PA-06-TX-4245-PW-00176(0) P	
Applicant Name:	Application Title:
HIDALGO (COUNTY)	HID004C/ Hildago Co. Pct 1 Roads
Period of Performance Start:	Period of Performance End:
11-25-2015	05-25-2017

Bundle Reference # (Amendment #)	Date Awarded

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	4245	-	DR	-TX	HID004C	215-99215-00	05-13-2016	C

APPLICANT: HIDALGO (COUNTY)

WORK COMPLETE AS OF:
04-27-2016 : 0 %

Site 1 of 11

DAMAGED FACILITY:

Site 18 Campacuas

COUNTY: Hidalgo

LOCATION:

Current Version:
Site 18 26.21246 -97.90975 to 26.21203 -97.90479 Campacuas Drive Mercedes, TX 78570
See Location Map 18

LATITUDE:
26.21203
26.21246

LONGITUDE:
-97.90479
-97.90975

DAMAGE DESCRIPTION AND DIMENSIONS:

Current Version:
DDD
During the Declared event period, This Asphalt wear surface roadway was submerged in standing floodwaters to varying depths of One (1) to Two (2) Feet for a period of Two (2) weeks. The floodwater saturated and softened a Six (6) Inch depth of the Twelve (12) Inch Sub Base and Eight (8) Inch deep Base (Caliche' Flex Base) causing pronounced undulations and rutting to the road creating severe and dangerous driving conditions; and, cracking and delamination of the Two (2) Inch deep asphalt wear surface. To restore the road to pre event form and function, The Applicant will need to hire a Contractor to perform the following:

- Replace Caliche' Flex Base - Dimensions 1745 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 1163.3 CY
- Replace Asphalt Wear Surface – Dimensions 1745 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 290.83 CY
- Treat and Compact Existing Sub Base with 3% Lime slurry additive – Dimensions 1745 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 872.5 CY x 2970 Lbs. specific weight per CY of Sub Base = 2591325 Lbs. / 2000 = 1295.66 Tons of Sub Base Material to be treated.

See photo labelled as Photo Site 18
This road, while in fair condition is nonetheless recommended as eligible damages, the rational for this recommendation is based on the FEMA PA Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained even planed, 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 at are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).
End of DDD

SCOPE OF WORK:

Current Version:

SOW
Work to Be Completed
The Applicant will follow its Procurement Policy and use public competitive bid solicitations to hire a Contractor to perform the repairs in accordance with the Scope of Work as detailed in this Sub Grant Application. The FEMA PA Specialist formulated this Damage Description, The Scope of Work and Estimates were formulated by The Applicants' Professional Engineer (TEDIS Infrastructure Group) located at 1201 E. Expressway 83 Mission, TX 78572. The Engineer of record that prepared the Applicant provided estimate is Mark Corbitt, P.E., CFM – Senior Project Engineer (phone number 956-424-7898). The FEMA Specialist worked with the Applicants' Director of Roads and Bridges (Oscar Gonzalez) and both parties (FEMA and Applicant), working together, inspected and evaluated all sites contained in this project. The Professional Engineer estimated the cost of the project using Recent Local Historical Costs (January 2016) for similar work using lowest unit costs from Bid Tabulations provided by The TEXDOT Pharr District Office. The FEMA PA Specialist formulated this Sub Grant Application with the cooperation and concurrence of the Applicants' Engineer and Director of Roads and Bridges.
The Scope of Work and Estimate provided by the Applicants' Engineer (a P.E. licensed in The State of Texas) was reviewed by The FEMA Specialist to ensure all scope items and costs correlate to the detailed damage description, Additionally, the estimated costs were validated by comparison to data provided by TEXDOT (see attached TEXDOT Low Unit Cost Bid Tabulations dated January 2016). The FEMA Specialist concurs that the Scope of Work and associated costs are reasonable; Therefore the scope and costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items
THE SPREADSHEET FURNISHED BY P. E. ROUNDED FIGURES OFF TO THE NEAREST TENTH

•EXCAVATION (ROADWAY) [TEXDOT Code 110 6001] - Contract Labor and Equipment to remove 2 Inch Depth of Asphalt Wear Surface and 8 Inch Depth of Caliche' Flex Base (total depth of 10 Inches combined). Includes hauling away and disposal costs. Dimensions 1745 Ft. long x 27 Ft. wide x 0.833 Ft. (10 Inch) deep / 27 = 1454.2 CY @ $4.03 = $5,860.29

•SPRINKLING (DUST CONTROL) [TEXDOT Code 204 6003] - Contract Labor, Equipment and Material to Apply water for dust control, earthwork, or base construction. Apply water at a uniform rate and in the required quantity, or as directed. This Item will be measured by the 1,000 gallon applied.
69.8 M Gallons @ $12.24 = $854.65

•PROOF ROLLING [TEXDOT Code 216 6001] - Contract Labor and Equipment to Proof-roll earthwork, base, or both to locate unstable areas. Correct unstable or non-uniform areas, if found. Rolling will be measured by the hour operated on surfaces being tested.
4.9 Hrs. @ $57.44 = $281.95

•FL BS (RDWY DEL) (TY E GR 4) (FNAL POS) [TEXDOT Code 247 6225] - Contract Labor, Equipment and Materials to construct a foundation course composed of an 8 Inch depth of compacted flexible base. Use Tex-100-E material definitions. Grade 4 may be further designated as Grade 4A, Grade 4B, etc. Type E. Caliche. Includes Hauling. Dimensions 1745 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 1163.3 CY @ $19.48 = $22,661.73

•LIME TRT (EXST MATL) (12") [TEXDOT Code 260 6011] - Contract Labor and Equipment only to treat Six (6) Inch Depth of the existing 12 Inch depth of Sub Base with 3% Lime. Dimensions 1745 Ft. long x 27 Ft. / 9 = 5235 SY @ $1.75 = $9,161.25

•LIME TRT (NEW BASE) (8") [TEXDOT Code 260 6015] - Contract Labor and Equipment only to treat 8 Inch depth of New Caliche' Flex Base with 3% Lime. Dimensions 1745 Ft. long x 27 Ft. / 9 = 5235 SY @ $2.75 = $14,396.25

•LIME (HYD, COM OR QK)(SLURRY) [TEXDOT Code 260 6043] - Contract Material Only including delivery to treat existing 12 inch depth of existing sub base and 8 inch depth of new Caliche' Flex Base.

Sub Base - Dimensions 1745 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 872.5 CY x 2970 Lbs. specific weight per CY of Sub Base = 2591325 Lbs. / 2000 = 1295.66 Tons of Sub Base Material x 0.03 (3% Lime add mixture by weight = 38.87 Tons of Lime

Base - Dimensions 1745 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 1163.33 CY x 3375 Lbs. specific weight per CY of Base = 3926250 Lbs. / 2000 = 1963.125 Tons of Base Material x 0.03 (3% Lime add mixture by weight = 58.89 Tons of Lime
Therefore,

38.87 Tons for Sub Base plus 58.89 Tons for Base = 97.76 Tons of Lime @ $136.24 = $13,324.74

•PRIME COAT (MC-30) [TEXDOT Code 310 6009] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY – Dimensions 1745 Ft. long x 27 Ft. / 9 = 5235 SY x 0.10 (10 % application rate) Gallons per SY = 523.5 Gallons @ $3.75 = $1,963.13

•ASPH (AC-10) Tack Coat [TEXDOT Code 316 6011] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY - Dimensions 1745 Ft. long x 27 Ft. / 9 = 5235 SY x 0.10 (10 % application rate) Gallons per SY = 523.5 Gallons @ $3.00 = $1,570.50

•D-GR HMA TY-D SAC-A PG76-22 [TEXDOT Code 341 6047] - Contract Labor, Equipment and Material to pave and roll in place a 2 Inch Depth of Asphalt wear surface. – Dimensions 1745 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 290.83 CY x 4104.6243 Lbs. per CY (specific weight of asphalt) = 1,193,747.8 Lbs./ 2000 = 596.88 Tons @ $74.62 = $44,539.43

•BARRICADES, SIGNS AND TRAFFIC HANDLING [TEXDOT Code 502 6001] 0.7 Months @ $1,000.00 = $700.00

Summary Estimated Costs

Subtotal: $115,314.00
Contingency [Five (5%) Percent]: $5,765.70
Survey and Engineering [Ten (10%) Percent]: $12,107.96

Total Construction Cost : $133,187.58
End of SOW

Site 2 of 11

DAMAGED FACILITY:	COUNTY: Hidalgo	
Site 19 Cherokee		
LOCATION:	LATITUDE: 26.21264 26.21317	LONGITUDE: -97.90433 -97.90923
Current Version: Site 19 26.21264 -97.90433 to 26.21317 -97.90923 Cherokee, Mercedes, TX 78570 See Location Map 19		

DAMAGE DESCRIPTION AND DIMENSIONS:

Current Version:
DDD
During the Declared event period, This Asphalt wear surface roadway was submerged in standing floodwaters to varying depths of One (1) to Two (2) Feet for a period of Two (2) weeks. The floodwater saturated and softened a Six (6) Inch depth of the Twelve (12) Inch Sub Base and Eight (8) Inch deep Base (Caliche' Flex Base) causing pronounced undulations and rutting to the road creating severe and dangerous driving conditions; and, cracking and delamination of the Two (2) Inch deep asphalt wear surface. To restore the road to pre event form and function, The Applicant will need to hire a Contractor to perform the following:

- Replace Caliche' Flex Base - Dimensions 1662 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 1,108.6 CY
- Replace Asphalt Wear Surface – Dimensions 1662 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 277.6 CY
- Treat and Compact Existing Sub Base with 3% Lime slurry additive – Dimensions 1662 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 831.0 CY x 2970 Lbs. specific weight per CY of Sub Base = 2468070 Lbs. / 2000 = 1234.035 Tons of Sub Base Material to be treated.

See photo labelled as Photo Site 19
This road, while in fair condition is nonetheless recommended as eligible damages, the rational for this recommendation is based on the FEMA PA Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained even planed, 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 at are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).
End of DDD

SCOPE OF WORK:

Current Version:
SOW
Work to Be Completed
The Applicant will follow its Procurement Policy and use public competitive bid solicitations to hire a Contractor to perform the repairs in accordance with the Scope of Work as detailed in this Sub Grant Application. The FEMA PA Specialist formulated this Damage Description, The Scope of Work and Estimates were formulated by The Applicants' Professional Engineer (TEDIS Infrastructure Group) located at 1201 E. Expressway 83 Mission, TX 78572. The Engineer of record that prepared the Applicant provided estimate is Mark Corbitt, P.E., CFM – Senior Project Engineer (phone number 956-424-7898). The FEMA Specialist worked with the Applicants' Director of Roads and Bridges (Oscar Gonzalez) and both parties (FEMA and Applicant), working together, inspected and evaluated all sites contained in this project. The Professional Engineer estimated the cost of the project using Recent Local Historical Costs (January 2016) for similar work using lowest unit costs from Bid Tabulations provided by The TEXDOT Pharr District Office. The FEMA PA Specialist formulated this Sub Grant Application with the cooperation and concurrence of the Applicants' Engineer and Director of Roads and Bridges.
The Scope of Work and Estimate provided by the Applicants' Engineer (a P.E. licensed in The State of Texas) was reviewed by The FEMA Specialist to ensure all scope items and costs correlate to the detailed damage description, Additionally, the estimated costs were validated by comparison to data provided by TEXDOT (see attached TEXDOT Low Unit Cost Bid Tabulations dated January 2016). The FEMA Specialist concurs that the Scope of Work and associated costs are reasonable; Therefore the scope and costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items
THE SPREADSHEET FURNISHED BY P. E. ROUNDED FIGURES OFF TO THE NEAREST TENTH.
•EXCAVATION (ROADWAY) [TEXDOT Code 110 6001] - Contract Labor and Equipment to remove 2 Inch Depth of Asphalt Wear Surface and 8 Inch Depth of Caliche' Flex Base (total depth of 10 Inches combined). Includes hauling away and disposal costs. Dimensions 1662 Ft. long x 27 Ft. wide x 0.833 Ft. (10 Inch) deep / 27 = 1385 CY @ $4.03 = $5,581.55

•SPRINKLING (DUST CONTROL) [TEXDOT Code 204 6003] - Contract Labor, Equipment and Material to Apply water for dust control, earthwork, or base construction. Apply water at a uniform rate and in the required quantity, or as directed. This Item will be measured by the 1,000 gallon applied. 00
66.5 M Gallons @ $12.24 = $814.

