



Garland/DBS, Inc.
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ROOFING MATERIAL AND SERVICES PROPOSAL

City of Delray Beach
Community Center & City Hall
Date Submitted: 11/30/2016
Proposal #: 25-FL-161000
MICPA # 14-5903

Florida General Contractor License #: CGC1517248

Please Note: The following estimate is being provided according to the pricing established under the Master Intergovernmental Cooperative Purchasing Agreement (MICPA) with Cobb County, GA and U.S. Communities. This estimate should be viewed as the maximum price an agency will be charged under the agreement. Garland/DBS, Inc. administered a competitive bid process for the project with the hopes of providing a lower market adjusted price whenever possible.

Scope of Work: BASE BID

Modified Roof Section (Community Center)

- 1 Remove existing roofing system down to the wood deck.
- 2 Replace any rotten or damaged wood decking.
- 3 Properly fasten wood deck per FBC.
- 4 Mechanically fasten HPR Tri-Base Premium Anchor Sheet per NOA# 12-0716.05.
- 5 Install Base Layer of insulation per NOA in 1.5" thick, tapered at ¼". Adhered using hot asphalt.
- 6 Install top layer of insulation DensDeck Prime min ¼" adhered using hot asphalt per NOA.
- 7 In a full mopping of approved asphalt apply two plies of HPR Glasfelts within the EVT range and at a rate of .25lbs/sq.
- 8 In a full mopping of approved asphalt install one ply of StressPly IV EUV FR Mineral within the EVT range and at a rate of .25lbs/sq
- 9 Retrofit all drains.
- 10 For all perimeter and curb flashings install new cant strip prior to installation of flashing plies.
- 11 Utilize Stressbase 80 and StressPly IV EUV FR Mineral for all flashings.
- 12 Install all new counter flashings using 040 Aluminum, Kynar coated, standard color.
- 13 Install all new R-Mer Edge ANSI-SPRI Coping Cap, 040 Aluminum, Kynar coated, standard color.
- 14 Install all new gutters and downspouts where indicated on plans using 040 Aluminum, Kynar coated, standard color.
- 15 Install all new metal edge using ,040 Aluminum, Kynar coated, standard color.

- 16 Remove one fan as indicated on plans on roof deck A-1.
- 17 Replace 4 fans on roof deck A-1 as indicated on plans.
- 18 Install new goose necks for conduit lines as indicated on plans.
- 19 Install all new rubber mounts for conduit & Condensation lines. Place on sacrificial ply and adhere using Greenlock XL.
- 20 Retrofit all roof drains per plans, properly sump all drains and form crickets to each drain.
- 21 Form crickets to all scuppers.
- 22 On roof deck A-7 retro fit existing internal downspouts with new drains and properly sump and form crickets.
- 23 Install all new lead plumbing stacks.
- 24 Wire brush all existing mechanical stands to remove rust. Prime with Rust-Go Primer at a rate of .5gal per square. Allow to dry and apply two coats of Rust-Go Top Coat at a rate of .5gal per square.
- 25 Install all new pitch pockets with umbrellas per specification below. Fill bottom half with Gar-Rock, fast setting concrete and the top ½ with Seal-Tite.
- 26 Replace all scuppers.
- 27 Contractor is to utilize low odor asphalt where possible and utilize odor inhibitors in kettle.
- 28 Includes 25 Year NDL Warranty.

KEE Single Ply Roof Section (Community Center)

- 1 Remove existing roof system down to wood deck and dispose of properly.
- 2 Replace any rotten or damaged wood decking, re-fasten per Florida Building Code.
- 3 Simultaneously mechanically fasten Poly-Iso Min 2" & Gypsum Cover Board min ¼".
- 4 Attach new Solar Brite KEE 60 mil fully adhered, heat welding all seams.
- 5 Includes 20 Year Warranty.

Clay Tile Roof Section (Community Center)

- 1 Please see "Section 07321 - Clay Roof Tiles" for the scope of work (Specification Section is attached for reference)..
- 2 Includes 25 Year Warranty.

Vertical Coating (Community Center Building Exterior)

- 1 Please see "Section 09800 - Vertical Coating Specification" for the scope of work (Specification Section is attached for reference).

Torch Applied Roof Section (City Hall)

- 1 Remove existing single ply roof system down to LWC surface.
- 2 Make any necessary repairs to the LWC surface as needed.
- 3 Mechanically fasten one ply of HPR Tri-Base Premium using ES Products per NOA #13-0716.06 pg. 36.
- 4 Install one ply of HPR Torchbase directly over the substrate.
- 5 Install one ply of StressPly IV Mineral directly over the base ply.
- 6 Install new cant strip around all perimeter and curb flashings prior to installation of flashing plies.

- 7 Using HPR Torchbase and StressPly IV Mineral for all curb and perimeter flashings.
- 8 Retrofit all roof drains.
- 9 Install new lead plumbing stacks.
- 10 Install all new termination bar and edge metal where needed, 040 Aluminum, Kynar Coated.
- 11 Contractor is responsible for re-certification of lighting protection.
- 12 Refer to plans and details for specific instructions pertaining to this roof section.
- 13 Install two coats of Garla-Brite aluminized coating.
- 14 Includes 25 Year NDL Warranty.

Modified Roof Section (City Hall)

- 1 Remove existing roof system down to wood deck.
- 2 Dispose of all materials properly and safely.
- 3 Mechanically fasten one ply of HPR Tri-Base Premium to wood deck per NOA 13-0716.05 pg. 23. Fasten using Trufast3" metal insulation plates with Trufast #14 HD Fasteners, OMG 3" Round Metal Plates with OMG Heavy Duty fasteners, OMG Flat Bottom Metal Plates with #14 Roofgrip fasteners or SFS Dekfast Galvalume Steel Hex Plates with Dekfast 14 fasteners spaced 6" o.c.
- 4 Install two plies of HPR Glasbase adhered with a full mopping of approved asphalt within the EVT Range and at a rate of 25 lbs./sq.
- 5 Install one ply of StressPly EUV FR Mineral adhered with a full mopping of approved asphalt within the EVT Range and at a rate of 25 lbs./sq.
- 6 Install new copper metal edge.
- 7 Install new copper counter flashing along wall with new termination bar.
- 8 Include 100sqft of deck replacement in base bid.
- 9 Contractor is to utilize low odor asphalt where possible and utilize odor inhibitors in kettle.
- 10 Includes 25 Year NDL Warranty.

Vertical Coating (City Hall Building Exterior)

- 1 Please see "Section 09800 - Vertical Coating Specification" for the scope of work (Specification Section is attached for reference).

Addenda #1-3

- 1 Please see "Addenda #1, #2 & #3" which have been attached to this proposal for reference.

