# **BID #WG21-25A SPECIFICATIONS**

All workmen and equipment shall be furnished by the Contractor.

No bid may be withdrawn for a period of thirty (30) days following the bid opening unless approved by the Baldwin County Commission, Bay Minette, Alabama.

# PREPARATION OF BIDS

Forms furnished, or copies thereof shall be used and strict compliance with requirement of the invitation, these instructions and the general specifications for the project are necessary. Special care should be exercised in the preparation of bids. Bidders must make their own estimates of the structure and difficulties attending the proposed contract, including local conditions uncertainty of weather, quantities and all other contingencies. All designations and prices shall be fully and clearly set forth. The proper blank spaces in the bid and quantity forms shall be suitably filled in.

# **BIDS FOR ALL OR PART**

The County reserves the right of awarding the contract in whole or in part, according to the best interest of the County.

# AWARD

Award will be made to the lowest responsible bidders meeting specifications. Quality, conformity with specifications, service and experience are among the factors that will be considered in determining the responsive bidder.

## **BIDDERS QUALIFICATIONS**

The County may make such investigations as they deem necessary to determine the ability of the bidders to furnish all materials, and the bidder shall furnish to the County all such information and data for this purpose as the County may request. The County reserves the right to reject any bid if the evidence submitted, or investigation of such bidder, fails to satisfy the County that such bidder is properly qualified to carry out the obligations of the contract and to furnish all materials contemplated therein. Conditional bids will not be accepted. Bidder(s) must have a Contractor's License issued by the Alabama State Licensing Board for General Contractors under the provision of Title 34, Chapter 8, Code of Alabama. Bidder(s) shall submit a copy of license.

# "ALABAMA GENERAL CONTRACTORS LICENSE NUMBER MUST BE CLEARLY LISTED ON THE OUTSIDE OF THE VENDOR BID ENVELOPE"

# **LAWS AND REGULATIONS**

The bidder's attention is directed to the fact that all applicable state laws, municipal ordinances, and rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.

# **POWER OF ATTORNEY**

Attorneys-in-fact who sign bid bonds must file with each bond a certified and effectively dated copy of their power of attorney.

# PERFORMANCE BOND

A performance bond in the form and terms approved by the County in an amount not less than the contract price will be required at the signing of the contract. A labor and materials bond in the form and terms approved by the County in an amount not less than fifty percent (50%) of the contract price insuring payment for all labor and materials shall also be required at the signing of the contract. In addition, the Contractor must furnish to the County, at the time of the signing of the contract a certificate of insurance coverage as provided in the specifications. The right is reserved to reject any and/or all bids and to waive informalities or irregularities and to furnish any item of material or work, and to change the amount of said contract.

# TRAFFIC CONTROL, SAFETY ITEMS

Contractor shall erect all warning signs, and provide the appropriate personnel, if required, and all other items required to safely handle traffic through work area. Traffic Control Devices shall be provided by the Contractor. Traffic Control Devices provided must comply with MUTCD.

## **CONTRACTORS AND SUBCONTRACTORS AND INSURANCE**

The Contractor shall not commence work under this contract until all the required insurance has been obtained by Contractor and approved by the County. Nor shall the Contractor allow any Subcontractor to commence work on his subcontract until the insurance required of the Subcontractor has been so obtained and approved.

## **COMPENSATION INSURANCE**

Contractor shall procure and shall maintain during the life of this contract Workmen's Compensation Insurance for all of his employees to be engaged in work on the project under his contract, and, in case of any such work sublet, the Contractor shall require the Subcontractor similarly, to provide Workmen's compensation Insurance for all of the latter's employees to be engaged in such work unless such employees are covered by the protection afforded by the Contractor's Workmen's Compensation Insurance. In case a class of employees engaged in hazardous work on the project under this contract is not protected under the Workmen's Compensation Statute, the Contractor shall provide and shall cause each Subcontractor to provide adequate employer's general liability insurance for the protection of such of his employees as are not otherwise protected. The Baldwin County Commission, its Departments and its employees shall be named as additional insured.

## CONTRACTOR'S PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE

The Contractor shall procure and shall maintain during the life of this contract a Comprehensive Liability Policy providing bodily injury and property damage coverage on an occurrence basis including damages arising from blasting explosion or collapse, mechanical equipment digging in streets or highways, and including completed operations, independent contractors and contractual general liability. Insurance shall be contractual general liability \$500,000.00 per occurrence bodily injury and property damage; \$5,000 per person medical payments or medical expense; \$500,000.00 per occurrence bodily injury and property damage; \$5,000 per person medical payments or medical expense; \$500,000.00 personal and advertising injury; \$50,000.00 fire damage (any one firm); \$1,000,000.00. The Baldwin County Commission, its Departments and its employees shall be named as additional insured. The Contractor agrees to maintain such coverage as is required in this section for a period of one (1) year from the date of acceptance of the work by the County or at the date of the final amounts owed the Contractor by the County, whichever occurs first.

# **COMPREHENSIVE AUTOMOBILE LIABILITY INSURANCE**

The Contractor agrees to carry a Comprehensive Automobile Liability Policy providing bodily injury liability on an occurrence basis and providing property damage liability on an accident basis. This policy shall protect the Contractor against all liability arising out of the use of automobiles, both private, passenger and commercial, regardless of whether such vehicles shall be owned by the Contractor, owned by others or hired. Limits of liability for Comprehensive Automobile Liability Insurance shall be \$1,000,000.00 combined single limit bodily injury and property damage each occurrence. The Baldwin County Commission, its departments and its employees shall be named as additional insured.

# **COUNTY'S PROTECTIVE LIABILITY INSURANCE**

The Contractor shall at his expense provide County's protective Liability policies issued in the names of the County and its departments covering their liability for operation of the Contractor. These policies shall provide limits of liability in the amount of \$1,000,000.00 per occurrence bodily injury and property damage, \$1,000,000.00 aggregate.

# **HOLD HARMLESS PROVISION**

Provider shall indemnify, defend and hold County and its Commissioners, affiliates, employees, agents, and representatives (collectively "County") harmless from and against any and all claims, demands, liabilities, damages, losses, judgments, costs, and expenses including, without limitations, attorneys' fees, for any and all personal injury (including death) and property damage of any kind or nature whatsoever, incurred by, asserted against, or imposed upon County, as a result of or in any manner related to provision of services hereunder, or any act or omission, by Provider. Contractor shall provide the COUNTY with proof of general liability coverage including the COUNTY as an additional insured. This indemnification shall survive the expiration of this Contract.

# SUBCONTRACTOR'S PUBLIC LIABILITY & PROPERTY DAMAGE INSURANCE

The Contractor shall require each of his Subcontractors to produce and maintain during the life of his subcontract, Subcontractor's Public Liability and Property Damage Insurance of the type specified in the above paragraph hereof, in amounts approved by the County.

Three (3) executed copies of each subsequent endorsement affecting the coverage of policies and of each cancellation shall be forwarded to the County.

# SAFETY STANDARDS AND ACCIDENT PREVENTION

With respect to all work performed under this Contract, the Contractor shall: Comply with the safety standards provisions of applicable laws, building and construction codes as required by the Associated General Contractors of America, and the requirements of OHSA (Occupational Safety and Health Act). Exercise every precaution at all times for the prevention of accidents and the protection of persons (including employees) and property. The Contractor shall furnish and maintain sufficient and adequate danger signals, lights, barriers, etc., as necessary to prevent accidents and to protect the work site. These items are Considered incidental and are considered as part of the Contract.

# **BUY AMERICAN REQUIREMENTS**

The Contractor acknowledges to and for the benefit of Baldwin County Commission of the State of Alabama that it understands that some of the goods and services under this Agreement may be funded with **federal monies** made available by the U.S. Department of the Interior - Coastal Impact Assistance Program (CIAP) and such laws contains provision commonly known as "Buy American" that requires all of the iron, steel and manufactured goods used in the project be produced in the United States ("Buy American Requirements"), including iron, steel, and manufactured goods provided by the Contractor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Baldwin County Commission that (a) the Contractor has reviewed and understands the Buy American Requirements, (b) all of the iron, steel, and manufactured goods used in the project will be and/or have been produced in the United States in a manner that complies with the Buy American requirements, unless a waiver of the requirements is approved, and (c) the Contractor will provide any further verified information, certification, or assurance of compliance with this paragraph, or information necessary to support a waiver of the Buy American Requirements, as may be requested by the County. As such, all products furnished by the CONTRACTOR under this contract must comply with, without limitations, the "Buy American" provisions of Title 43 CFR Sec. 12.700 through 12.830 U.S. Department of Interior.

# **DEBARMENT AND SUSPENSION**

Debarment and Suspension (Executive Orders 12549 and 12689)—A contract award (see 2 CFR 180.220) must not be made to parties listed on the governmentwide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

# **CLEAN AIR ACT AND THE FEDERAL WATER POLLUTION CONTROL ACT**

Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended—Contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

## **BYRD ANTI-LOBBYING AMENDMENT**

Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)—Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

# CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708). Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part

5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

# EQUAL EMPLOYMENT OPPORTUNITY

Equal Employment Opportunity. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."

# **TERMINATION FOR CAUSE AND FOR CONVENIENCE**

All contracts in excess of \$10,000 must address termination for cause and for convenience by the non-Federal entity including the manner by which it will be effected and the basis for settlement.

# **REMEDIES**

Contracts for more than the simplified acquisition threshold, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

## PROCUREMENT OF RECOVERED MATERIALS

A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

## TIME OF COMPLETION

Work shall begin within fifteen (15) days after award of contract, or as soon as weather conditions permit, unless otherwise notified.

Projects must be completed within **one hundred eighty (180) days** of notification to proceed. Unless work is hampered by long periods of inclement weather, or by due proof of material unavailability, the Baldwin County Commission will assess a penalty in the amount of 1/2 of 1% of the total contract for each normal work week beyond the agreed completion

date. Substantial Completion shall occur on the Date of Manufacturer's Punch List. Project shall be complete after receipt of Manufacturer's Warranty.

# **PROTECTION**

- 1) Protect the completed roof system as required in order that the design criteria are met.
- 2) Protect all adjacent surfaces from possible spillage, marring or staining in the process of installation.

# **GUARANTEE**

Contractor will provide a two (2) year Water Tightness Warranty covering labor by the Contractor on work as specified, which shall commence from the date of acceptance. This guarantee shall cover any and all defects in the workmanship. This warranty is exclusive of:

- 1) Physical damage by the Owner and/or other trades.
- 2) "Acts of God" fire, civil commotion, natural catastrophes or vandalism.

# **CLEANUP**

Accumulated debris shall be removed periodically to assure maximum safety and sanitation at all times. At the time of completion, the Contractor shall remove all excess material and debris from the site and leave all roof surfaces free from accumulations of dirt, debris and other extraneous materials.

# FINAL PAYMENT

The Contractor, immediately after the completion of the contract, shall give notice of said completion by an advertisement in some newspaper of general circulation in the local area, for a period of four (4) successive weeks. Proof of publication of said notice shall be made by the Contractor to the County, by affidavit of the publisher and a printed copy of the notice published. The advertisement of completion shall provide that any person having claims for labor and/or materials are requested to file notice of such claims with the County. The final payment shall not be made upon the contract until the expiration of 30 days after the completion of the notice and including all necessary cleanup, and the Baldwin County Commission receives written verification of completion and intent to warranty job, by the Manufacturing Company.

# **COORDINATION WITH BALDWIN COUNTY COMMISSION**

The Contact person for the Baldwin County Commission will be Wanda Gautney, at (251) 580-2520.

# **DRAWINGS**

The drawings are attached.

**BID #WG21-25A RESPONSE FORM** Roof Repairs and Replacement of Various County Buildings due to Hurricane Damage for the Baldwin County Commission

Date:				
Out of State	Yes	orNo	If yes, Registra	ation Number
Company Na	me:			
Address:				
Company Re	p			
		(Rep. Na	me Typed or Pri	nted)
Position:				
Email addres	s:			
Phone:				
Fax:				

Contractor's License Number (License Issued by the Alabama State Licensing Board for General Contractors)

# "ALABAMA GENERAL CONTRACTORS LICENSE NUMBER MUST BE CLEARLY LISTED ON THE OUTSIDE OF THE VENDOR BID ENVELOPE"

# TABLE OF CONTENTS

Section #	Section Title	Page #
BIDDING REQUIR	<u>EMENTS</u>	
SECTION 00300	BID FORM	13
SECTION 00800	SUPPLEMENTARY CONDITIONS	23
DIVISION 1 - SPEC	CIFICATIONS	
SECTION 01360	MANUFACTURER WARRANTY SITE CERTIFICATION	24
SECTION 01800	MAINTENANCE	25
DIVISION 5 - MET	ALS	
SECTION 05120	STRUCTURAL STEEL	26
SECTION 05310	METAL ROOF DECK	35
DIVISION 6 - WOC	D & PLASTIC	
SECTION 06100	ROUGH CARPENTRY	39
DIVISION 7 - THE	RMAL & MOISTURE PROTECTION	
SECTION 07120	WALL WATERPROOFING	43
SECTION 07310	SHINGLES	47
SECTION 07411	MANUFACTURED METAL ROOF PANELS	52
SECTION 07600	FLASHING AND SHEET METAL	60
SECTION 07900	JOINT SEALERS	65

# SECTION 00300 - BID FORM

PRO	JECT IDENTIFICATION:	<b>"Roof Repairs and Replacement of Various County Buildings due to Hurricane Damage for the Baldwin County Commission"</b>
BID	TO:	Baldwin County Commission
BID	FROM:	
2. Ii a b	<ul> <li>DWNER to perform the Work</li> <li>n submitting this Bid, BIDDED</li> <li>a. It understands that Contrac work occurring at different</li> <li>b. BIDDER will sign and sub- the date of OWNER'S Noti</li> </ul>	ees, if this Bid is accepted, to enter into an agreement with as specified for the Bid Price within the Bid Times indicated. R represents, as more fully set forth in the Agreement, that: t is likely to be awarded to a single Bidder with portions of the times based on Owner sequencing preferences. mit the Agreement with Bonds and Insurance within 15 days after tice of Award. following Addenda receipt of which is hereby acknowledged. Number
ab	<ul> <li>\$</li></ul>	can add/delete quantities from the Contract as required. call 16 SF shingle. per SF = \$ <b>Included in Base Bid</b>
		Modified Bitumen roof maintenance as specified.

b.	UNIT PRICING -	Owner c	an add/delete	quantities	from the	Contract as	required

- i Clear drains of debris
- \$\_\_\_\_\_
  - ii. Replace walk pad.
- \$\_\_\_\_\_

# 3. FAIRHOPE COURTHOUSE, B

- a. BID OPTION #3 Perform shingle reroof as specified.
   \$\_\_\_\_\_\_\_
- b. UNIT PRICING Owner can add/delete quantities from the Contract as required.
  - i. Include cost to repair 100 SF deteriorated 5/8" plywood.

100 SF @	per SF =	<b>Included in Base Bid</b>

- ii. Include cost to repair 100 BF fascia board w/ new PT.
- **100 BF** @ \_\_\_\_\_ per BF = \$\_\_\_\_\_ Included in Base Bid

#### 4. FOLEY AREA 300 20764 HWY 24

- a. BID OPTION #4 Perform metal roof repairs as specified.
- b. UNIT PRICING Owner can add/delete quantities from the Contract as required.
  - i. Include cost to fabricate and install 20 LF of metal eave.

**20 LF** @ \_\_\_\_\_ per LF = \$ \_\_\_\_ Included in Base Bid

#### 5. FOLEY COURTHOUSE, 10 LOCATIONS

\$ \_\_\_\_\_

- a. BID OPTION #5 Perform shingle roof repairs and maintenance as specified.
- b. UNIT PRICING Owner can add/delete quantities from the Contract as required.
  - i. Clear gutters.
  - \$\_\_\_\_\_
    - ii. Include cost to fabricate and install 10 SF field shingle roofing.

**10 SF** @ \_\_\_\_\_ per SF = \$\_\_\_\_\_ Included in Base Bid

iii. Include cost to install 150 LF hip and ridge shingles.

**150 LF** @ \_\_\_\_\_\_ per LF = \$ \_\_\_\_\_ Included in Base Bid

#### 6. ANIMAL SHELTER BLDG. A

- a. BID OPTION #6 Perform shingle reroof as specified.
   \$
- b. UNIT PRICING Owner can add/delete quantities from the Contract as required.
  - i. Include cost to repair 3,000 SF deteriorated 5/8" plywood.

**3,000 SF** @ \_\_\_\_\_ per SF = \$\_\_\_\_\_ Included in Base Bid

ii. Include cost to repair 3,000 BF fascia board w/ new PT.

3,000 BF @	per BF =	Included in	n Base	Bid

#### 7. ANIMAL SHELTER BLDG. B

- a. BID OPTION #7 Perform metal roof repairs as specified. \$
- b. UNIT PRICING Owner can add/delete quantities from the Contract as required.
  - i. Include cost to fabricate and install 18 SF of metal roof panel.
  - **18 SF** @ \_\_\_\_\_ per SF = \$\_\_\_\_\_ Included in Base Bid

# 8. ROBERTSDALE ANNEX I

a. BID OPTION #8 – Perform mod bit roof repairs as specified.
 \$\_\_\_\_\_\_\_

b. UNIT PRICING – Owner can add/delete quantities from the Contract as required.

i. Include cost to fabricate and install 20 LF misc Kynar-coated 24ga G90 trim, per LF x 24" width.