•PROOF ROLLING [TEXDOT Code 216 6001] - Contract Labor and Equipment to Proof-roll earthwork, base, or both to locate unstable areas. Correct unstable or non-uniform areas, if found. Rolling will be measured by the hour operated on surfaces being tested.
4.7Hrs. @ $57.44 = $268.54

•FL BS (RDWY DEL) (TY E GR 4) (FNAL POS) [TEXDOT Code 247 6225] - Contract Labor, Equipment and Materials to construct a foundation course composed of an 8 Inch depth of compacted flexible base. Use Tex-100-E material definitions. Grade 4 may be further designated as Grade 4A, Grade 4B, etc. Type E. Caliche. Includes Hauling. Dimensions 1662 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 1108 CY @ $19.48 = $21,583.84

•LIME TRT (EXST MATL) (12") [TEXDOT Code 260 6011] - Contract Labor and Equipment only to treat Six (6) Inch Depth of the existing 12 Inch depth of Sub Base with 3% Lime. Dimensions 1662 Ft. long x 27 Ft. / 9 = 4986 SY @ $1.75 = $8,725.50

•LIME TRT (NEW BASE) (8") [TEXDOT Code 260 6015] - Contract Labor and Equipment only to treat 8 Inch depth of New Caliche' Flex Base with 3% Lime. Dimensions 1662 Ft. long x 27 Ft. / 9 = 4986 SY @ $2.75 = $13,711.50

•LIME (HYD, COM OR QK)(SLURRY) [TEXDOT Code 260 6043] - Contract Material Only including delivery to treat existing 12 inch depth of existing sub base and 8 inch depth of new Caliche' Flex Base.

Sub Base - Dimensions 1662 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 831.0 CY x 2970 Lbs. specific weight per CY of Sub Base = 2468070 Lbs. / 2000 = 1234.035 Tons of Sub Base Material x 0.03 (3% Lime add mixture by weight = 37.02 Tons of Lime

Base - Dimensions 1662 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 1108.6 CY x 3375 Lbs. specific weight per CY of Base = 3741525 Lbs. / 2000 = 1870.76 Tons of Base Material x 0.03 (3% Lime add mixture by weight = 56.12 Tons of Lime
Therefore,

37.02 Tons for Sub Base plus 56.12 Tons for Base = 93.14 Tons of Lime @ $136.24 = $12,690.96

•PRIME COAT (MC-30) [TEXDOT Code 310 6009] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY – Dimensions 1662 Ft. long x 27 Ft. / 9 = 4986 SY x 0.10 (10 % application rate) Gallons per SY = 498.6 Gallons @ $3.75 = $1,869.75

•ASPH (AC-10) Tack Coat [TEXDOT Code 316 6011] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY - Dimensions 1662 Ft. long x 27 Ft. / 9 = 4986 SY x 0.10 (10 % application rate) Gallons per SY = 498.6 Gallons @ $3.00 = $1,495.80

•D-GR HMA TY-D SAC-A PG76-22 [TEXDOT Code 341 6047] - Contract Labor, Equipment and Material to pave and roll in place a 2 Inch Depth of Asphalt wear surface. – Dimensions 1662 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 277.6 CY x 4104.6243 Lbs. per CY (specific weight of asphalt) = 1,139,443.7 Lbs./ 2000 = 568.5 Tons @ $74.62 = $42,420.93

•BARRICADES, SIGNS AND TRAFFIC HANDLING [TEXDOT Code 502 6001] 0.7 Months @ $1,000.00 = $700.00

Summary Estimated Costs

Subtotal: $109,862.37
Contingency [Five (5%) Percent]: $5,493.12
Survey and Engineering [Ten (10%) Percent]: $11,535.55

Total Construction Cost : $126,891.04
End of SOW

Site 3 of 11

DAMAGED FACILITY:	COUNTY: Hidalgo
Site 20 Santawan	

LOCATION:	LATITUDE:	LONGITUDE:
Current Version: Site 20 26.21185 -97.90671 to 26.21439 -97.90678 Santawan, Mercedes, TX 78570 See Location Map 20	26.21185 26.21439	-97.90671 -97.90678

DAMAGE DESCRIPTION AND DIMENSIONS:

Current Version:
DDD
During the Declared event period, This Asphalt wear surface roadway was submerged in standing floodwaters to varying depths of One (1)

to Two (2) Feet for a period of Two (2) weeks. The floodwater saturated and softened a Six (6) Inch depth of the Twelve (12) Inch Sub Base and Eight (8) Inch deep Base (Caliche' Flex Base) causing pronounced undulations and rutting to the road creating severe and dangerous driving conditions; and, cracking and delamination of the Two (2) Inch deep asphalt wear surface. To restore the road to pre event form and function, The Applicant will need to hire a Contractor to perform the following:

- Replace Caliche' Flex Base - Dimensions 900 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 600.0 CY
- Replace Asphalt Wear Surface – Dimensions 900 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 150.3 CY
- Treat and Compact Existing Sub Base with 3% Lime slurry additive – Dimensions 900 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 450 CY x 2970 Lbs. specific weight per CY of Sub Base = 1336500 Lbs. / 2000 = 668.25 Tons of Sub Base Material to be treated.

See photo labelled as Photo Site 20
This road, while in fair condition is nonetheless recommended as eligible damages, the rational for this recommendation is based on the FEMA PA Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained even planed, 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 at are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).
End of DDD

SCOPE OF WORK:

Current Version:
SOW
Work to Be Completed
The Applicant will follow its Procurement Policy and use public competitive bid solicitations to hire a Contractor to perform the repairs in accordance with the Scope of Work as detailed in this Sub Grant Application. The FEMA PA Specialist formulated this Damage Description, The Scope of Work and Estimates were formulated by The Applicants' Professional Engineer (TEDIS Infrastructure Group) located at 1201 E. Expressway 83 Mission, TX 78572. The Engineer of record that prepared the Applicant provided estimate is Mark Corbitt, P.E., CFM – Senior Project Engineer (phone number 956-424-7898). The FEMA Specialist worked with the Applicants' Director of Roads and Bridges (Oscar Gonzalez) and both parties (FEMA and Applicant), working together, inspected and evaluated all sites contained in this project. The Professional Engineer estimated the cost of the project using Recent Local Historical Costs (January 2016) for similar work using lowest unit costs from Bid Tabulations provided by The TEXDOT Pharr District Office. The FEMA PA Specialist formulated this Sub Grant Application with the cooperation and concurrence of the Applicants' Engineer and Director of Roads and Bridges.
The Scope of Work and Estimate provided by the Applicants' Engineer (a P.E. licensed in The State of Texas) was reviewed by The FEMA Specialist to ensure all scope items and costs correlate to the detailed damage description, Additionally, the estimated costs were validated by comparison to data provided by TEXDOT (see attached TEXDOT Low Unit Cost Bid Tabulations dated January 2016). The FEMA Specialist concurs that the Scope of Work and associated costs are reasonable; Therefore the scope and costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items
THE SPREADSHEET FURNISHED BY P. E. ROUNDED FIGURES OFF TO THE NEAREST TENTH.
•EXCAVATION (ROADWAY) [TEXDOT Code 110 6001] - Contract Labor and Equipment to remove 2 Inch Depth of Asphalt Wear Surface and 8 Inch Depth of Caliche' Flex Base (total depth of 10 Inches combined). Includes hauling away and disposal costs. Dimensions 900 Ft. long x 27 Ft. wide x 0.833 Ft. (10 Inch) deep / 27 = 749.7 CY @ $4.03 = $3,022.50

•SPRINKLING (DUST CONTROL) [TEXDOT Code 204 6003] - Contract Labor, Equipment and Material to Apply water for dust control, earthwork, or base construction. Apply water at a uniform rate and in the required quantity, or as directed. This Item will be measured by the 1,000 gallon applied. 00
36.0 M Gallons @ $12.24 = $440.79

•PROOF ROLLING [TEXDOT Code 216 6001] - Contract Labor and Equipment to Proof-roll earthwork, base, or both to locate unstable areas. Correct unstable or non-uniform areas, if found. Rolling will be measured by the hour operated on surfaces being tested.
2.5 Hrs. @ $57.44 = $145.42

•FL BS (RDWY DEL) (TY E GR 4) (FNAL POS) [TEXDOT Code 247 6225] - Contract Labor, Equipment and Materials to construct a foundation course composed of an 8 Inch depth of compacted flexible base. Use Tex-100-E material definitions. Grade 4 may be further designated as Grade 4A, Grade 4B, etc. Type E. Caliche. Includes Hauling. Dimensions 900 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 600.3 CY @ $19.48 = $11,688.00

•LIME TRT (EXST MATL) (12") [TEXDOT Code 260 6011] - Contract Labor and Equipment only to treat Six (6) Inch Depth of the existing 12 Inch depth of Sub Base with 3% Lime. Dimensions 900 Ft. long x 27 Ft. / 9 = 2,700 SY @ $1.75 = $4,725.00

•LIME TRT (NEW BASE) (8") [TEXDOT Code 260 6015] - Contract Labor and Equipment only to treat 8 Inch depth of New Caliche' Flex Base with 3% Lime. Dimensions 900 Ft. long x 27 Ft. / 9 = 2,700 SY @ $2.75 = $7,425.00

•LIME (HYD, COM OR QK)(SLURRY) [TEXDOT Code 260 6043] - Contract Material Only including delivery to treat existing 12 inch depth of existing sub base and 8 inch depth of new Caliche' Flex Base.