Line Item Pricing

Item #	Item Description	Unit Price	Quantity	Unit	Extended Price
	Community Center - Modified Roof Section				
2.06	Tear-off & Dispose of Debris: SYSTEM TYPE BUR W/ Insulation and Mineral Surfacing - Wood / Tectum Deck	\$ 1.82	12,884	SF	\$ 23,449
	Install One (1) Ply of HPR Tri-Base Premium	\$ 1.07	12,884	SF	\$ 13,786
6.12.01	Roof Deck and Insulation Option: WOOD ROOF DECK - HOT APPLICATION - ASTM D 312 TYPE III OR IV ASPHALT - INSULATION OPTION: - Mechanically Fasten Polyisocyanurate / Hot Mop Wood Fiber or Perlite to Provide an Average R-Value of 20 In Compliance with FM 1-90 Requirements	\$ 2.87	12,884	SF	\$ 36,977
4.46	Insulation Recovery Board & Insulations Options: INSULATION SUBSTITUTION OPTION Substitute 1/2" Treated Gypsum Insulation Board with Glass-Mat (e.g. DensDeck / Securock / Equal) in Place of the Wood Fiber or Perlite - Adhered in Hot ASTM D 312 Type III or IV Asphalt; Mopped	\$ 0.63	12,884	SF	\$ 8,117
4.51	Insulation Recovery Board & Insulations Options: INSULATION SLOPE OPTION Provide a 1/4" Tapered Polyisocyanurate Insulation System while Maintaining the Average R-Value Including Tapered Crickets; Adhered in ASTM D 312 Type III or IV Hot Asphalt; Mopped	\$ 4.20	12,884	SF	\$ 54,113
10.11.05	BUILT-UP MODIFIED ROOF WITH MINERAL CAP SHEET ADHERED IN HOT ASTM D 312 TYPE III OR IV ASPHALT: ROOF CONFIGURATION 2 ply of Glass Felt, Mineral Surfaced Cap Sheet, Set in Hot ASTM D 312 Type III or IV Asphalt : ROOFING MEMBRANE OPTION: - ASTM D 6162 SBS Fiberglass/Polyester Reinforced Modified Bituminous Sheet Material Type III - Minimum of 600 lbf/in tensile	\$ 6.77	12,884	SF	\$ 87,225
20.11.05	NEW FLASHINGS FOR ROOFING SYSTEMS & RESTORATION OPTIONS: ROOF FLASHINGS FOR MODIFIED & COAL TAR PITCH ROOF SYSTEMS: Minimum 1 Ply of Base Flashing and Mineral Cap Sheet Installed in Hot ASTM D 312 Type III or IV Asphalt:FLASHING OPTION: - BASE PLY: SBS Modified Fiberglass Reinforced Base Flashing Ply w/ Tensile Strength of 215 lbf/in tensile (ASTM D 5147); TOP PLY: ASTM D 6162 SBS Fiberglass/Polyester Reinforced Modified Bituminous Sheet Material Type III - 600 lbf/in tensile	\$ 16.34	1,800	SF	\$ 29,412

20.999	NEW FLASHINGS FOR ROOFING SYSTEMS & RESTORATION OPTIONS: ROOF FLASHINGS FOR MODIFIED & COAL TAR PITCH ROOF SYSTEMS: Minimum 1 Ply of Base Flashing and Mineral Cap Sheet Installed in Hot ASTM D 312 Type III or IV Asphalt: - PER SQUARE FOOT COSTS - INSTALLING IN COLD PROCESS FLASHING ADHESIVE Substitute Hot Asphalt Application for Cold Process Flashing Adhesive Application of Flashings	\$ 6.49	1,800	SF	\$ 11,682
	Metal Stretch-Out: 18" .040 Aluminum Coping Cap with Six (6) Bends	\$ 11.09	400	LF	\$ 4,436
	Metal Stretch-Out: 6" .040 Aluminum Drip Edge with Three (3) Bends	\$ 6.88	1,500	LF	\$ 10,320
	Metal Stretch-Out: 6" .040 Aluminum Counter Flashing with Four (4) Bends	\$ 7.38	600	LF	\$ 4,428
	Community Center - KEE Roof Section				
2.12	Tear-off & Dispose of Debris: SYSTEM TYPE Single-Ply W/ Insulation - Wood / Tectum Deck	\$ 1.45	7,900	SF	\$ 11,455
17.12.01	FULLY ADHERED SINGLE-PLY ROOF SYSTEMS: WOOD/TECTUM DECK - SINGLE-PLY APPLICATION: INSULATION OPTION: - WOOD DECK: Mechanically Fasten Polyisocyanurate / Adhere Treated 1/2" Gypsum Insulation Board with Glass-Mat (e.g. DensDeck / Securock / Equal) with Insulation Adhesive to Provide an Average R-Value of 20	\$ 3.98	7,900	SF	\$ 31,442
17.21.11	FULLY ADHERED SINGLE-PLY ROOF SYSTEMS: ROOF CONFIGURATION: Fully Adhered Single-Ply Roof System Installed Over Prepared Surface or Insulation: SINGLE-PLY ROOF TYPE: - ASTM D 6754 - Ketone Ethylene Ester (KEE) - 60 Mil Thickness	\$ 6.99	7,900	SF	\$ 55,221
	Community Center - Clay Tile Roof Section				
16.31	INSTALLATION OF SHAKE, TILE, OR SHINGLE ROOF SYSTEMS: INSTALL NEW BARREL CLAY/CEMENT TILE ROOF SYSTEM - New Barrel Clay/Cement Tile Roof System with Base Sheet as an Underlayment; Install Self-Adhering Underlayment on All Eaves, Peaks & Valleys	\$ 16.54	1,082	SF	\$ 17,896
	Community Center - Vertical Coating (Building Exterior)				