**20 LF @**\_\_\_\_\_ per LF = \$\_\_\_\_\_ Included in Base Bid

#### 9. ROBERTSDALE BRATS

- a. BID OPTION #9 Perform shingle and metal roof repairs as specified.
   \$
- b. UNIT PRICING Owner can add/delete quantities from the Contract as required.
  - i. Include cost to install 18 SF shingle roofing.

**18 SF** @ \_\_\_\_\_ per SF = \$\_\_\_\_\_ **Included in Base Bid** 

#### **10. SHERIFF'S OFFICE**

- a. BID OPTION #10 Perform metal roof repairs as specified. \$
- b. UNIT PRICING Owner can add/delete quantities from the Contract as required.
  - i. Include cost to repair 30 LF of damaged metal roof hip.

30 LF	a	 per	LF =	<u> </u>	Included	in	Base	Bid

#### **<u>11. AREA 200 HIGHWAY MAIN BLDG</u>**

- a. BID OPTION #11 Perform metal roof repairs as specified.
   \$\_\_\_\_\_\_
- b. UNIT PRICING Owner can add/delete quantities from the Contract as required.
  - i. Include cost to fabricate and install 10 LF of gable trim panels.

10 LF @	per $LF = $ \$	Included in Base Bid

#### **12. AREA 200 SIGN BLDG**

- a. BID OPTION #12 Perform metal roof replacement as specified.
- b. UNIT PRICING Owner can add/delete quantities from the Contract as required.
  - i. Include cost to fabricate and install 6,400 SF metal roof panels.

6,400 SF @ \_\_\_\_\_ per SF = \$\_\_\_\_\_ Included in Base Bid

ii. Include cost to fabricate and install 480 BF 2x6 wood purlins.

<b>480 BF</b> @ per BF = \$	Included in	Base Bid
-----------------------------	-------------	----------

#### **13. ANNEX II OLD CIS**

a. BID OPTION #13 - Reseal windows
 \$

\$

- b. UNIT PRICING Owner can add/delete quantities from the Contract as required.
  - i. Include cost to reseal 750 LF of windows

**750** LF @ \_\_\_\_\_ per LF = \$\_\_\_\_\_ Included in Base Bid

#### **14. BAY MINETTE ANNEX I**

a. BID OPTION #14 - Replace missing/damaged shingles.

	\$		
b.	UNIT PRICING – Owner can add	/delete quantities from the Contract	t as required.
	i. Include cost to replace 10	0 SF of damaged shingle.	
	100 SF @	_ per SF = \$	_Included in Base Bid
<u>15. AU</u>	BURN EXTENSION		
a.	BID OPTION #15 - Replace miss \$		
b.	UNIT PRICING – Owner can add	/delete quantities from the Contract	t as required.
	i. Include cost to replace 10	0 SF of damaged shingles.	
	100 SF @	_ per SF = \$	_Included in Base Bid
<u> 16. BC</u>	CAREA 100 HWY BLDG. A		
a.	BID OPTION #16 - Complete rero \$		
b.	UNIT PRICING – Owner can add	/delete quantities from the Contract	t as required.
	i. Include cost to replace 3,5	500 SF of damaged metal roofing pa	anels
	3,500 SF @	per SF = \$	Included in Base Bid
<u>17. Ba</u>	ldwin County AREA 100 HWY B	LDG. B	
a.	BID OPTION #17 - Complete rero \$		
b.	UNIT PRICING – Owner can add	/delete quantities from the Contract	t as required.
	i. Include cost to replace 1,5	500 SF of damaged metal roofing pa	anels.
	1,500 SF @	per SF = \$	Included in Base Bid
<u>18. Ba</u>	ldwin County AREA 100 HWY B	LDG. C	
a.	BID OPTION #18 - Ridge damage \$	-	
b.	UNIT PRICING – Owner can add	/delete quantities from the Contract	t as required.
	i. Include cost to replace 10	LF of damaged metal roof ridge.	

**10 LF @\_\_\_\_\_** per LF = \$\_\_\_\_\_ Included in Base Bid

#### **19. COMMISSION AT ADMINISTRATION**

a. BID OPTION #21 - Clear Debris \$

#### **20. LEGISLATION/DELEGATION**

- a. BID OPTION #20 Complete reroof and structural repair \$
- b. UNIT PRICING Owner can add/delete quantities from the Contract as required.
  - i. Include cost to replace 4,300 SF of damaged shingle.

**4,300 SF** @ \_\_\_\_\_ per SF = \$\_\_\_\_\_ Included in Base Bid

ii. Include cost to replace 15 LF rotted wood nailer/decking.

15 LF	(a)	per LF = \$	Included	l in Base	Bid

#### **21. REVENUE BAY MINETTE**

- a. BID OPTION #21 Complete reroof and wall waterproofing \$\_\_\_\_\_
- b. UNIT PRICING Owner can add/delete quantities from the Contract as required.
  - i. Include cost to replace 26,000 SF of damaged shingle roof.

**26,000 SF** @ \_\_\_\_\_ per SF = \$\_\_\_\_\_ Included in Base Bid

ii. Include cost to repair 1 SF of damaged EIFS.

**1 SF @**\_\_\_\_\_ per SF = \$\_\_\_\_\_ Included in Base Bid

iii. Include cost to waterproof 1 SF of EIFS.

1 SF @ \_\_\_\_\_ per SF = \$ \_\_\_\_\_ Included in Base Bid

#### 22. TRANSFER STATION SCALES

- a. BID OPTION #22 Complete reroof and eave repair \$\_\_\_\_\_\_
- b. UNIT PRICING Owner can add/delete quantities from the Contract as required.
  - i. Include cost to replace 1,707 SF of damaged shingle roof.

1,707 SF @ \_\_\_\_\_ per SF = \$\_\_\_\_\_ Included in Base Bid

ii. Include cost to replace 175 BF damaged vertical PT wood fascia.

175 BF @ per BF =	Included in Base Bid
-------------------	----------------------

### 23. BICENTENIAL PARK CHURCH

a. BID OPTION #23 - Steep slope shingle reroof \$\_\_\_\_\_

b. UNIT PRICING – Owner can add/delete quantities from the Contract as required.

i. Include cost to replace 2,500 SF of damaged shingle roofing.

2,500 SF @	per SF =	Included in Base Bid

#### 24. LITTLE RED SCHOOLHOUSE

- a. BID OPTION #24 Shingle roof repair \$\_\_\_\_\_
- b. UNIT PRICING Owner can add/delete quantities from the Contract as required.
  - i. Include cost to replace 26 SF of damaged shingle roofing.

$26 \text{ SF} (a) \qquad \text{per SF} = \$ \qquad \text{Inclu}$	ided in Base Bid
---	------------------

#### **25. BID FORM TABULATION**

Each of the Base Bids above are to be awarded as a single project to a single low responsive bidder.

1. BID OPTION #1 – Fairhope Brats	<u>\$</u>
2. BID OPTION #2 – Fairhope Courthouse, Typical	<u>\$</u>
3. BID OPTION #3 – Fairhope Courthouse, B	<u>\$</u>
4. BID OPTION #4 – Foley Area 300 20764 Hwy 24	<u>\$</u>
5. BID OPTION #5 – Foley Courthouse, 10 Locations	<u>\$</u>
6. BID OPTION #6 – Animal Shelter Bldg. A	<u>\$</u>
7. BID OPTION #7 – Animal Shelter Bldg. B	<u>\$</u>
8. BID OPTION #8 – Robertsdale Annex I	<u>\$</u>
9. BID OPTION #9 – Robertsdale Brats	<u>\$</u>
10. BID OPTION #10 – Sheriff's Office	<u>\$</u>

11. BID OPTION #11 – Area 200 Hwy Main Bldg	\$
12. BID OPTION #12 – Area 200 Sign Bldg	<u>\$</u>
13. BID OPTION #13 – Annex 2 Old CIS	<u>\$</u>
14. BID OPTION #14 – Bay Minette Annex I	<u>\$</u>
15. BID OPTION #15 – Auburn Extension	<u>\$</u>
16. BID OPTION #16 – BC Area 100 Hwy Bldg. A	<u>\$</u>
17. BID OPTION #17 – BC Area 100 Hwy Bldg. B	\$
18. BID OPTION #18 – BC Area 100 Hwy Bldg. C	\$
19. BID OPTION #19 – Commission at Admin	\$
20. BID OPTION #20 – Legislation/Delegation	\$
21. BID OPTION #21 – Revenue Bay Minette	\$
22. BID OPTION #22 – Transfer Station Scales	\$
23. BID OPTION #23 – Bicentennial Park Church	\$
24. BID OPTION #24 – Little Red Schoolhouse	\$
25. GRAND TOTAL	\$

END OF SECTION 00300 - BID FORM

#### **SECTION 00800 - SUPPLEMENTARY CONDITIONS**

#### 1.0 CONTRACT TIME AND LIQUIDATED DAMAGES

- A. Contract Time: <u>180</u> Work Days, from Notice to Proceed to Substantial Completion.
- B. Where additional buildings are added to this contract, the Contract Time shall be renegotiated.

### C. Liquidated Damages: Shall be \$150.00 per day and subject to the following;

- 1. Contract Work Day defined as:
  - a. 40F and rising,
  - b. 50% or less, chance of rain.
    - 1. Any incident of actual rain reported within 30 miles of jobsite shall remove this day as a Work Day.
    - 2. Weather Reporting Station shall be MOB (Mobile Regional Airport)
  - c. Monday through Friday.
- 2. Project shall be complete after receipt of Close-out documents including Manufacturer's Warranty.

#### **END OF SECTION 00800 – SUPPLEMENTARY CONDITIONS**

#### **SECTION 01360 - MANUFACTURER WARRANTY CERTIFICATION**

Description: International Building Code (IBC) and warranty compliance document from roof system manufacturer, to be completed for each roof section requiring warranty (required Submittal).

1.	ROOF SECTION:	
2.	MANUFACTURER:	
3.	CONTRACTOR:	
4.	SITE PRESSURES (IBC 1504.1):       Z1:       Z2:       Z3:	
5.	EDGE PRESSURES (IBC 1504.1): Outward: Upward:	
6.	UPLIFT TESTING: Roof Assembly#: Edge Metal Assembly #: _	
7.	<b>DEFINITIONS:</b> a. "Substrate": Any surface the new roof system will be applied to, including e membranes, sheet metal and masonry walls.	existing deck,
	b. "Roof System": The complete roofing system including Membranes, Adh Metal Flashing, Fasteners, and Insulations.	esives, Sheet
	c. "Drainage System": Tapered insulation, drains, scuppers, gutters and o primary and overflow.	lownspouts,
8.	<b>SUBSTRATES:</b> We have reviewed existing Substrates and approve Contractor' and attachment procedures for Roof System application to substrate for IBC, Spec Warranty compliance.	

- 9. <u>DRAINAGE:</u> Proposed finish roof drainage systems meets IBC, Specification and Warranty compliance.
- **10.** <u>**ROOF SYSTEM DESIGN:**</u> We have reviewed and approve the roof system design for IBC, Specification and Warranty compliance.
- 11. <u>WORKMANSHIP CERTIFICATION:</u> We agree to coordinate with contractor to inspect jobsite weekly to ensure workmanship compliance with IBC, Specification and Warranty requirements, and to issue written notification of any non-compliance construction.

Sincerely,

Manufacturer Representative PRINT NAME

Date

Manufacturer Representative SIGNATURE

### **SECTION 01800 - MAINTENANCE**

#### PART 1 - GENERAL

# 1.1 <u>RELATED DOCUMENTS</u>

A. Documents affecting work of this Section include, but are not necessarily limited to, General Requirements, bidding documents and drawings.

### 1.2 <u>GENERAL</u>

- A. Perform rooftop housekeeping and maintenance including;
- B. Clearing all debris from rooftops including corners and drains.
- C. Clearing all debris from leader heads, gutters and downspouts.

#### PART 2 – PRODUCTS

2.1 <u>N/A</u>

## PART 3 - EXECUTION

#### 3.1 <u>ROOFTOP DEBRIS</u>

A. Remove all debris from rooftops including organic and damaged construction debris related to the recent hurricanes.

#### 3.2 <u>GUTTERS</u>

- A. Remove all debris from leader heads, gutters and downspouts.
- B. Base of Downspout; remove any debris present at the base of the downspouts at ground level.

#### 3.3 <u>DISPOSAL</u>

A. Bag all collected debris and dispose offsite.

## **END OF SECTION 01800 - MAINTENANCE**

## SECTION 05120 - STRUCTURAL STEEL

#### PART 1 - GENERAL

#### 1.1 <u>RELATED DOCUMENTS</u>

A. Drawings and General Provisions of Contract, including General Conditions and other Division 1 Specifications Sections, apply to the Work of this Section.

#### 1.2 <u>RELATED WORK</u>

- A. Section 01410: Testing Laboratory Services
- B. Section 03600: Non Shrink Grout
- C. Section 04200: Unit Masonry

#### 1.3 <u>REFERENCE STANDARDS</u>

- A. American Institute of Steel Construction (AISC): Manual of Steel Construction.
- B. American Institute of Steel Construction (AISC): Code of Standard Practice.
- C. Welding: American Welding Society (AWS) "Structural Welding Code."

#### 1.4 **QUALITY ASSURANCE**

- A Examine Drawings and Specifications prior to bidding or executing work. Notify the Architect immediately should omissions or errors be discovered.
- B Furnish templates as required for proper installation of anchor bolts. Furnish instructions for setting anchor bolts and ascertain that they are properly set during the progress of the work.
- C All welders, both shop and field, shall be certified qualified operators, in accordance with the requirements of the American Welding Society.
- D The Specifications as written do not separate the responsibilities of the fabricator and erector. In the event that the Contractor elects to subdivide responsibilities of this section to two or more sub-contractors, the Contractor shall coordinate the work.
- E Testing: The Owner shall retain the services of a testing and inspection agency. The testing and inspection agency shall perform the following:
  - 1. Inspect high-strength bolted connections, visually inspect welded connections, perform required tests and inspections, and prepare test reports.
  - 2. Submit three copies of test reports to the Architect.
  - 3. Review mill test reports and certify compliance with Specification

requirements to the Architect.

- 4. If steel is not accompanied by test reports, or if test reports fail to verify compliance, perform additional tests in compliance with procedures specified in the appropriate ASTM specifications and prepare test reports.
- 5. Conduct and interpret the tests and state in each report whether the test specimens comply with the requirements.
- 6. Verify dry mil thickness of shop prime coat.
- 7. Perform additional tests, at Contractor's expense, as may be necessary to reconfirm any noncompliance of the original work, and as may be necessary to show compliance of corrected work.
- 8. Shop Welding: Inspect and test during fabrication of structural steel assemblies, as follows:
  - a. Certify welders and conduct inspections and tests as required. Record types and locations of all defects found in the work. Record work required and performed to correct deficiencies.
  - b. Perform visual inspection of all welds.
  - c. Non-destructive testing of welds.
  - d. Verify fabricator participates in the AISC Quality Certification program and is designated as an AISC certified plan category standard.
- F If the fabricator does not participate in the AISC Quality Certification Program and is not designated as an AISC certified plan, Category STD, Special Inspections will be required and performed.
  - 1. Payment for special inspections that are required will be the responsibility of the contractor.
- G Coordination: Close coordination, exchange of shop drawings, and cooperation is required of the fabricators and erectors of structural steel, steel joists, metal deck, studs, precast work and masonry.

## 1.5 <u>SUBMITTALS</u>

- A. Special Inspections: This project is subject to the requirements of The Fairfax County Special Inspections Program. All shop drawings showing details and layouts of structural steel components and connections shall be reviewed and approved by both the Structural Engineer of Record and The Fairfax County Critical Structures Section.
- B. Shop Drawings: Provide fabrication and erection documents for structural steel members and connections.

- C. Include all information necessary for the fabrication of component parts of the structural steel system. Indicate size and weight of members.
- D. Welded Connections: Submit written welding procedures and provide complete details of welded conditions using standard AWS welding symbols and recommended standard details shown in the AISC and AWS manuals. The size, length, type and location of all welds shall be indicated. Show field welds on the erection plans.
- E. Bolted Connections: Provide information on location, type and size of all bolts.
- F. Include setting drawings and templates for anchorages which shall be installed as work of other Sections.
- G. Product Data: Submit producers' or manufacturers' data for the following, including data to show compliance with specified requirements:
  - 1. Structural steel primer
  - 2. Expansion bolts
  - 3. Headed studs
- H. Mill test reports for each type of structural steel.
- I. Mill test reports for high strength bolts, nuts and washers, including chemical analysis, tensile strength tests, and hardness tests.
- J. Welder Qualifications: Submit evidence that welders employed in the work of this Section are currently certified under AWS qualification procedures.
- K. Certified mill test reports made by testing laboratory in accordance with ASTM A-6 shall be submitted prior to fabrication. The fabricator shall submit an affidavit that structural steel conforms to the requirements of the grades specified when requested.

