

# 2018

GOLDEN HAMMER AWARD



**CASTROROOFING**  
EMPOWERING BUILDING OWNERS



**TEXAS WOMAN'S**  
UNIVERSITY



**TEXAS WOMAN'S**  
UNIVERSITY

*“Celebrating 117 years of  
excellence in education”*

## *Award Book Content*

**Application – Page 03**

**Client Introduction – Page 05**

**General Information – Page 11**

**Uniqueness – Page 13**

Storm Hawks  
Opm

**Challenges – Page 17**

**Technical Drawings – Page 21**

**Safety Innovation – Page 23**

Drawings  
Fall Protection

**Commendations – Page 25**

Rooftek  
TWC

**Project Photos – Page 27**

## 2018 Golden Hammer Application

- Golden Hammer Award Entry** – **Outstanding Workmanship / Steep-Slope**
- Project Owner** – **TWU Texas Woman's University**  
307 Administration Drive, Denton TX 76201
- Roofing Contractor** – **Castro Roofing of Texas, LLC.**  
4854 Olson Drive, Dallas TX 75227
- Roofing Consultant** – **Roof Technical Services Inc**  
1944 Handley Drive, Fort Worth TX 76112
- Other NTRCA Members Involved** – **GAF Commercial Roofing Systems**  
– **ROOFTECH**
- Commencement / Completion** – **April 2017 through August 2017**
- Project Size** – **54,000,804 SF (multiple roof systems)**
- Project Amount** – **\$1,853,750.59**
- Submitted by** – **Ruben Amesquita**  
Marketing Director



application





**TEXAS WOMAN'S**  
UNIVERSITY

*"Celebrating 117 years of  
excellence in education"*



*Rich Texas History — Texas Woman's University Famous Alumni*



**Carly Patterson**  
*American Gymnast*



**Margo Jones**  
*American Stage Director and Producer*



**Helen Gurley Brown**  
*American Author*



**Millie Hughes-Fulford**  
*American Astronaut*



**Louise Ritter**  
*Olympic Athlete*



**Connie Douglas Reeves**  
*National Cowgirl Museum and Hall of Fame*



## *Overview of Texas Woman's University*

With an enrollment of approximately 15,000 students, Texas Woman's University (TWU) is the nation's largest university primarily for women. Texas Woman's offers degree programs in the liberal arts, nursing, health sciences, the sciences, business and education. Its campuses in Denton, Dallas and Houston are joined by an e-learning campus offering innovative online degree programs in business, education and general studies.

TWU serves the citizens of Texas in many ways. TWU graduates more new health care professionals than any other university in Texas. This high number of graduates greatly eases the teacher shortage by placing highly qualified professionals in the classroom.

TWU offers liberal arts-based curriculums that prepares students for success in a global society. It is one of the leading universities conducting research on prevention and treatment of childhood obesity, osteoporosis, stroke and diabetes.



client introduction



### **Carly Patterson**

#### **American Gymnast**

Carly Patterson Caldwell was born February 4, 1988 and is a former American artistic gymnast. She was the all-around champion at the 2004 Olympics, the first all-around champion for the United States at a non-boycotted Olympics.

Carly is a member of the USA Gymnastics Hall of Fame.



### **Margo Jones**

#### **American Stage Director and Producer**

Margo Jones lived from December 12, 1911 – July 24, 1955 and was an American stage director and producer best known for launching the American regional theater movement and for introducing the theater-in-the-round concept in Dallas, Texas.

She established the first regional professional company when she opened Theatre '47 in Dallas. Of the 85 plays Jones staged during her Dallas career, 57 were new, and one-third of those new plays had a continued life on stage, television and radio.



### **Helen Gurley Brown**

#### **American Author**

Helen Gurley Brown lived from February 18, 1922 – August 13, 2012 and was an American author, publisher, and businesswoman. In 1965, Gurley took over as editor-in-chief of Cosmopolitan magazine and was in that position until 1997.

She was the editor-in-chief of Cosmopolitan magazine for 32 years. Brown revamped the magazine by taking it from a women's magazine written by men, to one of the most widely sold women's magazines, now available in more than 100 countries.





### **Millie Hughes-Fulford**

#### **American Astronaut**

Millie Elizabeth Hughes-Fulford was born December 21, 1945 and is an American medical investigator, molecular biologist and former NASA astronaut who flew aboard a NASA Space Shuttle mission as a Payload Specialist.

She is a member of the American Association for the Advancement of Science, American Society for Gravitational Science and Biology, American Society for Bone and Mineral Research, American Society for Cell Biology and the Association of Space Explorers.



### **Louise Ritter**

#### **Olympic Athlete**

Louise Dorothy Ritter was born February 18, 1958 in Dallas, Texas. Louise qualified for the 1980 U.S. Olympic team but was unable to compete due to the 1980 boycott. She won gold in 1988 Summer Olympics held in Seoul, South Korea. In doing so she upset Ste-fka Kostadinova, the reigning world champion and world record-holder in the high-jump event.

She graduated from Texas Woman's University in 1988 where she starred for U.S. Olympic coach Dr. Bert Lyle. She was inducted into the Texas Track and Field Coaches Hall of Fame, Class of 2012.



### **Connie Douglas Reeves**

#### **National Cowgirl Museum and Hall of Fame**

Connie Douglas Reeves lived from September 26, 1901 – August 17, 2003 and was believed to be America's oldest cowgirl. She was the oldest member of the National Cowgirl Museum and Hall of Fame, and one of the first women to study law at a Texas law school. In 1998, the National Cowboy and Western Heritage Museum awarded Reeves the Chester A. Reynolds Memorial Award for her contributions to the Western way of life. She was one of only two women to have earned the award; the other being Mollie Taylor Stevenson Jr., founder of the American Cowboy Museum.









## *TWU Blagg Huey Library Roof Project*

Located close to the center of the TWU Denton campus on Administration Drive, the Blagg-Huey library was originally built in 1986 and endeavors to present opportunities to facilitate an array of information to assist both students and staff.

The library assists both students and researchers worldwide. With the use of "The Gateway to Women's History" the Blagg-Huey library provides online source materials from the University's Women's Collection of irreplaceable treasures and historical documents.

In addition, the digital image collection includes materials from the official archives of the Women's Airforce Pilots (WASPS) of World War II and more than 500 Denton County historical collection items dating back to the 1920s.

The Library also houses a cookbook collection considered one of the five largest culinary collections in the United States.



client introduction







## General Information

### Roof System Types:

- Modified Bitumen Roof System – 4,789 SF over four different wings

#### Roof Assembly:

- Metal Deck
- Base Layer Iso – Loose Laid
- Tapered Iso – Loose Laid
- Securock Recovery Board – Mechanically Attached
- Duraweld 4S APP Base Sheet
- Duraweld 4MFR APP Cap Sheet

- Composition Shingle Roof System – 44,735 SF on 9/12 roof pitch

#### Roof Assembly:

- Over existing Nail-base Insulation – Synthetic Underlayment mechanically attached
- GAF Camelot lifetime design shingles mechanically attached

- Copper Standing Seam @ Below Copula and Two Half Round Roofs areas – 3,480 SF

#### Roof Assembly:

- Wood Deck (Note: Metal deck below)
- 75 mil Tamko Metal and Tile underlayment
- Double lock Copper Standing Seam Roof System

- Interlocking Copper Shingles @ Copula – 1,800 SF (Note: Metal deck below):

#### Roof Assembly:

- Wood Deck
- 75 mil Tamko Metal and Tile underlayment
- Copper interlocking shingle

- Interlocking Copper Round Dormer Shingles @ 14 Dormers – 1,500 SF (Note: Metal deck below):

#### Roof Assembly:

- Wood Deck
- 75 mil Tamko Metal and Tile underlayment
- Radiused Interlocking Copper Shingles – Soldered

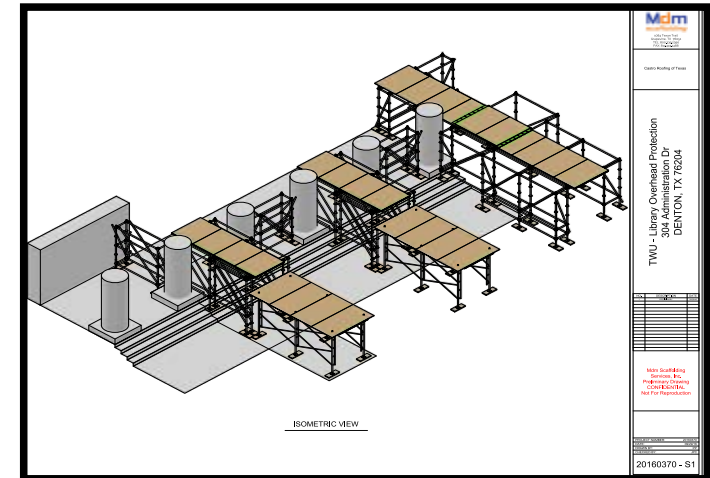
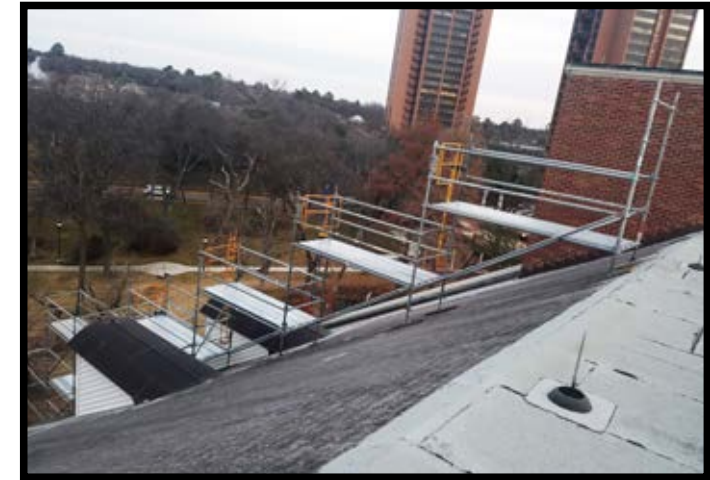
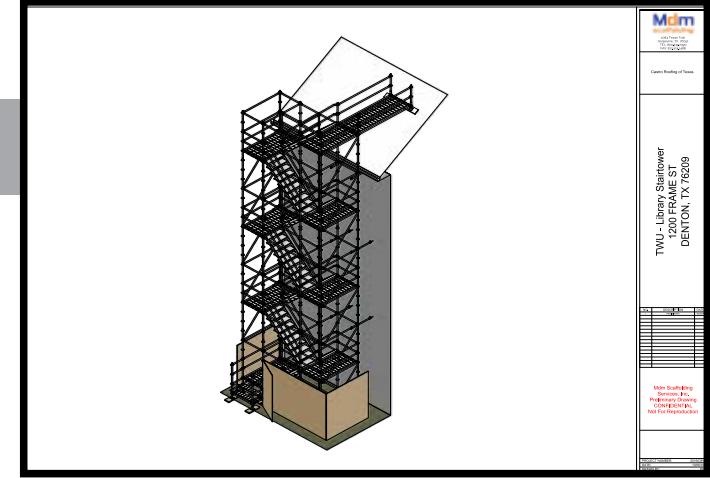