19.11	WALL COATINGS FOR COATING WALL SYSTEMS: ELASTOMERIC COATING FOR STUCCO WALL SYSTEM - Base Coat of Coating @ 1 Gallon per Sq. / Top Coat @ 1 Gallon per Sq. Applied as Specified	\$ 3.81	31,536	SF	\$ 120,121
	City Hall - Torch Applied Roof Section				
2.13	Tear-off & Dispose of Debris: SYSTEM TYPE Single-Ply W/ Insulation - Lightweight / Gyp Deck	\$ 1.45	9,758	SF	\$ 14,149
	Install One (1) Ply of HPR Tri-Base Premium	\$ 1.07	9,758	SF	\$ 10,441
12.13.02	2-PLY ROOF SYSTEMS - COMBINATIONS OF A BASE PLY & A CAP SHEET (TOP PLY) PLEASE NOTE: BASE PLY & CAP SHEET COMBINATIONS MUST BE APPROVED BY THE MANUFACTURER: ROOF CONFIGURATION 1 Ply of Torch Base Sheet Installed with Torch Application: BASE PLY OPTION: - ASTM D 6163 SBS Fiberglass Reinforced Modified Bituminous Sheet Material Type III - 210 lbf/in tensile	\$ 3.37	9,758	SF	\$ 32,884
12.41.01	2-PLY ROOF SYSTEMS - COMBINATIONS OF A BASE PLY & A CAP SHEET (TOP PLY) PLEASE NOTE: BASE PLY & CAP SHEET COMBINATIONS MUST BE APPROVED BY THE MANUFACTURER: ROOF CONFIGURATION 1 Ply of Mineral Surfaced, Torch-Applied Cap Sheet Installed with Torch Application: ROOFING MEMBRANE OPTION: - ASTM D 6162 SBS Fiberglass/Polyester Reinforced Modified Bituminous Sheet Material Type III - Minimum 300 lbf/in tensile Torch-Applied Membrane	\$ 5.78	9,758	SF	\$ 56,401
20.20.01	NEW FLASHINGS FOR ROOFING SYSTEMS & RESTORATION OPTIONS: Torch Applied Flashings - Minimum 1 Ply of Torch Base and Torch Mineral Cap Sheet; Torch Applied: FLASHING OPTION: - BASE PLY: SBS Modified Polyester/Fiberglass Reinforced Base Torch Applied Flashing Ply - 80 lbf/inch tensile (ASTM D 5147); TOP PLY: ASTM D 6162 SBS Fiberglass/Polyester Reinforced Modified Bituminous Sheet Material Type III - 300 lbf/in Tensile Torch Applied Membrane	\$ 17.86	1,000	SF	\$ 17,860
5.31	Coat New Roofing With Elastomeric Coating: ROOF SYSTEM TYPE Apply an Aluminum Coating per Specifications (1 Gallon per Square per Coat - 2 Coats Required) - Smooth or Mineral Surfaced Modified	\$ 1.54	10,758	SF	\$ 16,567
	City Hall - Modified Roof Section				
2.06	Tear-off & Dispose of Debris: SYSTEM TYPE BUR W/ Insulation and Mineral Surfacing - Wood / Tectum Deck	\$ 1.82	1,563	SF	\$ 2,845

3.12	Removal & Replacement of Roof Deck: DECK TYPE Wood Deck	\$ 5.10	100	SF	\$ 510
	Install One (1) Ply of HPR Tri-Base Premium	\$ 1.07	1,563	SF	\$ 1,672
10.11.05	BUILT-UP MODIFIED ROOF WITH MINERAL CAP SHEET ADHERED IN HOT ASTM D 312 TYPE III OR IV ASPHALT: ROOF CONFIGURATION 2 ply of Glass Felt, Mineral Surfaced Cap Sheet, Set in Hot ASTM D 312 Type III or IV Asphalt : ROOFING MEMBRANE OPTION: - ASTM D 6162 SBS Fiberglass/Polyester Reinforced Modified Bituminous Sheet Material Type III - Minimum of 600 lbf/in tensile	\$ 6.77	1,563	SF	\$ 10,582
	Metal Stretch-Out: 18" 16 oz. Copper Coping Cap with Six (6) Bends	\$ 13.04	1,500	LF	\$ 19,560
	Metal Stretch-Out: 6" .040 Aluminum Drip Edge with Three (3) Bends	\$ 7.52	1,500	LF	\$ 11,280
	City Hall - Vertical Coating (Building Exterior)				
19.11	WALL COATINGS FOR COATING WALL SYSTEMS: ELASTOMERIC COATING FOR STUCCO WALL SYSTEM - Base Coat of Coating @ 1 Gallon per Sq. / Top Coat @ 1 Gallon per Sq. Applied as Specified	\$ 3.81	42,070	SF	\$ 160,245
	Miscellaneous Caulking/Sealant				
	1 Component Polyurethane - Joint Size of 3/8" x 5/8"	\$ 3.80	3,072	LF	\$ 11,674
	Sub Total Prior to Multipliers				\$ 886,749
22.11	JOB SITE SPECIFIC MULTIPLIERS APPLIED TO EACH LINE ITEM ON ASSOCIATE JOB: MULTIPLIER - LIMITED / OBSTRUCTED / DIFFICULT ROOF ACCESS Multiplier Applied when Access to the Roof is Limited to Specific Entry Points, Equipment & Materials Cannot be Lifted by Crane on the Roof, or Access is Dependent Upon Road Closure	30%		%	\$ 266,025
22.21	JOB SITE SPECIFIC MULTIPLIERS APPLIED TO EACH LINE ITEM ON ASSOCIATE JOB: MULTIPLIER - ROOF HEIGHT IS GREATER THAN 2 STORIES EQUAL TO OR LESS THAN 5 STORIES Multiplier Applied when the Roof Height Exceeds 2 Stories, but is Equal to or Less than 5 Stories. Situation Creates the Need for Additional Safety Protection and Increased Crane Work.	25%		%	\$ 221,687
	TOTAL:				\$ 1,374,461

BASE BID:

Total Maximum Price of Line Items under the MICPA:	\$ 1,374,461
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Proposal Price Based Upon Market Experience:	\$ 1,205,703
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Competitive Bid Results (Base Bid):

*Certified Roofing Specialists, Inc.	\$ 1,205,703
*PSI Roofing	\$ 1,346,293
Hi-Tech Roofing	Non-Responsive Bidder
Crowther Roofing	Non-Responsive Bidder
Southern Certified, Inc.	Non-Responsive Bidder

*** - Price includes cost to pressure wash all tiles on City Hall Building. The price for each contractor is listed separately below as Alternate #2.**

We have identified the values of the Mechanical, electrical, and lightning protection work. These components total \$128,365.00 which includes all ancillary costs for labor, equipment and materials required to address the roofing components associated with these items.

Scope of Work: Alternate #1

- 1 Replacement of all City Hall Building Tile Roof sections.

Alternate #1:

Proposal Price Based Upon Market Experience:	\$ 349,885
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Competitive Bid Results (Alternate #1):

PSI Roofing	\$ 349,885
Certified Roofing Specialists, Inc.	\$ 602,041
Hi-Tech Roofing	Non-Responsive Bidder
Crowther Roofing	Non-Responsive Bidder
Southern Certified, Inc.	Non-Responsive Bidder

Scope of Work: Alternate #2

- 1 Pressure wash all tiles on the City Hall Buildings (price is also included in the BASE BID).

Alternate #2:

Proposal Price Based Upon Market Experience:	\$ 30,892
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Competitive Bid Results (Alternate #2):

Certified Roofing Specialists, Inc.	\$ 30,892
PSI Roofing	\$ 43,959
Hi-Tech Roofing	Non-Responsive Bidder
Crowther Roofing	Non-Responsive Bidder
Southern Certified, Inc.	Non-Responsive Bidder

Scope of Work: Alternate #3

- 1 Fabricate and install copper eave drip edge on Tile Roof Sections.

Alternate #3:

Proposal Price Based Upon Market Experience:	\$ 9,916
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Competitive Bid Results (Alternate #3):

Certified Roofing Specialists, Inc.	\$ 9,916
PSI Roofing	\$ 18,113
Hi-Tech Roofing	Non-Responsive Bidder
Crowther Roofing	Non-Responsive Bidder
Southern Certified, Inc.	Non-Responsive Bidder

Scope of Work: Alternate #4

- 1 Coat exterior of City Attorney's Building and pressure wash tile roof.

