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to the

CONTRACT DOCUMENTS

FOR

BID NUMBER 2024.10 ANNEX BUILDING ROOF IMPROVEMENTS PROJECT

FOR

CALHOUN COUNTY, TX

OCTOBER 29, 2024

eers

Prepared by:

G&W Engineers, Inc. 205 West Live Oak Port Lavaca, Texas 77979 (361) 552-4509



Scott P. Mason, P.E. Texas Serial No. 127893

G & W Engineers, Inc. Texas Registered Engineering Firm F-04188 Project No. 5310.026

Date: 10. 29. 24

Clarifications to the original Contract Documents, Contract Drawings and/or Specifications have been deemed necessary, and in certain cases, revisions to the original Contract Documents, Contract Drawings and/or Specifications are required. If discrepancies and/or inconsistencies exist between these specified revisions and the original Contract Documents, Contract Drawings and/or Specifications, said Addendum No. 1 shall govern.

CLARIFICATIONS:

- 1. Forms required with proposal as part of the bid package will be acceptable with signature using electronic signature.
- 2. The contingency allowance of has been updated to be 3% of the base bid. Please use updated "Bid"
- 3. The attached questions from CivCastUSA.com and emailed questions with their respective answers shall be considered final and incorporated into the Contract Documents. As noted in the documents, it was the BIDDER responsibility to provide a complete bid and ask any questions necessary within the questions period.
- 4. Submission of a bid with any clarifications, stipulations, exceptions shall not be considered, accepted or incorporated into the contract as a condition for award, contract or commitment to be able to perform the work.
- 5. The bid deadline and bid opening date shall remain unchanged.
- 6. Base bid is for a two (2) layer (R-25) (2.2" Thick) of tapered insulation installed on top of existing lightweight concrete and metal deck. Complete in place.
- 7. Alternate bid to be provided for a RT System (R-25) complete in place. For clarity and simplicity, the contingency allowance will be based upon the base bid regardless if alternate bid is chosen.
- 8. Selected contractor will have to work with the OWNER's HVAC contractor and coordinate with them on their installation of a new HVAC curb and reinstallation of the roof-top unit. This contract and the owner's option will include this coordination, making appropriate modifications to the metal deck of the building to accept the new curb. The new curb (by others) will be installed (by others) to handle the smaller footprint of the newer roof-top unit with a factory sized curb. Therefore, the HVAC curb and penetration will be smaller, and require modifications to the structure/deck to properly cover the excess area from the old larger Lennox unit that was installed many years prior to the newer unit. Work on weekend/after hours (60 hours or Friday Close of Business to Monday Open of Business) will be required to limit interruptions with building occupants. Please include the cost associated within the bid price of the option.
- 9. Windstorm Inspections and TDI application by OWNER.

CONTRACT DOCUMENTS:

REMOVE:	BID
REPLACE:	Revised Document
REASON:	For necessary modifications/revisions.

TECHNICAL SPECIFICATIONS:

INSERT: Document No. 01 2100 – AllowancesREASON: Modified provisions for contingency allowance from 10% to 3% and inserted proper specification for allowance.

REMOVE: Section 02505 – GRAVEL SURFACED AREAS

REASON: Included by error and not applicable to contract.

CONTRACT DRAWINGS

- **REMOVE:** R1.1 & R1.2
- **REPLACE:** With Revised Drawings.
- **REASON:** Updated base bid scope and alternative bid scope. Updated notes regarding owner's option. Added note regarding parapet build up.

BID (Revised per Addendum No. 1 - 10.29.24)

PROJECT NAME: <u>Bid Number 2024.10 – Annex Building Roof Improvements Project for Calhoun</u> <u>County, Texas</u>

DUE DATE: Tuesday, November 5, 2024 before 2:00:00 p.m.

NAME:

BASE WORK SCOPE is: Approximately 8,435 SF of roof tear down to lightweight concrete deck then replace with new insulation and system to meet windstorm requirements, penetration updates, new roof hatch with fall protection all complete in place per plans and specifications.