## 1.6 **QUALITY STANDARDS**

- A. All workmanship shall be in accordance with the Standard Specifications for Structural Steel for Building, and the Code of Standard Practice, as adopted by the American Institute of Steel Construction, except as otherwise specified. Exercise special care to ensure that structural steel work engaging architectural work will be straight, plumb and true, and that it will not interfere with the installation of such work.
- B. Any material or operation specified by reference to the published specifications of a manufacturer, The American Society for Testing and Materials (ASTM), The American Institute of Steel Construction (AISC), the American Welding Society (AWS), or other published standard, shall comply with the requirements of the standard listed. In case of a conflict between the referenced specification and the

project specifications, the project specifications shall govern.

# 1.7 EXPERIENCE AND QUALIFICATIONS

- A. The fabricator/erector shall have not less than five years' experience in structural steel work.
- B. The fabricator/erector shall submit a written description of fabrication and erection ability including equipment facilities, personnel, and a list of similar completed projects.
- C. <u>Certified Welders</u> shall be certified by a competent, experienced welding inspector or a recognized testing facility in the field of welding. The welder shall be certified to make certain welds under qualified procedures. The welder shall be qualified for each position, type weld, electrode, and thickness of base metal that he intends to weld in the shop or field. The welder shall re-qualify for a weld when he has not performed that weld within a six-month period of time. Each welder shall mark his identification symbol on his work in the shop or field.

# 1.8 DELIVERY STORAGE AND HANDLING

- A. Deliver steel properly marked for correct field assembly and erection.
- B. Deliver anchor bolts, washers and other anchorage devices to be built into other work in a timely manner to allow proper installation into other work.
- C. Protect steel and other accessories provided under this Section from damage, corrosion, distortion of members, and injury to shop paint. Store steel members off the ground, using platforms or pallets, in a location easily accessible for inspection.

# 2 PART 2 - PRODUCTS

# 2.1 <u>STRUCTURAL STEEL</u>

- A. Structural Steel Wide Flange Shapes: ASTM A 992 (Grade 50)
- B. Steel shapes angles, channels, bars and plates: ASTM A36 (See structural plans for specific yields)
- C. Structural steel tubing: ASTM A500, (Grade B), with a minimum of 46 KSI
- D. Structural steel pipe: ASTM A53 (grade B), Type E or S.
- E. Standard unfinished threaded fasteners:
  - 1. Bolts and nuts ASTM A307
  - 2. Washers ANSI B27.2
- F. Anchor bolts: F1554 (Grade 36)

- G. High strength threaded fasteners:
  - 1. ASTM A325
  - 2. ASTM A490
- H. Filler metals for welding:
  - 1. Shielded Metal-Arc Welding AWS A5.1 or 5.5 and AWS Code.
  - 2. Submerged ARC Welding AWS A5.17 and AWS Code.
  - 3. Flux-cored Arc Welding AWS A5.20 and AWS Code.
  - 4. Gas-Shielded Welding AWS A5.20 and AWS Code.
- I. Electrodes:
  - 1. Use AWS Matching Base Metals- see AWS Code 4.1.1 Table.
  - 2. Use type to produce weld metal with characteristics of steel being welded.
- J. Standard Primer Paint: High solids, low VOC, rust inhibitive, all purpose primer, free of lead, chromates, and other heavy metals. Primer paint is not required for non-exposed steel where encased in masonry:
- K. Provide zinc coating for galvanizing exposed hung plates of structural steel beams or lintels encased in exterior masonry, for other structural members or assemblies not encased in masonry and exposed to the weather, shall be galvanized.
  - 1. ASTM A123 for rolled, pressed, and forged steel shapes, plates, bars, and strips.
  - 2. ASTM A386 for assembled steel fabrications.
  - 3. ASTM A153 for steel hardware.
- L. Bedding mortar to be non-shrink factory-packaged grout conforming to CRD-C621; Embecco, Vibra-Foil or equal.
- M. Masonry Anchors: See Section 04200, Unit Masonry.
- N. Expansion Bolts: Zinc plated steel bolts. HSL heavy duty expansion anchors, Hilti "Kwick-Bolts," or approved equivalent.
- O. Shear Connectors: Headed stud type or threaded type, ASTM A108, Grade 1015 or 1020, cold finished carbon steel with dimensions complying with AISC specifications.
- P. Teflon expansion pads: see Section 05820, Slide Bearings (where applicable).

# 3 PART 3 - EXECUTION

### 3.1 FABRICATION STANDARDS

- A. Fabricate structural steel members in accordance with AISC Specifications and as indicated on the approved shop drawings.
- B. Shop Fabrication and Assembly; Fabricate and assemble structural steel members in the shop to the greatest extend possible. Assemble and weld built- up sections using methods to produce true alignment of axes without warp.
- C. Fabricate architecturally exposed structural steel in accordance with the applicable standards of the AISC. Members shall be sharp, true, and free from burrs and other irregularities. Welds shall be smooth, continuous and watertight.
- D. Except as otherwise detailed or noted on the Drawings, all connections shall be equivalent in detail to AISC standards.
- E. Welding: Where structural joints and connections are made by welding, the details of all conditions, the welding techniques, the appearance and quality of welds, and the methods used in correcting defective work shall conform to the requirements of the AISC "Specifications for the Design, Fabrication and Erection of Structural Steel Buildings," and the AWS "Structural Welding Code."
- F. High Strength Steel Bolts: Where structural joints and connections are made using high strength bolts, hardened washers and nuts tightened to a high tension, the materials, methods of installation and tension control, type of wrenches and inspection methods shall conform to "Specifications for Structural Joints Using ASTM A325 and A490 Bolts," as approved by the Research Council on Riveted and Bolted Structural Joints of the Engineering Foundation.
- G. Cut, drill or punch holes perpendicular to metal surfaces. Do not flame-cut holes or enlarge holes by burning.
- H. Holes for Other Work: Provide holes required for securing other work to structural steel members and for the passage of other work through steel members, as shown on approved, final shop drawings. Provide threaded nuts welded to framing members and other specialty items as indicated.
- I. Accessories: Provide anchorage for masonry to steel members as indicated on the Drawings.
- J. Lintels and shelf angles:
  - 1. Structural steel shapes or plates of sizes noted on the Drawings.
    - a. Built-up sections where indicated with or without separators as required.
    - b. Bolted or welded as noted or as approved.

- c. Attached to concrete or steel structural members as noted or detailed.
- 2. Lintel Bearings at each end shall be 6" minimum on masonry, unless otherwise noted.
- 3. Shelf angles:
  - a. Miter joints at corners.
  - b. Allow for expansion near corners and 40 ft. o. c. maximum.
- K. Column Bases: Press straightened for plates up to 4" thickness; milled for thicknesses over 4".
- L. Shop Painting:
  - 1. After inspection and before galvanizing or shipping, clean all steel surfaces to be painted. Remove loose rust, mill scale and spatter, slag or flux deposits. Clean surfaces in accordance with SSPC-SP-3 "Power Tool Clean" for concealed steel and SSPC-SP-6 "Commercial Blast Cleaning" for architecturally exposed structural steel.
  - 2. After surface preparation, apply primer paint in accordance with manufacturer's instructions and at a rate to provide a dry film thickness of not less that 1.5 mils. Paint application method shall result in full coverage of joints, corners, edges and all exposed surfaces.

## 3.2 EXAMINATION OF PROJECT CONDITIONS

- A. Contractor shall examine the areas and conditions under which the work of this Section is to be installed. Notify the Architect and Owner's Representative in writing of conditions detrimental to the proper completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected.
  - 1. Survey as-built anchor bolt, bearing plate, and embedded plate layouts prior to setting structural steel.
  - 2. Notify Architect and Owner's Representative if the erection of steel will deviate from the approved, final shop drawings as the result of fabrication errors, misalignment of embedded items, or other deviations.

## 3.3 <u>ERECTION</u>

A. General: Set structural frames true and plumb and set accurately to the lines and elevations indicated. Align and adjust the various members forming a part of a complete frame or structure before permanently fastening. Clean surfaces that will be in permanent contact once assembly is completed. Make approved adjustments to compensate for discrepancies in elevation and alignment.

- B. Temporary bracing shall be introduced wherever necessary to take care of all loads to which the structure may be subjected including natural forces, erection and operation of equipment. Temporary bracing shall be removed by the Contractor when no longer required.
- C. Establish required leveling and plumbing measurements based on the mean operating temperature of the structure. Make allowances for the difference between temperature at time of erection and mean temperature for structure on a building is in service.
- D. Whenever stocks of material, erection equipment, or other loads are temporarily supported by the steel work during erection, proper provision shall be made to take care of stresses resulting from temporary loading.
- E. All final connections shall be welded or bolted as indicated on the Drawings. All bolts for bolted final connections shall be ASTM A-325 and shall be tightened to a "snug tight" condition. All bolted connections shall have minimum capacities as shown in Tables I and II of the AISC Manual.
- F. Braces and guys: Coordinate the location of all braces and guys with the work of other trades. All removal of temporary braces, guys and struts shall be part of the work of this Section, and shall be coordinated with the work sequence as walls, floors and roof systems are constructed. All cable guys shall be double clamped and kept under tension.
- G. Welding rod ovens are required. Welding will not be permitted unless all ovens are in working order and used in accordance with the AWS Code.
- H. Column base plates and bearing plates shall be set level to correct elevations and shall be temporarily supported on steel wedges or shims until the supported members have been plumbed and grouted. Tighten anchor bolts after supported members have been positioned and plumbed. Do not remove wedges and shims. Cut any protruding part of wedges and shims flush with edge of plate prior to grouting. The entire bearing area under plates shall be grouted solid with non-shrink grout.
- I. Pack bedding mortar solid between surfaces and bases or plates to assure that absolutely no voids remain. Finish exposed surfaces and allow ample time to cure according to manufacturer's recommendations.
- J. Splice members only where indicated on approved, final shop drawings.
- K. Gas Cutting: Field correcting of fabrication by gas cutting shall not be permitted on any major member in the structural framing without prior written approval of the Architect and Owner's Representative.
- L. Fastening of splices of compression members shall be done after the abutting surfaces have been brought completely into contact.
- M. Do not enlarge unfair holes in members by burning or by the use of drift pins. Ream holes that must be enlarged to receive bolts.
- N. Erection Bolts: On exposed welded construction, remove erection bolts, fill holes

with plug welds and grind smooth.

- O. Field Welds: Comply with AISC specifications for removal of shop paint on surfaces adjacent to field welds.
- P. Masonry Expansion Bolts: Anchor only to solidly grouted masonry which has cured for a minimum of three days. Install expansion bolts in accordance with manufacturer's written instruction, using only masonry carbide bits for drilling. Provide a minimum embedment of bolt into masonry of 5" unless noted otherwise on Drawings.
- Q. Touch-Up Painting: After erection and final adjustments, wire brush clean and paint scarred surfaces, field welds, and rust spots using the same type of paint as that applied in the shop.

# 3.4 <u>TOLERANCES</u>

A. Individual pieces shall be erected so that the deviation from plumb, level and alignment shall not exceed 1 to 500.

## 3.5 FIELD QUALITY CONTROL

- A. Owner will employ an independent testing and inspection agency to inspect high strength bolted connections and welded connections and to perform tests and prepare test reports for all field inspections.
- B. When required by Special Inspections, the testing and inspection agency shall visit and inspect the fabricator's plant. The agency shall verify fabricator's compliance with the AISC Quality Certification Program for the appropriate category and with other current edition SIP requirements.
- C. The testing and inspection agency shall conduct tests in accordance with current edition SIP requirements, shall interpret the tests and shall state in reports whether the test specimens comply with or deviate from test requirements.
- D. Correct deficiencies in structural steel work that has been determined not to be in compliance. Additional tests, performed by contractor, which reconfirm non-compliance of original work or which are necessary to confirm compliance of corrected work, shall be at contractor's expense

## **END OF SECTION 05120 - STRUCTURAL STEEL**

## SECTION 05310 - METAL ROOF DECK

#### 4 <u>PART 1 – GENERAL</u>

#### 1.1 <u>SUMMARY</u>

A. This Section includes galvanized steel roof deck intended as support for insulation and roofing membrane.

### 1.2 <u>SUBMITTALS</u>

- A. Product Data: For each type of deck, accessory and product indicated.
- B. Shop Drawings: Show layout and types of deck panels, anchorage details, reinforcing channels, pans, deck openings, special jointing, accessories, and attachments to other construction.
- C. Product Certificates: Signed by steel deck manufacturers certifying that products furnished comply with requirements.
- D. Welding Certificates: Copies of certificates for welding procedures and personnel.
- E. Product Test Reports: From a qualified testing agency indicating that each of the following complies with requirements, based on comprehensive testing of current products:
- F. Mechanical fasteners.

## 1.3 **QUALITY ASSURANCE**

- A. Installer Qualifications: An experienced installer who has completed steel deck similar in material, design and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- B. Testing Agency Qualifications: An independent testing agency, acceptable to authorities having jurisdiction, qualified according to ASTM E 329 to conduct the testing indicated, as documented according to ASTM E 548.
- C. AISC Specifications: Calculate structural characteristics of steel deck according to AISC's "Specification for the Design of Cold-Formed Steel Structural Members."
- D. FM Listing: Provide galvanized steel roof deck evaluated by FM and listed in FM's "Approval Guide, Building Materials" for Class I fire rating and windstorm ratings. See drawings and manufacturer's calculations for specific windstorm rating requirements.

## 1.4 DELIVERY, STORAGE, AND HANDLING

- A. Protect steel deck from corrosion, deformation, and other damage during delivery, storage, and handling.
- B. Stack steel deck on platforms or pallets and slope to provide drainage. Protect with a waterproof covering and ventilate to avoid condensation.

#### PART 2 – PRODUCTS

#### 4.1 MANUFACTURERS

A. Manufacturers: Subject to Compliance with requirements, provide products by one of the following: Vulcan, D-Mac, ASC, DACS, or equal.

#### 4.2 <u>STEEL ROOF DECK</u>

- A. Galvanized Steel Roof Deck: Fabricate panels without top-flange stiffening grooves, to comply with "SDI Specifications and Commentary for Steel Roof Deck," in SDI Publication No. 29, and the following:
- B. Galvanized Steel Sheet: ASTM A 653 G-90 with minimum yield strength of 33,000 psi.
- C. Profile:  $1 \frac{1}{2}$ " depth, 'B'-deck.
- D. Galvanized Steel Thickness: 22 gauge or as required for span load tables.
- E. Span condition: As indicated.
- F. Side Laps: Overlapped and fastened.

#### 4.3 <u>ACCESSORIES</u>

- A. General: Provide manufacturer's standard accessory materials for deck that comply with requirements indicated.
- B. Mechanical Fasteners: Low-velocity, self-drilling galvanized-steel Tek fasteners.
- C. Side-Lap Fasteners: Self-drilling, galvanized-steel screws, No. 10 minimum diameter.
- D. Flexible Closure Strips: Vulcanized, closed-cell, synthetic rubber.
- E. Miscellaneous Sheet Metal Deck Accessories: Steel sheet, minimum yield strength of 33,000 psi, not less than 22 gauge design uncoated thickness, of same material and finish as deck; of profile indicated or required for application.
- F. Galvanized Steel Sheet Accessories: Galvanized Steel sheet, of same material, finish, and thickness as deck unless otherwise indicated.
- G. Vinyl Tape; "3M 472 or equal".

## 4.4 GALVANIZING REPAIR PAINT

A. High-zinc-dust content paint for re-galvanizing welds and repair painting galvanized steel, with dry film containing not less than 93% zinc dust by weight, and complying with ASTM A 780.

#### PART 3 – EXECUTION

#### 3.1 EXAMINATION

A. Examine supporting frame and field conditions for compliance with requirements for installation tolerances and other conditions affecting performance.

#### 3.2 INSTALLATION, GENERAL

- **A.** Install deck panels and accessories according to applicable specifications and commentary in SDI Publication No. 29, manufacturer's written instructions and requirements in this Section.
- B. Locate decking bundles to prevent overloading of supporting members.
- C. Place deck panels on supporting frame and adjust to final position with ends accurately aligned and bearing on supporting frame before being permanently fastened. Do not stretch or contract side-lap interlocks.
- D. Place deck panels flat and square and fasten to supporting frame without warp or deflection.
- E. Cut and neatly fit deck panels and accessories around openings and other work projecting through or adjacent to decking.
- F. Provide additional reinforcement and closure pieces at openings as required for strength, continuity of decking, and support of other work.
- G. Locate mechanical fasteners and install according to deck manufacturer's written instructions.
- H. Fasten roof deck panels to steel supporting members with mechanical fasteners as indicated on the drawings.
- I. Side-Lap and Perimeter Edge Fastening: Fasten side laps and perimeter edges of panels between supports as indicated on the drawings, but with intervals not exceeding 18".
- J. Mechanically fasten with self-drilling No. 10 diameter or larger galvanized steel selfdrilling screws.
- K. End bearing: Install deck ends over supporting frame with minimum end bearing of 1-1/2", with end joints as follows:
- L. End Joints: Lapped 2" minimum.
- M. Miscellaneous Roof Deck Accessories: Install ridge and valley plates, finish strips, cover plates, end closures, and reinforcing channels according to deck manufacturer's written instructions. Fasten to substrate to provide a complete deck installation.
- N. Flexible Closure Strips: Install flexible closure strips over partitions, walls, and where indicated. Install with adhesive according to manufacturer's written instructions to ensure complete closure.