Alternate #4:

Proposal Price Based Upon Market Experience:	\$ 30,356
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Competitive Bid Results (Alternate #4):

Certified Roofing Specialists, Inc.	\$ 30,356
PSI Roofing	\$ 70,229
Hi-Tech Roofing	Non-Responsive Bidder
Crowther Roofing	Non-Responsive Bidder
Southern Certified, Inc.	Non-Responsive Bidder

Competitive Bid Results (BASE BID & ALL ALTERNATES):

PSI Roofing	\$ 1,828,479
Certified Roofing Specialists, Inc.	\$ 1,878,908
Hi-Tech Roofing	Non-Responsive Bidder
Crowther Roofing	Non-Responsive Bidder
Southern Certified, Inc.	Non-Responsive Bidder

Potential issues that could arise during the construction phase of the project will be addressed via unit pricing for additional work beyond the scope of the specifications. This could range anywhere from wet insulation, to the replacement of deteriorated wood nailers. **Proposal pricing valid through 3/31/2017.**

If you have any questions regarding this proposal, please do not hesitate to call me at my number listed below.

Respectfully Submitted,

Matt Egan

Matt Egan
Garland/DBS, Inc.
(216) 430-3662

SECTION 07321 - CLAY ROOF TILES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Clay tile roof

1.2 RELATED SECTIONS

- A. Section Includes:
 - 1. Clay roof tiles.
 - 2. Felt Underlayment.
 - 3. Self-adhering Sheet Underlayment.
- B. Related Sections:
 - 1. Division 6 Section "Rough Carpentry" for wood framing and sheathing.

1.3 DEFINITIONS

- A. Roofing Terminology: Refer to ASTM D 1079, glossaries in RTI/WSRCA's "FRSA/TRI Florida High Wind Tile Installation Manual, Revised 5th Edition, 2014" and NRCA's "The NRCA Roofing and Waterproofing Manual" for definitions of terms related to roofing work in this Section.

1.4 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop drawings and product data: Complete shop drawings; including roof plan and / or elevations and sections of each condition, shall be submitted for approval prior to fabrication. Such drawings shall also include material type, metal thickness, finish, and installation procedures. Indicate material profile, jointing pattern, jointing details, and fastening methods. Submit installation details if any deviation is required from construction document details. Deviations must be approved prior to installation.
- C. Sealed statement by Engineer, licensed in the State of Florida, stating that roofing assembly will conform to Florida Building Code Wind Requirements. Calculations shall show wind pressures, clip spacing, and fastener quantity, size, type, and spacing.
- D. Color Chart showing full range of standard colors for color selection.
- E. Once a color is selected from the color chart, submit an actual sample with the selected color and finish for City's approval.
- F. Samples for Initial Selection: For each type of clay roof tile and accessory tile indicated.
 - 1. Include similar Samples of trim and accessories involving color selection.
- G. Samples for Verification: For the following products, in manufacturer's standard sizes:
 - 1. Clay Roof Tile: Full size.
 - 2. Accessory Tile: Full size, each type.
- H. Material Test Reports: For each type of clay roof tile, including Miami Dade Product Approval for the roofing system.
- I. Maintenance Data: For roofing to include in maintenance manuals.
- J. Manufacturer's comprehensive warranty for the specified period.
- K. Installer's comprehensive warranty for the specified period.

1.5 REFERENCES

- A. Florida Building Code (FBC): Construction shall comply with High Velocity Hurricane Zone Construction as listed in Chapters 15 & 16 - 2010 edition including all updates and revisions.
- B. ASCE 7-10 – 170 mph minimum wind speed, Category III, Exposure C.
- C. National Roofing Contractors Association. Steep-Slope Roofing Materials Guide. Rosemont, IL: NRCA, (Published biennially).
- D. Roof Tile Institute (formerly: National Tile Roofing Manufacturers Association)/Western States Roofing Contractors Association. Gillan, Leland E., and Terry Anderson. Concrete and Clay Tile Roof Design-Build Criteria Manual for Cold and Snow Regions. Eugene, OR/San Mateo, CA: RTI/WSRCA, 1998.
- E. Western States Roofing Contractors Association. WSRCA Roofing Details and Applications. San Mateo, CA: WSRCA, 1998.
- F. FRSA/TRI Florida High Wind Tile Installation Manual, Revised 5th Edition, 2014

1.6 QUALITY ASSURANCE

- A. Source Limitations: Obtain clay roof tiles and accessory tiles from single source from single manufacturer.
- B. Perform Work in accordance with NRCA Roofing and Waterproofing Manual.
- C. Installer's Field Supervision: Maintain a full-time Supervisor/Foreman on job site during all phases of roofing work while roofing work is in progress
- D. Fire-Test-Response Characteristics: Provide clay roof tiles and related roofing materials with the fire-test-response characteristics indicated, as determined by testing identical products per test method indicated below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify materials with appropriate markings of applicable testing and inspecting agency.
 - 1. Exterior Fire-Test Exposure: Class A; UL 790 or ASTM E 108, for application and roof slopes indicated.

1.7 PRE-INSTALLATION MEETINGS

- A. Convene minimum two weeks prior to commencing Work of this section
- B. Review installation procedures and coordination required with related Work.
- C. Inspect and make notes of job conditions prior to installation:Record minutes of the conference and provide copies to all parties present.
 - 1. Record minutes of the conference and provide copies to all parties present.
 - 2. Identify all outstanding issues in writing designating the responsible party for follow up action and the timetable for completion.
 - 3. Installation of roofing system shall not begin until all outstanding issues are resolved to the satisfaction of the City.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Store underlayment rolls on end, on pallets or other raised surfaces. Do not double stack rolls.

1. Handle, store, and place roofing materials in a manner to avoid significant or permanent damage to roof deck or structural supporting members.
- B. Protect unused underlayment from weather, sunlight, and moisture when left overnight or when roofing work is not in progress.
- C. Avoid stopiling of materials on roofs without first obtaining acceptance from the City.

1.9 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing to be performed according to manufacturer's written instructions and warranty requirements.
 1. Install self-adhering sheet underlayment within the range of ambient and substrate temperatures recommended by manufacturer.

1.10 WARRANTY

- A. Special Warranty: Standard form in which manufacturer agrees to repair or replace clay roof tiles that fail in materials within specified warranty period.
 1. Manufacturer is to guarantee materials for a period indicated following final acceptance of Work.
 - a. 30 years from date of acceptance
- B.
 1. Installer is to guarantee all work against defects in materials and workmanship for a period indicated following the final acceptance of Work.
 - a. 5 years from date of acceptance.

1.11 EXTRA MATERIALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 1. Clay Roof Tiles: 100 sq. ft. of each type, in unbroken bundles.