Item	Quantity	Unit	Unit Price	Total Bid Price
B.1) Furnishing all necessary equipment, materials, and labor for Mobilization, demobilization, barricades, insurance, and bonds as per plans and specifications	1	LS		
B.2) Furnish all necessary equipment, materials, and labor for the roof replacement scope of work for the entire building in accordance with drawings and specifications. Includes, but not limited to all flashings, sheet metal, trim, roof systems (membranes and boards), two layers of tapered insulation (R25), wood nailers for parapet extension, fasteners, sealants and other items necessary to fully complete the work.	1	LS		
B.3) Furnish all necessary equipment, materials, and labor for the roof top penetration modifications in accordance with drawings and specifications. Includes, but not limited to all flashings, sheet metal, trim, boards, fasteners, sealants and other items necessary to fully complete the work. (Excludes Mechanical HVAC Mods).	1	LS		
B.4) 3% Owners Contingency: To be used only as directed by Engineer for Owner's purposes and only by change orders that indicate amounts to be charged to the Owner's Contingency.	1	LS	3% of Base Bid (0.03 X Sum of Base Bid Lines 1-3 above)	
	TOTAL BA	SE BID	\$	
OWNER'S OPTION(S)				
Item	Quantity	Unit	Unit Price	Total Bid Price
O.1) Furnish all necessary equipment, materials, and labor for the roofing support of modification of HVAC curb, which includes closing of the space between the old curb and new with new roof decking, demo as required in the area to adequately seal the space and accept new roof system. Work after hours and or weekend required and coordinating with Owner's HVAC contractor.	1	LS		

Item	Quantity	Unit	Unit Price	Total Bid Price
ALTERNATE BID ITEM(S)			•	
Item	Quantity	Unit	Unit Price	Total Bid Price
A.1) Furnish all necessary equipment, materials, and labor for a RT Roof System in lieu of a tapered insulation roof system. Includes all of the necessary materials as in the base bid.	1	LS		
TOTAL ALTERN	ATE BID (B	id Items	B1,A1,B3 & B4)	

DIVISION 01 – GENERAL REQUIREMENTS SECTION 01 2100 - ALLOWANCES

PART I - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
 - 1. Certain items are specified in the Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when direction will be provided to Contractor. If necessary, additional requirements will be issued by Change Order.
- B. Types of allowances include the following:
 - 1. Contingency allowances.

1.3 DEFINITIONS

A. Allowance: A quantity of work or dollar amount included in the Contract, established in lieu of additional requirements, used to defer selection of actual materials and equipment to a later date when direction will be provided to Contractor. If necessary, additional requirements will be issued by Change Order.

1.4 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract, advise Engineer and Architect of the date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the Work.
- B. At Engineer and Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.
- C. Purchase products and systems selected by Engineer/Architect from the designated supplier.

1.5 SUBMITTALS

A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Change Orders.

Addendum No. 1 – 10/29/24

1.6 INFORMATIONAL SUBMITTALS

- A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.7 COORDINATION

A. Coordinate allowance items with other portions of the Work. Furnish templates as required to coordinate installation.

1.8 ALLOWANCES

- A. Use the allowances only as directed by Engineer and Architect for Owner's purposes and only by Change Orders that indicate amounts to be charged to an allowance.
- 8. Contractor's overhead, profit, and related costs for products, equipment, and services ordered by Owner under the allowances are included in the allowances and are not part of the Contract Sum. These costs include delivery, installation, taxes (if applicable), insurance, equipment rental, and similar costs.
- C. Change Orders authorizing use of funds from the allowances will include Contractor's related costs and reasonable overhead and profit margins.
- D. At Project closeout, credit unused amounts remaining in the allowances to Owner by Change Order.

1.9 ADJUSTMENT OF ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, prepare a Change Order proposal based on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place where applicable. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
 - 1. Include installation costs in purchase amount only were indicated as part of the allowance.
 - 2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other margins claimed.
 - 3. Submit substantiation of a change in scope of work, if any, claimed in Change Orders related to unit-cost allowances.
 - 4. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.

- B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit.
 - 1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of work has changed from what could have been foreseen from information in the Contract Documents.
 - 2. No change to Contractor's indirect expense is permitted for selection of higher- or lowerpriced materials or systems of the same scope and nature as originally indicated.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

A. Allowance No. 1 (Contingency): The net sum of Three Percent (3%) of the total base bid to be used as directed by the Engineer for making incidental change orders for the betterment of the project, and miscellaneous provisions to improve or provide for the design intent, or for unforeseen conditions. All change orders using monies from this allowance will be coordinated and approved by ENGINEER and then the OWNER prior to work being done.