O. Span: Individual units of decking shall span minimum 2 spans.

# 3.3 FIELD QUALITY CONTROL

- A. Remove and replace work that does not comply with specified requirements.
- B. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of corrected work with specified requirements

## 3.4 <u>REPAIRS AND PROTECTION</u>

- A. Galvanizing Repairs: Prepare and repair damaged galvanized coatings on both surfaces of deck with galvanizing repair paint according to ASTM A 780 and manufacturers written instructions.
- B. Provide final protection and maintain conditions to ensure that steel deck is without damage or deterioration at time of Substantial Completion.

#### END OF SECTION 05310 - METAL ROOF DECK

#### **SECTION 06100 - ROUGH CARPENTRY**

#### PART I - GENERAL

#### 1.1 <u>SCOPE OF WORK</u>

A. Provide the wood products necessary to complete the roofing work in accordance with the Project Manual

### 1.2 <u>RELATED SECTIONS</u>

- A. Drawings and general provisions of the Contract, including General Supplementary Conditions and Division 1 Specification Sections apply to this section.
- B. Section 07552 "Modified Membrane Roofing"

#### 1.3 <u>REFERENCES</u>

А.	ASTM D - 1079	Terminology Relating to Roofing, Waterproofing, and Bituminous Materials
B.	Lumber Standards:	American Softwood Lumber Standard PS 20-70 by the U.S.
		Department of Commerce.
C.	Plywood Standards:	U.S. product Standard PSI-74/ANSI A 199.1 or latest APA
		Performance Standards for American Plywood Association.
D.	ASTM E - 108	Test Methods for Fire Test of Roof Coverings
E.	ASCE -7	American Society of Civil Engineering, Minimum Design
		Loads for Buildings and Other Structures
F.	FM	Factory Mutual
G.	NRCA	National Roofing Contractors Association
H.	UL	Underwriters Laboratories
I.	WH	Warnock Hersey

## 1.4 <u>SUBMITTALS</u>

A. Provide submittals for lumber or plywood materials upon request.

#### 1.5 **QUALITY ASSURANCE**

- A. Comply with governing codes and regulations. Use experienced installers.
- B. Lumber Standards: Comply with American Softwood Lumber Standard PS 20-70 by the U.S. Department of Commerce.
- C. Plywood Standards: Comply with U.S. product Standard PSI-74/ANSI A 199.1 or latest APA Performance Standards for American Plywood Association.
- D. Factory Marking: Mark each piece of lumber or plywood to indicate type, grade, agency providing inspection service.

E. Size and Shape: Dress lumber 4 sides (S4S) and work to shapes and patterns shown. Nominal sizes shown and specified refer to undressed lumber dimensions. Detailed dimensions show actual lumber size required.

## 1.6 DELIVERY STORAGE AND HANDLING

- A. Time delivery and installation of carpentry work to avoid delaying other trades whose work is dependent on or affected by the carpentry work. Keep materials dry during delivery and storage
- B. Store lumber and plywood in stacks with provisions for air circulation within stacks. Protect bottom of stacks against contact with damp or wet surfaces.
- C. Protect exposed materials against water and wind. Remove damaged or unsuitable material from the job site.

# 1.7 <u>MANUFACTURER'S INSPECTIONS</u>

A. Follow provisions in other Sections.

# 1.8 **PROJECT CONDITIONS**

A. Follow provisions in other Sections.

# 1.9 SEQUENCING AND SCHEDULING

A. Follow provisions in other Sections.

## 1.10 WARRANTY

A. Follow provisions in other Sections.

# PART 2 - PRODUCTS

## 2.1 <u>GENERAL</u>

A. Provide nailers, wood blocking and plywood as necessary to complete roofing work as directed by governing codes, roof manufacturer, and plans and specifications.

# 2.2 <u>DESCRIPTION</u>

- A. Construction Lumber: ACQ Pressure Treated, Standard Grade Douglas Fir, Western Larch, Western Hemlock (WWPA or WCLB) or No. 2 dimension Southern Pine (SPIB).
- B. Exterior Type Plywood: APA Rated sheathing, EXT.
- C. Bucks, Nailers, Blocking, Etc.: Treated No. 2 common grade of any WWPA or WCLA species or No. 2 Southern Pine(SPIB).
- D. Anchorage and Fastenings: Proper type, size material and finish for each application.

E. Quality: Sound, seasoned, well manufactured materials of longest practical lengths and sizes to minimize joints. Free from warp which cannot be easily corrected by anchoring and attachment. Discard material with defects which would impair quality of work.

#### 5 2.3 <u>NAILS AND FASTENERS</u>

- A. Fasteners: Use fasteners as dictated by Factory Mutual Wind Uplift requirements of Data Loss Sheet 1-49, meeting ASCE 7.
- B. Fasteners for attachment into steel structure
  - 1. Type: Teks5 Hex-Head Screw.
- C. Fasteners for wood to wood attachments.
  - 1. 8d, hot dip galvanized.
  - 2. #12 coated screws, minimum 1-1/4" imbedment in lumber or minimum length to provide through-penetration in plywood.
- D. Fasteners for wood to concrete; Drive Pins, Expansion Fasteners, Rawl Spikes or Tapcons, minimum 1-1/4" imbedment.

## PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Verify measurements and dimensions shown before proceeding with carpentry work.
- B. Examine supporting structure and conditions under which carpentry work is to be installed. Do not proceed with installation until unsatisfactory conditions have been corrected.
- C. Correlate location of nailers, blocking and similar supports for attached work.
- D. Scribe and cope as required for accurate fit of carpentry work to other work.

## 3.2 GENERAL INSTALLATION REQUIREMENTS

- A. Provide nailers, blocking and sleepers where shown on the drawings and details, or required for attachment of other work. Coordinate with locations of other work involved; refer to shop specifications of such work.
- B. Attach to substrate securely as required to support applied loading. Countersink bolts and nuts flush with surfaces.
- C. Securely attach wood nailers to substrates in accordance with Factory Mutual Loss Prevention Data Sheet 1-49 and as required by ASCE 7.
- D. Provide washers under bolt heads and nuts in contact with wood.
- E. Do not wax or lubricate fasteners that depend on friction for holding power.

- F. Select fasteners of size that will not penetrate members where opposite side will be exposed to view or will receive finish material.
- G. Make tight connections between members. Install fasteners without splitting of wood; predrill as required. Do not drive threaded friction type fasteners; turn into place. Tighten bolts and lag screws at installation and retighten as required for tight connections prior to closing in or at completion of work.

# 3.3 <u>METAL EDGE AT INSULATED ROOF SYSTEMS:</u>

A. Horizontal pressure treated wood nailers, minimum four inch (4") nominal width, are to be stacked atop each other to a total thickness as needed for flush transition between adjacent insulation boards and roof-edge.

# 3.4 EQUIPMENT CURBS

- A. All curbs are required to have a nailable wood surface, to provide positive attachment of the Membrane Flashing System.
- B. All curb-heights are to be raised with additional nailers as needed to provide an eight
   (8) inch membrane flashing height.

## 3.5 EXPANSION JOINT CURB

- A. All curbs are required to have a nailable wood surface, to provide positive attachment of the Membrane Flashing System.
- B. All curb-heights are to be raised with additional nailers as needed to provide an eight (8) inch membrane flashing height.
  - 1. Curb shall be raised a minimum six inches (6") above the existing height.

## END OF SECTION 06100 - ROUGH CARPENTRY
### SECTION 07120 - WALL WATERPROOFING

### PART 1 - GENERAL

### 1.1 <u>SUMMARY OF WORK</u>

A. Section Includes: The restoration of deteriorated masonry walls, work to include repairs to masonry joints, wall expansion joint sealant, and clear coating application.

### 1.2 <u>REFERENCES</u>

A. The standards listed below form a part of this specification to the extent referenced. Standards are referred to in the text by basic reference only.

1.	ASTM C-91	Standard Specification for Masonry Cement
2.	ASTM C 679	Standard Test Method for Tack-Free Time of
		Elastomeric Sealants
3.	ASTM C 920	Standard Specification for Elastomeric Joint Sealants
4.	ASTM D 412	Standard Test Method for Vulcanized Rubber and
		Thermoplastic Elastomers-Tension
5.	ASTM D 562	Standard Test Method for Consistency of Paints
		Measuring Krebs Unit (KU) Viscosity Using a Stormer-
		Type Viscometer
6.	ASTM D 1002	Standard Test Method for Apparent Shear Strength
7.	ASTM D 1475	Standard Test Method for Density of Liquid Coatings,
		Inks and Related Products
8.	ASTM D 1682	Standard Test Method for Breaking Load and Elongation
		of Textile Fabrics
9.	ASTM D 2370	Standard Test Method for Tensile Properties of Organic
		Coatings
10.	ASTM D 2369	Standard Test Method for Volatile Content of Coatings
11.	ASTM D 2939	Standard Test Methods for Emulsified Bitumens Used as
		Protective Coatings
12.	ASTM D 4212	Standard Test Method for Viscosity by Dip-Type
		Viscosity Cups
		· .

### 1.3 <u>SUBMITTALS</u>

- A. Submit Product Data Sheets for each type of product specified include manufacturer's technical product data, installation instructions, and recommendations for each type of roofing product required. Include data substantiating that materials comply with specified requirements.
- B. Submit Installer Certificate from Manufacturer confirming Approval, with minimum 5 years' experience and approved for warranty issuance.
- C. Upon request, submit a sample of each product.
- D. Submit sample of Manufacturer's 5 year, single-source, materials warranty.
- E. Certified copy of Manufacturer's ISO 9001 compliance.

### 1.4 **QUALITY ASSURANCE**

- A. Contractor Qualifications
  - 1. Applicator shall have a minimum of five years' experience installing waterproofing applications, and must be pre-approved by the waterproofing and roofing material manufacturer.
- B. Pre-Construction Meeting
  - 1. Waterproofing Contractor, Material Manufacturer's representative and Owner's Representative, shall meet at job site to review specifications and job related conditions prior to Contractor starting work.
- C. Materials Manufacturer shall provide the following:
  - 1. Twice per week job site inspections of the work in progress, keeping the Owner's representative informed as to the progress and quality of the work as observed, report to Contractor within 3 days of site visit, Contractor to forward report within 7 days of site visit.
  - 2. Review and approve all Work to be in conformance with Contract and Warranty requirements.

### 1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials undamaged in manufacturers clearly labeled unopened containers.
- B. Coordinate delivery with scheduled installation date to allow minimum storage time at site.
- C. Store material in clean, dry location at temperature between 50 and 90F. If exposed to lower temperatures, restore to proper temperature before using. Protect from soiling, abuse and moisture. Follow manufacturer's recommended instructions.
- D. Store only that material that can be used on the roof in one day; scatter over the roof area so that deck and roof membranes are not deflected or damaged. Heavy concentrated loads are not permitted on roof. Store pails atop plywood/pallet set atop polystyrene insulation.
- E. Provide required storage units and safeguards.

### 1.6 **PROJECT / SITE CONDITIONS**

- A. Verify existing mortar and masonry is structurally sound prior to coating application.
  - 1. Bring structural defects to the attention of the Owner's Representative.
- B. Environmental Requirements.
  - 1. Do not apply coatings when temperature is 50 degrees F or lower.

2. Do not apply coatings to damp surfaces.

### 1.7 WARRANTY

- A. The waterproofing Contractor shall provide Manufacturer a two (2) year warranty against defects in materials and workmanship. The warranty shall include repairs of leaks in areas covered by this Scope of Work.
- B. The Manufacturer shall provide Owner a 5 year materials warranty with workmanship certification of proper installation.

### PART 2 MATERIALS

### 2.1 <u>PRODUCTS</u>

- A. Provide products and services by Garland, Hyload or Ecology, substitution requests should be submitted ten (10) days prior to Bid Date.
- B. No products shall be used that contain asbestos.

### C. MORTAR JOINT REPAIRS: Type "N" Mortar, tested under ASTM C-91.

1.	Fineness, 35%	45-um (No. 325) sieve	24
2.	Autocl Exp.	Max., %	1.0%
3.	Time of Setting	Initial Set, min., hr.	2
		Final Set, min., hr.	24
4.	<b>Compressive Strength</b>	7 days	500 psi
		28 days	900 psi

D. SEALANT: Single component modified silane elastomeric adhesive sealant.

1.	Hardness, Shore A	ASTM C 920, 15-20	30
2.	Tensile Strength	ASTM D 412	225 psi
3.	Ultimate Elongation	ASTM D 412	500%

# E. CLEAR MASONRY WATERPROOFING: High performance solvent based damproofer for masonry

- minipi			
1.	Density @77F	ASTM D1475	6.95 lbs/gal
2.	Resin Solids		Typical 35-45%
3.	Water Repellency	ASTM E-514	100% reduction
4.	Permeability	ASTM D1653	>85% breathability
3.	VOC	250 g/l	

### PART 3 EXECUTION

### 3.1 **PREPARATION**

- A. Protect surfaces of the building and the surrounding grounds from contamination, soiling and damage during the waterproofing application.
- B. Pressure-wash all surfaces to receive new waterproofing work, removing all loose prior coatings, and any debris, grease, rust, or efflorescence, that will interfere with the adhesion of the new materials.

- 1. Use an algaecide as needed to achieve the desired degree of cleaning wall surfaces.
- 2. Following the pressure washing, scrape any existing coating to insure that it is adequately adhered, removing all remaining loosely bonded areas of old coating.

### 3.2 WALL CRACKS & JOINTS

- A. Remove old caulking and mastics from joints.
- B. Grind crack to minimum 1/4" width.
- C. For Joints: Install closed cell back rod a minimum of 3/4" in depth into the joint under 30% compression. Note: In some areas it may be necessary to remove existing mortar to achieve the desired 3/4" depth.
- D. Install new sealant into the joint detail and tool to uniform smoothness.

### 3.3 WALL PENETRATIONS

- A. Remove old caulking from joints.
- B. Install new sealant at the wall-to-penetration intersections. This includes downspouts, scupper inlet tube, scupper faceplate, leader-heads, intake/exhaust grills, etc...

### 3.4 <u>CLEAR MASONRY DAMPROOFER</u>

- A. Apply all silicone/siloxane type coatings LAST, so that overspray does not fall on other surfaces prior to their Work.
- B. Remove old caulking from joints.
- C. Apply a single coat at a rate of 75 sq. ft per gallon, allowing 1 hour cure.
- D. Apply second coat at a rate of 75 sq. ft. per gallon.

### **END OF SECTION 07120 – WALL WATERPROOFING**

### **SECTION 07310 – SHINGLE ROOFING**

### PART 1 - GENERAL

### 6 1.1 <u>SCOPE OF WORK</u>

A. Removal of existing shingle roofing, base sheets, imbedded sheet metals and loose nails. Installation of continuous underlayment, new shingles, metal drip edge, hip and ridge shingles, and shingle repairs for adjacent membrane roof transitions.

### 1.2 <u>SUBMITTALS</u>

- A. Manufacturer's signed Shop Drawings, containing;
  - 1. Site Pressures for Field (ASCE-7) and Perimeter (ANSI-SPRI ES-1).
  - 2. Scope of Work for IBC and Warranty Compliance.
  - 3. CAD drawn details (Field, Flashings, Metal Edge, and Curbs, dimensioned), showing fastener types and spacing, and interfacing for coatings, reinforcements, mastics and sealants.
  - 4. Roof Plan scaled, with construction notes as needed.
  - 5. Design Summary
    - a. IBC-2015
      - b. ASCE 7-10
        - (1) Safety Factor: 1.65
        - (2) Test Method: ASTM E-1592.
      - c. SMACNA 5<sup>th</sup> Edition or later.
- B. Submit Section 01360 Manufacturer Site Certification demonstrating compliance with specified warranty requirements and non-compliance shall be grounds for rejection of Bid.
- C. Submit engineer's Truss Repair Letter listing approved products and procedures for any truss repairs.
  - 1. Provide engineer's post installation letter verifying proper truss repairs have been completed.
- D. Submit Product Data Sheets for each type of product specified.
- E. Show evidence that the Installer specializes in shingle reroofing with a minimum 5 years experience and who is certified by roofing system manufacturer.
- F. Manufacturer's Warranties
  - 1. Sample of Shingle Manufacturer's twenty (30) year limited Warranty.
  - 2. Sample of Underlayment Manufacturer's ten (10) year Limited Materials Warranty.

### 1.3 <u>MANUFACTURER'S INSPECTIONS</u>

- A. When the project is in progress, the Roofing System Manufacturer will provide the following:
  - 1. Keep the Architect/Owner informed as to the progress and quality of the work observed.

- 2. Provide job site inspections a minimum of two days per week, with written inspection reports of observations.
- 3. Report to the Owner in writing, any failure or refusal of the Contractor to correct unacceptable practices called to the Contractor's attention.
- 4. Confirm, after completion of the project and based on manufacturer's observations and tests, that manufacturer has observed no applications procedures in conflict with the specifications other than those that may have been previously reported and corrected.