PART 2 - PRODUCTS

2.1 CLAY ROOF TILES

- A. Clay Roof Tiles: ASTM C 1167, molded- or extruded-clay roof tile units of shape and configuration indicated, kiln fired to vitrification, and free of surface imperfections. Provide with fastening holes prepunched at factory before firing.
 1. Basis-of-Design Product: Subject to compliance with requirements, provide product indicated on Drawings or comparable product by one of the following:
 - a. Clay Forever, LLC.
 - b. Claymex Brick and Tile, Inc.
 - c. Deleo Clay Tile.
 - d. D'Hanis Brick & Tile Company.
 - e. Gladding, McBean; a division of PABCO Building Products, LLC.
 - f. International Roofing Products, Inc.
 - g. Ludowici Roof Tile.
 - h. M.C.A. (Maruhachi Ceramics of America, Inc.).
 - i. US Tile.

- j. Zion Tile Corporation.
- 2. Durability: Grade 1.
- 3. High-Profile Shape: Match Existing Barrel Tile Shape
- 4. Size: Match Existing.
- 5. Finish and Texture: Match Existing.
- 6. Color: Match Existing.
- 7. High-Profile-Shape Accessory Tiles: Provide all required units, in color matching clay roof tiles and existing conditions.

2.2 ACCESSORIES

- A. Asphalt Roofing Cement: ASTM D 4586, Type II, asbestos free.
- B. Butyl Sealant: ASTM C 1311, single-component, solvent-release butyl rubber sealant; polyisobutylene plasticized; heavy bodied.
- C. Roofing Asphalt: ASTM D 312, Type IV.
- D. Foam Adhesive: Two-component, polyurethane expanding adhesive recommended for application by clay roof tile manufacturer.
- E. Eave Closure: Manufacturer's standard copper eave closure formed to shape of clay roof tile.
- F. Wood Nailers: Comply with requirements for pressure-preservative-treated wood in Division 6 Section "Rough Carpentry"
- G. Ridge and Hip Anchor: Designed to mechanically fasten the Ridge / Hip Cap on tile roof systems, with Florida HVHZ Product Approval with adhesive and mechanical installation. Installation shall comply with RAS 118, RAS 119, or RAS 120.

2.3 FASTENERS

- A. Roofing Nails: ASTM F 1667, stainless-steel, 0.1055-inch diameter shank, sharp-pointed, conventional roofing nails with barbed shanks; minimum 3/8-inch- diameter head; of sufficient length to penetrate 3/4 inch into roof-deck sheathing.
 - 1. Where nails are in contact with metal flashing, use nails made from same metal as flashing.
- B. Felt Underlayment Nails: stainless-steel, wire with low-profile capped heads or disc caps, 1-inch minimum diameter.
- C. Wood Batten Nails: ASTM F 1667; common or box, steel wire, flat head, and smooth shank.
- D. Wire Ties: Copper, 0.083-inch minimum diameter.

2.4 UNDERLAYMENT MATERIALS

- A. Felt Underlayment: ASTM D 226, Type II, asphalt-saturated organic felt, unperforated.
 - 1. Acceptable Manufacturers:
 - a. Commercial Innovations: Viking AOB
- B. Self-Adhering, High-Temperature Sheet: Minimum 60 mils thick, consisting of slip-resisting polyethylene-film top surface laminated to layer of butyl or SBS-modified asphalt adhesive, with release-paper backing; cold applied. Provide primer when recommended by underlayment manufacturer.
 - 1. Thermal Stability: ASTM D 1970; stable after testing at 240 deg F.
 - 2. TAS 103
 - 3. Low-Temperature Flexibility: ASTM D 1970; passes after testing at minus 20 deg F.
 - 4. Acceptable Manufacturers:
 - a. Commercial Innovations: Viking UDL Metal SA

2.5 METAL FLASHING AND TRIM

- A. General: Comply with requirements in Division 7 Section "Sheet Metal Flashing and Trim."
 - 1. Sheet Metal: 26 gauge Galvanized Sheet steel/copper where visible to the public.
- B. Fabricate sheet metal flashing and trim to comply with recommendations that apply to design, dimensions, metal, and other characteristics of the item in SMACNA's "Architectural Sheet Metal Manual."
- C. Vent-Pipe Flashings:
 - 1. Install $\frac{3}{4}$ " to 6" 4 lb. Flexible Lead Pipe Flashing with 12" riser, 12" x 12" seamless base, and lead vent pipe counter flashing. Base pipe flashings specifically designed for tile roof applications.
 - 2. Install vent-pipe flashing over base sheet with continuous mastic between the flashing flange and the base sheet. Install waterproofing membrane over the flashing base.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
 - 1. Examine roof sheathing to verify that sheathing joints are supported by framing and blocking or metal clips and that installation is within flatness tolerances.
 - 2. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and completely anchored and that provision has been made for flashings and penetrations through roofing.
- B. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 UNDERLAYMENT INSTALLATION

- A. General: Comply with clay roof tile manufacturer's written instructions and recommendations in NRCA's "The NRCA Roofing and Waterproofing Manual."
- B. Single-Layer Felt Underlayment: Install on roof deck parallel with and starting at the eaves. Lap sides a minimum of 2 inches over underlying course. Lap ends a minimum of 4 inches. Stagger end laps between succeeding courses at least 72 inches. Fasten with roofing nails.
- C. Self-Adhering Sheet Underlayment: Install wrinkle free; comply with low-temperature installation restrictions of underlayment manufacturer if applicable. Install over the entire roof, lapped in direction to shed water. Lap sides not less than 3-1/2 inches. Lap ends not less than 6 inches, staggered 24 inches between succeeding courses. Roll laps with roller. Cover underlayment within seven days.
 - 1. Prime concrete and masonry surfaces to receive self-adhering sheet underlayment.
 - 2. Extend self-adhering sheet underlayment over entire roof deck.
- D. Metal-Flashed, Open-Valley Underlayment: Install two layers of 36-inch- wide Self-Adhering Sheet underlayment centered in valley. Stagger end laps between layers at least 72 inches. Lap ends of each layer at least 12 inches in direction to shed water, and seal with asphalt roofing cement.