#### Other Interesting Facts:

- Provided and Installed professionally designed fall protection system
- Removed and reinstalled lightning protection
- Enclosed entire project with fencing and added access points as needed
- Provided a scaffolding system to access both shingle roof and modified bitumen roof systems
- Overhead protection was added at multiple locations
- Special scaffolding was added around elevated center copula
- Remove and dispose of 44,735 SF of asbestos containing concrete tile shingles
- Water-proof masonry at eight chimney locations

general information





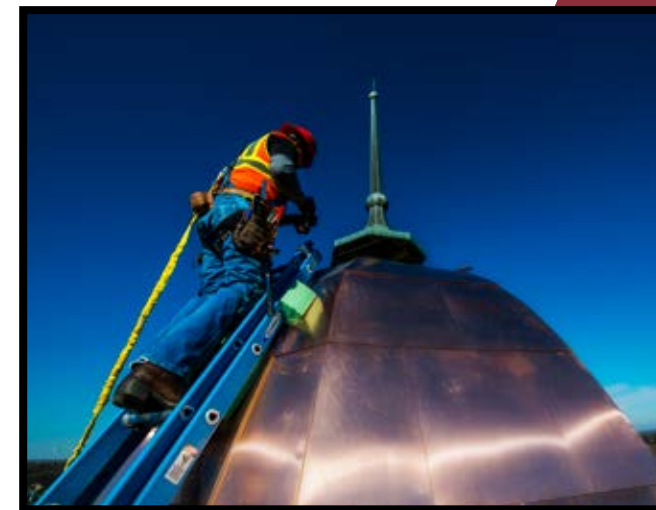
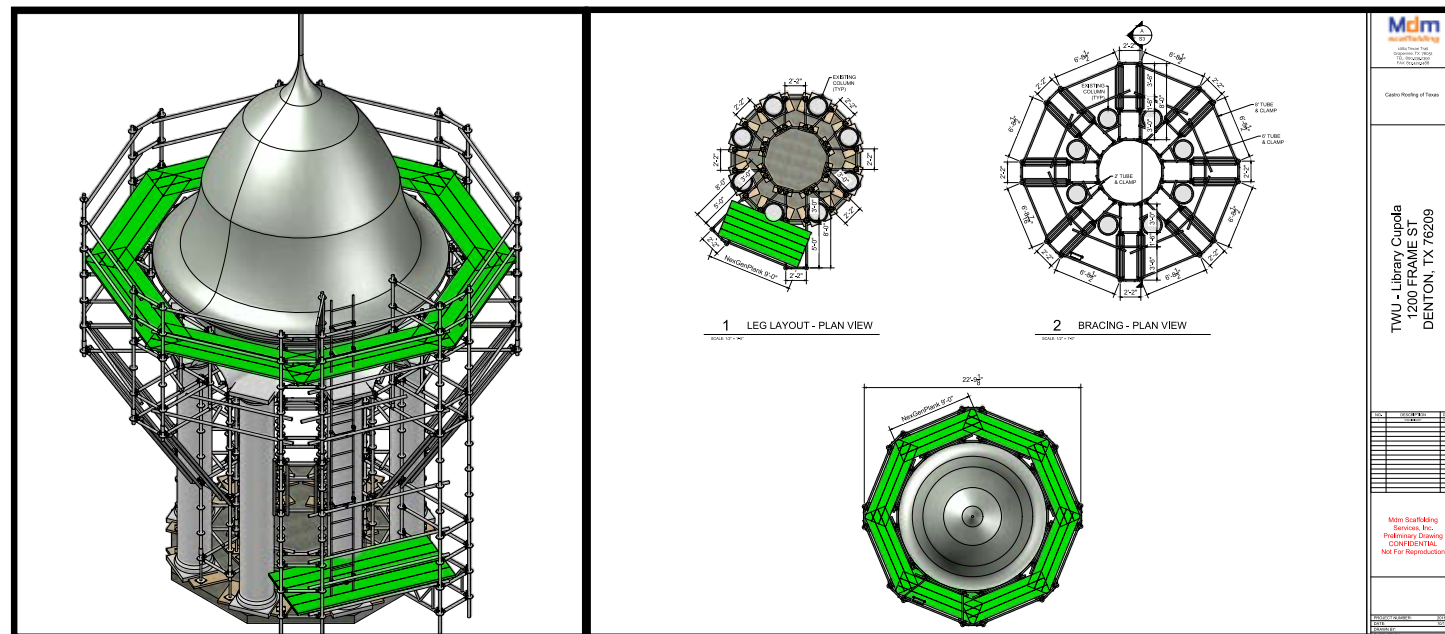


# Uniqueness

## Roof System Types:

The TWU Blagg-Huey Library had multiple unique characteristics most of which was the center piece of the entire building - an unreachable copper clad copula. Therefore, a scaffolding system was erected to encompass the entire copula to allow the workers to safely have access to the area. The old copper shingles were removed and new custom-sized copper interlocking shingles were installed. The copula surface was not "flat/even-planed" but rather "radiused," thereby adding an even greater level of difficulty.

There were also three other copper covering styles installed depending on the location and particular attributes needed for waterproofing and aesthetic considerations. The stair scaffolding was also unique. Access via the stair scaffolding was not only to reach the roof level's edge at the composition roof but also to go up the composition roof's steep incline to the flat modified bitumen roof at its apex. In addition, the front main entrance had multiple pedestrian overhead protection scaffolds erected to allow pedestrian traffic during library operations.



uniqueness







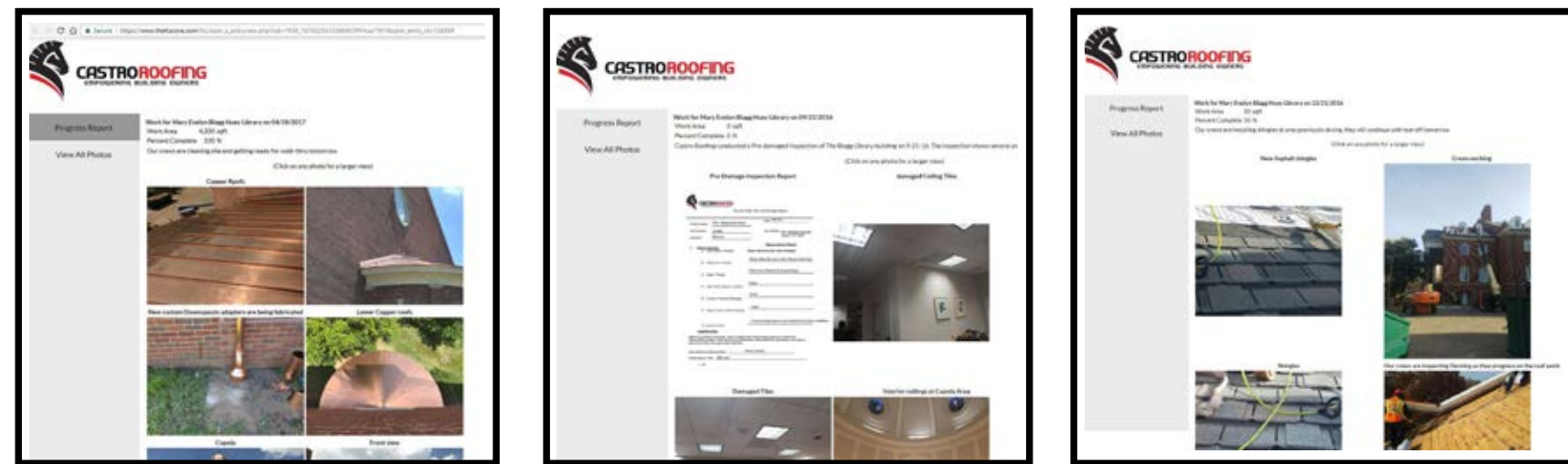
## Uniqueness (continued)