### 1.4 DELIVERY, STORAGE, AND HANDLING

- A. Store all products in manufacturer's unopened, labeled packaging until they are ready for installation.
- B. Store products in a covered, ventilated area, at temperature not more than 110 degrees F (43 degrees C); do not store near steam pipes, radiators, or in direct sunlight.
- C. Store bundles on a flat surface. Maximum stacking height shall not exceed Manufacturer's recommendations. Store all roll goods on end.
- D. Store and dispose of solvent-based materials in accordance with all federal, state and local regulations.
- E. Proceed with work only when existing and forecasted weather conditions will permit work to be performed in accordance with Manufacturer's recommendations

### PART 2 - PRODUCTS

### 7 2.1 <u>SHINGLE ROOF</u>

- A. Shingle Manufacturers: GAF, Certainteed, Atlas, or Owen's Corning.
  - 1. Color and profile shall be selected by Owner based on availability.
  - 2. Self-sealing, granule surfaced, asphalt shingle with a fiberglass reinforced core and a mineral granule surfacing. Architectural laminate styling providing a wood shake appearance with a 5" or 5 5/8" exposure. Meets ASTM D 3018 Type 1, ASTM D 3161 Class F, ASTM D 3462, and ASTM D 7158 Class H.
  - 3. Hip & Ridge Shingles.
  - 4. Starter Roll.
- 8 B. Underlayment, Sheet Metals, Mastics and Sealants Manufacturer: Garland, Ecology or Hyload.
  - 1. Underlayment
    - a. "HPR Aquashield", by Garland.
    - b. "Hyload WS 75mil", by Hyload.
    - c. "ERS-900-B/VR", by Ecology.
  - 2. Sheet Metal: ANSI-SPRI ES-1 tested, for Drip Edge, Jamb and Head Flashing.

- a. "RmerLine", by Garland.
- b. Hyload Metals, by Hyload.
- c. Ecology Metals, by Ecology.
- 3. Mastic
  - 1. "Flashing Bond", by Garland.
  - 2. "Hyload Flashing Membrane Adhesive", by Hyload.
  - 3. "ERS-304-MB", by Ecology.

## 9 2.3 <u>NAILS AND FASTENERS</u>

- A. Shingle Nails for Wood Deck
  - 1. Type: 8d
  - 2. Shank Type: Annular ring shank nails
  - 3. Shank Quantity: Minimum 20 rings per inch,
  - 4. Head Diameter: Minimum 3/8-inch (9.5 mm)
  - 5. Corrosion Resistance: Hot dipped galvanized, meeting ASTM G85
  - 6. Length: 5/8" plywood: Minimum  $\frac{3}{4}$ " L.
  - 7. Lumber, all thicknesses: Minimum 1.0" L.
- B. Nails for Wood Deck Re-Attachment into Rafters
  - 1. Type: #8
  - 2. Shank Type: Annular ring shank nails
  - 3. Shank Quantity: Minimum 20 rings per inch,
  - 4. Head Diameter: Minimum 3/8-inch (9.5 mm)
  - 5. Corrosion Resistance: Hot dipped galvanized, meeting ASTM G85
  - 6. Length:
    - a. 5/8" plywood: Minimum 2" L.
    - b. 5/4" lumber: Minimum 2-1/2" L.
- C. "Cap Nails" shall be an integrated cap with nail, 1-inch length and 1-inch diameter and of not less than 32 gage (0.010 inch) sheet metal. 'Cap Nail shall be tested for corrosion resistance in compliance with ASTM G 85. All of cartons shall be labeled to note compliance with the corrosion resistance requirements.

### PART 3 – EXECUTION

### 3.1 EXAMINATION

- A. Review Manufacturer's Shop Drawings onsite with Manufacturer's representative and coordinate during weekly site visits, as required for Warranty.
- B. Submit engineer's Truss Repair Letter listing approved products and procedures for any truss repairs.
  - 1. Provide engineer's post installation letter verifying proper truss repairs have been completed.

### 3.2 **DEMOLITION**

A. Remove all existing roofing down to the roof deck.

### 3.3 <u>DECK REPAIRS</u>

A. Where required, install new matching thickness wood decking attached 6" oc at all trusses.

### 3.4 DECK REATTACHMENTS

- A. Provide additional deck reattachments per IBC and IRC and as provided by Manufacturer's Shop Drawings.
- B. Reattach existing decking to a 6" oc finish, typically.

### 3.5 <u>UNDERLAYMENT</u>

A. Install continuous underlayment to deck per Shop Drawings.

### 3.6 VALLEY

- A. Install valley as shown in plan details, typically California Cut or Metal Valley.
- B. Metal Valleys (when specified); engage return-hem with clips at twenty-four inches (24") oc fastened outside of valley. Apply an asphalt mastic transition along roof-side return-hem for both sides of valley.

### **3.7 DRIP EDGE**

- A. Install new drip edge at 3" oc staggered.
- B. Apply asphalt primer to the drip edge flange.
- C. Install starter roll.

### 3.8 <u>HEAD TRIM</u>

- A. Install starter roll.
- B. Install shingles as specified.
- C. Install Head trim fabricated and attached per Shop Drawings.

### 3.9 <u>PLUMBING BOOTS</u>

A. Remove and replace existing lead plumbing boots with aluminum-clad PVB boots.

### 3.10 SHINGLE INSTALLATION

- A. Install per manufacturer's instructions.
- B. Install 6 nails per shingle.

## 3.11 <u>CLEANING</u>

- A. Remove bitumen drippage from all walls, windows, floors, ladders, and finished surfaces.
- B. Remove loose debris from grounds at the end of each work day.

**END OF SECTION 07310 – SHINGLE ROOFING** 

### SECTION 07411 - MANUFACTURED METAL ROOF PANELS

### PART 1 - GENERAL

### 1.1 <u>RELATED DOCUMENTS</u>

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

### 1.2 <u>SUMMARY</u>

- A. This Section includes prefinished manufactured metal roof panels attached to structural purlins/deck, with matching trim, and all related work, of the following type:
  - 1. Formed roof panels with machine seamed sealed joints, at 36-inches on center.
  - 2. Finished underside of panels where exposed to view, similar to topside, except 2-coat system (primer and color coats).
  - 3. Two year watertightness warranty and 20 year finish warranty.
- B. Scope Roofing Systems: The work in the Section includes all labor, materials, accessories, services and incidentals necessary for supplying, installing and testing of the prefinished metal roofing system described herein. Provide matching prefinished flashing, fascia panels, caps, copings, curbs, gutters, downspouts, trim, closures, etc., which are associated with and/or come in contact with roofing system's components, in same base metal as roofing panels, and panels, and make watertight junctions with work of other trades.
  - 1 General Requirements: Metal roofing system as specified and indicated is to be attached to structural purlins, with matching trim.
  - 2. Curbs for mechanical equipment and other work as indicated or required by project conditions, with counterflashings to match roofing panels.

### 1.3 <u>SUBMITTALS:</u>

- A. General: Submit the following in accordance with Conditions of Contract and Division 1 Section Sections.
- B. Product data including manufacture's product specification, standard details, certified product test results, installation instructions, and general recommendations, as applicable to materials and finishes for each component and for total panel system.
- C. Contractor shall;
  - 1. Submit Manufacturer's Wind Uplift Calculations Testing for
  - 2. Submit Manufacturer's Letter reviewing and approving Existing Substrate, Roof Membrane Design, Roof Sheet Metal Design, and willing to provide specified Roof Warranty. Failure to demonstrate compliance with Specification shall be cause for rejection of submittal and Bid.

- D. Sample for Verification Purposes of Roof Panels: Provide sample panels 12-inches long by actual panel width, in the profile, style color, and texture indicated. Include clips, any battens, fasteners, closures, and other panel accessories.
- E. Shop Drawings specified to this project showing layouts of panels on roofs, details of edge conditions, joints, corners, panel profiles, supports anchorages, trim, flashings, closures, accessories and special details. Distinguish between factory and field assembly work. The manufacturer's technical engineering department shall approve the drawings before they are submitted.
- F. Qualification data for manufacturer, fabricator and installer.
- G. Manufacturer's certification for installer.
  - 1. The written documentation from the roofing manufacture shall also certify that roofing design and system provided comply with requirements specified and the manufacturer's requirements for the roofing system provided.

## 1.4 **QUALITY ASSURANCE:**

- A. Wind Uplift: Provide Manufacturer's wind uplift calculations per IBC 1504 currently adopted Edition.
- B. Field Measurements: Where possible, prior to fabrication of panels, take field measurements of structure or substrates to receive panel system. Allow for trimming panel units where final dimension cannot be established prior to fabrication. Terminal edges of panels, closures and turned-down caps shall be to a neat straight line.
- C. Manufacturer's Project Manager: The Manufacturer shall provide a Project Manager, who shall work with personnel to develop the shops drawings of the project prior to installation of the roof. When beginning installation procedures, the manager shall be present at all times to instruct and manage the installers' crew. The entire installation shall be subject to the direction of the Project Manager, who shall be responsible for the proper and timely installation of the system.
  - 1. The Project Manager shall attend a required Pre-Roofing Conference, and return to the project site when requested by installer, and at beginning of this work, and 50% and 100% roof completion stages.
- D. Manufacturer Qualifications: A qualified manufacturer that has 10 years' experience in manufacturing roofing systems identical to that specified for this Project.
  - 1. Certification: Provide written certification from the roofing manufacturer that roofing design and system provided comply with the requires specified and manufacturer's requirements for the roofing system provided.
  - 2. This certification shall be included in other required submittals and be attached to completed and executed manufacturer's roofing warranty.
  - 3. Upon request, submit evidence of complying with requirements.
- E. Manufacturer Inspections: Manufacturer shall inspect work in progress a minimum of two days per week and issue reports within 5-7 days, until Substantial Completion. Inspections will confirm IBC Chapter 15 installation methods and materials' compliance.

- F. Installer Qualifications; Engage an experienced Installer (Roofer) to perform roofing work who has specialized in installing roofing system similar to that required for this Project and who is acceptable to manufacturer of primary roofing materials.
  - 1. Installer's Field Supervision: Require Installer to maintain a full-time supervisor/foreman who is on jobsite during times that roofing work is in progress and who is experienced in installing roofing systems similar to type and scope required for this Project.
  - 2. Refer to Division 1 Section "Special Conditions", for additional information and experience and other requirements.
- G. Pre-Roofing Conference: A pre-roofing conference is required before any roofing materials are installed. This conference shall be conducted by Owner's Representative, Roofing Contractor and the Roofing Materials Manufacturer
  - 1. The pre-roofing conference is intended to clarify demolition (for renovation or reroofing projects) and application requirements for work to be completed before roofing operations can begin. This would include detailed review of the specifications, roof plans, roof deck information, flashing details, and approved shop drawings, submittal requirements, this shall be resolved. If this pre-roofing conference cannot be satisfactorily conducted without further inspection and investigation by any of the parties present, it shall be reconvened at the earliest possible time to avoid delay of the work. In no case should the work proceed without inspection of all roof deck areas and substantial agreement on all points.
  - 2. The following are to be accomplished during the conference:
    - a. Establish trade-related job schedules, including the installation of roof-mounted mechanical equipment.
    - b. Establish roofing schedule and work methods that will prevent roof damage.
    - c. Require that all roof penetrations and walls be in place prior to installing the roof.
    - d. Establish those areas on the job site that will be designated as work and storage areas for roofing operations.
    - e. Establish weather and working temperature conditions to which all parties must agree.
    - f. Establish acceptable methods of protecting the finished roof if any trades must travel across or wok on or above any areas of the finished roof.
  - 3. The Owner's Representative shall prepare a written report indicating actions taken and decisions made at this pre-roofing conference. This report shall be made a part of the Project record and copies furnished to all parties.

## 1.5 DELIVERY, STORAGE AND HANDLING:

- A. Comply with manufacturer's current written instructions and recommendations.
- B. Deliver panels and other components so they will not be damaged or deformed. Package panels for protection against transportation damage.
- C. Handling: Exercise care in unloading, storing, and erecting panels to prevent bending, warping, twisting, and surface damage.

- D. Stack materials on platforms or pallets, covered with tarpaulins or other suitable weathertight ventilated covering. Store metal panels so that they will not accumulate water. Do not store panels in contact with earth, water, or other materials that might cause staining, denting, or other surface damage.
- E. Deliver accessories, such as reglet, inserts, etc., which are to be installed by other trades and/or in conjunction with the work of other trades, far enough in advance so as not to delay the Work on the project.

## 1.6 WARRANTIES AND GUARANTEES:

- A. Manufacturer's System, Labor and Materials, and Wind Warranty: The manufacturer shall warranty that the roofing system shall remain watertight (without perceptible deformation) and completely leak free for a period of two (2) years from the date of Substantial Completion.
- B. Manufacturer shall execute a single warranty covering of the following criteria. Multiple-source warranties are not acceptable.
  - 1. Manufacturer's two (2) year watertight warranty, including coverage for all trim, flashings, and penetrations associated with the roof area.
  - 2. Paint Finish Warranty: 20 years minimum from the date of Substantial Completion. Failures include, but are not limited to, cracking, deforming, fading or otherwise deteriorating beyond normal weathering, and as otherwise indicated. Fading is defined as loss of color, after cleaning with product recommended by manufacturer, of more than 4 color-difference units as measured according to ASTM D2244, and as otherwise indicated.
  - 3. Warranty shall commence on date of substantial completion [or final payment], whichever is agreed by contract.
  - 4. Installer shall provide manufacturer with a two (2) year warranty covering roofing system installation and water tightness.
  - 5. Warranty shall contain no provisions for "blanket voiding".
  - 6. Warranty shall not charge owner for leak calls for any reason.
  - 7. Warranty shall not require a manufacturer's maintenance program and only routine maintenance such as cleaning debris shall be necessary.
- C. Repairs that become necessary, such as for leaks, wind damage or temperature stress while roofing is under warranty and/or guarantee, shall be performed by the installer within 7-days of notification. Should for any reason, the installer not be able to perform the repairs, it shall be incumbent upon the manufacturer to do so. If repairs are not begun on time, Owner shall have work done by others and costs will be charged to the Contractor, with no detrimental effect on the remaining warranty and no termination of warranty.
- C. The above warranty and guaranty shall be in addition to, shall be in effect simultaneously with, and shall not alter other project or project warranties or guarantees, nor shall they serve as limitations to other remedies available to the Owner.

### 1.7 **PROJECT CONDITIONS**

- A. Weather: Proceed with roofing work when existing and forecasted weather conditions permit work to be performed in accordance with manufacturer's recommendations and warranty requirements.
- B. Substrate Conditions: Do not begin roofing installation until substrates have been inspected and are determined to be in satisfactory condition.

### 1.8 <u>SEQUENCING</u>

A. Coordinate installation with flashings and other adjoining construction to ensure proper sequencing.

### PART 2 – PRODUCTS

### 2.1 **PRODUCT/MANUFACTURER**

- A. Manufacturers: Preformed corrugated panels mechanically attached to supports using exposed fasteners and lapping adjacent panels. Roofing panels, closures, and all exposed trim, gutters, downspouts, and similar items shall be factory prefinished.
- B. Product/Manufacturer: Subject to compliance with requirements, provide standing machine seamed roofing system equivalent to the following, by one of the above named manufacturers, or other product properly submitted at least 10-days prior to Bid Date and subsequently accepted for bidding in writing or by Addendum by the Owner's Representative.
  - 1. Garland, Hyload or Ecology, in compliance with specifications.

### 2.2 <u>MATERIALS</u>

- A. Prefinished Panels and Trim: Fabricate of minimum twenty four (24) gauge G90 steel, with prefinished roofing panels and closures, and 2-coat full strength (70-percent) Kynar 500 resin (20-year) finish for all roofing panels, exposed trim, gutters, downspouts, and similar items; Provide 2-coat finish on underside of panels where exposed to view in the finished work, and where not exposed to view provide manufacturer's standard primer and "wash coating".
- B. Vertical Seams: All roof panels shall be formed with a one-and-one-half (1-1/2) inch rib height.
- C. Panel Width; All roof panels shall be thirty six (36) inch wide.
- D. Ridge Caps, Flashing and Trim: All flashing and cover over all curbs, roof penetrations, etc., shall be of the same material, gauge and finish as the panels with which they are used, unless heavier gauge is required by project conditions.
- E. Fasteners: All exposed fasteners shall match adjacent material finish and/or color. Length and diameter of screws shall be sufficient to meet design criteria. All fasteners shall have neoprene rubber washer.

- F. Closures: Precut closures from gray cross-linked closed-cell polyethylene composition foam to the exact profile of the members with which they are to function.
- G. Sealants: Non-skinning, non-hardening, non-oxidizing butyl sealant, designed for metal-to-metal concealed joints. Field applied adhesive tape sealants shall be extruded polymeric butyl tape, non-skinning. Use no exposed sealants.
- H. Bituminous Coating: Cold-Applied asphalt mastic, SSPC-12, compounded for 15-mil dry film thickness per coat, and approved for the intended use by both the mastic and roofing manufacturers.