3.3 METAL FLASHING INSTALLATION

- A. General: Install metal flashings and other sheet metal to comply with requirements in Division 7 Section "Sheet Metal Flashing and Trim."
 - 1. Install metal flashings according to clay roof tile manufacturer's written instructions and recommendations in NRCA's "The NRCA Roofing and Waterproofing Manual."
 - 2. Install per NOA.
 - 3. Apron Flashings: Extend lower flange over and beyond each side of downslope tile roofing and up the vertical surface.
 - 4. Step Flashings: Install with 3-inch headlap extending over the underlying tile and up the vertical surface. Install with lower edge of flashing just upslope of, and concealed by, butt of overlying tile. Fasten to roof deck only.
 - 5. Cricket Flashings: Install against roof-penetrating elements, extending concealed flange beneath upslope tile roofing and beyond each side.
 - 6. Open-Valley Flashings: Install centrally in valleys, lapping ends at least 8 inches in direction to shed water. Fasten upper end of each length to roof deck beneath overlap.
 - 7. Secure hemmed flange edges into continuous metal cleats and fastened to roof deck.
 - 8. Adhere 36" wide strips of self-adhering sheet to metal flanges and to self-adhering sheet underlayment.
 - 9. Channel Flashings: Install over underlayment and fasten to roof deck.
 - 10. Rake Pan Flashings: Install over underlayment and fasten to roof deck. Install continuous cleats at ridge, rake, and eave conditions.
 - 11. Rake Drip Edges: Install over underlayment and fasten to roof deck. Install continuous cleats at ridge, rake, and eave conditions.
 - 12. Eave Drip Edges: Install beneath underlayment and fasten to roof deck. Install continuous cleats at ridge, rake, and eave conditions.
 - 13. Pipe Flashings: Form flashing around pipe penetrations and tile roofing. Fasten and seal to tile roofing.
 - 14. Ridge and Hip Anchor: HVHZ installation shall comply with RAS 118, RAS 119, or RAS 120.

3.4 WOOD NAILERS AND BATTENS

- A. Install wood nailers at ridges, hips, and rakes and securely fasten to roof deck.
- B. Install beveled wood cant at eaves and securely fasten to roof deck.
- C. Install per NOA.

3.5 CLAY ROOF TILE INSTALLATION

- A. General: Install clay roof tiles according to manufacturer's written instructions, to recommendations in FRSA/TRI Florida High Wind Tile Installation Manual, Revised 5th Edition, 2014 and to NRCA's "The NRCA Roofing and Waterproofing Manual."
 - 1. Maintain uniform exposure and coursing of clay roof tiles throughout roof.
 - 2. Extend tiles 2 inches over eave fascia.
 - 3. Install to comply with NOA.

3.6 ADJUSTING AND CLEANING

- A. Remove and replace damaged or broken clay roof tiles.
- B. Remove excess clay roof tiles and debris from Project site.

END OF SECTION 07321

SECTION 09800 – VERTICAL COATING SPECIFICATION

PART 1 — GENERAL

1.1 SUMMARY

A. Scope

This shall be the specification used for City of Delray Beach City Hall.

1.3 SUBMITTALS

- A.** Product Data: Submit manufacturer's standard submittal package including specification, installation instructions, and general information for each waterproofing material.
- B.** Applicator Qualifications: Submit a current qualified applicator certificate from the specified waterproofing manufacturer.
- C.** Color swatch of available colors shall be submitted to the city for color approval. A 4'x4' swatch of selected colors is to be painted on the side of the building for color approval.

1.4 QUALIFICATIONS

- A.** Primary coating materials shall be products from a single manufacturer. The primary manufacturer shall recommend any secondary materials. Manufacturer shall have a minimum of 10 years experience in the manufacture of materials of this type.
- B.** Applicators shall have a minimum of 5 years experience in the application of damp proofing materials of the type specified. Applicator shall be an authorized applicator from the specified damp proofing manufacturer.
- C.** Pre Bid Job Walk: There is to be a mandatory pre bid job walk. Anyone not attending the pre bid job walk will not be allowed to bid the project. All products considered an equal to the specified product or any changes in the work of installation or specifications must be presented at the pre bid job walk. If a change in the specification is accepted, it will be considered as an alternate and will be presented as a bid amendment issued 5 working days prior to the bid opening. No other changes to the specification or bid documents will be accepted.

Pre-Installation Conference: Just prior to commencement of the vertical coating system, meet at the site with a representative of the coating manufacturer. The vertical coating contractor, the general contractor and other parties affected by this section. Review methods and procedures, substrate conditions, scheduling and safety.

1.5 DELIVERY, STORAGE AND HANDLING

- A.** Store all coating materials in the original unopened containers between 50° - 80°F (10°- 26°C) until ready for use.

- B.** Follow the special handling or storage requirements of the manufacturer for cold weather, hot weather, etc.
- C.** Safety: Refer to all applicable data, including but not limited to, MSDS sheets, PDS sheets, product labels, and specific instructions for specific personal protection requirements.
- D.** Ventilation: Provide adequate ventilation to prevent the accumulation of hazardous fumes during application.
- E.** Environmental requirements: Proceed with work of this section only when existing and forecasted weather conditions will permit the application to be performed in accordance with the manufacturer's recommendations.

1.6 WARRANTY

- A.** The contractor shall guarantee that all work performed will be free from defects in materials and workmanship. Upon notice of defect in writing, the contractor within one year after completion of work shall, at his own expense, make all necessary repairs or replacements of the defective work in question.
- B.** A 7-year, material warranty is available with this system provided it has been installed by a Garland Approved Applicator and is installed according to this specification.

PART 2 — PRODUCTS

2.1 MANUFACTURERS

- A.** The design is based upon coating systems engineered and manufactured by The Garland Company or approved equals:

The Garland Company
3800 East 91st Street
Cleveland, Ohio 44105
Telephone: (800) 762-8225
Website: www.garlandco.com

2.2 MATERIALS

- A.** Acrylic Exterior Latex Satin Paint: CIP KOTE is a 100% acrylic exterior latex satin paint. Formulated to give years of maintenance free service. CIP KOTE has excellent adhesion, color fastness, and mildew, algae, and chalk resistance. For use on masonry, stucco, wood, siding, primed metal, and galvanized metal.

CIP KOTE has the following physical properties:

Pigment by weight: 24.0%

Vehicle by weight: 76.0%

Weight per gallon: 10.45lbs +/-

Total solids by weight: 49.0%

Total vehicle solids by weight: 24.0%

Vehicle: 100% Acrylic

Viscosity: 100-105 KU's

Flashpoint: N/A

VOC (less exempt solvents): 49 g/L; 041lb/gal

- B. Acrylic Latex Clear Masonry Sealer: CIP SEAL is a 100% acrylic latex masonry sealer. CIP SEAL has a high resin content that provides excellent penetration and chalk sealing for superior holdout of subsequent coats of paint. The main function of a sealer is to absorb and bind a deteriorated (chalky & oxidized) paint film and it will condition a porous substrate so that subsequent coatings will have proper long term adhesion.

CIP-SEAL has the following physical properties:

100% Acrylic Latex Solids: 28.0%

Water & Additives: 72.0%

Weight per gallon: 9.22lbs

Total Solids by weight: 29.0%

Vehicle: 100% Acrylic

Viscosity: 50-55 KU's

- C. Acrylic Latex Fresh Masonry Sealer: CIP STUCKO-Sealer is 100% acrylic pigmented new masonry sealer. CIP STUKO-SEALER has a high resin content that provides excellent penetration and priming to sealing unpainted masonry for superior hold-out of subsequent coats of paint. The main function of this alkali resistant sealer is providing a barrier coat that will condition a porous stucco substrate to resistant alkalinity, so that subsequent coatings will have proper long term adhesion and durability.