Sub Base - Dimensions 900 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 450 CY x 2970 Lbs. specific weight per CY of Sub Base = 1,336,500 Lbs. / 2000 = 668.25 Tons of Sub Base Material x 0.03 (3% Lime add mixture by weight = 20.04 Tons of Lime

Base – Dimensions900 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 600.3 CY x 3375 Lbs. specific weight per CY of Base = 2,026,012.5 Lbs. / 2000 = 1,013.66 Tons of Base Material x 0.03 (3% Lime add mixture by weight = 30.40 Tons of Lime
Therefore,

20.04 Tons for Sub Base plus 30.40 Tons for Base = 50.4 Tons of Lime @ $136.24 = $6,872.36

•PRIME COAT (MC-30) [TEXDOT Code 310 6009] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY – Dimensions 900 Ft. long x 27 Ft. / 9 = 2,700 SY x 0.10 (10 % application rate) Gallons per SY = 270 Gallons @ $3.75 = $1,012.50

•ASPH (AC-10) Tack Coat [TEXDOT Code 316 6011] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY - Dimensions 900 Ft. long x 27 Ft. / 9 =2,700 SY x 0.10 (10 % application rate) Gallons per SY = 270 Gallons @ $3.00 = $810.00

•D-GR HMA TY-D SAC-A PG76-22 [TEXDOT Code 341 6047] - Contract Labor, Equipment and Material to pave and roll in place a 2 Inch Depth of Asphalt wear surface. – Dimensions 900 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 150.3 CY x 4104.6243 Lbs. per CY (specific weight of asphalt) = 616,925.03 Lbs./ 2000 = 308.46 Tons @ $74.62 = $22,971.63

•BARRICADES, SIGNS AND TRAFFIC HANDLING [TEXDOT Code 502 6001] 0.4 Months @ $1,000.00 = $400.00

Summary Estimated Costs

Subtotal: $59,513.20
Contingency [Five (5%) Percent]: $2,975.66
Survey and Engineering [Ten (10%) Percent]: $6,248.89

Total Construction Cost : $68,737.74
End of SOW

Site 4 of 11

DAMAGED FACILITY:	COUNTY: Hidalgo
Site 21 Caddoe	

LOCATION:	LATITUDE:	LONGITUDE:
Current Version: Site 21 26.21426 -97.90668 to 26.21434 -97.90339 Caddoe, Mercedes, TX 78570 See Location Map 21	26.21426 26.21434	-97.90668 -97.90339

DAMAGE DESCRIPTION AND DIMENSIONS:

Current Version:
DDD
During the Declared event period, This Asphalt wear surface roadway was submerged in standing floodwaters to varying depths of One (1) to Two (2) Feet for a period of Two (2) weeks. The floodwater saturated and softened a Six (6) Inch depth of the Twelve (12) Inch Sub Base and Eight (8) Inch deep Base (Caliche' Flex Base) causing pronounced undulations and rutting to the road creating severe and dangerous driving conditions; and, cracking and delamination of the Two (2) Inch deep asphalt wear surface. To restore the road to pre event form and function, The Applicant will need to hire a Contractor to perform the following:

- Replace Caliche' Flex Base - Dimensions 1125 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 750.4 CY
- Replace Asphalt Wear Surface – Dimensions 1125 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 187.9 CY
- Treat and Compact Existing Sub Base with 3% Lime slurry additive – Dimensions 1125 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 562.5 CY x 2970 Lbs. specific weight per CY of Sub Base = 1,670,628 Lbs. / 2000 = 835.31 Tons of Sub Base Material to be treated.

See photo labelled as Photo Site 21
This road, while in fair condition is nonetheless recommended as eligible damages, the rational for this recommendation is based on the FEMA PA Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained even planed, 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 at are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).
End of DDD

SCOPE OF WORK:

Current Version:
SOW
Work to Be Completed
The Applicant will follow its Procurement Policy and use public competitive bid solicitations to hire a Contractor to perform the repairs in accordance with the Scope of Work as detailed in this Sub Grant Application. The FEMA PA Specialist formulated this Damage Description, The Scope of Work and Estimates were formulated by The Applicants' Professional Engineer (TEDIS Infrastructure Group) located at 1201 E. Expressway 83 Mission, TX 78572. The Engineer of record that prepared the Applicant provided estimate is Mark Corbitt,

P.E., CFM – Senior Project Engineer (phone number 956-424-7898). The FEMA Specialist worked with the Applicants' Director of Roads and Bridges (Oscar Gonzalez) and both parties (FEMA and Applicant), working together, inspected and evaluated all sites contained in this project. The Professional Engineer estimated the cost of the project using Recent Local Historical Costs (January 2016) for similar work using lowest unit costs from Bid Tabulations provided by The TEXDOT Pharr District Office. The FEMA PA Specialist formulated this Sub Grant Application with the cooperation and concurrence of the Applicants' Engineer and Director of Roads and Bridges.
The Scope of Work and Estimate provided by the Applicants' Engineer (a P.E. licensed in The State of Texas) was reviewed by The FEMA Specialist to ensure all scope items and costs correlate to the detailed damage description, Additionally, the estimated costs were validated by comparison to data provided by TEXDOT (see attached TEXDOT Low Unit Cost Bid Tabulations dated January 2016). The FEMA Specialist concurs that the Scope of Work and associated costs are reasonable; Therefore the scope and costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items
THE SPREADSHEET FURNISHED BY P. E. ROUNDED FIGURES OFF TO THE NEAREST TENTH.
•EXCAVATION (ROADWAY) [TEXDOT Code 110 6001] - Contract Labor and Equipment to remove 2 Inch Depth of Asphalt Wear Surface and 8 Inch Depth of Caliche' Flex Base (total depth of 10 Inches combined). Includes hauling away and disposal costs. Dimensions 1125 Ft. long x 27 Ft. wide x 0.833 Ft. (10 Inch) deep / 27 = 937.5 CY @ $4.03 = $3,778.13

•SPRINKLING (DUST CONTROL) [TEXDOT Code 204 6003] - Contract Labor, Equipment and Material to Apply water for dust control, earthwork, or base construction. Apply water at a uniform rate and in the required quantity, or as directed. This Item will be measured by the 1,000 gallon applied. 00
45.0 M Gallons @ $12.24 = $550.99

•PROOF ROLLING [TEXDOT Code 216 6001] - Contract Labor and Equipment to Proof-roll earthwork, base, or both to locate unstable areas. Correct unstable or non-uniform areas, if found. Rolling will be measured by the hour operated on surfaces being tested.
3.2 Hrs. @ $57.44 = $181.77

•FL BS (RDWY DEL) (TY E GR 4) (FNAL POS) [TEXDOT Code 247 6225] - Contract Labor, Equipment and Materials to construct a foundation course composed of an 8 Inch depth of compacted flexible base. Use Tex-100-E material definitions. Grade 4 may be further designated as Grade 4A, Grade 4B, etc. Type E. Caliche. Includes Hauling. Dimensions 1125 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 750 CY @ $19.48 = $14,610.00

•LIME TRT (EXST MATL) (12") [TEXDOT Code 260 6011] - Contract Labor and Equipment only to treat Six (6) Inch Depth of the existing 12 Inch depth of Sub Base with 3% Lime. Dimensions 1,125 Ft. long x 27 Ft. / 9 = 3,375 SY @ $1.75 = $5,906.25

•LIME TRT (NEW BASE) (8") [TEXDOT Code 260 6015] - Contract Labor and Equipment only to treat 8 Inch depth of New Caliche' Flex Base with 3% Lime. Dimensions 1,125 Ft. long x 27 Ft. / 9 = 3,375 SY @ $2.75 = $9,281.25

•LIME (HYD, COM OR QK)(SLURRY) [TEXDOT Code 260 6043] - Contract Material Only including delivery to treat existing 12 inch depth of existing sub base and 8 inch depth of new Caliche' Flex Base.

Sub Base - Dimensions 1,125 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 562.5 CY x 2970 Lbs. specific weight per CY of Sub Base = 1,670,625 Lbs. / 2000 = 835.3125 Tons of Sub Base Material x 0.03 (3% Lime add mixture by weight = 25.06 Tons of Lime

Base – Dimensions 1,125 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 750.4 CY x 3375 Lbs. specific weight per CY of Base = 2,532,600 Lbs. / 2000 = 1,266.3 Tons of Base Material x 0.03 (3% Lime add mixture by weight = 37.99 Tons of Lime
Therefore,

25.06 Tons for Sub Base plus 37.99 Tons for Base = 63.5 Tons of Lime @ $136.24 = $8,590.45

•PRIME COAT (MC-30) [TEXDOT Code 310 6009] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY – Dimensions 1,125 Ft. long x 27 Ft. / 9 = 3,375 SY x 0.10 (10 % application rate) Gallons per SY = 337.5 Gallons @ $3.75 = $1,265.63

•ASPH (AC-10) Tack Coat [TEXDOT Code 316 6011] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY - Dimensions 1,125 Ft. long x 27 Ft. / 9 =3,375 SY x 0.10 (10 % application rate) Gallons per SY = 3,375 Gallons @ $3.00 = $1,012.50

•D-GR HMA TY-D SAC-A PG76-22 [TEXDOT Code 341 6047] - Contract Labor, Equipment and Material to pave and roll in place a 2 Inch Depth of Asphalt wear surface. – Dimensions 1,125 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 187.9 CY x 4104.6243 Lbs. per CY (specific weight of asphalt) = 771,258.9 Lbs./ 2000 = 385.63 Tons @ $74.62 = $28.714.53

•BARRICADES, SIGNS AND TRAFFIC HANDLING [TEXDOT Code 502 6001] 0.5 Months @ $1,000.00 = $500.00

Summary Estimated Costs

Subtotal: $74,391.50
Contingency [Five (5%) Percent]: $3,719.57
Survey and Engineering [Ten (10%) Percent]: $7,811.11

Total Construction Cost : $85,922.18
End of SOW

DAMAGED FACILITY:	COUNTY: Hidalgo	
Site 22 Kickapoo		
LOCATION:	LATITUDE:	LONGITUDE:
Current Version: Site 22 26.21337 -97.90385 to 26.21426 -97.90490 Kickapoo, Mercedes, TX 78570 See Location Map 22	26.21337 26.21426	-97.90385 -97.9049

DAMAGE DESCRIPTION AND DIMENSIONS:

Current Version:
DDD
During the Declared event period, This Asphalt wear surface roadway was submerged in standing floodwaters to varying depths of One (1) to Two (2) Feet for a period of Two (2) weeks. The floodwater saturated and softened a Six (6) Inch depth of the Twelve (12) Inch Sub Base and Eight (8) Inch deep Base (Caliche' Flex Base) causing pronounced undulations and rutting to the road creating severe and dangerous driving conditions; and, cracking and delamination of the Two (2) Inch deep asphalt wear surface. To restore the road to pre event form and function, The Applicant will need to hire a Contractor to perform the following:

- Replace Caliche' Flex Base - Dimensions 570 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 380.2 CY
- Replace Asphalt Wear Surface – Dimensions 570 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 95.2 CY
- Treat and Compact Existing Sub Base with 3% Lime slurry additive – Dimensions 570 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 285 CY x 2970 Lbs. specific weight per CY of Sub Base = 846,450 Lbs. / 2000 = 423.23 Tons of Sub Base Material to be treated.