### Storm Hawks - Castro Roofing's Commercial Special Storm Division

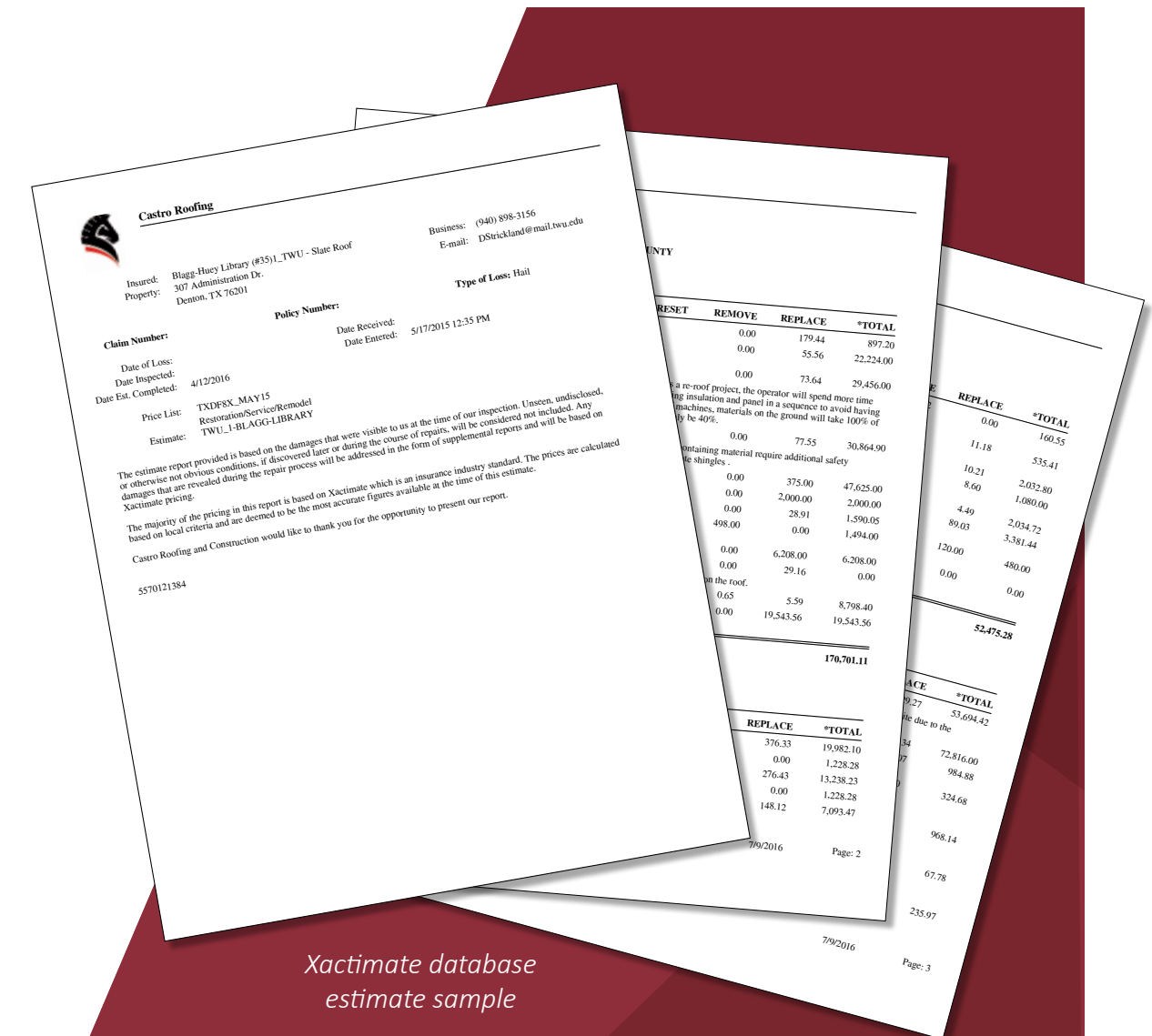
At Castro Roofing, we've perfected the art of damage detection and repair. For the TWU Blagg Huey Library project, the insurance company offered \$600,000.00 to repair hail damage. After Storm-Hawks were contacted to perform forensic analysis by TWU, additional storm damage was documented and provided as proof. TWU used the information to obtain over \$1,800,000.00.

### Online Project Management (OPM)

Castro Roofing's OPM system provided online, weekly updates regarding project schedule and photographic, detailed representations during the entire project cycle. Owner, design professional and owner's representatives were able to view updated, detailed progress reports, 24/7.



OPM system provided online project schedule, percent completion, areas worked and photo documentation of progress



Xactimate database estimate sample

uniqueness





*Modified Bitumen Roof System — 4,789 SF over four different wings*



*Composition Shingle Roof System — 44,735 SF on 9/12 roof pitch*



## Challenges

### The TWU Blagg-Huey Library had multiple roof systems that had to be integrated:

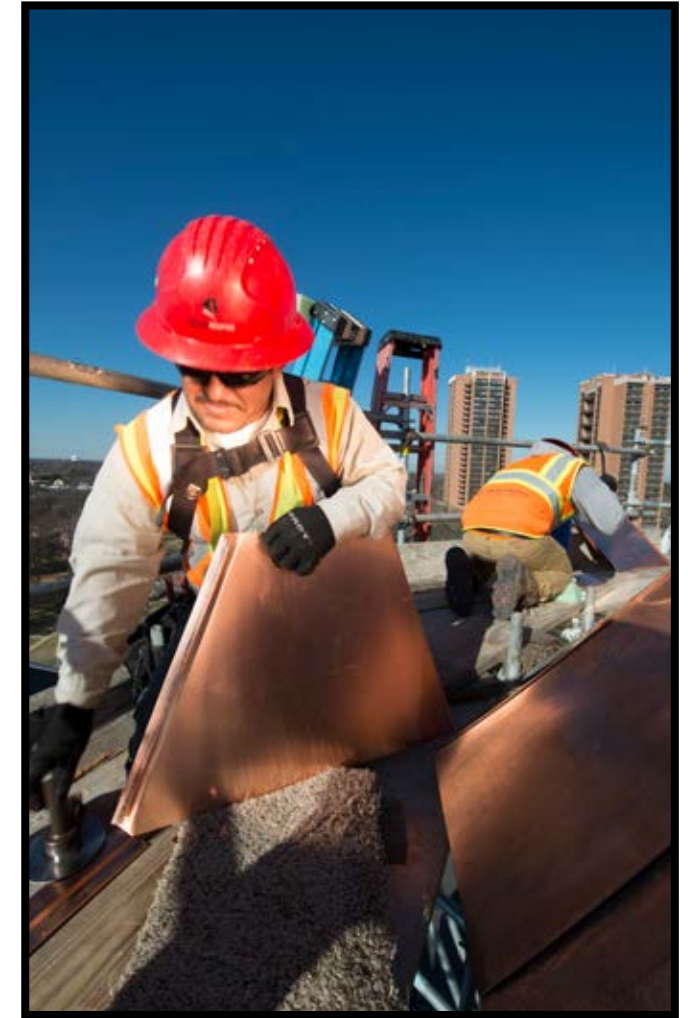
**Composition Shingles** – Existing flat cementitious shingles were removed. The challenge was that all the trash had to be bagged and or deposited into a special lined dumpster. An air monitoring company was contracted to ensure no airborne contaminants were present. If the monitoring revealed contaminants a different removal method would be required. Some of the roof areas could only be reached via telescopic forklift with appropriate baskets. Since, at the perimeter, a custom round copper gutter system was prescribed, several courses of shingles were left uninstalled to allow for undamaged gutter installation and then integrated the missing shingle courses afterwards. The GAF Camelot shingle has a very specific application protocol to ensure proper appearance. These protocols had to be followed for proper alignment particularly difficult on a very steep roof with long runs both vertically and horizontally.

**Modified Bitumen Roof System** – Location of the roofs presented a challenge. These were located on about a nine foot corridor (forming a cross when aerially viewed at four different locations) along the highest point of the composition roofs, spreading out from the center section where the cupola is located. Old roof system had to be removed and safely discarded into dumpsters. Then the new full tapered system and the two ply torched modified bitumen roof system installed.