### 2.3 <u>METAL FINISHES</u>

- A. General: Protect coating either by application of strippable film or by packing plastic film or other suitable material between panels in a manner to properly protect the finish. Furnish air-drying, spray finish in matching color for touch-up, in the event touch-up is allowed by the design professional; however, it is probable that the design professional will require replacement of any materials which exhibit any damage to finishes.
  - 1. Durability: Provide coating system that has been field tested under normal range of weathering conditions for minimum of 20 years without significant peel blister, flake, chip, crack, or check in fish; without chalking in excess of No. 8 in accordance with ASTM D 659; and without fading in excess of 5-NBS units (or acceptable equivalent accelerated weathering).
- B. Roof Panels;, Closures, Exposed Trim, Gutter, Downspouts, and Similar Items-Fluoropolymer Coating: Manufacturer's standard 2-coat (i.e.: primer and color), thermo-cured full-strength 70 percent resin "Kynar 500" coating and 30 percent reflective gloss when tested in accordance with ASTM D 523: Dry film thickness of 1.6 mils, minimum. Provide 2-coat finish on underside of panels where exposed to view in the finished work, and manufacturer's standard primer and wash coating at concealed locations.
  - 1. Colors: As selected by owner's representative after Bid Date, from manufacturer's "standard" non-metallic colors; Minimum 15 colors to select from, including in part, color(s) to match similar applications existing on the existing building to include in part, to match aluminum windows, storefront or curtain wall, or equivalent price finish selected by design professional after bidding.

### 2.4 PANEL FABRICATION

- A. General: Fabricate and finish panels accessories at the factory, by manufacturer's standard procedures and processes, as required to fulfill indicated performance requirements demonstrated by laboratory testing. Comply with indicated profiles and dimensional requirements and with structural requirements.
- B. Apply bituminous coating or other permanent separation materials on concealed panel surfaces where panels would otherwise be indirect contact with substrate materials that are noncompatible or could result in corrosion or deterioration of either material or finishes.

- C. Fabricate panel joints with captive gaskets or separator strips, which provide a tight seal and prevent metal-to-metal contact in manner that will minimize noise from movements within panel system.
- D. Field Roll Forming: Field forming of panels is not acceptable unless manufacturer will supply a certification letter that the roll forming machine is minimum 15 stages and that the manufacturer's full time employee(s) shall be solely responsible for panel production and quality control procedures.

### PAR T 3 – EXECUTION

### 3.1 EXAMINATION AND PREPARATION

- A. Installer shall examine all substrates and verify that they are acceptable, which will be acknowledged and accepted by his beginning work. Installer shall verify that all penetrations, expansion joints, blocking, etc., are securely anchored into place, and that substrate is clean and free of all debris or other substance detrimental to the roofing work.
  - 1. Notify the Contractor in writing of conditions requiring corrections, for proper completion of the Work. Do not proceed until unsatisfactory conditions have been satisfactorily completed.
- B. NOTE: The use of square head nails, staples, and pneumatic or electric nail guns are strictly prohibited.
- C. Miscellaneous Framing: Install subpurlins, eave angles, furring, and other miscellaneous roof panel support members and anchorage according to metal roof panel manufacturer's written instructions.

### 3.2 PANEL INSTALLATION

- A. General: Comply with manufacturer's written instructions and recommendations for installation, as applicable to project conditions and supporting substrates. Anchor panels and other components of the work securely in place, with provision for thermal and structural movement.
  - 1. Field cutting of exterior panels by torch or abrading is not permitted. Shearing-type cutting tools are permitted.
  - 2. Install two fasteners within each corrugation along each purlin.
  - 3. Install stitch screws through laps at 16" oc.
  - 4. Install minimum 6" panel lap, head-lap fastened through butyl tape.
- B. Accessories: Install components required for a complete roof panel system, including in part, trim, copings, fascias, stops, ridge closures, curbs, clips, flashings, counterflashings, sealants, gaskets, fillers, closure strips, and similar items.
  - 1. Provide and install counterflashing to match roofing over flashing at vent stacks, flues, curbs, and other penetrations, except those indicated to be field painted.
- C. Joint Seals: Install gaskets, joint fillers, and sealants where indicated and where required for weatherproof performance of panels systems and accessories. Provide

types of gaskets, sealants, and fillers indicated or, of not otherwise indicated, types recommended by panel manufacturer.

- 1. Flash and seal roof panels at eave and rake with rubber, neoprene or other closures to exclude weather.
- 2. Counter-flash over otherwise exposed flashings with metal and finish to match adjacent roof metal.
- 3. Refer to other sections of these specifications for product and installation requirements applicable to indicated joint sealers.
- D. Joint Sealers: Refer to other sections of these specifications for post-installation requirement on joint sealers; not work of this section.
- E. Lap-Seams: Provide butyl tape at lapped joints of ribbed or fluted roof sheets and between roof sheets and protruding equipment, vents, and accessories.
- F. Installation Tolerances: Shim and align panel units within installed tolerance of 1/4inch in 20'0" on level/plumb/slope and location/line as indicated, and within 1/8-inch offset of adjoining faces and of alignment of matching profiles.
- G. Roofer shall install curbs supplied by other trades for roof mounted equipment and other items, and cover with metal to match roofing.

### 3.3 <u>CLEANING AND PROTECTION</u>

- A. Damaged Units: replace panels and other components of the work that have been damaged or have deteriorated beyond successful repair by means of finish touch-up of similar minor repair procedures as determined solely by the design professional.
- B. Cleaning: Remove temporary protective coverings and strippable films (if any) as soon as each panel is installed. Upon completion of panel installation, clean finished surfaces as recommended by panel manufacturer, and maintain in a clean condition during construction.

### END OF SECTION 07411 - MANUFACTURED METAL ROOF PANELS

### SECTION 07600 - FLASHING AND SHEET METAL

### PART 1 - GENERAL

### 1.1 <u>RELATED DOCUMENTS</u>:

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to work of this Section.

### 1.2 <u>SUMMARY</u>:

- A. This Section includes the following, where indicated, and where required by project conditions, and <u>which are not part of other Sections</u>:
  - 1. Prefinished metal counter flashing and base flashing.
  - 2. Miscellaneous prefinished metal wall flashing, counterflashing, and reglets.
  - 3. Exposed prefinished metal trim/fascia units, column caps, and other items as indicated on the Drawings.
  - 4. Elastic flashing at top of all curbs, top course of double wythe walls, at perimeters of all exterior wall openings (i.e.: doors, windows, louvers, etc.), through-wall flashing, and elsewhere as indicated.
  - 5. Miscellaneous sheet metal accessories as indicated and as required by project conditions.
- B. Exposed metal flashing is intended to be factory formed, prefinished baked enamel, as specified, in manufacturer's standard non-metallic color(s) selected by Architect after bidding.

### 1.3 <u>SUBMITTALS</u>:

- A. General: Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections.
- B. Product data for Flashing, Sheet Metal and Accessories: Manufacturer's current technical product data, installation instructions and general recommendations for each specified sheet material, fabricated product, coating system, and color selection data.
- C. Upon request, provide samples of the following flashing, sheet metal, and accessory items:
  - 1. 12-inch-long samples of factory-fabricated products exposed as finished work. Provide complete with specified factory finish.
  - 2. Physical samples for color selections, where color selection is required.
- D. Shop drawings showing layout, profiles, methods of joining, and anchorages details, including major counter flashings, trim/fascia units, expansion joint systems, and other fabricated work. Provide layouts at 1/4-inch scale and details at 3-inch scale.
- E. Provide written assurance that each sheet metal product to be incorporated into a Roofing warranty is approved by the roof system manufacturer, and also code compliant per ANSI-SPRI ES-1.

### 1.4 **PROJECT CONDITIONS:**

A. Coordinate work of this section with interfacing and adjoining work for proper sequencing of each installation. Ensure best possible weather resistance and durability of work and protection of materials and finishes.

### **PART 2 - PRODUCTS**

### 2.1 **ROOFING SHEET METAL, TRIM UNITS, & FLASHING**

- Provide sheet metal flashing compliant with IBC 1504 and ANSI-SPRI ES-1, and in A. compliance with 01360 manufacturer warranty certifications.
- Fabricate of minimum 24-gage metal, with minimum 50,000 P.S.I. yield, with 2-B. coat full strength (70-percent) Kynar 500 resin (20-year) finish. Provide one of the following base metals, to be the same base metal used for other sheet metal applications and systems:
  - ASTM A 792 aluminum-zinc allow coated steel sheet ("Galvalume"), or 1.
  - 2. ASTM A 653, G-90 (galvanized) zinc-coated steel sheet.
  - 3. Typical metal flashing, except where specifically indicated otherwise.
- C. Sheet Metal Types:

4.

7.

- Coping/Curb Caps 1.
- Counter flashings 2.
- 24 gauge Kynar standard finish G90 steel.
- 24 gauge Kynar standard finish G90 steel.
- 3. Plumbing Vent Flashings Zinc or Copper, 4lb lead Pitch Pans & Bonnets
  - 24 gauge Kynar standard finish G90 steel. 22 gauge steel, G90 mil finish.
- 5. Continuous Cleats

Metal Edge:

- 6. Gutter & Downspouts:
  - 24 gauge Kynar standard finish G90 steel.
    - 24 gauge Kynar standard finish G90 steel.
- D. Colors: As selected by Architect after Bid Date, from manufacturer's standard nonmetallic colors: Minimum 15 colors to selection.

#### 2.2 FASTENERS

- Sheet Metal to Wood, Imbedded; 3/8" head, #10, 1-1/4" length, hot-dip galvanized. A.
- B. Sheet Metal to Wood, Exposed; #12-14 HWH Sheet Metal Screw with neoprene washer, 1-1/4" length, hot-dip galvanized or FM coating.

### 2.3 **LEAD FLASHING (AT PLUMBING VENT STACKS):**

- A. 4-pound lead sheet, fabricated to extend 4 inches minimum onto roof and turn down 1 inch minimum down inside vent stacks.
  - For metal roofing, provide counterflashing over vent stacks, curbs, and other 1. penetrations' flashings in same material and color as metal roofing.
  - 2. Note that flashing at metal roofing shall also be as recommended by metal roof panel manufacturer and shall fully comply with applicable warranties.

### 2.4 <u>MISCELLANEOUS MATERIALS AND ACCESSORIES</u>:

### A. Solder:

- 1. For use with steel or copper: Provide 50 50 tin/lead solder (ASTM B 32), with rosin flux.
- 2. For use with stainless steel: Provide 60 40 tin/lead solder (ASTM B 32), with acid-chloride type flux, except use rosin flux over tinned surfaces.
- B. Fasteners: Same metal as flashing/sheet metal or other non-corrosive metal as recommended by sheet manufacturer. Match finish of exposed heads with material being fastened.
- C. Bituminous Coating: SSPC Paint 12, solvent-type bituminous mastic, nominally free of sulfur, compounded for 15-mil dry film thickness per coat.
- D. Mastic Sealant: Polyisobutylene; non-hardening, non-skinning, non-drying, nonmigrating sealant.
- E. Elastomeric Sealant: Generic type recommended by manufacturer of metal and fabricator of components being sealed and complying with requirements for joint sealants as specified in Section 07900 "Joint Sealers."
- F. Metal Accessories: Provide sheet metal clips, straps, anchoring devices, and similar accessory units as required for installation of work, matching or compatible with material being installed, noncorrosive, size and gage required for performance.
- G. Provide splash block <u>sloped away from building</u>, approximately 12-inches wide x 24inches long x 2-inches thick x 3-inches high, with 3-raised edges and one "open" end turned toward building – at locations where downspouts would otherwise drain on grade.
  - 1. Provide 1-precast concrete splash block at each downspout which drains onto grade or paving;
  - 2. Provide 1-preformed metal pan with corrugated bottom and properly hemmed edges (minimum 12" x 24") at each downspout which drains onto a roof below.

## 2.5 <u>FABRICATED UNITS</u>:

- A. General Metal Fabrication: Shop-fabricate work to greatest extent possible. Comply with details shown and with applicable requirements of SMACNA "Architectural Sheet Metal Manual" and other recognized industry practices. Fabricate for waterproof and weather-resistant performance, with expansion provisions for running work, sufficient to permanently prevent leakage, damage, or deterioration of the work. Form work to fit substrates. Comply with material manufacturer instructions and recommendations for forming material. Form exposed sheet metal work without excessive oil-canning, buckling, and tool marks, true to line and levels indicated, with exposed edges folded back to form hems.
  - 1. <u>At metal roofing and horizontal or sloped metal flashings over 6-inches wide</u>, provide custom configurations and continuous brake-metal roofing system, with continuous concealed clip anchors rated for I-90 uplift conditions, with

1-inch high standing seam Pittsburgh lock-seam joints - filled with sealant, double-folded, and corners turned down at 45-degrees.

- 2. Provide matching materials and finish for fascia metal covering, flashing, counterflashing and trim.
- B. Seams: Fabricate nonmoving seams in sheet metal with standing seam at exposed tops and lapped side or edge seams. For metal other than aluminum, tin edges to be seamed, form seams, and solder. Form aluminum seams with epoxy seam sealer. Pop-rivet joints for additional strength where required and at vertical faces.
- C. Separations: Provide for separation of metal from non-compatible metal or corrosive substrates by coating concealed surfaces at locations of contact, with bituminous coating or other permanent separation as recommended by manufacturer/fabricator.

## PART 3 - EXECUTION

### 3.1 <u>INSTALLATION REQUIREMENTS</u>:

- A. General: Except as otherwise indicated, comply with manufacturer's current written installation instructions and recommendations, with SMACNA "Architectural Sheet Metal Manual," and reviewed submittals and shop drawings.
  - 1. Install manufactured, bought-out items in accordance with manufacturer's current written instructions and recommendations.
  - 2. Anchor units of work securely in place by methods indicated, providing for thermal expansion of metal units; conceal fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weatherproof.
- B. Underlayment: Where stainless steel or aluminum is to be installed directly on cementitious or wood substrates, install a slip sheet of red rosin paper and a course of polyethylene underlayment.
- C. Bed flanges of work in a thick coat of bituminous roofing cement where required for waterproof performance.
- D. Install counterflashing in reglets, by snap-in seal arrangement for anchorage and filling reglet with mastic or elastomeric sealant, as indicated and depending on degree of sealant exposure, or if not indicated, as recommended by referenced standards, flashing and roofing manufacturers, and otherwise as required for the intended application.
- E. Flashing:
  - 1. Comply with manufacturer's current written instructions and recommendations for installation of all systems components in all applications indicated on the Drawings, and as otherwise required by project conditions.
  - 2. At any parapet wall and roof curbs applications, extend flashing continuous, over top of wall or curb, and turn down one inch (1") minimum on exterior side of wall and mechanically anchor in place at side of top of wall, below and concealed by continuous metal clip anchor (acting as termination bar)

and metal cap flashing or coping, and down over top edge of roofing flashing material at roof side.

### 3.2 <u>CLEANING AND PROTECTION</u>:

- A. Clean exposed metal surfaces, removing substances that might cause corrosion of metal or deterioration of finishes.
  - 1. Repair damaged metal and metal finishes air-drying touch-up paint.
  - 2. Replace damaged flashing and sheet metal work which cannot be repaired and when finish repair and restoration is not acceptable to Architect.
- B. Protection: Advise Contractor of required procedures for surveillance and protection of flashings and sheet metal work during construction to ensure that work will be without damage or deterioration other than natural weathering at time of Substantial Completion.

### 3.3 <u>COUNTERFLASHINGS</u>

A. Remove existing counterflashing and install new counterflashing per manufacturer's shop drawings and warranty requirements.

### 3.4 <u>PLUMBING VENTS</u>

A. Remove existing plumbing vent flashing and install new prefabricated plumbing vent flashing per manufacturer's shop drawings and warranty requirements.

### 3.5 <u>METAL EDGE</u>

A. Remove existing metal edge flashing and install new metal edge flashing per manufacturer's shop drawings and warranty requirements.

### 3.6 EXPANSION JOINT CAP

A. Remove existing expansion joint cap flashing and install new expansion joint cap flashing per manufacturer's shop drawings and warranty requirements.

### END OF SECTION 07600 – FLASHING AND SHEET METAL

### SECTION 07900 - JOINT SEALERS

### PART 1 - GENERAL

### 1.1 <u>RELATED DOCUMENTS</u>:

A. Related work specified elsewhere includes: N/A

### **1.2 DESCRIPTION OF WORK:**

A. Work described in this section includes joint sealer systems.

### 1.3 <u>SYSTEM PERFORMANCES</u>:

A. Provide joint sealers that have been produced and installed to establish and maintain watertight and airtight continuous seals.

### 1.4 **<u>QUALITY ASSURANCE</u>**:

- A. Installer Qualifications: Engage an Installer who has successfully completed within the last three years at least 3 joint sealer applications similar in type and size to that of this project and who will assign mechanics from these earlier applications to this project, of which one will serve as lead mechanic.
- B. Single Source Responsibility for Joint Sealer Materials: Obtain joint sealer materials from a single manufacturer for each different product required.

### 1.5 <u>SUBMITTALS</u>:

A. Product Data: Submit manufacturer's complete product specifications, handling/installation/curing instructions, color charts and performance tested data sheets for each product required.

### 1.6 <u>DELIVER, STORAGE AND HANDLING</u>:

- A. Deliver materials to project site in original unopened containers or bundles with labels informing about manufacturer, product name and designation, color, expiration period for use, pot life, curing time and mixing instructions for multi-component materials.
- B. Store and handle materials to prevent their deterioration or damage due to moisture, temperature changes, contaminants, or other causes.