See photo labelled as Photo Site 22
This road, while in fair condition is nonetheless recommended as eligible damages, the rational for this recommendation is based on the FEMA PA Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained even planed, 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 at are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).
End of DDD

SCOPE OF WORK:

Current Version:
SOW
Work to Be Completed
The Applicant will follow its Procurement Policy and use public competitive bid solicitations to hire a Contractor to perform the repairs in accordance with the Scope of Work as detailed in this Sub Grant Application. The FEMA PA Specialist formulated this Damage Description, The Scope of Work and Estimates were formulated by The Applicants' Professional Engineer (TEDIS Infrastructure Group) located at 1201 E. Expressway 83 Mission, TX 78572. The Engineer of record that prepared the Applicant provided estimate is Mark Corbitt, P.E., CFM – Senior Project Engineer (phone number 956-424-7898). The FEMA Specialist worked with the Applicants' Director of Roads and Bridges (Oscar Gonzalez) and both parties (FEMA and Applicant), working together, inspected and evaluated all sites contained in this project. The Professional Engineer estimated the cost of the project using Recent Local Historical Costs (January 2016) for similar work using lowest unit costs from Bid Tabulations provided by The TEXDOT Pharr District Office. The FEMA PA Specialist formulated this Sub Grant Application with the cooperation and concurrence of the Applicants' Engineer and Director of Roads and Bridges.
The Scope of Work and Estimate provided by the Applicants' Engineer (a P.E. licensed in The State of Texas) was reviewed by The FEMA Specialist to ensure all scope items and costs correlate to the detailed damage description, Additionally, the estimated costs were validated by comparison to data provided by TEXDOT (see attached TEXDOT Low Unit Cost Bid Tabulations dated January 2016). The FEMA Specialist concurs that the Scope of Work and associated costs are reasonable; Therefore the scope and costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items
THE SPREADSHEET FURNISHED BY P. E. ROUNDED FIGURES OFF TO THE NEAREST TENTH.
•EXCAVATION (ROADWAY) [TEXDOT Code 110 6001] - Contract Labor and Equipment to remove 2 Inch Depth of Asphalt Wear Surface and 8 Inch Depth of Caliche' Flex Base (total depth of 10 Inches combined). Includes hauling away and disposal costs. Dimensions 570 Ft. long x 27 Ft. wide x 0.833 Ft. (10 Inch) deep / 27 = 475 CY @ $4.03 = $1,914.25

•SPRINKLING (DUST CONTROL) [TEXDOT Code 204 6003] - Contract Labor, Equipment and Material to Apply water for dust control, earthwork, or base construction. Apply water at a uniform rate and in the required quantity, or as directed. This Item will be measured by the 1,000 gallon applied. 00
22.8 M Gallons @ $12.24 = $279.17

•PROOF ROLLING [TEXDOT Code 216 6001] - Contract Labor and Equipment to Proof-roll earthwork, base, or both to locate unstable areas. Correct unstable or non-uniform areas, if found. Rolling will be measured by the hour operated on surfaces being tested.
1.6 Hrs. @ $57.44 = $92.10

•FL BS (RDWY DEL) (TY E GR 4) (FNAL POS) [TEXDOT Code 247 6225] - Contract Labor, Equipment and Materials to construct a

foundation course composed of an 8 Inch depth of compacted flexible base. Use Tex-100-E material definitions. Grade 4 may be further designated as Grade 4A, Grade 4B, etc. Type E. Caliche. Includes Hauling. Dimensions 570 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 380 CY @ $19.48 = $7,402.40

•LIME TRT (EXST MATL) (12") [TEXDOT Code 260 6011] - Contract Labor and Equipment only to treat Six (6) Inch Depth of the existing 12 Inch depth of Sub Base with 3% Lime. Dimensions 570 Ft. long x 27 Ft. / 9 = 1,710 SY @ $1.75 = $2,992.50

•LIME TRT (NEW BASE) (8") [TEXDOT Code 260 6015] - Contract Labor and Equipment only to treat 8 Inch depth of New Caliche' Flex Base with 3% Lime. Dimensions 570 Ft. long x 27 Ft. / 9 = 1,710 SY @ $2.75 = $4,702.50

•LIME (HYD, COM OR QK)(SLURRY) [TEXDOT Code 260 6043] - Contract Material Only including delivery to treat existing 12 inch depth of existing sub base and 8 inch depth of new Caliche' Flex Base.

Sub Base - Dimensions 570 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 285 CY x 2970 Lbs. specific weight per CY of Sub Base = 846,450 Lbs. / 2000 = 423.225 Tons of Sub Base Material x 0.03 (3% Lime add mixture by weight = 12.70 Tons of Lime

Base – Dimensions 570 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 380.2 CY x 3375 Lbs. specific weight per CY of Base = 1,283,175 Lbs. / 2000 = 641.59 Tons of Base Material x 0.03 (3% Lime add mixture by weight = 19.25 Tons of Lime
Therefore,

12.70 Tons for Sub Base plus 19.25 Tons for Base = 31.9 Tons of Lime @ $136.24 = $4,352.49

•PRIME COAT (MC-30) [TEXDOT Code 310 6009] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY – Dimensions 570 Ft. long x 27 Ft. / 9 = 1,710 SY x 0.10 (10 % application rate) Gallons per SY = 171 Gallons @ $3.75 = $641.25

•ASPH (AC-10) Tack Coat [TEXDOT Code 316 6011] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY - Dimensions 570 Ft. long x 27 Ft. / 9 =1,710 SY x 0.10 (10 % application rate) Gallons per SY = 171 Gallons @ $3.00 = $513.00

•D-GR HMA TY-D SAC-A PG76-22 [TEXDOT Code 341 6047] - Contract Labor, Equipment and Material to pave and roll in place a 2 Inch Depth of Asphalt wear surface. – Dimensions 570 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 95.2 CY x 4104.6243 Lbs. per CY (specific weight of asphalt) = 390,760.23 Lbs./ 2000 = 195 Tons @ $74.62 = $14,548.70

•BARRICADES, SIGNS AND TRAFFIC HANDLING [TEXDOT Code 502 6001] 0.2 Months @ $1,000.00 = $200.00

Summary Estimated Costs

Subtotal: $37,638.36
Contingency [Five (5%) Percent]: $1,881.92
Survey and Engineering [Ten (10%) Percent]: $3,952.03

Total Construction Cost : $43,472.30
End of SOW

Site 6 of 11

DAMAGED FACILITY:	COUNTY: Hidalgo
Site 23 Wichita	

LOCATION:	LATITUDE:	LONGITUDE:
Current Version: Site 23 26.21328 -97.90589 to 26.21422 -97.90593 Wichita, Mercedes, TX 78570 See Location Map 23	26.21328 26.21422	-97.90589 -97.90593

DAMAGE DESCRIPTION AND DIMENSIONS:

Current Version:
DDD
During the Declared event period, This Asphalt wear surface roadway was submerged in standing floodwaters to varying depths of One (1) to Two (2) Feet for a period of Two (2) weeks. The floodwater saturated and softened a Six (6) Inch depth of the Twelve (12) Inch Sub Base and Eight (8) Inch deep Base (Caliche' Flex Base) causing pronounced undulations and rutting to the road creating severe and dangerous driving conditions; and, cracking and delamination of the Two (2) Inch deep asphalt wear surface. To restore the road to pre event form and function, The Applicant will need to hire a Contractor to perform the following:

- Replace Caliche' Flex Base - Dimensions 385 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 256.8 CY
- Replace Asphalt Wear Surface – Dimensions 385 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 64.3 CY
- Treat and Compact Existing Sub Base with 3% Lime slurry additive – Dimensions 385 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 192.5 CY x 2970 Lbs. specific weight per CY of Sub Base = 571,725 Lbs. / 2000 = 285.86 Tons of Sub Base Material to be treated.

See photo labelled as Photo Site 23
This road, while in fair condition is nonetheless recommended as eligible damages, the rational for this recommendation is based on the FEMA PA Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained even planed, 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 at are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).
End of DDD

SCOPE OF WORK:

Current Version:
SOW
Work to Be Completed
The Applicant will follow its Procurement Policy and use public competitive bid solicitations to hire a Contractor to perform the repairs in accordance with the Scope of Work as detailed in this Sub Grant Application. The FEMA PA Specialist formulated this Damage Description, The Scope of Work and Estimates were formulated by The Applicants' Professional Engineer (TEDIS Infrastructure Group) located at 1201 E. Expressway 83 Mission, TX 78572. The Engineer of record that prepared the Applicant provided estimate is Mark Corbitt, P.E., CFM – Senior Project Engineer (phone number 956-424-7898). The FEMA Specialist worked with the Applicants' Director of Roads and Bridges (Oscar Gonzalez) and both parties (FEMA and Applicant), working together, inspected and evaluated all sites contained in this project. The Professional Engineer estimated the cost of the project using Recent Local Historical Costs (January 2016) for similar work using lowest unit costs from Bid Tabulations provided by The TEXDOT Pharr District Office. The FEMA PA Specialist formulated this Sub Grant Application with the cooperation and concurrence of the Applicants' Engineer and Director of Roads and Bridges.
The Scope of Work and Estimate provided by the Applicants' Engineer (a P.E. licensed in The State of Texas) was reviewed by The FEMA Specialist to ensure all scope items and costs correlate to the detailed damage description, Additionally, the estimated costs were validated by comparison to data provided by TEXDOT (see attached TEXDOT Low Unit Cost Bid Tabulations dated January 2016). The FEMA Specialist concurs that the Scope of Work and associated costs are reasonable; Therefore the scope and costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items
THE SPREADSHEET FURNISHED BY P. E. ROUNDED FIGURES OFF TO THE NEAREST TENTH.
•EXCAVATION (ROADWAY) [TEXDOT Code 110 6001] - Contract Labor and Equipment to remove 2 Inch Depth of Asphalt Wear Surface and 8 Inch Depth of Caliche' Flex Base (total depth of 10 Inches combined). Includes hauling away and disposal costs. Dimensions 385 Ft. long x 27 Ft. wide x 0.833 Ft. (10 Inch) deep / 27 = 320.7 CY @ $4.03 = $1,292.96

•SPRINKLING (DUST CONTROL) [TEXDOT Code 204 6003] - Contract Labor, Equipment and Material to Apply water for dust control, earthwork, or base construction. Apply water at a uniform rate and in the required quantity, or as directed. This Item will be measured by the 1,000 gallon applied. 00
15.4M Gallons @ $12.24 = $188.56

•PROOF ROLLING [TEXDOT Code 216 6001] - Contract Labor and Equipment to Proof-roll earthwork, base, or both to locate unstable areas. Correct unstable or non-uniform areas, if found. Rolling will be measured by the hour operated on surfaces being tested.
1.1 Hrs. @ $57.44 = $62.21

•FL BS (RDWY DEL) (TY E GR 4) (FNAL POS) [TEXDOT Code 247 6225] - Contract Labor, Equipment and Materials to construct a foundation course composed of an 8 Inch depth of compacted flexible base. Use Tex-100-E material definitions. Grade 4 may be further designated as Grade 4A, Grade 4B, etc. Type E. Caliche. Includes Hauling. Dimensions 385 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 256.8 CY @ $19.48 = $4,999.87

•LIME TRT (EXST MATL) (12") [TEXDOT Code 260 6011] - Contract Labor and Equipment only to treat Six (6) Inch Depth of the existing 12 Inch depth of Sub Base with 3% Lime. Dimensions 385 Ft. long x 27 Ft. / 9 = 1,155 SY @ $1.75 = $2,021.25

•LIME TRT (NEW BASE) (8") [TEXDOT Code 260 6015] - Contract Labor and Equipment only to treat 8 Inch depth of New Caliche' Flex Base with 3% Lime. Dimensions 385 Ft. long x 27 Ft. / 9 = 1,155 SY @ $2.75 = $3,176.25

•LIME (HYD, COM OR QK)(SLURRY) [TEXDOT Code 260 6043] - Contract Material Only including delivery to treat existing 12 inch depth of existing sub base and 8 inch depth of new Caliche' Flex Base.