challenges





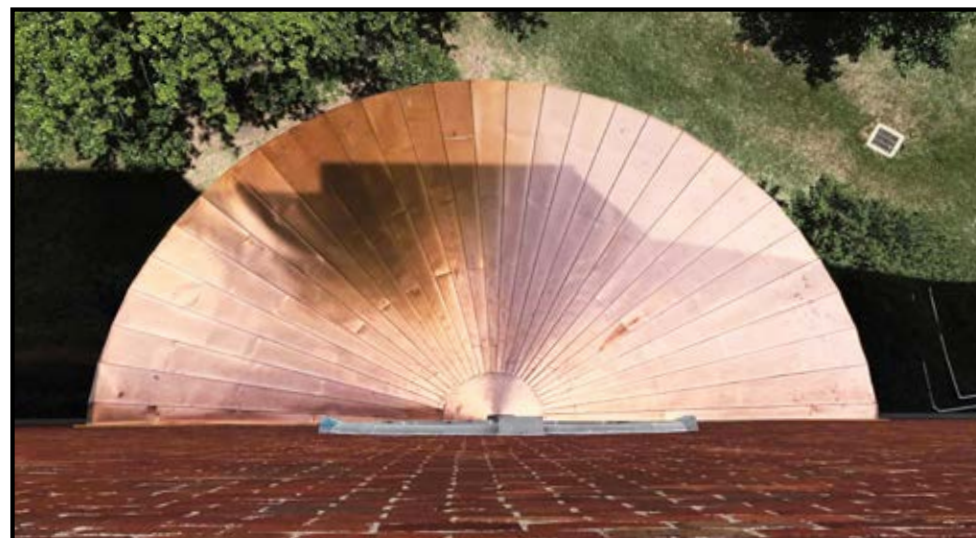


## Challenges (continued)

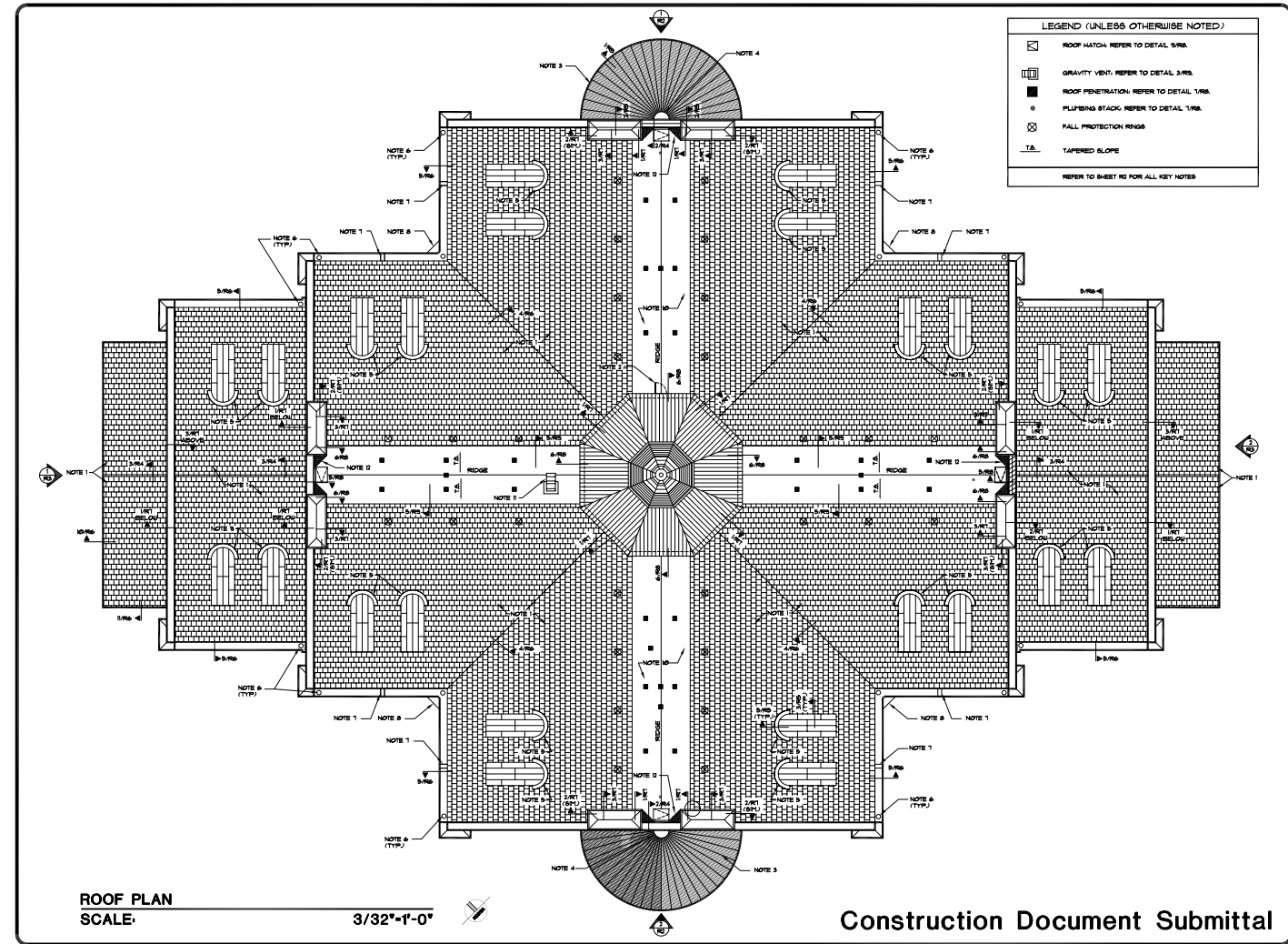
**The TWU Blagg-Huey Library had multiple roof systems that had to be integrated:**

**Copper Copula** - The old copper shingles were removed and new custom-sized copper interlocking shingles were installed. The copula surface was not "flat/even-planed" but rather "radiused," thereby adding an even greater level of difficulty. Note: Copula could only be reached via customized scaffolding.

**Copper Double Lock Standing Seam Roof System** - Two half round standing seam roofs - one at Northeast and one at Southwest side of building. The standing seam panels were tapered to form the radius. With the panels wider at the bottom and thinner at the top. The entire width had to be calculated in order to ensure all panels were basically the same size from left to right. Special care was taken to not bend the copper or unduly mark for aesthetic reasons.



challenges



**CASTOROOFFING**  
CORPORATE BUILDING DIVISION  
**ROOFTECH**

Mary Evelyn Blagg Huey  
Library  
307 Administration Drive  
Denton, TX

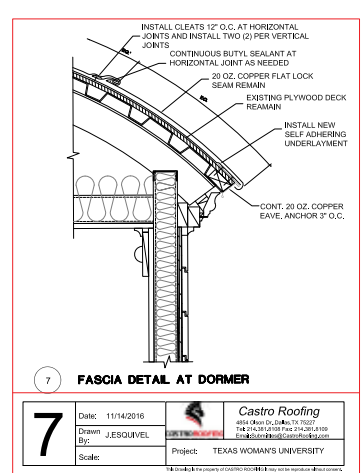
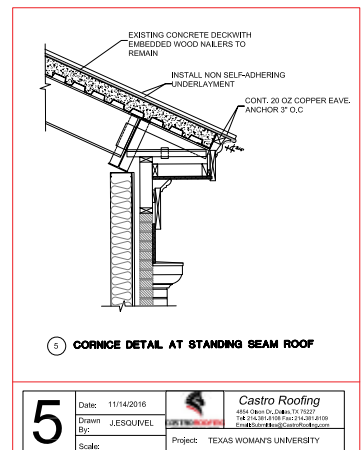
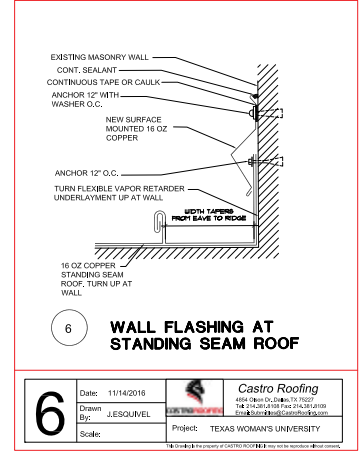
THE SEALING ON THIS DOCUMENT WAS APPROVED BY  
CASTOROOFFING

Checked By: JES  
Project Number: 14-007  
Date: 03/21/2016

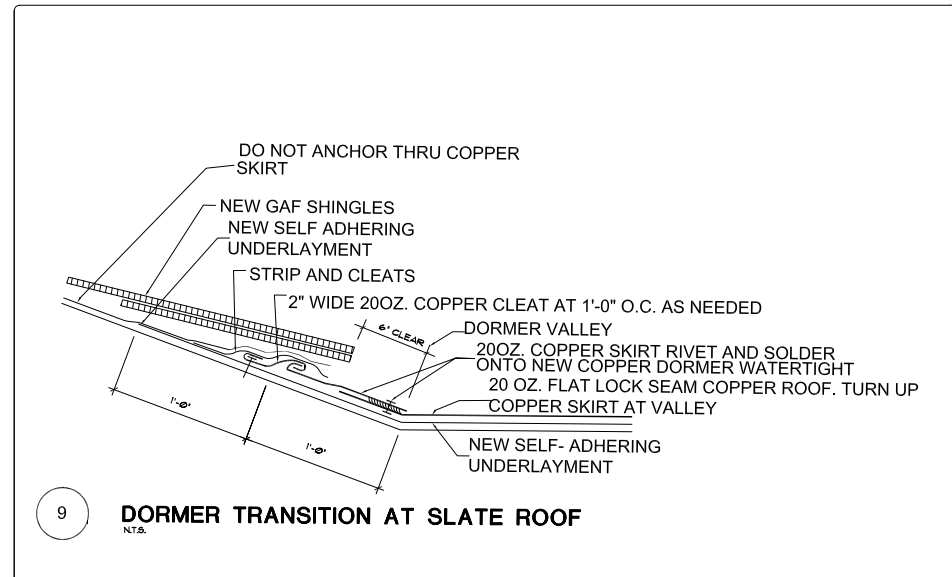
CASTOROOFFING INC.  
4914 North Co. Dr. Suite 111707  
Ft. Worth, TX 76116  
817-335-1111  
www.castoroofting.com

DATE: 11/14/2016  
DRAWN BY: JESOUVEL  
PROJECT: TEXAS WOMAN'S UNIVERSITY

**R1**



# Roof Details

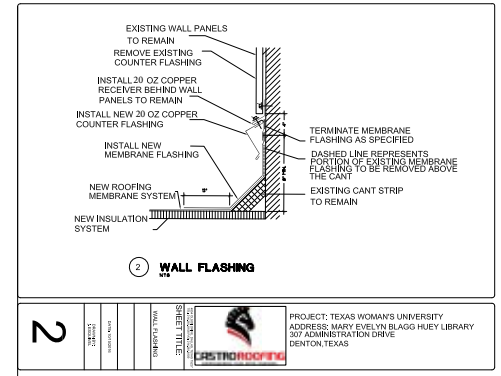
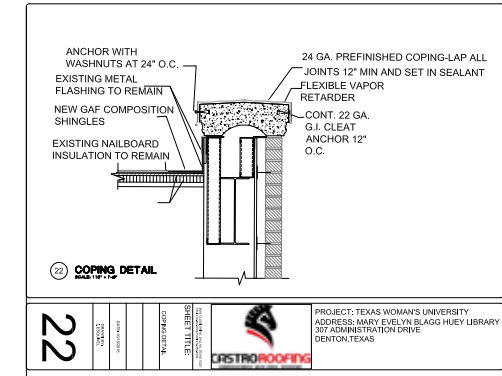
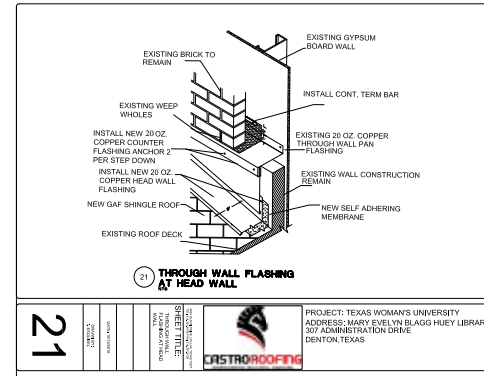
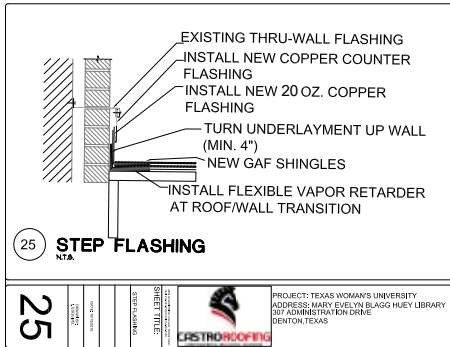
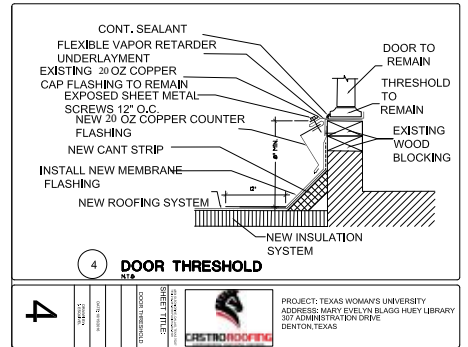