END OF SECTION

ROOF AREA *2 PLY MOD BIT *VARIES 2" TO *VARIES 3" TO * METAL DECK	T (OVER) 4" PERLITE FIBER BOARD (OVER) 5" LIGHTWEIGHT CONCRETE DECK(OVER)	BASE BID INSTALL THE SPECIFIED PRODUCTS AND SYSTEMS AT THE FOLLOWING AREAS: ROOF AREA * REMOVE EXISTING PERLITE INSULATION AND BITUMEN MEMBRANE COMPLETELY TO LIGHTWEIGHT CONCRETE.
SYMBOL	LEGEND	* 2 PLY GRANULE SURFACE SBS MODIFIED BITUMEN MEMBRANE SYSTEM INSTALLED BY TORCH
RTU/AHU	ROOF TOP UNIT/ AIR HANDLER UNIT	* VENTED BASE SHEET - (MECHANICALLY FASTENED OVER) * TWO(2) LAYERS (R-25)(2.2")TAPERED INSULATION(OVER)
🖂 RH	ROOF HATCH	* SANDED BASE SHEET INSTALLED BY TORCH APPLICATION METHOD - (OVER)
🖸 EV	EXHAUST VENT	(* EXISTING LIGHTWEIGHT CONCRETE (PROPERLY CLEANED, REPAIRED, AND PREPPED. ALL MOISTURE CONTAINING MATERIALS REMOVED AND REPLACED.)
SC	SCUPPER	
🗄 DS	DOWNSPOUT	
∘ CD	CONDENSATION DRAIN	ALTERNATE BID
∘ SP	SOIL PIPE	INSTALL THE SPECIFIED PRODUCTS AND SYSTEMS AT THE FOLLOWING AREAS:
—CON—	CONDENSATE	ROOF AREA
	TAPER LINE	* INSTALL RT SYSTEM IN LEIU OF TAPERED INSULATION(R-25)
TP	TRAFFIC PAD	



Code Compliance

International Building Code Review Information Edition: IBC 2021 Address: 201 W. AUSTIN ST., Port Lavaca Texas 77979 Occupancy (Chapter 3):BUISNESS GROUP B Type of Construction: Type 1-B

ROOF ASSEMBLIES AND ROOFTOP STRUCTURES (CHAPTER 15): PERFORMANCE REQUIREMENTS (1504) Wind Resistance of Non-ballasted Roofs (1504.3):

covering shall be permitted to be determined using allowable stress design. Edge Securement for low-slope roofs (1504.5):

Aggregate (1504.8):

Not Permitted - 1609.2 Hurricane Prone Region FIRE CLASSIFICATION (SECTION 1505): Minimum Roof Covering Classification (Table 1505.1):

REQUIREMENTS FOR ROOF COVERINGS (SECTION 1507)

В

Modified Bitumen Roofing (Section 1507.11):Slope (1507.11.1) Roof replacement or roof recover of existing low-slope roof coverings shall not be required to maintain the minimum design slope Material Standards (1507.11.2)

ASTM D6509 ROOF INSULATION (SECTION 1508): Material Standards (Table 1508.2): Expanded Polystyrene ASTM C578

Polyisocyanurate Board ASTM C1289, Type I or II

Edition: IECC 2021 8,434 SF Gross Area:

CLIMATE ZONE (Figure 301.1 or Table 301.1): Calhoun, TX - 2A* Asterisk (*) indicates a warm-humid climate

BUILDING ENVELOPE REQUIREMENTS (SECTION C402):

OPAQUE THERMAL ENVELOPE INSULATION COMPONENT MINIMUM REQUIREMENTS, R-VALUE METHOD (TABLE C402.1.3): Insulation Entirely Above Roof Deck, R-25ci Roof: OPAQUE THERMAL ENVELOPE ASSEMBLY MAXIMUM REQUIREMENTS, U-FACTOR METHOD (TABLE C402.1.4): Roof: Insulation Entirely Above Roof Deck, U-0.039

SOLAR REFLECTANCE AND THERMAL EMITTANCE (Section C402.3): Low-sloped roofs directly above cooled conditioned spaces in Climate Zones 1, 2, and 3 shall comply with one or more of the options in Table C402.3

TOTAL BULIDING PERI	FORMANCE (SECTION C
ROOF - Reference	Roof - Proposed
Туре:	Insulation Entirely Abo
Gross Area:	8,434 SF
U-Factor (Table 402.1.4)	:U-0.039
Solar Absorbance:	0.75

0.90

GENERAL NOTES

Emittance:

1 CONSULT W/OWNER AND REMOVE ALL ABANDONED OR NON-FUNCTIONAL ROOF MOUNTED EQUIPMENT AND ACCESSORIES. VOIDS IN ROOF DECK LEFT BY REMOVED EQUIPMENT SHALL BE REPAIRED AS SPECIFIED AND DETAILED 2 REPLACE ALL EXISTING NON-MECHANICALLY OPERATED VENTS AND VENTILATORS AND WITH NEW PRODUCTS OF IDENTICAL DESIGN, FUNCTION, AND CONFIGURATION, UNLESS OTHERWISE INDICATED.