Sub Base - Dimensions 385 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 192.5 CY x 2970 Lbs. specific weight per CY of Sub Base = 571,725 Lbs. / 2000 = 285.86 Tons of Sub Base Material x 0.03 (3% Lime add mixture by weight = 8.58 Tons of Lime

Base – Dimensions 385 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 256.8 CY x 3375 Lbs. specific weight per CY of Base = 866,700 Lbs. / 2000 = 433.35 Tons of Base Material x 0.03 (3% Lime add mixture by weight = 13 Tons of Lime
Therefore,

8.58 Tons for Sub Base plus 13 Tons for Base = 21.5 Tons of Lime @ $136.24 = $2,939.84

•PRIME COAT (MC-30) [TEXDOT Code 310 6009] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY – Dimensions 385 Ft. long x 27 Ft. / 9 = 1,155 SY x 0.10 (10 % application rate) Gallons per SY = 115.5 Gallons @ $3.75 = $433.13

•ASPH (AC-10) Tack Coat [TEXDOT Code 316 6011] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY - Dimensions 385 Ft. long x 27 Ft. / 9 =1,155 SY x 0.10 (10 % application rate) Gallons per SY = 115.5 Gallons @ $3.00 = $346.50

•D-GR HMA TY-D SAC-A PG76-22 [TEXDOT Code 341 6047] - Contract Labor, Equipment and Material to pave and roll in place a 2 Inch Depth of Asphalt wear surface. -- Dimensions 385 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 64.3 CY x 4104.6243 Lbs. per CY (specific weight of asphalt) = 263,927.34 Lbs./ 2000 = 131.96 Tons @ $74.62 = $9,826.75

•BARRICADES, SIGNS AND TRAFFIC HANDLING [TEXDOT Code 502 6001] 0.2 Months @ $1,000.00 = $200.00

Summary Estimated Costs

Subtotal: $25,487.31
Contingency [Five (5%) Percent]: $1,274.37
Survey and Engineering [Ten (10%) Percent]: $2,676.17

Total Construction Cost : $29,437.85
End of SOW

Site 7 of 11

DAMAGED FACILITY:	COUNTY: Hidalgo
Site 24 Tejas	

LOCATION:	LATITUDE:	LONGITUDE:
Current Version: Site 24 26.21472 -97.90322 to 26.20786 -97.90939 Tejas, Mercedes, TX 78570 See Location Map 24	26.20786 26.21472	-97.90939 -97.90322

DAMAGE DESCRIPTION AND DIMENSIONS:

Current Version:
DDD
During the Declared event period, This Asphalt wear surface roadway was submerged in standing floodwaters to varying depths of One (1) to Two (2) Feet for a period of Two (2) weeks. The floodwater saturated and softened a Six (6) Inch depth of the Twelve (12) Inch Sub Base and Eight (8) Inch deep Base (Caliche' Flex Base) causing pronounced undulations and rutting to the road creating severe and dangerous driving conditions; and, cracking and delamination of the Two (2) Inch deep asphalt wear surface. To restore the road to pre event form and function, The Applicant will need to hire a Contractor to perform the following:

- Replace Caliche' Flex Base - Dimensions 3276 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 2,185.1 CY
- Replace Asphalt Wear Surface -- Dimensions 3276 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 547.1 CY
- Treat and Compact Existing Sub Base with 3% Lime slurry additive -- Dimensions 3276 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 1,638 CY x 2970 Lbs. specific weight per CY of Sub Base = 4,864,860 Lbs. / 2000 = 2,432.43 Tons of Sub Base Material to be treated.

See photo labelled as Photo Site 24
This road, while in fair condition is nonetheless recommended as eligible damages, the rational for this recommendation is based on the FEMA PA Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained even planed, 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 at are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).
End of DDD

SCOPE OF WORK:

Current Version:
SOW
Work to Be Completed
The Applicant will follow its Procurement Policy and use public competitive bid solicitations to hire a Contractor to perform the repairs in accordance with the Scope of Work as detailed in this Sub Grant Application. The FEMA PA Specialist formulated this Damage Description, The Scope of Work and Estimates were formulated by The Applicants' Professional Engineer (TEDIS Infrastructure Group) located at 1201 E. Expressway 83 Mission, TX 78572. The Engineer of record that prepared the Applicant provided estimate is Mark Corbitt, P.E., CFM -- Senior Project Engineer (phone number 956-424-7898). The FEMA Specialist worked with the Applicants' Director of Roads and Bridges (Oscar Gonzalez) and both parties (FEMA and Applicant), working together, inspected and evaluated all sites contained in this project. The Professional Engineer estimated the cost of the project using Recent Local Historical Costs (January 2016) for similar work using lowest unit costs from Bid Tabulations provided by The TEXDOT Pharr District Office. The FEMA PA Specialist formulated this Sub Grant Application with the cooperation and concurrence of the Applicants' Engineer and Director of Roads and Bridges.
The Scope of Work and Estimate provided by the Applicants' Engineer (a P.E. licensed in The State of Texas) was reviewed by The FEMA Specialist to ensure all scope items and costs correlate to the detailed damage description, Additionally, the estimated costs were validated by comparison to data provided by TEXDOT (see attached TEXDOT Low Unit Cost Bid Tabulations dated January 2016). The FEMA Specialist concurs that the Scope of Work and associated costs are reasonable; Therefore the scope and costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items
THE SPREADSHEET FURNISHED BY P. E. ROUNDED FIGURES OFF TO THE NEAREST TENTH.
•EXCAVATION (ROADWAY) [TEXDOT Code 110 6001] - Contract Labor and Equipment to remove 2 Inch Depth of Asphalt Wear Surface and 8 Inch Depth of Caliche' Flex Base (total depth of 10 Inches combined). Includes hauling away and disposal costs. Dimensions 3,276 Ft. long x 27 Ft. wide x 0.833 Ft. (10 Inch) deep / 27 = 2730 CY @ $4.03 = $11,001.90

•SPRINKLING (DUST CONTROL) [TEXDOT Code 204 6003] - Contract Labor, Equipment and Material to Apply water for dust control, earthwork, or base construction. Apply water at a uniform rate and in the required quantity, or as directed. This Item will be measured by the 1,000 gallon applied. 00
131.1 M Gallons @ $12.24 = $1,604.49

•PROOF ROLLING [TEXDOT Code 216 6001] - Contract Labor and Equipment to Proof-roll earthwork, base, or both to locate unstable areas. Correct unstable or non-uniform areas, if found. Rolling will be measured by the hour operated on surfaces being tested.
9.2 Hrs. @ $57.44 = $529.32

•FL BS (RDWY DEL) (TY E GR 4) (FNAL POS) [TEXDOT Code 247 6225] - Contract Labor, Equipment and Materials to construct a foundation course composed of an 8 Inch depth of compacted flexible base. Use Tex-100-E material definitions. Grade 4 may be further designated as Grade 4A, Grade 4B, etc. Type E. Caliche. Includes Hauling. Dimensions 3276 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 2,184 CY @ $19.48 = $42,544.32

•LIME TRT (EXST MATL) (12") [TEXDOT Code 260 6011] - Contract Labor and Equipment only to treat Six (6) Inch Depth of the existing 12 Inch depth of Sub Base with 3% Lime. Dimensions 3276 Ft. long x 27 Ft. / 9 = 9,828 SY @ $1.75 = $17,199.00

•LIME TRT (NEW BASE) (8") [TEXDOT Code 260 6015] - Contract Labor and Equipment only to treat 8 Inch depth of New Caliche' Flex Base with 3% Lime. Dimensions 3276 Ft. long x 27 Ft. / 9 = 9,828 SY @ $2.75 = $27,027.00

•LIME (HYD, COM OR QK)(SLURRY) [TEXDOT Code 260 6043] - Contract Material Only including delivery to treat existing 12 inch depth of existing sub base and 8 inch depth of new Caliche' Flex Base.

Sub Base - Dimensions 3276 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 1,638 CY x 2970 Lbs. specific weight per CY of Sub Base = 4,864,860 Lbs. / 2000 = 2,432.43 Tons of Sub Base Material x 0.03 (3% Lime add mixture by weight = 72.97 Tons of Lime

Base – Dimensions 3276 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 2,185.1 CY x 3375 Lbs. specific weight per CY of Base = 7,374,712.5 Lbs. / 2000 = 3,687.36 Tons of Base Material x 0.03 (3% Lime add mixture by weight = 110.62 Tons of Lime
Therefore,

72.97 Tons for Sub Base plus 110.62 Tons for Base = 183.6 Tons of Lime @ $136.24 = $25,015.39

•PRIME COAT (MC-30) [TEXDOT Code 310 6009] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY – Dimensions 3,276 Ft. long x 27 Ft. / 9 = 9,828 SY x 0.10 (10 % application rate) Gallons per SY = 982.8 Gallons @ $3.75 = $3,685.50

•ASPH (AC-10) Tack Coat [TEXDOT Code 316 6011] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY - Dimensions 3,276 Ft. long x 27 Ft. / 9 =9,828 SY x 0.10 (10 % application rate) Gallons per SY = 982.8 Gallons @ $3.00 = $2,948.40

•D-GR HMA TY-D SAC-A PG76-22 [TEXDOT Code 341 6047] - Contract Labor, Equipment and Material to pave and roll in place a 2 Inch Depth of Asphalt wear surface. – Dimensions 3,276 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 547.1 CY x 4104.6243 Lbs. per CY (specific weight of asphalt) = 2,245,639.9 Lbs./ 2000 = 1,120.6 Tons @ $74.62 = $83,616.72

•BARRICADES, SIGNS AND TRAFFIC HANDLING [TEXDOT Code 502 6001] 1.4 Months @ $1,000.00 = $1,400.00

Summary Estimated Costs

Subtotal: $216,572.04
Contingency [Five (5%) Percent]: $10,828.60
Survey and Engineering [Ten (10%) Percent]: $22,740.06

Total Construction Cost : $250,140.70
End of SOW

Site 8 of 11		
DAMAGED FACILITY: Site 25 Shawnee	COUNTY: Hidalgo	
LOCATION: Current Version:	LATITUDE: 26.20824 26.21166	LONGITUDE: -97.90877 -97.90857

Site 25 26.20824 -97.90877 to 26.21166 -97.90857 Shawnee, Mercedes, TX 78570
See Location Map 25

DAMAGE DESCRIPTION AND DIMENSIONS:

Current Version:
DDD
During the Declared event period, This Asphalt wear surface roadway was submerged in standing floodwaters to varying depths of One (1) to Two (2) Feet for a period of Two (2) weeks. The floodwater saturated and softened a Six (6) Inch depth of the Twelve (12) Inch Sub Base and Eight (8) Inch deep Base (Caliche' Flex Base) causing pronounced undulations and rutting to the road creating severe and dangerous driving conditions; and, cracking and delamination of the Two (2) Inch deep asphalt wear surface. To restore the road to pre event form and function, The Applicant will need to hire a Contractor to perform the following:

- Replace Caliche' Flex Base - Dimensions 1414 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 943.1 CY
- Replace Asphalt Wear Surface – Dimensions 1414 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 236.1 CY
- Treat and Compact Existing Sub Base with 3% Lime slurry additive – Dimensions 1414 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 707 CY x 2970 Lbs. specific weight per CY of Sub Base = 2,099,790 Lbs. / 2000 = 1,049.90 Tons of Sub Base Material to be treated.