**6**

DATE: 11/14/2016  
DRAWN BY: JESOUVEL  
PROJECT: TEXAS WOMAN'S UNIVERSITY

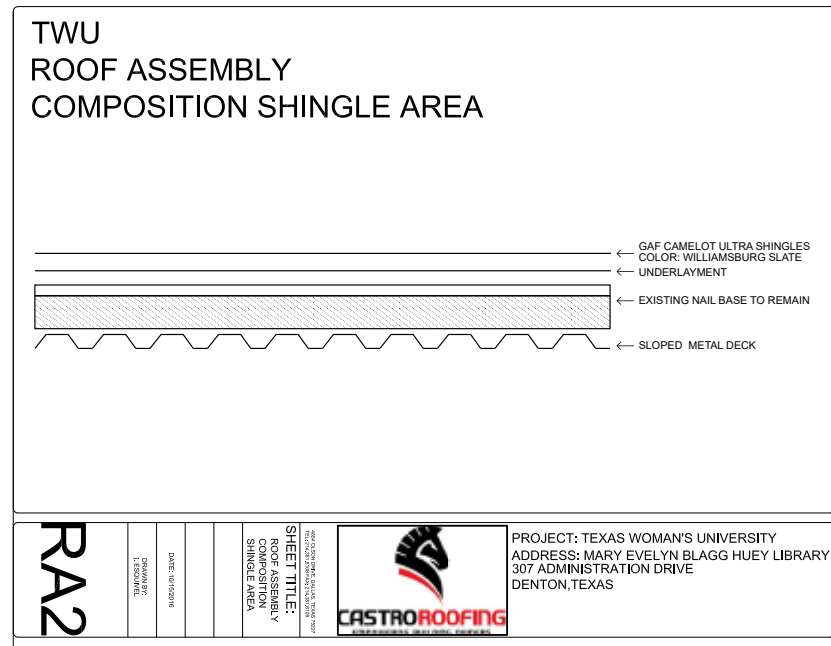
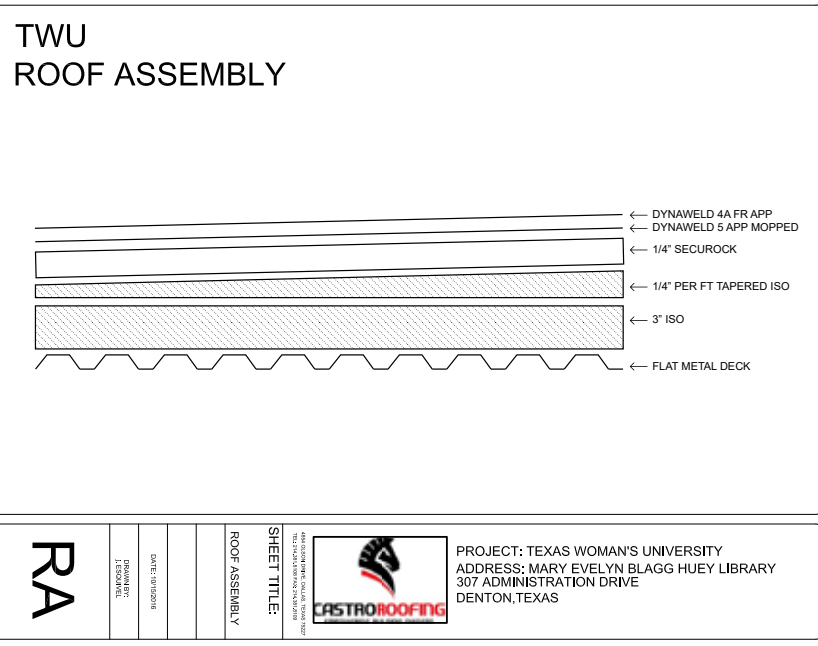
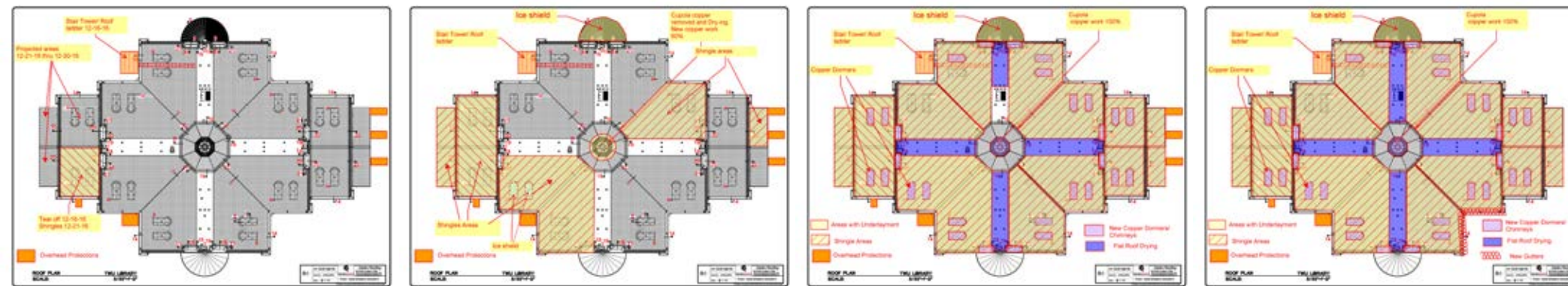
**CASTOROOFFING**

PROJECT: TEXAS WOMAN'S UNIVERSITY  
ADDRESS: MARY EVELYN BLAGG HUEY LIBRARY  
307 ADMINISTRATION DRIVE  
DENTON, TEXAS



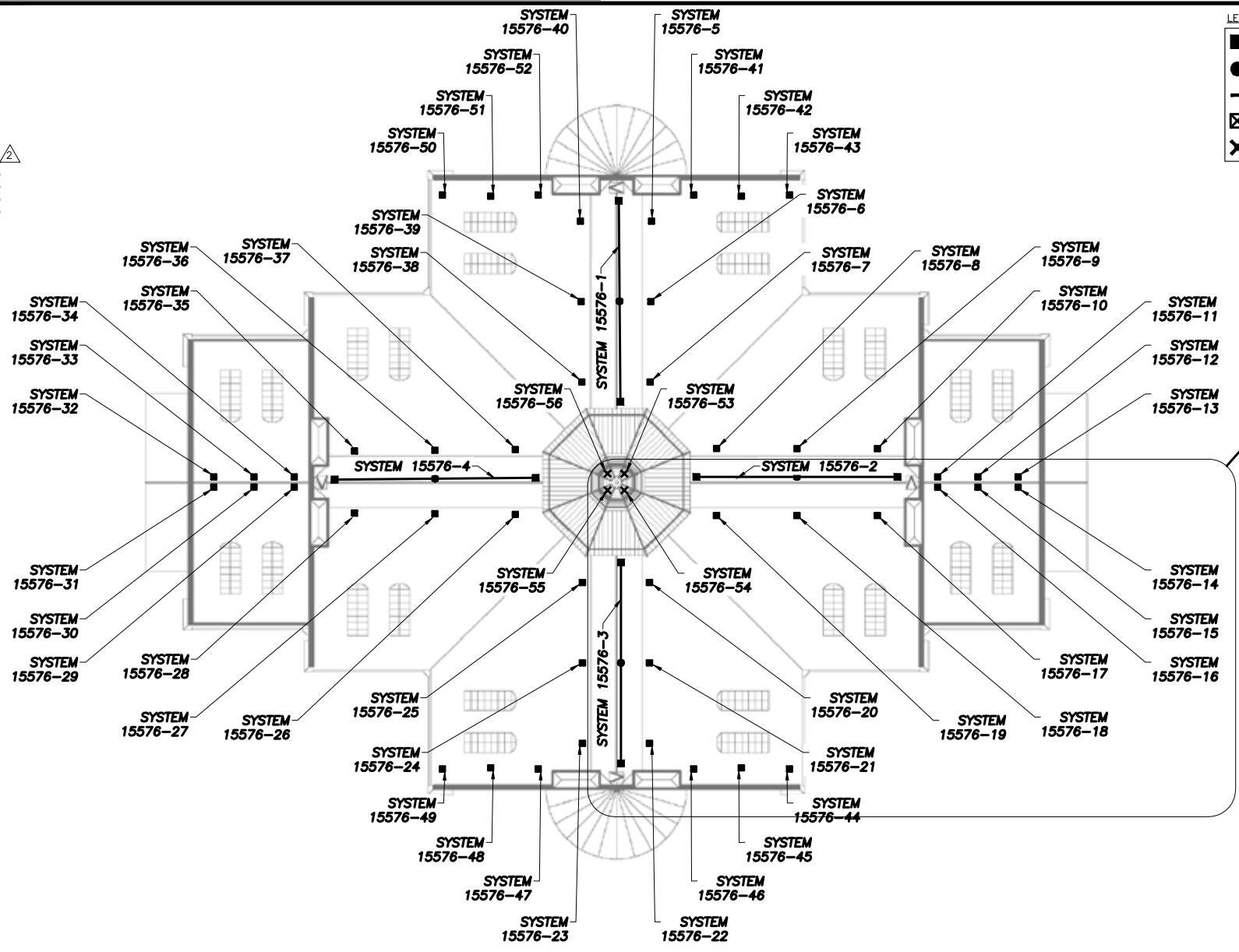


# Roof Assembly and Schedule Plan

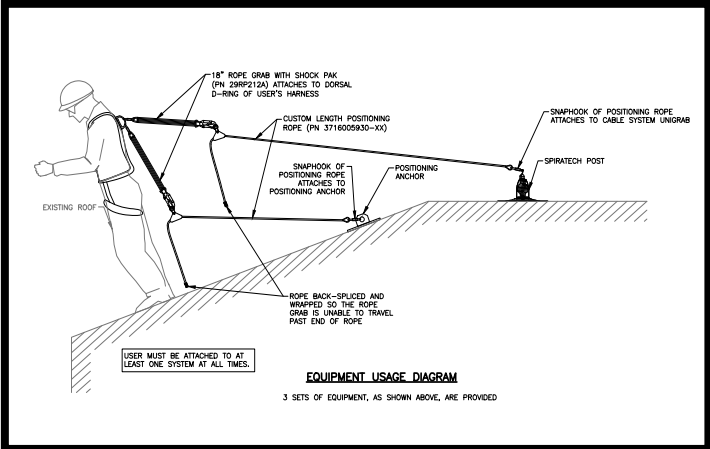


technical drawings

- NOTES:
1. SYSTEMS 15576-1, 2, 3 & 4 ARE CABLE LIFELINE SYSTEMS. ALL OTHER SYSTEMS ARE POSITIONING ANCHORS.
  2. SYSTEM 15576-5 - 15576-52 POSITIONING ANCHORS CONSIST OF PLATES BOLTED TO THE ROOF DECK AS SHOWN IN SECTION 3/2.1.
  3. SYSTEM 15576-53, 54, 55 & 56 POSITIONING ANCHORS ARE RIGID POSTS THAT CONNECT TO EXISTING CONCRETE AS SHOWN IN SECTION 4/2.1.