CIP STUKO-SEALER has the following physical properties:

Pigment by weights: 28%

Vehicle by weight: 72.0%

Weight per Gallon: 11.22lbs

Total Solids by Weight: 46.0%

Vehicle: 100% Acrylic

Viscosity: 95-100 KU's

- D.** Urethane Sealant: Tuff-Stuff single-component polyurethane sealant for joints and cracks in masonry surfaces.
- E.** Cement-based patching compound: Gar-Rock is an all-weather, fast setting, chemical action concrete patching material designed to patch concrete surfaces where quick permanent repairs are desired.
- F.** Epoxy-based patching compound: Fill-Loc is a two-component, VOC compliant, 100% solids epoxy patching product designed to make repairs to small surface imperfections prior to applying a thin coating.
- G.** Epoxy-based primer: Uni-Prime is a water based, two-component, VOC compliant, epoxy primer design to prep general surfaces to be coated.
- H.** Polyester Tape: Dura-Walk Polyester Tape is a fusion bonded fabric polyester designed to be a reinforcement fabric over cracks or joints.
- I.** Misc. Accessories: All items incorporated into this system shall be compatible with and approved by coating manufacturer.

NOTE: Allow additional material for rough or irregular surfaces and up to 5% for material loss during application.

PART 3 — EXECUTION

3.1 EXAMINATION

- A.** Verify that substrate is ready to receive work; surface is clean, dry and free from projections and depressions, loose scale, sand, curing compounds, grease, oil, asphalt, loose coatings need removed and other foreign deposits.
- B.** Do not begin work until concrete substrate has cured 28 days, minimum. Water cured treatment of concrete is preferred. Resin or water based curing compound should not be used. Non-compatible curing agents must be removed prior to application.

- C.** The work shall not be started when temperature is under 50°F (10°C) or when precipitation is imminent.
- D.** Verify that all other work involved with this area, done under other sections, has been completed and accepted by the architect and general contractor prior to starting the waterproofing application.
- E.** Verify that all concrete surface pH level must not be higher than 11 prior to coating.
- F.** Damaged areas of concrete, mortar joints or EFIS should be repaired prior to coating.

3.2 PREPARATION

- A.** Clean substrate to remove any and all surface contaminants. Surfaces to be coated must be cleaned to a sound surface. Refer to your Garland representative for specific preparation techniques
- B.** Mask-off all adjoining areas that are not to receive the elastomeric wall coating.
- C.** Provide a suitable workstation to mix the coating materials.
- D.** Concrete: Special attention should be given to smoothness of surface and freedom from contaminants, including paint or previous coatings. Consult your Garland representative for alternate procedures for coating over existing paint. Such procedures are highly dependent on specific job conditions. Curing compounds if used shall be removed by sandblasting or etching. In the event specifications are not met, the following corrective procedures are recommended.

- 1.** Surface Contaminants: Wipe up grease or oil with a solvent and absorbent material. Disposal of this material should be in accordance with local laws and codes. Wash with solvent-alkaline cleaners diluted one part cleaner and five parts water. Rinse thoroughly with clean water. If evidence of oil film remains as indicated by water "beading," etch surface with 10% solution muriatic acid. Agitate surface with stiff bristle broom; then rinse with clean water.

Remove curing compounds by etching with 10% muriatic acid followed by clean water rinse. Allow to thoroughly dry before applying coating. Grinding or sandblasting can remove heavy deposits of contaminants.

Any residual traces of asphalt stains must be sealed with an epoxy primer to avoid staining of light colored top coats. Apply primer in two coats and allow a minimum of 48 hours cure time.

- E.** Cracks less than 1/16" (1.5 mm) wide shall be sealed after cleaning has been performed using elastomeric urethane sealant. Crack shall be cleared of all loose debris and dirt and widened slightly at the surface to accommodate urethane sealant. Apply urethane sealant by knifing into crack or gunning over crack surface, followed by tooling to match adjacent surface profile, pressing the sealant into the crack cavity to fill completely.

- F.** Cracks 1/16" (1.5 mm) to 1/8" (3.0 mm) wide shall be routed to a 1/4" to 1/2" groove, backer rod shall be installed, groove shall be caulked with urethane sealant. Fill grooves flush with adjacent surfaces.
- G.** Allow sufficient curing time for all sealants to dry-through before proceeding with elastomeric coating application. At least 24 hours are required.
- H.** Defective mortar or stucco areas should be repaired using a cement-based patching compound.
- I.** Tool out existing caulking around all window frames from the frame to wall. Properly clean joint and re-seal with Tuff-Stuff MS.
- J.** Tool out all existing joints around door frames from frame to wall. Properly seal with Tuff-Stuff MS or GreenLock XL depending on joint size. Use Greenlock XL for all joints over 1/4" in width.
- K.** Remove existing weather strip on all windows. Re-Seal with All-Sil Silicone sealant (black) then install all new weather stripping on all windows.
- L.** Wet-seal/Re-Glaze all windows using All-Sil, Silicone sealant.
- M.** All metal railings and fixtures are to be wire brushed or sanded to remove any existing rust spots. Prime with Rust-Go Primer at a rate of .5gal per square and allow to dry before coating.
- N.** Replace or repair damaged or missing concrete decorative band on exterior prior to coating.
- O.** Repair rear building parking lot concrete wall of all cracks and penetrations prior to coating.

3.3 INSTALLATION

- A.** Technical Advice: The installation of this acrylic latex coating system shall be accomplished in the presence of, or with the advice of the manufacturer's technical representative.
- B.** Joint Treatment:
 - 1.** Non-moving Cracks: Stripe coats all non-moving cracks. Fill the crack first with a bead of Tuff-Stuff polyurethane caulking and strike flush. After filling apply CIP KOTE for a distance of 3" (7.62 cm) on each side of the crack 4 mils thick and allow curing.

2. Moving Cracks: Remove all dirt and loose chips of concrete from the crack. Fill with Tuff-Stuff and strike flush with the wall surface. Center 4" wide piece of polyester tape over the crack and stick it firmly and thoroughly to the wall. Stripe coat 8-10 mils of CIP KOTE over the polyester tape and for 3" on each side of the crack.
3. Control Joints: Place a backer material (solvent resistant expanded plastic such as polyethylene or polypropylene) in the joint. The backer material should be oversized so it can be compressed into the joint and flush to the wall surface. Apply a bead of Tuff-Stuff polyurethane caulking or GreenLock Joint Sealant over the backer rod sealing the joint and strike flush with the wall surface.
- C. Acrylic Latex Clear Masonry Sealer: Apply CIP-SEAL at a rate of 250sqft - 450sqft per gallon depending on surface texture and porosity. Allow two hours dry time between coats.
- D. Acrylic Latex Fresh Masonry Sealer: Apply CIP STUKO-SEALER at a rate of 250qft-450sqft per gallon depending on surface texture and porosity.
- E. Acrylic Latex Sating Finish Wall Paint: Apply CIP KOTE at a rate of 250-450sqft per gallon depending on surface texture and porosity. Always apply to full opacity. Minimum of 4 wet mils.