### 1.7 **PROJECT CONDITIONS**:

- A. Environmental Conditions: Do not proceed with installation of joint sealers under the following conditions:
  - 1. When ambient and substrate temperature conditions are outside the limits permitted by joint sealer manufacturer or below 40° F.

- 2. When joint substrates are wet due to rain, frost, condensation or other causes.
- B. Joint Width Conditions: Do not proceed with installation of joint sealers when joint widths are less than allowed by joint sealer manufacturer for application indicated.

### PART 2 - PRODUCTS

### 2.1 <u>MATERIALS, GENERAL</u>:

2.

- A. Compatibility: Provide joint sealers, joint fillers and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by testing and field experience.
- B. Colors: Provide color of exposed joint sealers indicated, or if not indicated, as selected by Architect from manufacturer's standard colors.

### 2.2 <u>ELASTOMERIC JOINT SEALANTS</u>:

3.

vehicular traffic.

- A. Elastomeric Sealant Standard: Provide manufacturer's standard chemically curing, single component elastomeric adhesive sealant of base polymer indicated which complies with ASTM C 920 requirements, including those for Type, Grade, Class and Uses.
- B. Multi-Part Nonsag Silane Sealant: Type M, Grade NS, Class 25, Uses NR, M, A and, as applicable to joint substrates indicated, O.
  - 1. Products: Subject to compliance with requirements, provide the following: a. "Tuff Stuff MS": Garland Company.

Tur	f Stuff MS <sup>*</sup> ; Garland Con	ipany.	
1.	Hardness, Shore A	ASTM C 920, 15-20	30
2.	Tensile Strength	ASTM D 412	225
	psi		

- Ultimate Elongation ASTM D 412 500%
- 2. Locations for Use: Exterior joints and penetrations in vertical surfaces of concrete, and between metal and concrete, mortar of stone; overhead or ceiling joints; perimeters of metal frames in exterior walls; vertical expansion and control joints in masonry and concrete; and at all miscellaneous locations requiring a joint sealant.
- 3. Equivalent 1-part sealants will be acceptable <u>for interior surfaces only</u>, by one of the above named manufacturers.
- C. Two-Part Pourable Epoxy/Urethane Hybrid Sealant: Type M, Grade P, Class 25; Uses T, M, A and, as applicable to joint substrates indicated, O.
  - 1. Products: Subject to compliance with requirements, provide the following:

a.	"Peri	na-Joint Sealant"; Garland	Company	C
	1.	Flexural Strength	ASTM D790	2780
		psi		
	2.	Tensile Strength	ASTM D412	3280
		psi		
	3.	Elongation at Break	ASTM D412	50%
Loc	ations for	Use: Exterior and interior	or expansion, control ar	nd construction
join	ts in ho	rizontal surfaces; and jo	ints subject to pedest	rian and light

- D. One-Part Mildew-Resistant Silicone Sealant: Type S, Grade NS; Class 25, Uses NT, G, A and, as applicable to nonporous joint substrates indicated, O; formulated with fungicide for sealing interior joints with nonporous substrates around ceramic tile, showers, sinks and plumbing fixtures.
  - 1. Products: Subject to compliance with requirements, provide the following:
    - a. "All-Sil"; Garland Company

1.	Surface Temp Range	-60F to 350F	
2.	Tensile Strength	ASTM D412	230
	psi		
3.	Elongation	ASTM D412	360%
4.	Joint Movement	ASTM C719	+/-50
5.	Hardness	ASTM C920	24
	points		

- 2. Locations for Use: Interior joints in vertical surfaces and terminal edges of tile; and joints At damp areas, such as around sinks and plumbing fixtures and pipe penetrations; and exposed terminal edges of vinyl flooring, such as around door frames and terminations at concrete.
- E. High Movement Joints; Single component 100% solids polyether.
  - 1. Products: Subject to compliance with requirements, provide the following:
    - a. "Greenlock XL"; Garland Company

1.	Shear Strength	<b>ASTM D1002</b>	140 psi
2.	Slump	ASTM C679	0 slump
3.	Shrinkage measurable	After 14 days	Non
4.	Low Temp Flex	<sup>1</sup> / <sub>4</sub> " mandrel	-20F
5.	Viscosity @ 70F	Brookfield RVF	850,000 cPs

### 2.3 <u>LATEX JOINT SEALERS</u>:

- A. Acrylic-Emulsion Sealant: Manufacturer's standard, one part nonsag, acrylic, mildew resistant, acrylic emulsion sealant complying with ASTM C 834, formulated to be paintable and recommended for exposed applications on interior and on protected exterior exposures involving joint movement of not more than  $\pm$  7.5%.
  - 1. Products: Subject to compliance with requirements, provide with one of the following:
    - a. "Chem-Calk 600"; Bostik Construction Products Div.
    - b. "AC-20"; Pecora Corp.
    - c. "Sonolac"; Sonneborn Building Products Div; BASF Building Systems.
  - 2. Locations for Use: Interior joints in field-painted vertical and overhead surfaces at perimeter of metal door frames, gypsum drywall, plaster and concrete or concrete masonry; and all other interior locations not indicated otherwise.

### 2.4 <u>FIRE-RESISTANT JOINT SEALERS</u>:

A. N/A

### 2.5 JOINT SEALANT BACKING:

- A. General: Provide sealant backings of material and type which are non-staining; are compatible with joint substrates, sealants, primers and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
- B. Plastic Foam Joint-Fillers:
  - 1. Preformed, compressible, resilient, non-waxing, non-extruding strips of plastic foam of material indicated below, and of size, shape and density to control sealant depth and otherwise contribute to producing optimum sealant performance.
  - 2. Backer Rod: Premium grade, <u>closed cell</u> polyethylene foam rod; Seal tight Backer Rod, as manufactured by W.R. Meadows, Inc., or approved equivalent.
  - 3. Joint Filler: "Ceramar" flexible foam expansion joint filler, as manufactured by W.R. Meadows, Inc., or approved equivalent.
- C. Bond Breaker Tape: Polyethylene tape or other plastic tape as recommended by sealant manufacturer for preventing bond between sealant and joint filler or other materials at back (3rd) surface of joint. Provide self-adhesive tape where applicable.

### 2.6 <u>MISCELLANEOUS MATERIALS</u>:

- A. Primer: Provide type recommended by joint sealer manufacturer where required for adhesion of sealant to joint substrates indicated.
- B. Cleaners for Nonporous Surfaces: Provide non-staining, chemical cleaner of type acceptable to manufacturer of sealant and sealant backing materials which are not harmful to substrates and adjacent nonporous materials.
- C. Masking Tape: Provide non-staining, non-absorbent type compatible with joint sealants and to surface adjacent to joints.
- D. Joint Fillers: ASTM D 1751, asphalt-saturated cellulosic fiber or ASTM D 1752, cork or self-expanding cork in preformed strips.

### PART 3 - EXECUTION

### 3.1 <u>INSPECTION</u>:

A. Require Installer to inspect joints indicated to receive joint sealers for compliance with requirements for joint configuration, installation tolerances and other conditions affecting joint sealer performance. Obtain Installer's written report listing any conditions detrimental to performance of joint sealer work. Do not allow joint sealer work to proceed until unsatisfactory conditions have been corrected.

### 3.2 <u>PREPARATION</u>:

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealers to comply with recommendations of joint sealer manufacturers and the following requirements:
  - 1. Remove all foreign material from joint substrates which could interfere with adhesion of joint sealer, including dust; paints, except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer; oil; grease; waterproofing; water repellents; water; surface dirt and frost.
  - 2. Clean concrete, masonry, unglazed surfaces of ceramic tile and similar porous joint substrate surfaces, by brushing, grinding, blast cleaning, mechanical abrading, acid washing or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealers. Remove loose particles remaining from above cleaning operations by vacuuming or blowing out joints with oil-free compressed air.
  - 3. Remove latex and form release agents from concrete.
  - 4. Clean metal, glass, porcelain enamel, glazed surfaces of ceramic tile and other non-porous surfaces by chemical cleaners or other means which re not harmful to substrates or leave residues capable of interfering with adhesion of joint sealers.
- B. Joint Priming: Prime joint substrates where indicated or where recommended by joint sealer manufacturer based on preconstruction joint sealer-substrate tests or prior experience. Apply primer to comply with joint sealer manufacturer's recommendations. Confine primers to areas of joint sealer bond, do not allow spillage or migration onto adjoining surfaces.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces which otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

### 3.3 <u>INSTALLATION OF JOINT SEALERS</u>:

- A. General: Comply with joint sealer manufacturer's printed installation instructions applicable to products and applications indicated, except where more stringent requirements apply.
- B. Scope; Apply new sealants at window locations where directed.
  - 1. Masonry Sill & Head, two horizontal rows; Apply new sealant as directed along the entire joints.
  - 2. Metal to Glass, two horizontal rows and two vertical applications; Apply new sealant as directed for all joints.
- C. Elastomeric Sealant Installation Standard: Comply with recommendations of ASTM C 1193 for use of joint sealants as applicable to materials, applications and conditions indicated.

- D. Latex Sealant Installation Standard: Comply with requirements of ASTM C 790 for use of latex sealants.
- E. Installation of Sealant Backings:
  - 1. Install sealant backings to comply with the following requirements:
  - 2. Install joint-fillers of type indicated or recommended by sealant manufacturer to provide support of sealants during application and at position required to produce the cross-sectional shapes and depths of installed sealants relative to joint widths which allow optimum sealant movement capability.
    - a. Do not leave gaps between ends of joint-fillers.
    - b. Do not stretch, twist, puncture or tear joint-fillers.
    - c. Remove absorbent joint-fillers which have become wet prior to sealant application and replace with dry material.
  - 3. Install bond breaker tape between sealants and joint-fillers, compression seals or back of joints where required to prevent third-side adhesion of sealant to back of joint.
- F. Installation of Sealants: Install sealants by proven techniques that result in sealants directly contacting and fully wetting joint substrates, completely filling recesses provided for each joint configuration and providing uniform, cross-sectional shapes and depths relative to joint widths which allow optimum sealant movement capability.
- G. Tooling of Nonsag Sealants:
  - 1. Immediately after sealant application and prior to time skinning or curing begins, tool sealants to form smooth, uniform beads of configuration indicated, to eliminate air pockets and to ensure contact and adhesion of sealant with sides of joint. Remove excess sealants from surfaces adjacent to joint. Do not use tooling agents which discolor sealants or adjacent surfaces or are not approved by sealant manufacturer.
  - 2. Concave joint configuration per Figure 5A in ASTM C 1193, unless otherwise indicated

### 3.4 **<u>PROTECTION AND CLEANING</u>**:

- A. Protect joint sealers during and after curing period from contact with contaminating substances or from damage resulting from construction operations or other causes so that they are without deterioration or damage at time of substantial completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealers immediately and reseal joints with new materials to produce joint sealer installations with repaired areas indistinguishable from original work.
- B. Clean off excess sealants or sealant smears adjacent to joints as work progresses by methods and with cleaning materials approved by manufacturers of joint sealers and of products in which joints occur.

### END OF SECTION 07900 - JOINT SEALERS

State of Alabama )

County of Baldwin )

### **CONTRACT FOR PROFESSIONAL & CONSTRUCTION SERVICES**

This Contract for **Professional and Construction** Services is made and entered into by and between the County of Baldwin (hereinafter called "COUNTY") acting by and through its governing body, the Baldwin County Commission, and PROVIDER, (hereinafter referred to as "PROVIDER").

### WITNESSETH:

Whereas,

Whereas,

**NOW, THEREFORE**, in consideration of the premises and the mutual covenants herein contained the sufficiency of which being hereby acknowledged, PROVIDER and COUNTY do hereby agree as follows:

- I. <u>Definitions</u>. The following terms shall have the following meanings:
  - A. COUNTY: Baldwin County, Alabama

B. COMMISSION: Baldwin County Commission

C. PROVIDER:

- II. <u>Obligations Generally</u>. The COUNTY hereby retains, and the PROVIDER agrees to perform for the COUNTY, those services as hereinafter set forth. This document shall serve as the binding contract for the services of PROVIDER. PROVIDER shall immediately commence performance of the services outlined herein upon full execution of this Contract. All work shall be commenced and completed in a timely manner as, and at the times, herein set out.
- III. <u>Recitals Included</u>. The above recitals and statements are incorporated as part of this Agreement, and shall have the effect and enforceability as all other provisions herein.

- IV. <u>Professional Qualifications</u>. For the purpose of this Contract, the PROVIDER represents and warrants to the COUNTY that it possesses the professional, technical, and administrative personnel with the specific experience and training necessary to provide the professional services required herein.
- V. <u>No Prohibited Exclusive Franchise</u>. The COUNTY neither perceives nor intends, by this Contract, a granting of an exclusive franchise or violation of Art. I, Section 22 of the Alabama Constitution.
- VI. <u>Representation/Warranty of Certifications, Etc.</u> PROVIDER represents and warrants that PROVIDER is presently certified, licensed and otherwise permitted under all necessary and applicable laws and regulations to perform the services herein, and that PROVIDER shall renew, maintain, and otherwise ensure that all such certifications, licenses, and permits are current and valid, without interruption, for and through completion of the services. The representation and warranty aforesaid is a material inducement to the COUNTY in entering this Contract, and the parties agree that the breach thereof shall be deemed material at the County's option.
- VII. <u>Legal Compliance</u>. PROVIDER shall at all times comply with all applicable Federal, State, local and municipal laws and regulations, including but not limited to Title 2 C.F.R. Part 200. For more information about the Federal Regulations visit the website <u>http://www.gpoaccess.gov/index.html</u> of Federal Regulations.
- VIII. Independent Contractor. PROVIDER acknowledges that it is an independent contractor, and PROVIDER shall at all times remain as such in performing the services under this Contract. PROVIDER is not an employee, servant, partner, or agent of the COUNTY and has no authority, whether express or implied, to contract for or bind the COUNTY in any manner. The parties agree that PROVIDER shall be solely responsible for and shall have full and unqualified control over developing and implementing its own means and methods, as it deems necessary and appropriate in providing the aforementioned services, and that the COUNTY's interests herein are expressly limited to the results of said services. PROVDIER is not entitled to unemployment insurance benefits, and PROVIDER is responsible for and obligated to pay any and all federal and state income tax on any monies paid pursuant to this Contract.
  - IX. <u>No Agency Created</u>. It is neither the express nor the implied intent of PROVIDER or COUNTY to create an agency relationship pursuant to this Contract. Therefore, the PROVIDER does not in any manner act on behalf of COUNTY and the creation of such a relationship is prohibited and void.

- X. <u>Unenforceable Provisions</u>. If any one or more of the provisions contained herein shall, for any reason, be held to be invalid, illegal or unenforceable in any respect, then such provision or provisions shall be deemed severable from the remaining provisions hereof, and such invalidity, illegality or unenforceability shall not affect any other provision hereof. This Contract shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.
- XI. <u>Entire Agreement</u>. This Contract represents the entire and integrated agreement between COUNTY and PROVIDER and supersedes all prior negotiations, representations, or agreements, either written or oral. This Contract may be amended only by written instrument signed by all parties.
- XII. <u>Failure to Strictly Enforce Performance</u>. The failure of the COUNTY to insist upon the strict performance of any of the terms, covenants, agreements and conditions of this Contract shall not constitute, and shall never be asserted by PROVDIER as constituting, a default or be construed as a waiver or relinquishment of the right of the COUNTY to thereafter enforce any such term, covenant, agreement, or condition, but the same shall continue in full force and effect.
- XIII. <u>Assignment</u>. This Contract or any interest herein shall not be assigned transferred or otherwise encumbered by PROVIDER without the prior written consent of the COUNTY, which may be withheld or granted in the sole discretion of the COUNTY.
- XIV. <u>Ownership of Documents/Work</u>. The COUNTY shall be the owner of all copyright or other intellectual property rights in reports, documents and deliverables produced and paid for under this Contract, and to the extent permitted by Alabama law, any such material may be reproduced and reused at the discretion of the COUNTY without payment of further consideration. PROVIDER shall not transfer, disclose, or otherwise use such information for any purpose other than in performance of the services hereunder, without the COUNTY's prior written consent, which may be withheld or granted in the sole discretion of the COUNTY.
- XV. <u>Notice</u>. Notice required herein shall be in writing, unless otherwise allowed, and said notice shall be deemed effective when received at the following addresses:

### **PROVIDER**:

COUNTY:	Baldwin County Commission c/o Chairman
	312 Courthouse Square
	Suite 12
	Bay Minette, AL 36507

XVI. <u>Services to be Rendered</u>. PROVIDER is retained by the COUNTY as a professionally-qualified Contractor. The general scope of work for the services shall include all the terms and Conditions of "Competitive Bid #WG21-25A", the same being expressly incorporated herein by reference, and without limitation will encompass:

### "Competitive Bid #WG21-25A – Roof Repairs and Replacement of Various County Buildings due to Hurricane Damage for the Baldwin County Commission."

PROVIDER will provide ongoing communications with COUNTY regarding this service, including updates, emails and etc. as requested. Additionally, PROVIDER will meet with COUNTY as needed or requested.