- LEGEND
- CABLE SYSTEM END POST
  - CABLE SYSTEM INTERMEDIATE POST
  - CABLE LIFELINE
  - ☒ PLATE TYPE POSITIONING ANCHOR
  - ⊗ RIGID POST TYPE POSITIONING ANCHOR



ACCESS/EGRESS:  
USER SHALL ATTACH TO SYSTEM UPON ENTERING UNPROTECTED ROOF AREA AND SHALL REMAIN 100% TIED OFF WHILE ON ROOF.

FALL PROTECTION LAYOUT PLAN  
SEE DWG. NO. 1.1 FOR DIMENSIONS AND STEEL FRAMING

CONFIDENTIAL:  
THIS DRAWING AND THE INFORMATION CONTAINED THEREON IS THE CONFIDENTIAL AND PROPRIETARY INFORMATION OF FLEXIBLE LIFELINE SYSTEMS AND MAY NOT BE COPIED OR REPRODUCED WITHOUT EXPRESS WRITTEN PERMISSION FROM FLEXIBLE LIFELINE SYSTEMS.

- APPROVED AS IS
- APPROVED AS NOTED
- REVISE AND RESUBMIT

NO.	DATE	DESCRIPTION	DRG	PM	ENGR
1	12/20/16	FOR APPROVAL - NOT FOR CONSTR.	SLC	EM	MRB
1	12/13/16	FOR APPROVAL - NOT FOR CONSTR.	SLC	EM	MRB
0	12/1/16	FOR APPROVAL - NOT FOR CONSTR.	SLC	EM	MRB

**FLEXIBLE LIFELINE SYSTEMS**  
Texas COA #F-17043  
14325 West Hardy Road  
Houston, TX 77060  
phone: (281) 448-8821  
fax: (281) 448-9225  
www.flexiblelifeline.com

APPROVAL

Drawn By	SLC
Date	11/22/16
Checked By	MRB
Date	12/1/16
Designed By	EM
Date	11/22/16

TEXAS WOMAN'S UNIVERSITY	
BLAGG HUEY LIBRARY, 307 ADMINISTRATION DR, DENTON, TX 78204	
ROOFTOP FALL PROTECTION FOR CASTRO ROOFING	
FALL PROTECTION LAYOUT PLAN	
JOB NO. 15576	SCALE: 3/4" = 1'-0"
DWG. NO. 1.0	REV. 2



## *Safety Innovation*

**Fall Protection System** - All different areas had to be designed to meet OSHA and other requirements. Many meetings were held during the design phase to determine the proper system for a particular application. These design decisions were then submitted for approval, more meetings to change some design aspects were held and then final approval was achieved. These different fall protection methodologies had to be integrated to the various roof systems and structural conditions encountered on the project.



safety innovation



**ROOFTECH**

**ROOFING & WATERPROOFING SPECIALISTS**

1944 Handley Drive, Fort Worth, Texas 76112

(817) 496-4631 or Metro 429-8256 Fax 457-9946

December 15, 2017

Mr. Rudy Rodriguez  
Castro Roofing  
4854 Olson Dr.  
Dallas, Texas 75227

Project: Texas Woman's University  
Roof Replacement at Mary Evelyn Blagg Huey Library  
307 Administration Drive  
Denton, Texas 76204  
Letter of Recommendation

Re:

Dear Mr. Rodriguez,

I want to take this opportunity to commend your company for the exceptional performance renovating the TWU Library this last year. I have worked on over 50 projects with Castro Roofing during the last 23 years to provide successful results to our mutual clients. I consider this one of our greatest accomplishments.

I have watched your company change, grow, and improve throughout the years. Your leadership and drive for excellence is apparent by the policies and procedures that have been implemented to improve client and consultant communication. Communication with the client is professional and conscientious. Your desire to provide client services above and beyond expectations is unparalleled. You are able to handle the technical aspects of a project as well as guide the client through the process and anticipate pitfalls before they happen.

Construction is always challenging. Castro's conflict management skills are exceptional. Rather than avoiding problematic issues with the client and the consultant, Castro addresses issues openly and quickly with resolution in mind. There are always problems in construction and how one handles them speaks volumes about integrity and personal values.

The TWU Library project was difficult from a programming, technical, and logistical perspective and it was completed on time and under budget. The age of the building, historical significance, intricacy of the sheet metal detail work, along with the existing construction deficiencies made this project a potential nightmare. A roof is usually just a roof, but in this case aesthetics were as important as waterproofing. The detail work is truly a work of art. We look forward to our continued working relationship with Castro Roofing.

Sincerely,



Cindy L. Chadwell, AIA, RRC  
Rooftech, CEO/President



**TEXAS WOMAN'S  
UNIVERSITY**

**Facilities Management & Construction Department**  
1200 Frame St., P.O. Box 425619, Denton, Texas 76204-5619  
Main Line 940-898-3130 Fax 940-898-3148

December 15, 2017

Re: Roof Replacement Blagg Huey Library, Texas Woman's University

This re-roofing project started with a major hail storm and insurance claim which Castro Roofing of Texas assisted in evaluating the storm damage and developing the scope of work for replacement. Then successfully completed this complex roofing project. The building consists of three main types of roofing systems on several different roofing platforms.

The main roof is a high pitch roof originally with synthetic slate that contained Asbestos thus requiring abatement. This roof was replaced with a premium asphalt shingle that resembles slate in appearance but is more hail resistant. The upper flat areas between the high pitch roofs is a modified bitumen system and some lower roofs as well as the center cupola are copper standing seam systems.

All three roof types were completely replaced as was the main copper flashing and the copper gutters and downspouts. The craftsmanship on the copper is superb and the center copula required extensive scaffolding. Along with the roof replacement a comprehensive fall protection system was added on all the roofs.

Upon completion of the roof replacement of this centrally located and high profile building our department started receiving many compliments from across campus on how great the building now looked.

Sincerely,

*Don Strickland*

Donald L. Strickland  
Director, Construction Services  
Facilities Management & Construction



Recommendation Letter

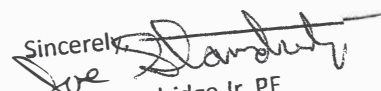
Castro Roofing

December 2017

As the retired Associate VP Facilities Management and Construction with Texas Woman's University, I had the pleasure of working on the reroofing of the TWU Library Building with Castro Roofing. The project entailed removal of asbestos containing faux tiles and replacement with architectural asphalt shingle tiles as well as replacement of copper roofing elements. The entire project was over one million dollars and was completed after I retired. However, Castro roofing provided excellent design and construction services for the project. The newly installed roof has stopped the many leaks that had plagued the building for years according to the facilities staff and has added to the beauty of the TWU campus.

I have found Mr. Rodriguez to be very professional and trustworthy as he helped us negotiate the replacement cost with the insurance provider for the campus roof replacement. I highly recommend Castro Roofing for any projects that your company may be contemplating and am available to provide further information if needed. My email is [jstandr@gmail.com](mailto:jstandr@gmail.com). Please feel free to email me with any questions.

