 4 Work To Be Completed	1/LS	\$ 0.00	\$ 0.00
2	9888	Site 2 Site 02 Precinct # 4 Work To Be Completed	1/LS	\$ 5,273.78	\$ 5,273.78
3	9888	Site 3 Site 03 Precinct # 4 Work To Be Completed	1/LS	\$ 23,988.61	\$ 23,988.61
4	9888	Site 4 Site 04 Precinct # 4 Work To Be Completed	1/LS	\$ 3,832.00	\$ 3,832.00
5	9888	Site 5 Site 05 Precinct # 4 Work To Be Completed	1/LS	\$ 33,249.90	\$ 33,249.90
6	9888	Site 6 Site 06 Precinct # 4 Work To Be Completed	1/LS	\$ 23,730.41	\$ 23,730.41
7	9888	Site 7 Site 07 Precinct # 4 Work To Be Completed	1/LS	\$ 3,113.78	\$ 3,113.78
8	9888	Site 8 Site 08 Precinct # 4 Work To	1/LS	\$ 6,325.87	\$ 6,325.87

		Be Completed			
9	9888	Site 9 Site 09 Precinct # 4 Work To Be Completed	1/LS	\$ 5,000.37	\$ 5,000.37
10	9888	Site 10 Site 10AB Precinct # 4 Work To Be Completed	1/LS	\$ 19,618.68	\$ 19,618.68
11	9888	Site 11 Site 11 Precinct # 4 Work To Be Completed	1/LS	\$ 14,848.06	\$ 14,848.06
12	9888	Site 12 Site 12 Precinct # 4 Work To Be Completed	1/LS	\$ 13,161.63	\$ 13,161.63
13	9888	Site 13 Site 13ABCD Precinct # 4 Work To Be Completed	1/LS	\$ 7,718.16	\$ 7,718.16
		Direct Subgrantee Admin Cost			
14	9888	Site 1 Site 01 Precinct # 4 Direct Subgrantee Admin Cost	1/LS	\$ 0.00	\$ 0.00
15	9888	Site 2 Site 02 Precinct # 4 Direct Subgrantee Admin Cost	1/LS	\$ 284.00	\$ 284.00
16	9888	Site 3 Site 03 Precinct # 4 Direct Subgrantee Admin Cost	1/LS	\$ 489.00	\$ 489.00
17	9888	Site 4 Site 04 Precinct # 4 Direct Subgrantee Admin Cost	1/LS	\$ 141.00	\$ 141.00
18	9888	Site 5 Site 05 Precinct # 4 Direct Subgrantee Admin Cost	1/LS	\$ 576.00	\$ 576.00
19	9888	Site 6 Site 06 Precinct # 4 Direct Subgrantee Admin Cost	1/LS	\$ 489.00	\$ 489.00
20	9888	Site 7 Site 07 Precinct # 4 Direct Subgrantee Admin Cost	1/LS	\$ 141.00	\$ 141.00
21	9888	Site 8 Site 08 Precinct # 4 Direct Subgrantee Admin Cost	1/LS	\$ 284.00	\$ 284.00
22	9888	Site 9 Site 09 Precinct # 4 Direct Subgrantee Admin Cost	1/LS	\$ 141.00	\$ 141.00
23	9888	Site 10 Site 10AB Precinct # 4 Direct Subgrantee Admin Cost	1/LS	\$ 489.00	\$ 489.00
24	9888	Site 11 Site 11 Precinct # 4 Direct Subgrantee Admin Cost	1/LS	\$ 284.00	\$ 284.00
25	9888	Site 12 Site 12 Precinct # 4 Direct Subgrantee Admin Cost	1/LS	\$ 284.00	\$ 284.00
26	9888	Site 13 Site 13ABCD Precinct # 4 Direct Subgrantee Admin Cost	1/LS	\$ 284.00	\$ 284.00
				TOTAL COST	\$ 163,747.25
PREPARED BY CHARLES M LOIHLE			TITLE	SIGNATURE <i>Charles M Loihle</i>	
APPLICANT REP. Ramon Garcia			TITLE Hidalgo County Judge	SIGNATURE	