See photo labelled as Photo Site 25
This road, while in fair condition is nonetheless recommended as eligible damages, the rational for this recommendation is based on the FEMA PA Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained even planed, 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 at are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).
End of DDD

SCOPE OF WORK:

Current Version:
SOW
Work to Be Completed
The Applicant will follow its Procurement Policy and use public competitive bid solicitations to hire a Contractor to perform the repairs in accordance with the Scope of Work as detailed in this Sub Grant Application. The FEMA PA Specialist formulated this Damage Description, The Scope of Work and Estimates were formulated by The Applicants' Professional Engineer (TEDIS Infrastructure Group) located at 1201 E. Expressway 83 Mission, TX 78572. The Engineer of record that prepared the Applicant provided estimate is Mark Corbitt, P.E., CFM – Senior Project Engineer (phone number 956-424-7898). The FEMA Specialist worked with the Applicants' Director of Roads and Bridges (Oscar Gonzalez) and both parties (FEMA and Applicant), working together, inspected and evaluated all sites contained in this project. The Professional Engineer estimated the cost of the project using Recent Local Historical Costs (January 2016) for similar work using lowest unit costs from Bid Tabulations provided by The TEXDOT Pharr District Office. The FEMA PA Specialist formulated this Sub Grant Application with the cooperation and concurrence of the Applicants' Engineer and Director of Roads and Bridges.
The Scope of Work and Estimate provided by the Applicants' Engineer (a P.E. licensed in The State of Texas) was reviewed by The FEMA Specialist to ensure all scope items and costs correlate to the detailed damage description, Additionally, the estimated costs were validated by comparison to data provided by TEXDOT (see attached TEXDOT Low Unit Cost Bid Tabulations dated January 2016). The FEMA Specialist concurs that the Scope of Work and associated costs are reasonable; Therefore the scope and costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items
THE SPREADSHEET FURNISHED BY P. E. ROUNDED FIGURES OFF TO THE NEAREST TENTH.
•EXCAVATION (ROADWAY) [TEXDOT Code 110 6001] - Contract Labor and Equipment to remove 2 Inch Depth of Asphalt Wear Surface and 8 Inch Depth of Caliche' Flex Base (total depth of 10 Inches combined). Includes hauling away and disposal costs. Dimensions 1414 Ft. long x 27 Ft. wide x 0.833 Ft. (10 Inch) deep / 27 = 1,178.3 CY @ $4.03 = $4,748.68

•SPRINKLING (DUST CONTROL) [TEXDOT Code 204 6003] - Contract Labor, Equipment and Material to Apply water for dust control, earthwork, or base construction. Apply water at a uniform rate and in the required quantity, or as directed. This Item will be measured by the 1,000 gallon applied. 00
56.6 M Gallons @ $12.24 = $692.54

•PROOF ROLLING [TEXDOT Code 216 6001] - Contract Labor and Equipment to Proof-roll earthwork, base, or both to locate unstable areas. Correct unstable or non-uniform areas, if found. Rolling will be measured by the hour operated on surfaces being tested.
4.0 Hrs. @ $57.44 = $228.47

•FL BS (RDWY DEL) (TY E GR 4) (FNAL POS) [TEXDOT Code 247 6225] - Contract Labor, Equipment and Materials to construct a foundation course composed of an 8 Inch depth of compacted flexible base. Use Tex-100-E material definitions. Grade 4 may be further designated as Grade 4A, Grade 4B, etc. Type E. Caliche. Includes Hauling. Dimensions 1414 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 942.7 CY @ $19.48 = $18,363.15

•LIME TRT (EXST MATL) (12") [TEXDOT Code 260 6011] - Contract Labor and Equipment only to treat Six (6) Inch Depth of the existing 12 Inch depth of Sub Base with 3% Lime. Dimensions 1414 Ft. long x 27 Ft. / 9 = 4242 SY @ $1.75 = $7,423.50

•LIME TRT (NEW BASE) (8") [TEXDOT Code 260 6015] - Contract Labor and Equipment only to treat 8 Inch depth of New Caliche' Flex

Base with 3% Lime. Dimensions 1414 Ft. long x 27 Ft. / 9 = 4242 SY @ $2.75 = $11,665.50

•LIME (HYD, COM OR QK)(SLURRY) [TEXDOT Code 260 6043] - Contract Material Only including delivery to treat existing 12 inch depth of existing sub base and 8 inch depth of new Caliche' Flex Base.

Sub Base - Dimensions 1414 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 707 CY x 2970 Lbs. specific weight per CY of Sub Base = 2,099,790 Lbs. / 2000 = 1,049.90 Tons of Sub Base Material x 0.03 (3% Lime add mixture by weight = 31.50 Tons of Lime

Base – Dimensions 1414 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 943.1 CY x 3375 Lbs. specific weight per CY of Base = 3,182,962.5 Lbs. / 2000 = 1,591.48 Tons of Base Material x 0.03 (3% Lime add mixture by weight = 47.74 Tons of Lime
Therefore,

31.50 Tons for Sub Base plus 47.74 Tons for Base = 79.3 Tons of Lime @ $136.24 = $10,797.24

•PRIME COAT (MC-30) [TEXDOT Code 310 6009] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY – Dimensions 1414 Ft. long x 27 Ft. / 9 = 4,242 SY x 0.10 (10 % application rate) Gallons per SY = 424.2 Gallons @ $3.75 = $1,590.75

•ASPH (AC-10) Tack Coat [TEXDOT Code 316 6011] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY - Dimensions 1414 Ft. long x 27 Ft. / 9 =4,242 SY x 0.10 (10 % application rate) Gallons per SY = 424.2 Gallons @ $3.00 = $1,272.60

•D-GR HMA TY-D SAC-A PG76-22 [TEXDOT Code 341 6047] - Contract Labor, Equipment and Material to pave and roll in place a 2 Inch Depth of Asphalt wear surface. – 1414 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 236.1 CY x 4104.6243 Lbs. per CY (specific weight of asphalt) = 969,101.79 Lbs./ 2000 = 483.7 Tons @ $74.62 = $36,090.98

•BARRICADES, SIGNS AND TRAFFIC HANDLING [TEXDOT Code 502 6001] 0.6 Months @ $1,000.00 = $600.00

Summary Estimated Costs

Subtotal: $93,473.40
Contingency [Five (5%) Percent]: $4,673.67
Survey and Engineering [Ten (10%) Percent]: $9,814.71

Total Construction Cost : $107,961.78
End of SOW

Site 9 of 11

DAMAGED FACILITY:	COUNTY: Hidalgo
Site 26 Cheyenne	

LOCATION:	LATITUDE:	LONGITUDE:
Current Version: Site 26 26.21170 -97.91016 to 26.21146 -97.90524 Cheyenne, Mercedes, TX 78570 See Location Map 26	26.21146 26.2117	-97.90524 -97.91016

DAMAGE DESCRIPTION AND DIMENSIONS:

Current Version:
DDD
During the Declared event period, This Asphalt wear surface roadway was submerged in standing floodwaters to varying depths of One (1) to Two (2) Feet for a period of Two (2) weeks. The floodwater saturated and softened a Six (6) Inch depth of the Twelve (12) Inch Sub Base and Eight (8) Inch deep Base (Caliche' Flex Base) causing pronounced undulations and rutting to the road creating severe and dangerous driving conditions; and, cracking and delamination of the Two (2) Inch deep asphalt wear surface. To restore the road to pre event form and function, The Applicant will need to hire a Contractor to perform the following:

- Replace Caliche' Flex Base - Dimensions 1657 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 1,105.2 CY
- Replace Asphalt Wear Surface – Dimensions 1657 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 276.7CY
- Treat and Compact Existing Sub Base with 3% Lime slurry additive – Dimensions 1657 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 828.5 CY x 2970 Lbs. specific weight per CY of Sub Base = 2,460,645 Lbs. / 2000 = 1,230.32 Tons of Sub Base Material to be treated.

See photo labelled as Photo Site 26
This road, while in fair condition is nonetheless recommended as eligible damages, the rational for this recommendation is based on the FEMA PA Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained even planed, 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 at are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).
End of DDD

SCOPE OF WORK:

Current Version:
SOW
Work to Be Completed
The Applicant will follow its Procurement Policy and use public competitive bid solicitations to hire a Contractor to perform the repairs in accordance with the Scope of Work as detailed in this Sub Grant Application. The FEMA PA Specialist formulated this Damage Description, The Scope of Work and Estimates were formulated by The Applicants' Professional Engineer (TEDIS Infrastructure Group) located at 1201 E. Expressway 83 Mission, TX 78572. The Engineer of record that prepared the Applicant provided estimate is Mark Corbitt, P.E., CFM – Senior Project Engineer (phone number 956-424-7898). The FEMA Specialist worked with the Applicants' Director of Roads and Bridges (Oscar Gonzalez) and both parties (FEMA and Applicant), working together, inspected and evaluated all sites contained in this project. The Professional Engineer estimated the cost of the project using Recent Local Historical Costs (January 2016) for similar work using lowest unit costs from Bid Tabulations provided by The TEXDOT Pharr District Office. The FEMA PA Specialist formulated this Sub Grant Application with the cooperation and concurrence of the Applicants' Engineer and Director of Roads and Bridges.
The Scope of Work and Estimate provided by the Applicants' Engineer (a P.E. licensed in The State of Texas) was reviewed by The FEMA Specialist to ensure all scope items and costs correlate to the detailed damage description, Additionally, the estimated costs were validated by comparison to data provided by TEXDOT (see attached TEXDOT Low Unit Cost Bid Tabulations dated January 2016). The FEMA Specialist concurs that the Scope of Work and associated costs are reasonable; Therefore the scope and costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items
THE SPREADSHEET FURNISHED BY P. E. ROUNDED FIGURES OFF TO THE NEAREST TENTH.
•EXCAVATION (ROADWAY) [TEXDOT Code 110 6001] - Contract Labor and Equipment to remove 2 Inch Depth of Asphalt Wear Surface and 8 Inch Depth of Caliche' Flex Base (total depth of 10 Inches combined). Includes hauling away and disposal costs. Dimensions 1657 Ft. long x 27 Ft. wide x 0.833 Ft. (10 Inch) deep / 27 = 1,380.8 CY @ $4.03 = $5,564.76

•SPRINKLING (DUST CONTROL) [TEXDOT Code 204 6003] - Contract Labor, Equipment and Material to Apply water for dust control, earthwork, or base construction. Apply water at a uniform rate and in the required quantity, or as directed. This Item will be measured by the 1,000 gallon applied. 00
66.3 M Gallons @ $12.24 = $811.55

•PROOF ROLLING [TEXDOT Code 216 6001] - Contract Labor and Equipment to Proof-roll earthwork, base, or both to locate unstable areas. Correct unstable or non-uniform areas, if found. Rolling will be measured by the hour operated on surfaces being tested.
4.7 Hrs. @ $57.44 = $267.73

•FL BS (RDWY DEL) (TY E GR 4) (FNAL POS) [TEXDOT Code 247 6225] - Contract Labor, Equipment and Materials to construct a foundation course composed of an 8 Inch depth of compacted flexible base. Use Tex-100-E material definitions. Grade 4 may be further designated as Grade 4A, Grade 4B, etc. Type E. Caliche. Includes Hauling. Dimensions 1657 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 1104.7 CY @ $19.48 = $21,518.91

•LIME TRT (EXST MATL) (12") [TEXDOT Code 260 6011] - Contract Labor and Equipment only to treat Six (6) Inch Depth of the existing 12 Inch depth of Sub Base with 3% Lime. Dimensions 1657 Ft. long x 27 Ft. / 9 = 4,971 SY @ $1.75 = $8,699.25

•LIME TRT (NEW BASE) (8") [TEXDOT Code 260 6015] - Contract Labor and Equipment only to treat 8 Inch depth of New Caliche' Flex Base with 3% Lime. Dimensions 1657 Ft. long x 27 Ft. / 9 = 4,971 SY @ $2.75 = $13,670.25

•LIME (HYD, COM OR QK)(SLURRY) [TEXDOT Code 260 6043] - Contract Material Only including delivery to treat existing 12 inch depth of existing sub base and 8 inch depth of new Caliche' Flex Base.