3.4 FIELD QUALITY CONTROL

- A.** The contractor for work under this section shall maintain a quality control program specifically to verify compliance with this specification. A daily log shall be kept to record actions in the field.
- B.** Inspections: Inspections will be performed 3 days per week, by an approved manufacturer's representative, will be required on all projects requiring a warranty.

END OF SECTION



THE GARLAND COMPANY, INC.

HIGH PERFORMANCE ROOFING AND FLOORING SYSTEMS

3800 EAST 91ST STREET • CLEVELAND, OHIO 44105

PHONE: (216) 641-7500 • FAX: (216) 641-0633

NATIONWIDE: 1-800-321-9336

Date: November 13, 2016

To: Contractors

Re: Delray Beach
City Hall/Community Center
Addendum #1

Robert Moses
SE/SW Florida Area Manager
Phone: 305-807-2140
Email: rmoses@garlandind.com

1. Base Bid to Include the Following:
 - a. Community Center, all Flat Roof Sections and entire building exterior.
 - b. City Hall, all Flat Roof Sections and entire building exterior, pressure wash all cement tile roof, repair and replace any broken or missing tiles.
 - c. Exterior of Storage Building and pressure wash all cement tile roof, repair and replace any broken or missing tiles.
 - d. Exterior of IT Building and pressure wash all cement tile roof, repair and replace any broken or missing tiles.
 - e. Exterior of dumpster enclosure at City Hall.
 - f. Exterior of Chiller unit enclosure at City Hall.
 - g. Exterior of City Hall small mechanical building and pressure wash all cement tile roof, repair and replace any broken or missing tiles.
 - h. Pressure washing and repairing of all cement tiles for all roof sections at City Hall is included in the Base Bid, **however please utilize the separate tab on the worksheet to break this item apart from the base bid.**
 - i. **Awarded contractor is to provide pre-construction video.**
2. Provide an alternate to replace all cement tiles for all buildings located at City Hall per specification and details provided.
3. For all windows remove failing weather stripping and seal using AL-Sil silicone sealant, black.
4. Specification for Clay tiles is to be switched to Cement tiles to match existing.
5. For all buildings at City Hall please provide an alternate to use Copper for all edge metal. Base bid is for Garland Aluminium 040 Kynar Copper Penny.
6. City Hall:
 - a. Remove all hurricane screens. Wire brush all hurricane shutters to remove existing rust. Prime with Rust-Go Primer all parts of hurricane

- shutters including tracks per data sheet. Allow to dry and coat with CIP Kote. City is to select final color for top coat of shutters.
- b. Bottom track of hurricane shutters apply Tuff-Stuff MS Sealant and allow to cure prior to CIP KOTE application.
 - c. Contractor is responsible for the removal of all awnings/canopies.
 - d. Cut out and replace any damaged fascia. Replace full 10'. Wood is to be primed 360 degrees prior to installation.
 - e. Repair any damaged concrete on all walkways, ramps, etc.
 - f. Repair or replace any damaged railing systems.
 - g. All railing systems are to be wire brushed, primed with Rust-Go Primer and painted. City is to select color prior to installation of final top coat.
 - h. On all railing systems, grind down hydrolic cement around vertical stands. Apply Perma-joint sealant to properly enclose penetrations at the base of stands.
 - i. All shutters tracking, mounts etc. shall be wire brushed and coated with Rust-Go Primer per data sheet. Allow to dry before applying CIP KOTE. Actual shutters are not to be coated.
 - j. Repair the concrete ramp on the northwest corner of the building and the southwest side of the building.
 - k. Install new wood block/nailer on top of Chiller Enclosure walls and install new R-Mer Edge Coping per detail.
 - l. Remove the entire canopy on the west side of the building. Wire brush or sand any visible rust from the frame. Make any repairs to the frame as needed. Coat with Rust-Go Primer per data sheet and allow to dry. Apply top coat of CIP KOTE in red(city is to select the color prior to application).
7. Community Center:
- a. Roof A-7 is to be replaced with Solar Brite KEE per specification provide.
 - b. Contractors are required to remove "Tennis" sign and re-install when project is completed.
 - c. Contractor is to paint all Lettering Signage on the front of the building.
 - d. Include 500sqft of wood decking replacement in base bid.
 - e. Replace all wood screens around AC units using pressure treated wood. Wood is to be primed 360 degrees before installation.
 - f. Contractor is responsible for all electrical, mechanical and condensation lines on roof surface.
 - g. Windows on the South West side of the building are to be replaced with Impact Resistant windows meeting current code. Total of 8.
 - h. Contractor is to be mindful not to paint hex bolt threads for shutters installation.
 - i. Install new 3" PVC Conduit line with pull string on rubber mounted brackets. Apply cap on both ends to allow easy installation for upcoming events in need of conduit.



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HIGH PERFORMANCE ROOFING AND FLOORING SYSTEMS

3800 EAST 91ST STREET • CLEVELAND, OHIO 44105

PHONE: (216) 641-7500 • FAX: (216) 641-0633

NATIONWIDE: 1-800-321-9336

Date: November 13, 2016

To: Contractors

Re: Delray Beach
City Hall & Community Center
Renovations
Addendum #2

Robert Moses
SE/SW Florida Area Manager
Phone: 305-807-2140
Email: rmoses@garlandind.com

1. Initial engineering provided by Garland. Further engineering or pull test required per Garland Engineering is the responsibility of the Contractor.
2. All permit fees will be handled by the City of Delray Beach.
3. Bond fees will be handled by Garland/DBS Inc.



THE GARLAND COMPANY, INC.

HIGH PERFORMANCE ROOFING AND FLOORING SYSTEMS

3800 EAST 91ST STREET • CLEVELAND, OHIO 44105

PHONE: (216) 641-7500 • FAX: (216) 641-0633

NATIONWIDE: 1-800-321-9336

Date: November 18, 2016

To: Contractors

Re: City of Delray Beach
Community Center & City Hall Renovations
Addendum #3

SE /SW Florida Area Manager
Robert Moses
Phone: 305-807-2140
Email: rmoses@garlandind.com

1. For Community Center Roof Section A-7 please see attached KEE Solar Brite Specification. Mechanically fastened insulation, fully adhered system.
2. Please include a separate price on a new tab on the worksheet to pressure wash the roof, replace all broken or loose tiles, and full exterior paint and repairs for the City Attorneys Office located at 200 N.W. 1st Ave. Delray Beach, FL 33444.
3. Please make sure you include lighting re-certification on both City Hall and The Community Center. This is listed in the specification.