Sincerely,

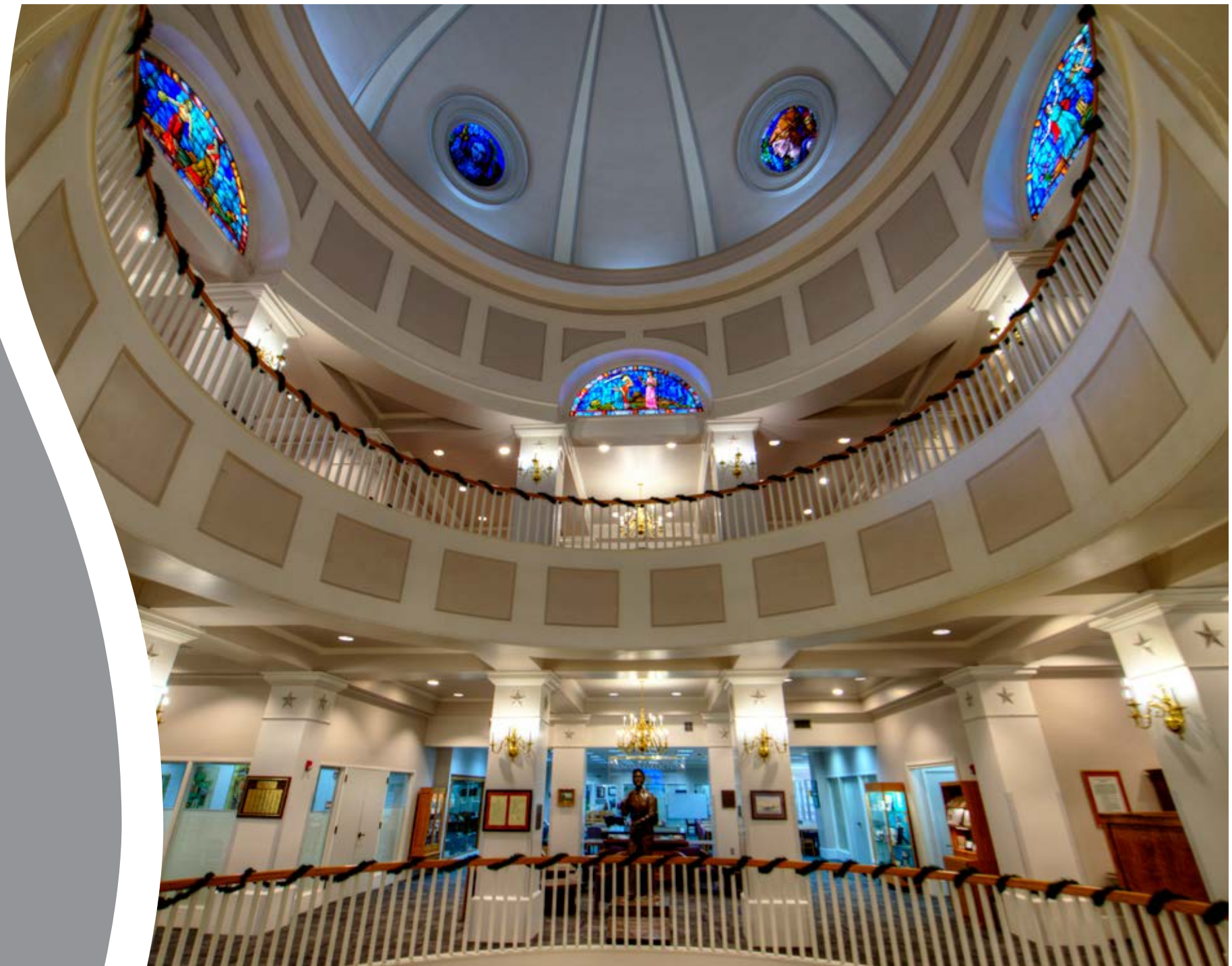
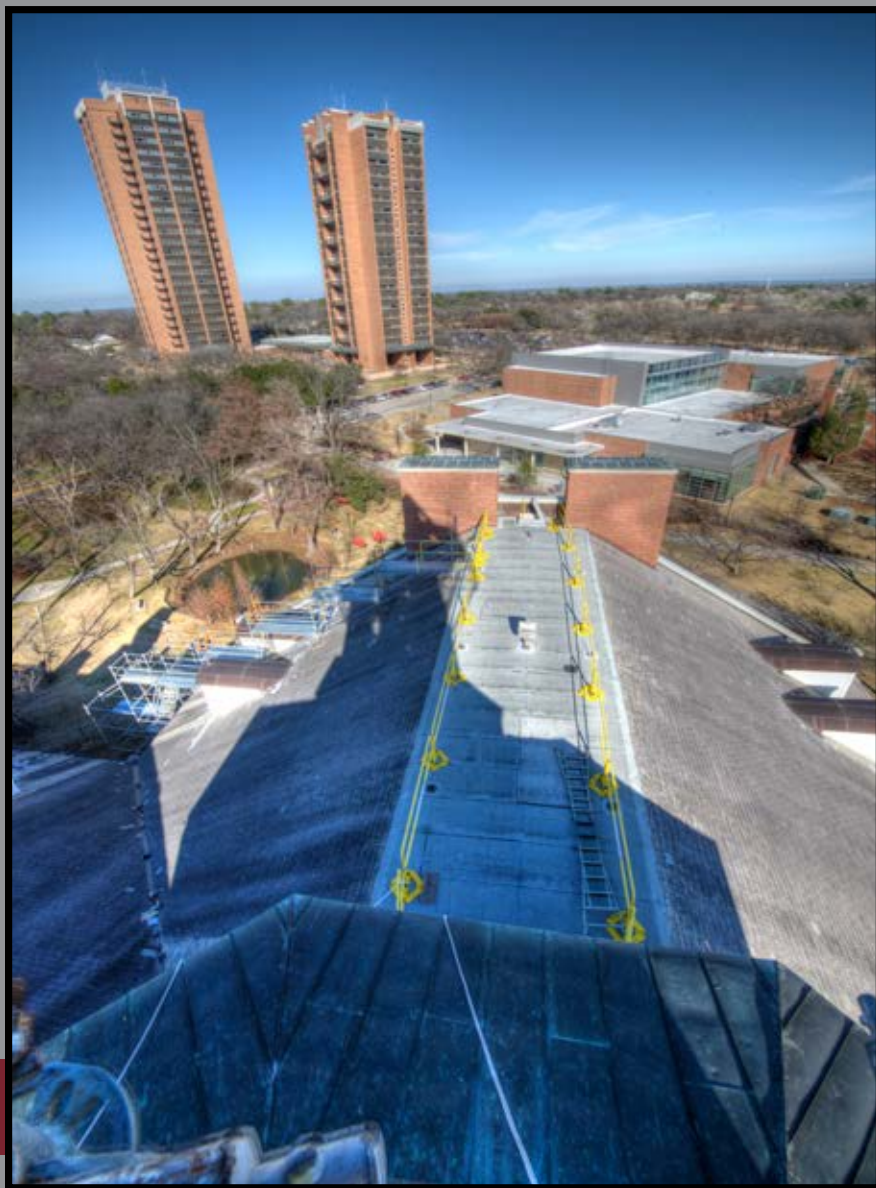


Joe D. Standridge Jr. PE



commendations







# Project Photos

**Seeing is believing** - Please enjoy the many facets of the Castro Roofing TWU Blagg Huey Library project through the lens of many of our marvelous employees and administrative staff members.