Sub Base - Dimensions 1657 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 =828.5 CY x 2970 Lbs. specific weight per CY of Sub Base = 2,460,645Lbs. / 2000 = 1,230.32 Tons of Sub Base Material x 0.03 (3% Lime add mixture by weight = 36.91 Tons of Lime

Base – Dimensions 1657 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 1,105.2 CY x 3375 Lbs. specific weight per CY of Base = 3,730,050 Lbs. / 2000 = 1,865.3 Tons of Base Material x 0.03 (3% Lime add mixture by weight = 55.95 Tons of Lime
Therefore,

36.91 Tons for Sub Base plus 55.95 Tons for Base = 92.9 Tons of Lime @ $136.24 = $12,652.78

•PRIME COAT (MC-30) [TEXDOT Code 310 6009] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY – Dimensions 1657 Ft. long x 27 Ft. / 9 = 4,971 SY x 0.10 (10 % application rate) Gallons per SY = 497.1 Gallons @ $3.75 = $1,864.13

•ASPH (AC-10) Tack Coat [TEXDOT Code 316 6011] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY - Dimensions 1657 Ft. long x 27 Ft. / 9 = 4,971 SY x 0.10 (10 % application rate) Gallons per SY = 497.1 Gallons @ $3.00 = $1,491.30

•D-GR HMA TY-D SAC-A PG76-22 [TEXDOT Code 341 6047] - Contract Labor, Equipment and Material to pave and roll in place a 2 Inch Depth of Asphalt wear surface. – 1657 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 276.7 CY x 4104.6243 Lbs. per CY (specific weight of asphalt) = 1,135,749.5 Lbs./ 2000 = 566.8 Tons @ $74.62 = $42,293.31

•BARRICADES, SIGNS AND TRAFFIC HANDLING [TEXDOT Code 502 6001] 0.7 Months @ $1,000.00 = $700.00

Summary Estimated Costs

Subtotal: $109,533.96
Contingency [Five (5%) Percent]: $5,476.70
Survey and Engineering [Ten (10%) Percent]: $11,501.07

Total Construction Cost : $126,511.73
End of SOW

Site 10 of 11

DAMAGED FACILITY:	COUNTY: Hidalgo	
Site 27 Seminole		
LOCATION:	LATITUDE:	LONGITUDE:
Current Version: Site 27 26.21084 -97.90571 to 26.21102 -97.90800 Seminole, Mercedes, TX 78570 See Location Map 27	26.21084 26.21102	-97.90571 -97.908

DAMAGE DESCRIPTION AND DIMENSIONS:

Current Version:
DDD
During the Declared event period, This Asphalt wear surface roadway was submerged in standing floodwaters to varying depths of One (1) to Two (2) Feet for a period of Two (2) weeks. The floodwater saturated and softened a Six (6) Inch depth of the Twelve (12) Inch Sub Base and Eight (8) Inch deep Base (Caliche' Flex Base) causing pronounced undulations and rutting to the road creating severe and dangerous driving conditions; and, cracking and delamination of the Two (2) Inch deep asphalt wear surface. To restore the road to pre event form and function, The Applicant will need to hire a Contractor to perform the following:

- Replace Caliche' Flex Base - Dimensions 794 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 529.6 CY
- Replace Asphalt Wear Surface – Dimensions 794 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 132.6 CY
- Treat and Compact Existing Sub Base with 3% Lime slurry additive – Dimensions 794 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 397 CY x 2970 Lbs. specific weight per CY of Sub Base = 1,179,090 Lbs. / 2000 = 589.55 Tons of Sub Base Material to be treated.

See photo labelled as Photo Site 27
This road, while in fair condition is nonetheless recommended as eligible damages, the rational for this recommendation is based on the FEMA PA Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained even planed, 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 at are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).
End of DDD

SCOPE OF WORK:

Current Version:
SOW
Work to Be Completed
The Applicant will follow its Procurement Policy and use public competitive bid solicitations to hire a Contractor to perform the repairs in accordance with the Scope of Work as detailed in this Sub Grant Application. The FEMA PA Specialist formulated this Damage Description, The Scope of Work and Estimates were formulated by The Applicants' Professional Engineer (TEDIS Infrastructure Group) located at 1201 E. Expressway 83 Mission, TX 78572. The Engineer of record that prepared the Applicant provided estimate is Mark Corbitt, P.E., CFM – Senior Project Engineer (phone number 956-424-7898). The FEMA Specialist worked with the Applicants' Director of Roads and Bridges (Oscar Gonzalez) and both parties (FEMA and Applicant), working together, inspected and evaluated all sites contained in this project. The Professional Engineer estimated the cost of the project using Recent Local Historical Costs (January 2016) for similar work using lowest unit costs from Bid Tabulations provided by The TEXDOT Pharr District Office. The FEMA PA Specialist formulated this Sub Grant Application with the cooperation and concurrence of the Applicants' Engineer and Director of Roads and Bridges.
The Scope of Work and Estimate provided by the Applicants' Engineer (a P.E. licensed in The State of Texas) was reviewed by The FEMA Specialist to ensure all scope items and costs correlate to the detailed damage description, Additionally, the estimated costs were validated by comparison to data provided by TEXDOT (see attached TEXDOT Low Unit Cost Bid Tabulations dated January 2016). The FEMA Specialist concurs that the Scope of Work and associated costs are reasonable; Therefore the scope and costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items
THE SPREADSHEET FURNISHED BY P. E. ROUNDED FIGURES OFF TO THE NEAREST TENTH.
•EXCAVATION (ROADWAY) [TEXDOT Code 110 6001] - Contract Labor and Equipment to remove 2 Inch Depth of Asphalt Wear Surface and 8 Inch Depth of Caliche' Flex Base (total depth of 10 Inches combined). Includes hauling away and disposal costs. Dimensions 794 Ft. long x 27 Ft. wide x 0.833 Ft. (10 Inch) deep / 27 = 661.7 CY @ $4.03 = $2,666.52

•SPRINKLING (DUST CONTROL) [TEXDOT Code 204 6003] - Contract Labor, Equipment and Material to Apply water for dust control, earthwork, or base construction. Apply water at a uniform rate and in the required quantity, or as directed. This Item will be measured by the

1,000 gallon applied. 00
31.8 M Gallons @ $12.24 = $388.88

•PROOF ROLLING [TEXDOT Code 216 6001] - Contract Labor and Equipment to Proof-roll earthwork, base, or both to locate unstable areas. Correct unstable or non-uniform areas, if found. Rolling will be measured by the hour operated on surfaces being tested.
2.2 Hrs. @ $57.44 = $128.29

•FL BS (RDWY DEL) (TY E GR 4) (FNAL POS) [TEXDOT Code 247 6225] - Contract Labor, Equipment and Materials to construct a foundation course composed of an 8 Inch depth of compacted flexible base. Use Tex-100-E material definitions. Grade 4 may be further designated as Grade 4A, Grade 4B, etc. Type E. Caliche. Includes Hauling. Dimensions 794 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 529.3 CY @ $19.48 = $10,311.41

•LIME TRT (EXST MATL) (12") [TEXDOT Code 260 6011] - Contract Labor and Equipment only to treat Six (6) Inch Depth of the existing 12 Inch depth of Sub Base with 3% Lime. Dimensions 794 Ft. long x 27 Ft. / 9 = 2,382 SY @ $1.75 = $4,168.50

•LIME TRT (NEW BASE) (8") [TEXDOT Code 260 6015] - Contract Labor and Equipment only to treat 8 Inch depth of New Caliche' Flex Base with 3% Lime. Dimensions 794 Ft. long x 27 Ft. / 9 = 2,382 SY @ $2.75 = $6,550.50

•LIME (HYD, COM OR QK)(SLURRY) [TEXDOT Code 260 6043] - Contract Material Only including delivery to treat existing 12 inch depth of existing sub base and 8 inch depth of new Caliche' Flex Base.

Sub Base - Dimensions 794 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 397 CY x 2970 Lbs. specific weight per CY of Sub Base 1,179,090 Lbs. / 2000 = 589.55 Tons of Sub Base Material x 0.03 (3% Lime add mixture by weight = 17.69 Tons of Lime

Base – Dimensions 794 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 529.6 CY x 3375 Lbs. specific weight per CY of Base = 1,787,400 Lbs. / 2000 = 893.7 Tons of Base Material x 0.03 (3% Lime add mixture by weight = 26.81 Tons of Lime
Therefore,

17.69 Tons for Sub Base plus 26.81 Tons for Base = 44.5 Tons of Lime @ $136.24 = $6,062.95

•PRIME COAT (MC-30) [TEXDOT Code 310 6009] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY – Dimensions 794 Ft. long x 27 Ft. / 9 = 2,382 SY x 0.10 (10 % application rate) Gallons per SY = 238.2 Gallons @ $3.75 = $893.25

•ASPH (AC-10) Tack Coat [TEXDOT Code 316 6011] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY - Dimensions 794 Ft. long x 27 Ft. / 9 = 2,382 SY x 0.10 (10 % application rate) Gallons per SY = 238.2 Gallons @ $3.00 = $714.60

•D-GR HMA TY-D SAC-A PG76-22 [TEXDOT Code 341 6047] - Contract Labor, Equipment and Material to pave and roll in place a 2 Inch Depth of Asphalt wear surface. –794 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 132.6 CY x 4104.6243 Lbs. per CY (specific weight of asphalt) = 544,273.2 Lbs./ 2000 = 271.6 Tons @ $74.62 = $20,266.08

•BARRICADES, SIGNS AND TRAFFIC HANDLING [TEXDOT Code 502 6001] 0.3 Months @ $1,000.00 = $300.00

Summary Estimated Costs

Subtotal: $52,450.98
Contingency [Five (5%) Percent]: $2,622.55
Survey and Engineering [Ten (10%) Percent]: $5,507.35

Total Construction Cost : $60,580.88
End of SOW

Site 11 of 11

DAMAGED FACILITY:	COUNTY: Hidalgo
Site 28 Creek Place	

LOCATION:	LATITUDE:	LONGITUDE:
Current Version: Site 28 26.20979 -97.908071 to 26.21097 -97.90666 Creek Place, Mercedes, TX 78570 See Location Map 28	26.20979 26.21097	-97.908071 -97.90666

DAMAGE DESCRIPTION AND DIMENSIONS:

Current Version:
DDD
During the Declared event period, This Asphalt wear surface roadway was submerged in standing floodwaters to varying depths of One (1) to Two (2) Feet for a period of Two (2) weeks. The floodwater saturated and softened a Six (6) Inch depth of the Twelve (12) Inch Sub Base and Eight (8) Inch deep Base (Caliche' Flex Base) causing pronounced undulations and rutting to the road creating severe and dangerous driving conditions; and, cracking and delamination of the Two (2) Inch deep asphalt wear surface. To restore the road to pre event form and

function, The Applicant will need to hire a Contractor to perform the following:
- Replace Caliche' Flex Base - Dimensions 692 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 461.6 CY
- Replace Asphalt Wear Surface – Dimensions 692 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 115.6 CY
- Treat and Compact Existing Sub Base with 3% Lime slurry additive – Dimensions 692 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 346 CY x 2970 Lbs. specific weight per CY of Sub Base = 1,027,620 Lbs. / 2000 = 513.81 Tons of Sub Base Material to be treated.