3 PROVIDE CRICKETS ON THE HIGH SIDE OF ALL CURBS 24" OR GREATER WIDE TO DIVERT ROOF DRAINAGE TO DISCHARGE AREAS (SCUPPERS, ROOF DRAINS, ETC.) AT EQUIPMENT SUPPORT CURBS, PROVIDE CRICKETS ON HIGH SIDE OF CURB. 4 SUMP ALL ROOF DRAINS AND PRIMARY DRAINAGE SCUPPERS AS DETAILED AND SPECIFIED

5 PROVIDE 4" LAP JOINTS FOR ALL SHEET METAL FLASHING RECEIVERS. 6 FLASH ALL ROUND ROOF PENETRATIONS AS DETAILED UNLESS OTHERWISE NOTED. 7 PROVIDE CURBS FOR ALL VENTILATORS WITH A DECK OPENING OF 12-INCHES OR

GREATER. 8 RAISE ALL ROOF MOUNTED APPURTENANCES, EQUIPMENT, PIPING, ETC. TO 8-INCH MINIMUM HEIGHT ABOVE TOP OF ROOF MEMBRANE OR AS REQUIRED TO PROVIDE CLEARANCES AS RECOMMENDED BY NRCA STANDARDS. 9 VERIFY ROOF DRAIN ASSEMBLY COMPONENTS ARE SEALED AND NOT RESTRICTED. PERFORM A HYDROSTATIC WATER TEST ON ROOF DRAIN ASSEMBLY. PROVIDE OWNER AND ENGINEER WITH WRITTEN REPORT OF HYDROSTATIC WATER TEST. REPLACE ALL MISSING OR BROKEN DRAIN COMPONENTS (BOWLS, STRAINERS, CLAMPING RINGS, ETC.).

10 ALL EXISTING SCUPPERS AND COLLECTOR BOXES SHALL BE REMOVED AND REPLACED WITH NEW ONES. NEW COLLECTOR BOXES SHALL MATCH EXISTING. NEW DOWNSPOUTS TO MATCH EXISTING. DO NOT INSTALL NEW DOWNSPOUTS OVER CONTROL JOINTS, WALL OPENINGS, HANDICAPPED RAMPS OR ANY WALL-MOUNTED DEVICE.

11 INSTALL NEW ROOF DRAINS AND SPECIFICATIONS 12 INSTALL ROLLER SUPPORTS UNDER ALL ELECTRICAL CONDUIT, GAS, WATER A/C AND DRAINAGE LINES NOT SUSPENDED FROM PIPE HANGERS. SECURE CONDUIT AND LINES AS PER WINDSTORM REQUIREMENTS. 13 ALL LUMBER INDICATED IN DRAWINGS IS NEW (UNLESS INDICATED AS EXISTING). 14 IF ASBESTOS CONTAINING MATERIALS ARE DETERMINED TO EXIST AT AREAS SCHEDULED FOR WORK, THE REMOVAL, HANDLING AND DISPOSAL OF THE ACM MUST TAKE PLACE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL LAWS

AND REGULATIONS. 15 RAISE ALL PLUMBING, GAS, ELECTRICAL & MECHANICAL LINES & SUPPORT WITH

NEW ADJUSTABLE PIPE SUPPORTS. 16 ALL ROOFTOP APPURTENANCES, EQUIPMENT, PIPING, ETC. SHALL BE ATTACHED / REATTACHED IN A MANNER TO PROVIDE CODE REQUIRED WIND RESISTANCE AS

CALCULATED BY ASCE-7. 17 CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND SCHEDULING THE SITE INSPECTIONS OF THE OWNER'S WINDSTORM ENGINEER. 18 PROVIDE ONE-WAY MOISTURE RELIEF VENTS ON ALL NEW LIGHTWEIGHT

INSULATING CONCRETE SYSTEMS, AT A MINIMUM DENSITY OF ONE VENT EVERY 900 SQUARE FEET. 19 PROVIDE MOISTURE SURVEY OF ALL EXISTING ROOF COMPONENTS SCHEDULED TO REMAIN IN PLACE. PROVIDE WRITTEN REPORT OF MOISTURE SURVEY RESULTS TO OWNER AND ARCHITECT. REMOVE AND REPLACE ALL MOISTURE CONTAINING MATERIAL PRIOR TO INSTALLATION OF NEW ROOF SYSTEM.