*TWU Blagg Huey Library Before*



*TWU Blagg Huey Library After*

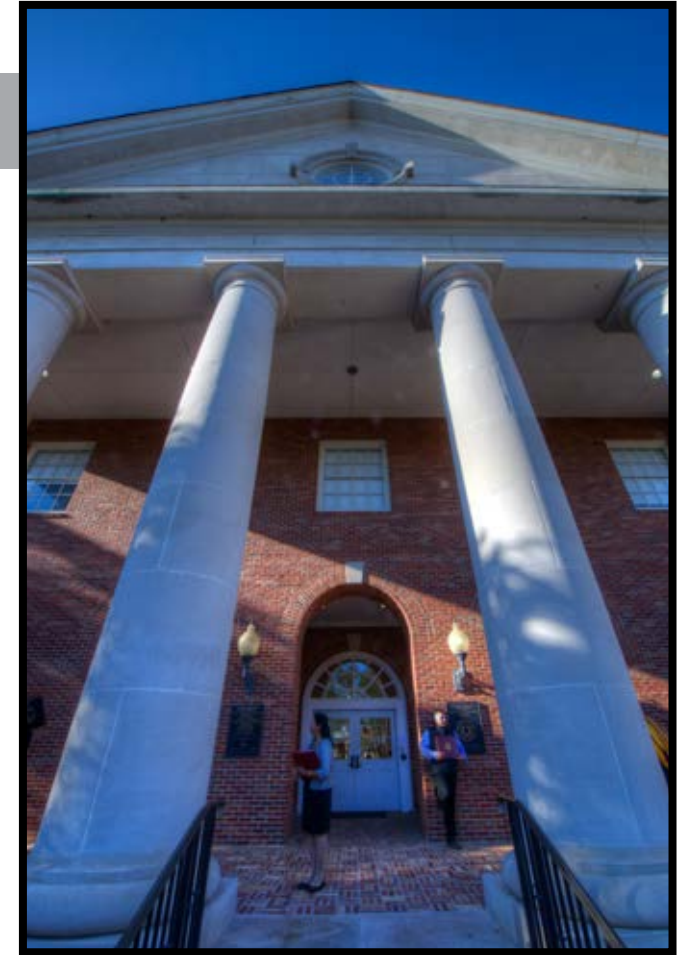


project photos

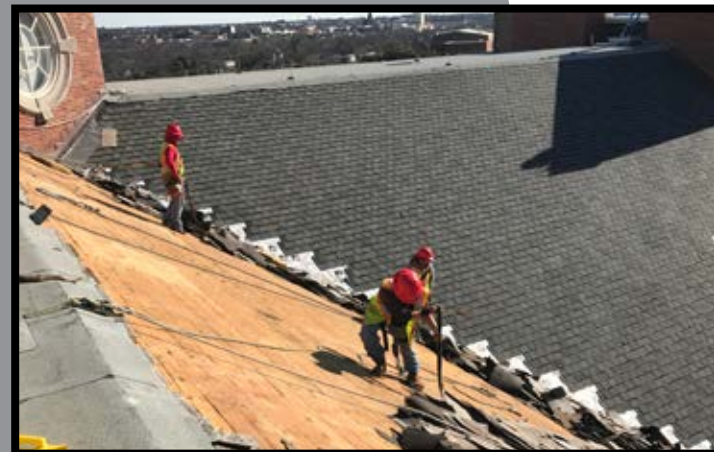




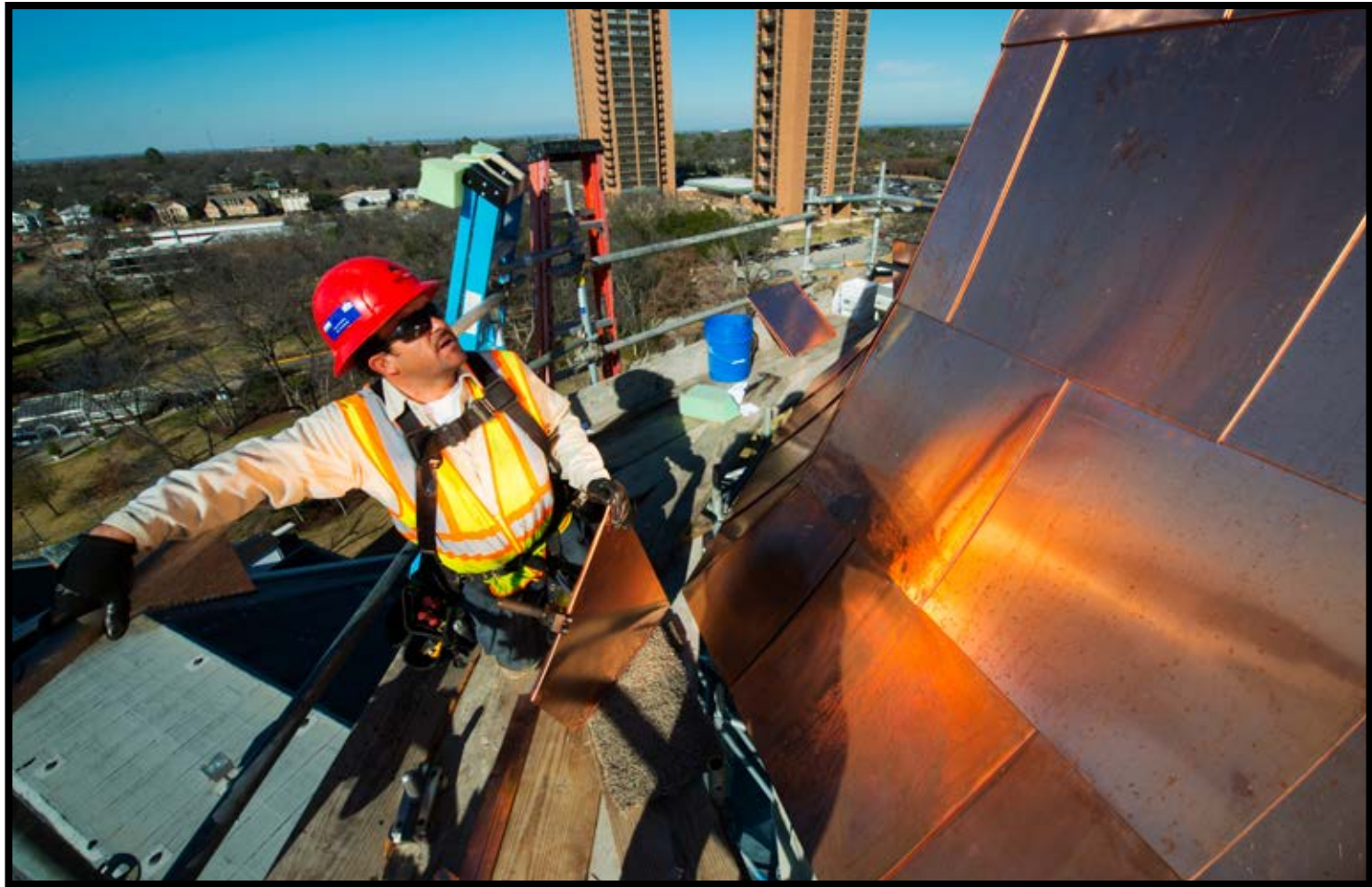




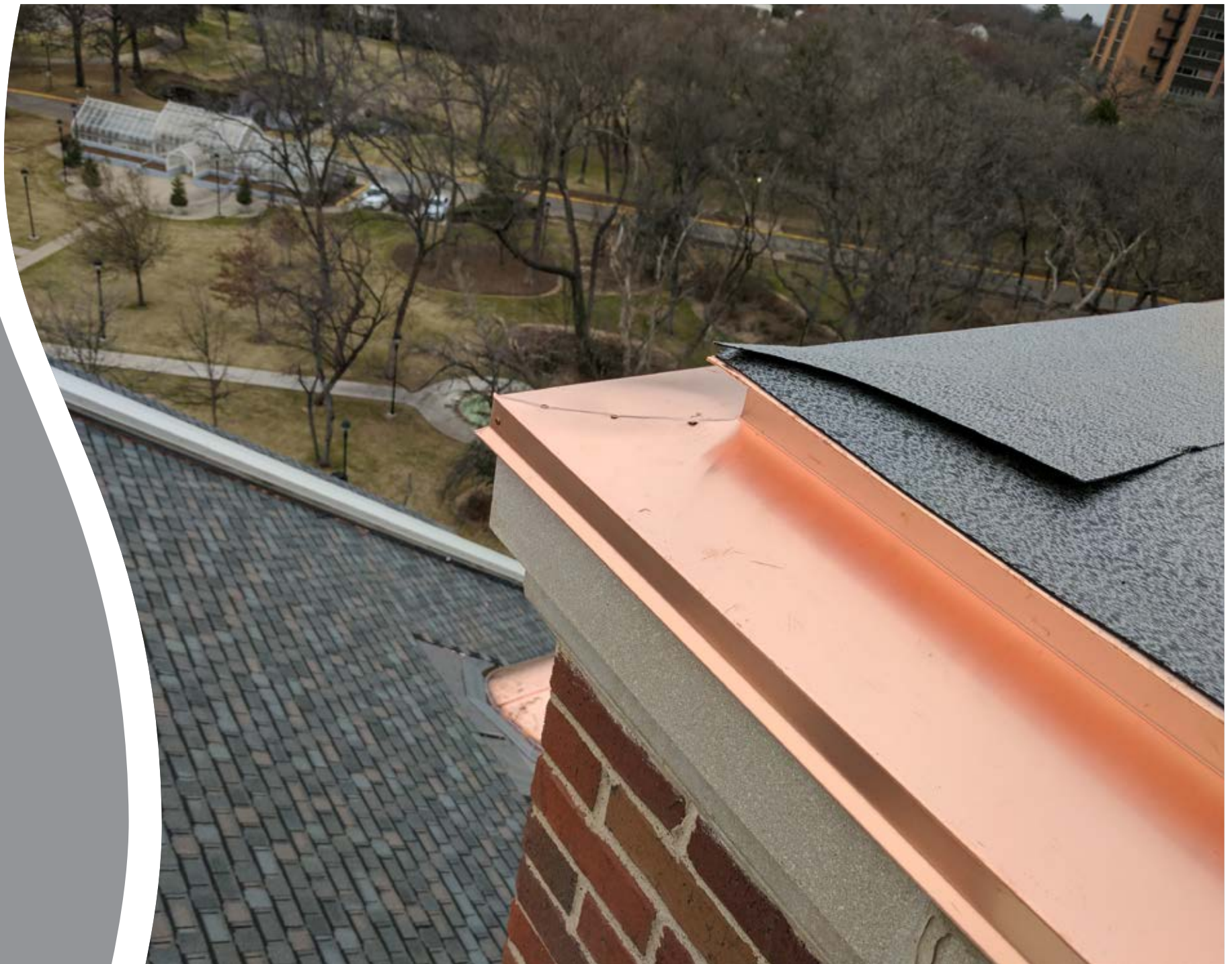








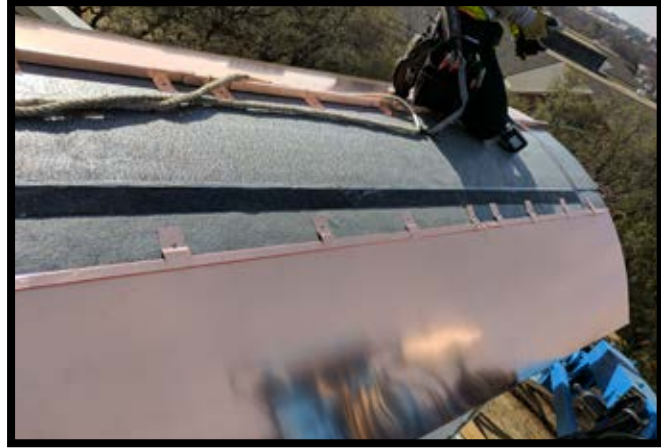




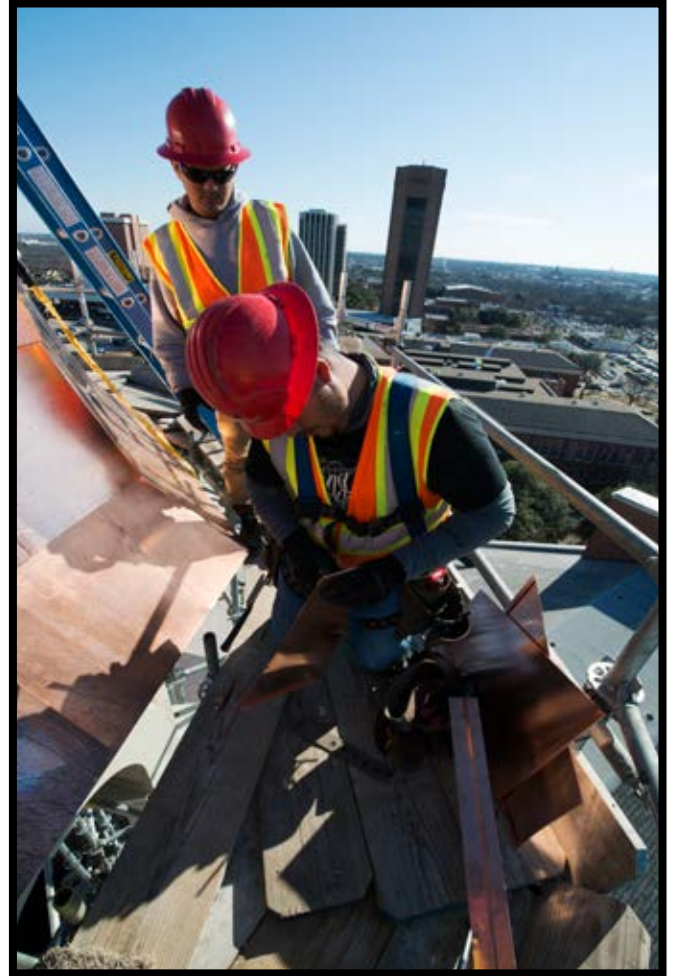
























**CASTROROOFING**  
EMPOWERING BUILDING OWNERS



2018 GOLDEN HAMMER AWARD



**TEXAS WOMAN'S**  
UNIVERSITY