See photo labelled as Photo Site 28
This road, while in fair condition is nonetheless recommended as eligible damages, the rational for this recommendation is based on the FEMA PA Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained even planed, 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 at are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).
End of DDD

SCOPE OF WORK:

Current Version:
SOW
Work to Be Completed
The Applicant will follow its Procurement Policy and use public competitive bid solicitations to hire a Contractor to perform the repairs in accordance with the Scope of Work as detailed in this Sub Grant Application. The FEMA PA Specialist formulated this Damage Description, The Scope of Work and Estimates were formulated by The Applicants' Professional Engineer (TEDIS Infrastructure Group) located at 1201 E. Expressway 83 Mission, TX 78572. The Engineer of record that prepared the Applicant provided estimate is Mark Corbitt, P.E., CFM – Senior Project Engineer (phone number 956-424-7898). The FEMA Specialist worked with the Applicants' Director of Roads and Bridges (Oscar Gonzalez) and both parties (FEMA and Applicant), working together, inspected and evaluated all sites contained in this project. The Professional Engineer estimated the cost of the project using Recent Local Historical Costs (January 2016) for similar work using lowest unit costs from Bid Tabulations provided by The TEXDOT Pharr District Office. The FEMA PA Specialist formulated this Sub Grant Application with the cooperation and concurrence of the Applicants' Engineer and Director of Roads and Bridges.
The Scope of Work and Estimate provided by the Applicants' Engineer (a P.E. licensed in The State of Texas) was reviewed by The FEMA Specialist to ensure all scope items and costs correlate to the detailed damage description, Additionally, the estimated costs were validated by comparison to data provided by TEXDOT (see attached TEXDOT Low Unit Cost Bid Tabulations dated January 2016). The FEMA Specialist concurs that the Scope of Work and associated costs are reasonable; Therefore the scope and costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items
THE SPREADSHEET FURNISHED BY P. E. ROUNDED FIGURES OFF TO THE NEAREST TENTH.
•EXCAVATION (ROADWAY) [TEXDOT Code 110 6001] - Contract Labor and Equipment to remove 2 Inch Depth of Asphalt Wear Surface and 8 Inch Depth of Caliche' Flex Base (total depth of 10 Inches combined). Includes hauling away and disposal costs. Dimensions 692 Ft. long x 27 Ft. wide x 0.833 Ft. (10 Inch) deep / 27 = 576.7 CY @ $4.03 = $2,323.97

•SPRINKLING (DUST CONTROL) [TEXDOT Code 204 6003] - Contract Labor, Equipment and Material to Apply water for dust control, earthwork, or base construction. Apply water at a uniform rate and in the required quantity, or as directed. This Item will be measured by the 1,000 gallon applied. 00
27.7 M Gallons @ $12.24 = $338.928

•PROOF ROLLING [TEXDOT Code 216 6001] - Contract Labor and Equipment to Proof-roll earthwork, base, or both to locate unstable areas. Correct unstable or non-uniform areas, if found. Rolling will be measured by the hour operated on surfaces being tested.
1.9 Hrs. @ $57.44 = $111.81

•FL BS (RDWY DEL) (TY E GR 4) (FNAL POS) [TEXDOT Code 247 6225] - Contract Labor, Equipment and Materials to construct a foundation course composed of an 8 Inch depth of compacted flexible base. Use Tex-100-E material definitions. Grade 4 may be further designated as Grade 4A, Grade 4B, etc. Type E. Caliche. Includes Hauling. Dimensions 692 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 461.3 CY @ $19.48 = $8,986.77

•LIME TRT (EXST MATL) (12") [TEXDOT Code 260 6011] - Contract Labor and Equipment only to treat Six (6) Inch Depth of the existing 12 Inch depth of Sub Base with 3% Lime. Dimensions 692 Ft. long x 27 Ft. / 9 = 2,076 SY @ $1.75 = $3,633.00

•LIME TRT (NEW BASE) (8") [TEXDOT Code 260 6015] - Contract Labor and Equipment only to treat 8 Inch depth of New Caliche' Flex Base with 3% Lime. Dimensions 692 Ft. long x 27 Ft. / 9 = 2,076 SY @ $2.75 = $5,709.00

•LIME (HYD, COM OR QK)(SLURRY) [TEXDOT Code 260 6043] - Contract Material Only including delivery to treat existing 12 inch depth of existing sub base and 8 inch depth of new Caliche' Flex Base.

Sub Base - Dimensions 692 Ft. long x 27 Ft. x 0.5 Ft. (6 Inch) deep / 27 = 346 CY x 2970 Lbs. specific weight per CY of Sub Base 1,027,620 Lbs. / 2000 = 513.81 Tons of Sub Base Material x 0.03 (3% Lime add mixture by weight = 15.41 Tons of Lime

Base – Dimensions 692 Ft. long x 27 Ft. x 0.667 Ft. (8 Inch) deep / 27 = 461.6 CY x 3375 Lbs. specific weight per CY of Base = 1,557,900 Lbs. / 2000 = 778.95 Tons of Base Material x 0.03 (3% Lime add mixture by weight = 23.37 Tons of Lime
Therefore,

15.41 Tons for Sub Base plus 23.37 Tons for Base = 38.8 Tons of Lime @ $136.24 = $5,284.08

•PRIME COAT (MC-30) [TEXDOT Code 310 6009] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY – Dimensions 692 Ft. long x 27 Ft. / 9 = 2,076 SY x 0.10 (10 % application rate) Gallons per SY = 207.6 Gallons @ $3.75 = $778.50

•ASPH (AC-10) Tack Coat [TEXDOT Code 316 6011] - Contract Labor, Equipment and material to apply at a rate of 0.1 Gal/SY - Dimensions 692 Ft. long x 27 Ft. / 9 = 2,076 SY x 0.10 (10 % application rate) Gallons per SY = 207.6 Gallons @ $3.00 = $622.80

•D-GR HMA TY-D SAC-A PG76-22 [TEXDOT Code 341 6047] - Contract Labor, Equipment and Material to pave and roll in place a 2 Inch Depth of Asphalt wear surface. –692 Ft. long x 27 Ft. x 0.167 Ft. (2 Inch) deep / 27 = 115.6 CY x 4104.6243 Lbs. per CY (specific weight of asphalt) = 474,494.56 Lbs./ 2000 = 236.7 Tons @ $74.62 = $17,662.63

•BARRICADES, SIGNS AND TRAFFIC HANDLING [TEXDOT Code 502 6001] 0.3 Months @ $1,000.00 = $300.00

Summary Estimated Costs

Subtotal: $45,751.48
Contingency [Five (5%) Percent]: $2,287.57
Survey and Engineering [Ten (10%) Percent]: $4,803.91

Total Construction Cost : $52,842.96
End of SOW

PROJECT NOTES:

DIRECT ADMINISTRATIVE COSTS: Direct Administrative Cost for work to be completed estimated at $5,500.00 using 2015 Consumer Price Index Matrix- See Attachment. The Sub grantee requested Direct Administrative Cost (DAC) that are directly chargeable to this project. Associated work is related administration of the PA project only and in accordance with 2 CFR 200.413. These cost are treated consistently and uniformly as direct cost in all federal awards and other sub grantee activities and are not included in any approved indirect cost rates.
HAZARD MITIGATION: 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).

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 Federal Emergency Management Agency E-Grants Page 5 of 16 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.

ENVIRONMETNAL 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 IS 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 case of a change in scope of work, the applicant shall notify the Texas Division of Emergency Management program representative 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:
- Estimate furnished by TEDSI INFRASTRUCTURE GROUP, 1201 E. Expressway 83, Mission, TX. 78572 (Mark Corbitt, P. E., CFM, Sr. Project Engineer)
- TEXDOT Unit Bid Cost

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 of10/22 to 10/31/2015 with the exception of requests for alternate or improved projects.

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.

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 18 Campacuas Work To Be Completed	1/LS	$ 175,699.00	$ 175,699.00
2	9888	Site 2 Site 19 Cherokee Work To Be Completed	1/LS	$ 167,329.00	$ 167,329.00
3	9888	Site 3 Site 20 Santawan Work To Be Completed	1/LS	$ 68,737.74	$ 68,737.74
4	9888	Site 4 Site 21 Caddoe Work To Be Completed	1/LS	$ 85,922.18	$ 85,922.18
5	9888	Site 5 Site 22 Kickapoo Work To Be Completed	1/LS	$ 43,472.30	$ 43,472.30
6	9888	Site 6 Site 23 Wichita Work To Be Completed	1/LS	$ 29,437.85	$ 29,437.85
7	9888	Site 7 Site 24 Tejas Work To Be Completed	1/LS	$ 302,936.00	$ 302,936.00
8	9888	Site 8 Site 25 Shawnee Work To Be Completed	1/LS	$ 107,961.78	$ 107,961.78

9	9888	Site 9 Site 26 Cheyenne Work To Be Completed	1/LS	$ 154,945.00	$ 154,945.00
10	9888	Site 10 Site 27 Seminole Work To Be Completed	1/LS	$ 60,580.88	$ 60,580.88
11	9888	Site 11 Site 28 Creek Place Work To Be Completed	1/LS	$ 52,842.96	$ 52,842.96
12	9901	Direct Administrative Costs (Subgrantee)	1/LS	$ 5,500.00	$ 5,500.00
				TOTAL COST	$ 1,255,364.69

PREPARED BY LARRY L GLADDEN	TITLE Project Specialist	SIGNATURE
APPLICANT REP. Ramon Garcia	TITLE Hidalgo County Judge	SIGNATURE 5/24/2016

ALTERNATE POINT OF CONTACT ON RPA
FOR RAMON GARCIA County Judge
Ricardo Saldana
Emergency Management Coordinator
Hidalgo County, TX