20 UNLESS INDICATED ELSEWHERE IN THESE DRAWINGS, MAXIMUM DOWNTIME ALLOWED FOR MECHANICAL A/C SERVICE TO INTERIOR SPACE IS 72 HOURS. CONTRACTOR TO PROVIDE TEMPORARY A/C SERVICE TO INTERIOR SPACE IF A/C EQUIPMENT IS DISCONNECTED FOR LONGER THAN 72 HOURS.



Roof Coverings installed on roofs in accordance with Section 1507 that are mechanically attached or adhered to the roof deck shall be assigned to resist the design wind load pressures for components and caldding in accordance with Section 1609.5.2. the wind load on the roof

Low-slope built-up, modified bitumen and single-ply roof system metal edge securement, except gutters, shall be designed and installed for wind loads in accordance with Chapter 16 and tested for resistance in accordance with Test Methods RE-1, RE-2 and RE-3 of ANSI/PSRI ES-1, except basic wind speed, V, shall be determined from figures 1609.3(1) thorough 1609.3(8) as applicable.

requirements of one-quarter unit vertical in 12 units horizontal (2-percent slope) in section 1507 for roofs that provide positive roof drainage

Modified bitumen roofing materials shall comply with ASTM D6162, ASTM D6163, ASTM D6164, ASTM D6222, ASTM D6223, ASTM D6298, or

INTERNATIONAL ENERGY CONSERVATION CODE REVIEW INFORMATION

C407):

bove Deck, R-25ci





	Founded on building scien	5 ces	Roof Uplift Field D	Data Collection Form	n	
Date:	1 - 9 - 20			Project No. Project Locat	ion: 201 West Au	stin Street Port Lavaca, TX 77979
O	Toct of	SAVACH		Arristant	-101	R (
Operator: Test No.	Date of Test	Time Started	Wind Speed, MPH	Assistant: Air Temp, °F	SIAH Roof Temp, °F	Corners and Perimeters, Ft
3	7-9-29	9:15	6.21	34	90.3	12 ft
Building Name	ANN	EXI		-		
Location of Test Target Negative	Pressure, PSF =	Auluké				
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egative Pressure, PSF	Inches of water	At Start	At Finish	Pass	Fail	Observations & Comments
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Roof Uplift Field Data Collection Form Project No. Project Name: ORT LAVACA LANNEX Project Location: 201 West Austin Street Port Lavaca, TX 77979 GARCIA Time Started Wind Operator: KRYSG Assistant: 131AH Rente Test No. Date of Test Wind Speed, MPH Air Temp, °F Roof Temp, °F Corners and Perimeters, Ft 7-9-24 8:304 82 0 88.8 ANNEX PORTLAVACA - CORNER ressure, PSF = failure 12 ft Building Name Location of Test Target Negative Pressure, PSF = Allowable Deflection, inches = Deflection, Inches Negative Pressure, Inches of water At Start PSF At Finish Pass Fail Observations & Comments 5.8 0.04 30 2.05 45 8.7 0.10 1.35 Rost destatche x Sudden Balloun Resting de A. atter power off 5 60 11.5 75 14.4 90 17.3 105 70.2 23.1 120 .

AM		Roof Uplift Field	Data Collection For	m					
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Project Name:	Jort LAVALA HINNI	1	Assistant:						
Test No.	Date of Test Time Started	Wind Speed, MPH	Air Temp, *F	Roof Temp, *F	Corners and Perimeters, Ft				
27	-9-24 8:55	4.97	840	99.2	12 ft				
Building Name	Given J								
Target Negative Pressu	Ire, PSF = kijuré	_			-				
Allowable Deflection, in	Deflec	tion, Inches				-			
PSF Incl	hes of water At Start	At Finish	Pass	Fail	Observations & Comments				
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45 8.	7								
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