- A. PROVIDER is responsible for the professional quality, technical accuracy, timely completion and coordination of all services furnished by or in relation to this Contract.
- B. PROVIDER represents and warrants that its services shall be performed within the limits and standards provided by the COUNTY, in a manner consistent with the level of care and skill ordinarily exercised by similar providers under similar circumstances at the time the services are performed.

### XVII. General Responsibilities of the COUNTY.

- A. The COUNTY shall provide reasonable notice to PROVIDER whenever the COUNTY actually observes or otherwise actually becomes aware of any development that affects the scope or time of PROVIDER's services hereunder or any defect or nonconformance in the work of PROVIDER.
- B. The COUNTY shall pay to PROVIDER the compensation as, and subject to the terms set out below.
- XVIII. <u>Termination of Services</u>. The COUNTY or PROVIDER may terminate this contract, with or without cause or reason, by giving ten (10) days written notice of such to the other party. Upon receipt of such notices, PROVIDER shall discontinue its work to the extent specified in the notice.

In the event of termination, the COUNTY shall pay PROVIDER for all services satisfactorily rendered, and for any expenses deemed by COUNTY to be a reimbursable expense incurred pursuant to this Contract and prior to the date of termination.

- XIX. <u>Compensation Limited</u>. The compensation to be paid to the PROVIDER shall be the full compensation for all work performed by PROVIDER under this Contract. Any and all additional expenditures or expenses of PROVIDER, not listed in full within this Contract, shall not be considered as a part of this Agreement and shall not be demanded by PROVIDER or paid by COUNTY.
- XX. <u>Direct Expenses</u>. Compensation to PROVIDER for work shall be paid <u>\$\_\_\_\_\_\_</u>. Said compensation shall be all inclusive, including without limitation, reimbursement of all cost, incidentals and operating expense associated with those directly engaged in performance of the requested services
- XXI. <u>Method of Payment</u>. PROVIDER shall submit invoices to the COUNTY for payment for work performed. Such invoice shall be accompanied by a detailed account of compensation to be paid PROVIDER.

Payment shall be made by the COUNTY within thirty (30) days of the approval of the invoice submitted by the PROVIDER. The COUNTY agrees to review and approve invoices submitted for payment in a timely manner.

- XXII. <u>Effective and Termination Dates</u>. This Contract shall be effective and commence immediately upon the same date as its full execution, and shall terminate upon either the expiration of not more than **one hundred eighty** (180) days after the Notice to Proceed is given or upon a written notification thereof received by either party within the required ten (10) day period. [Nothing herein stated shall prohibit the parties from otherwise terminating this Contract according to the provisions herein.]
- XXIII. <u>Force Majeure</u>. The Parties hereto shall incur no liability to the other if performance becomes impossible or impracticable by reason on an event or effect that the parties could neither have anticipated nor controlled. This allowance shall include both an act of nature and acts of third parties. Any costs that would otherwise be incurred and/or necessitated by the provisions herein shall be alleviated for either party by such event or effect.
- XXIV. <u>Indemnification</u>. Provider shall indemnify, defend and hold County and its Commissioners, affiliates, employees, agents, and representatives (collectively "County") harmless from and against any and all claims, demands, liabilities, damages, losses, judgments, costs, and expenses including, without limitations, attorneys' fees, for any and all personal injury (including death)

and property damage of any kind or nature whatsoever, incurred by, asserted against, or imposed upon County, as a result of or in any manner related to provision of services hereunder, or any act or omission, by Provider. Contractor shall provide the COUNTY with proof of general liability coverage including the COUNTY as an additional insured. This indemnification shall survive the expiration of this Contract.

- XXV. <u>Number of Originals</u>. This Contract shall be executed with three originals, all of which are equally valid as an original.
- XXVI. <u>Governing Law.</u> This Contract in all respects, including without limitation its formation, validity, construction, enforceability and available remedies, shall be governed by the laws of the State of Alabama, without regard to Alabama conflict of law principles.
- XXVII. Prior to performing services pursuant to this Contract, Insurance. Provider shall carry, with insurers satisfactory to County, throughout the term of hereof, Auto Liability Insurance, including owned, hired and non-owned vehicles, with limits of not less than \$1,000,000, combined single limit, for both bodily injury liability and property damage liability each occurrence; Commercial General Liability Insurance, including all contractual liability hereunder, with limits not less than \$1,000,000, combined single limit, for both bodily injury liability and property damage liability each occurrence, and Worker's Compensation Insurance, meeting the statutory limits of the State of Alabama and Employer's Liability Insurance fully covering all employees and supervisors participating in the work at the subject property site. All liability insurance shall name the County as an additional insured. Prior to commencing operations hereunder, a Certificate of Insurance evidencing such coverage, satisfactory to County, shall be furnished to County, which shall specifically state that such insurance shall provide for at least ten (10) days' notice to County in the event of cancellation, termination or any change in such insurance policies. The workers compensation certificate shall bear an endorsement clearly evidencing a waiver of the right of subrogation against County and County Representatives. Should Provider fail to furnish current evidence upon demand of any insurance required hereunder, or in the event of cancellation, termination or change in any such insurance, County may, at its option, suspend this Contract until insurance is obtained, terminate this Contract immediately without further action, or hold Provider in material default and pursue any and all remedies available.
- XXVIII. <u>Surety</u>: As a material inducement for the County to enter this Contract, any and all bond and/or surety guarantees required by the County in reference to the Project shall be in a form acceptable to the County and shall, without limitation, meet the following requirements:
  - (a) Acceptance of Surety. The bond and/or surety document must be

reviewed by, and be acceptable to, County staff and approved by the County Commission. In the event that such document is not in an acceptable form at any time prior to or during the effectiveness of this Contract, the services and/or work described in this Contract shall either not commence or immediately cease, depending on the situation. Any project delay that is attributable to the County's acceptance, or nonacceptance, of the bond and/or surety document form shall in no way be consider as a delay caused by the County, and the Contractor and/or Provider waives all rights to claim that any such delay was the fault of the County.

(b) <u>Value of Surety</u>. The bond and/or surety guarantee shall be of an amount equal to or greater than 100 percent of the total cost identified in the bid response.

(c) <u>Term of Surety</u>. Any bond and/or surety guarantees required by the County must be valid at all times during the life of this Contract. Notwithstanding anything written or implied herein to the contrary, in no event shall the bond and/or surety document lapse, terminate, expire, or otherwise become invalid prior to the County, or the County's authorized agent, providing a written Notice to the Provider/Contractor that the Project is in fact completed in all respects. Said Notice from the County or its authorized agent shall not be provided until the County, in its sole discretion, is satisfied that the Project is complete in all respects.

- (d) Scope of the Surety. The terms and provisions of any bond and/or surety guarantee provided as part of this Project shall in all respects, without limitation, be consistent and in agreement with, the provisions of this Contract. In the event that the bond and/or surety guarantee is in conflict with this Contract, this Contract shall govern. Neither this section nor this provision limits the duties of the Provider/Contractor to satisfy all of the requirements in this Contract.
- XXIX. <u>Title 39/Code of Alabama Compliance</u>. As a condition of any Bid Award and the respective contract(s) pursuant thereto, the County places full reliance upon the fact that it is the sole responsibility of any contractor, person or entity entering into such a contract with Baldwin County for the prosecution of any public works, to ensure that they and/or any of their respective agents comply with all applicable provisions of Title 39-1-1 et seq. <u>Code of AL</u> <u>1975</u>. More specifically, any contractor, person or entity entering into such a contract with Baldwin County for the prosecution of any public works shall be in compliance with, and have full knowledge of, the following provisions of Title 39:

"(f) The Contractor shall, immediately after the completion of the contract give notice of the completion by an advertisement in a newspaper of general

circulation published within the city or county in which the work has been done, for a period of four successive weeks. A final settlement shall not be made upon the contract until the expiration of 30 days after the completion of the notice. Proof of publication of the notice shall be made by the contractor to the authority by whom the contract was made by affidavit of the publisher and a printed copy of the notice published . . ." §39-1-1(f) Code of AL 1975. "(g) Subsection (f) shall not apply to contractors performing contracts of less than fifty thousand (\$50,000) in amount. In such cases, the governing body of the contract to be published one time in a newspaper of general circulation, published in the county of the contracting agency and shall post notice of final completion on the agency's bulletin board for one week, and shall require the contractor to certify under oath that all bills have been paid in full. Final settlement with the contractor may be made at any time after the notice has been posted for one entire week." §39-1-1 (g) Code of AL 1975.

XXX. The public works project which is the subject of this invitation to bid is partially funded through the Federal Emergency Management Agency (FEMA) Public Assistance Program, and the balance is funded by the Baldwin County Commission.

<u>NOTE:</u> Any failure to fully comply with this section or any applicable laws of the State of AL shall be deemed a material breach of the terms of both the Bid Award and the Respective contracts resulting there from. Furthermore, Baldwin County takes no responsibility for resulting delayed payments, penalties, or damages as a result of any failure to strictly comply with Alabama Law.

IN WITNESS WHEREOF, the parties hereto have executed this contract on the last day of execution by the COUNTY as written below.

COUNTY

ATTEST:

JOE DAVIS, III Chairman /Date

WAYNE DYESS County Administrator /Date

## **SIGNATURE & NOTARY PAGE TO FOLLOW**
State of Alabama ) County of Baldwin )

I, \_\_\_\_\_\_Notary Public in and for said County, in said State, hereby certify that, Joe Davis, III, whose name as Chairman of Baldwin County Commission, and Wayne Dyess, whose name as County Administrator, are known to me, acknowledged before me on this day that, being informed of the contents of the Contract for Professional and Construction Services, they, as such officers and with full authority, executed same knowingly and with full authority to do so on behalf of said Commission.

Given under my hand and official seal, this the day of \_\_\_\_\_, 2021.

Notary Public My Commission Expires

#### **PROVIDER:**

#### **Insert Providers Name**

)

\_\_\_\_\_/\_\_\_\_/Date

State of Alabama

County of Baldwin )

I, \_\_\_\_\_\_Notary Public in and for said County and State, hereby certify that \_\_\_\_\_\_as \_\_\_\_\_of \_\_\_\_\_, whose name is signed to the foregoing in that capacity, and who is known to me, acknowledged before me on this day that, being informed of the contents of the foregoing, he executed the same voluntarily on the day the same bears date for and as an act of said \_\_\_\_\_\_.

GIVEN under my hand and seal on this the \_\_\_\_\_ day of \_\_\_\_\_, 2021.

Notary Public My Commission Expires

#### **CERTIFICATION REGARDING LOBBYING**

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

If any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions. Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

* APPLICANT'S ORG	ANIZATION		
* PRINTED NAME AN Prefix:	D TITLE OF AUTHORIZED REPRES	SENTATIVE	Middle Name:
* Last Name:			Suffix:
* Title:		* DATE	

## Baldwin County Commission 1. Fairhope Brats & 2. Fairhope Courthouse, Typical



Photo 1: Fairhope Brats





Photo 3: Fairhope Courthouse, Typical



Photo 4: Fairhope Courthouse, Typical

2. Fairhope Courthouse, Typical



2. Fairhope Courthouse, Typical



Photo 3: Fairhope Courthouse, Typical

Photo 3: Fairhope Courthouse, Typical

2. Fairhope Courthouse, Typical & 3. Fairhope Courthouse, B



Photo 3: Fairhope Courthouse, B

Photo 4: Fairhope Courthouse, B





### Baldwin County Commission 4. Foley Area 300 & 5. Foley Courthouse



Photo 3: Foley Courthouse

Photo 4: Foley Courthouse



5. Foley Courthouse & 6. Animal Shelter Bldg. A



## Baldwin County Commission 7. Animal Shelter Bldg. B



Photo 1: Animal Shelter Bldg. B



Photo 2: Animal Shelter Bldg. B

#### Baldwin County Commission 8. Annex I Robertsdale



Photo 3: Annex I Robertsdale

Photo 4: Annex I Robertsdale



### Baldwin County Commission 9. Brats Robertsdale & 10. Sheriff's Office Robertsdale



Photo 3: Sheriff's Office Robertsdale

Photo 4: Sheriff's Office Robertsdale

### Baldwin County Commission 11. Area 200 Hwy Main Bldg & 12. Area 200 Sign Bldg



Photo 3: Commission 2 Silverhill

Photo 4: Commission 2 Silverhill

#### Baldwin County Commission 13. Annex 2 Old CIS & 14. Annex 1 Bay Minette



Photo 3: Annex 1 Bay Minette

Photo 4: Annex 1 Bay Minette





#### Baldwin County Commission 15. Auburn Extension & 16. BC Area 100 Hwy Bldg. A



`

Photo 1: Auburn Extension



Photo 2: Auburn Extension



Photo 1: BC Area 100 Hwy Bldg. A



Photo 2: BC Area 100 Hwy Bldg. A

#### Baldwin County Commission 17. BC Area 100 Hwy Bldg. B & 18. BC Area 100 Hwy Bldg. C



Photo 1: BC Area 100 Hwy Bldg. B



Photo 2: BC Area 100 Hwy Bldg. B



Photo 3: BC Area 100 Hwy Bldg. C



Photo 4: BC Area 100 Hwy Bldg. C

### Baldwin County Commission , 19. Comm. At Admin.





Photo 1: Comm. at Admin.

Photo 2: Comm. at Admin.

#### Baldwin County Commission 20. Legislation/ Delegation Bldg. & 21. Revenue BM Bldg.



Photo 1: Legislation/ Delegation Bldg; deck damage.



Photo 2: Legislation/ Delegation Bldg.







Photo 4: Revenue BM Bldg.

### Baldwin County Commission 22. Transfer Station Scales & 23. Bicentennial Park Church



Photo 1: Transfer Station Scales





Photo 1: Bicentennial Park Church



Photo 2: Bicentennial Park Church



### Baldwin County Commission 24. Little Red School House



Photo 1: Little Red School House

Photo 2: Little Red School House







A FAIRHOPE COURTHOUSE ROOF B 1.1 SCALE: 3/32" = 1'0"





FAIRHOPE COURTHOUSE ROOF B 1100 FAIRHOPE AVE, FAIRHOPE, AL 36532



59'-9"













BC AREA 100 HWY BLDG A 203 DICKMAN RD BAY MINETTE, AL 36507

LA RESEARCH AND ENGINEERING
5815 I-10 INDUSTRIAL PARKWAY SOUTH
THEODORE, AL 36582 PH: 251.653.9009 FX: 251.653-5803







1-OF-11 SHEETS	OF
A-1	
SHEET	
;#: N/A	JOB #:
SCALE 3/32"=1'0"	
DATE 03/24/2021	
CHECKED A.M.	
DRAWN L.A.	

BC AREA 100 HWY BLDG B 203 DICKMAN RD BAY MINETTE, AL 36507

LA RESEARCH AND ENGINEERING

→z

5815 I-10 INDUSTRIAL PARKWAY SOUTH THEODORE, AL 36582 PH: 251.653.9009 FX: 251.653-5803







41 





DR

BICENTENNIAL PARK CHURCH 51233 HIGHWAY 225 STOCKTON, AL 36579

LA RESEARCH AND ENGINEERING 5815 I-10 INDUSTRIAL PARKWAY SOUTH THEODORE, AL 36582 PH: 251.653.9009 FX: 251.653-5803



A LEGISLATION/DELEGATION BLDG 1.1 SCALE: 3/32" = 1'0"

OF

1-OF-11 SHEETS

A-1

- 80'-5" 

Image: Normal State       Normal State       Image: Normal State	
--	--





MAGNOLIA ANIMAL SHELTER BLDG A SCALE: 3/32" = 1'0"



OF			JOB #:				
1-OF-11	A-1	SHEET	<i>‡</i> : N/A	SCALE 3/32"=1'0"	DATE 03/24/2021	CHECKED A.M.	L.A.
SHEETS				"	1		

DRA

MAGNOLIA ANIMAL SHELTER BLDG A 15050 COUNTY RD 49 SUMMERDALE, AL 36580

LA RESEARCH AND ENGINEERING

5815 I-10 INDUSTRIAL PARKWAY SOUTH THEODORE, AL 36582 PH: 251.653.9009 FX: 251.653-5803

S)~



JOB

#

N/A

SHEET

CHECKED

 $\frac{A.M}{\frac{DATE}{\sqrt{24/2}}}$ 

24/20 CALE \$2"=1

 $\tilde{2}$ 

1'0"

DR

H

1-OF-11

SHEE

 $A_{-}$ 

 $\rightarrow$ 



199'-3"

MAGNOLIA ANIMAL SHELTER BLDG F 15050 COUNTY RD 49 SUMMERDALE, AL 36580		
	ER BLDG B	$\mathbf{N}$
SUMMERDALE, AL 36580	19	
	580	

LA RESEARCH AND ENGINEERING 5815 I-10 INDUSTRIAL PARKWAY SOUTH THEODORE, AL 36582 PH: 251.653.9009 FX: 251.653-5803

















DR

TRANSFER STATION SCALES BLDG 43205 NICHOLSVILLE RD BAY MINETTE, AL 36507 
 LA RESEARCH AND ENGINEERING

 5815 I-10 INDUSTRIAL PARKWAY SOUTH

 THEODORE, AL 36582

 PH: 251.653.9009 FX: 251.653-5803





