Manor Independent School District

Board of Trustees Board Meeting Agenda Item January 22, 2024

CONSENT ITEM SHEET

RE: Consider and possible action regarding selection of professional service provider for proposed Testing and Balancing services for the HVAC system at New Transportation Facility, including possible delegation of authority to Superintendent and/or designee to negotiate and execute an agreement.

Supporting Documents:

1. Qualifications for Proposed Professional

District Goals:

FACILITIES & MAINTENANCE- By 2026, Manor ISD will proactively provide facilities to ensure 100% of scholars will have safe, well-maintained, environmentally sustainable, and community accessible facilities.

Bottom of Form

Background Information:

In heating, ventilation, and air conditioning (HVAC), testing, adjusting and balancing (TAB) are the three major steps used to achieve proper operation of heating, ventilation, and air conditioning systems. TAB refers to commercial building construction and the specialized contractors who employ personnel that perform this service. In general, the TAB specialist performs air and hydronic measurements on the HVAC systems and adjusts the flows as required to achieve optimum performance of the building environmental equipment.

As part of the District's project that have HVAC systems such as the New Transportation Facility, MISD will need to have a TAB specialist come and perform that work.

The TAB work shall be done under the direct supervision of a qualified engineer employed by the TAB professional firm. Because these services require an engineering license, it is a professional service. No formal procurement process is required under Texas law (*see* Texas Government Code Ch. 2254 "Professional Services Procurement Act" and Texas Educ. Code Section 44.031(f)). Under Texas Government Code Section 2254.003, the District may not select the professional based on price initially; instead, the professional is selected on the basis of demonstrated competence and qualifications to perform the services; and then a contract is negotiated for a fair and reasonable price.

Fiscal Implications:

As required by law for professional engineering services, the price will be negotiated with the selected professional following Board action.

Administrative Recommendation:

Administration recommends that the board approve the proposed professional as presented by Administration and delegate authority to the Superintendent to finalize an agreement in a form approved by legal counsel. Administration recommends that the Board select COMPLETE SYSTEM BALANCE, LLC based on their demonstrated competence and qualifications.

Proposed Motion Language:

"I move that the Board approve COMPLETE SYSTEM BALANCE, LLC for the HVAC Testing and Balancing services for the New Transportation Facility based on their demonstrated competence and qualifications as presented by Administration and further delegate authority to the Superintendent or his designee to negotiate and enter into an agreement for a fair and reasonable price."

Mr. Joe Mendez	Dr. Robert Sormani	
Contact Person	Approved by Superintendent	

Testing and Balancing of Air and Hydronic Systems

PO Box 399 Rockwall, Texas 75087 972-965-4289

www.completesystembalance.com

Cody Lee:

- **2007-Present:** President/ Manager of Complete System Balance
- **1998-2006:** Technician for Delta-T Inc., Dallas, Texas
- 2022-Present: NEBB National Board Member & Chapter Affairs Chairman
- **2018 to Present:** NEBB Texas Board Member
- **2014 to Present:** NEBB Texas Technical Committee Chairman
- 2009: Completed Testing to become a Certified Professional
- through the National Environmental Balancing Bureau (NEBB)
- 2016 to Present: QCxP Qualified Commissioning Provider
- **2004:** Completed Testing to become a Certified Test and Balance
- Engineer through the AABC
- **2003:** Completed Testing to become a Certified Test and Balance Technician through the AABC
- 1996-1998: Attended and graduated (Texas State Technical College) for Air Conditioning and Refrigeration Services; Waco, Texas

Ty Boyer:

- 2014 to 2018: Project Manager for Air Engineering and Testing
- 2018-2022: Project Manager for Campos Engineering
- 2020: Passed Exam to become a NEBB Certified Technician
- 2022: Passed Exam to become a NEBB Certified Professional
- 2022 to Present: Certified Professional / Project Manager for Complete System Balance

Brady Allen:

- **2008 to Present:** Vice president of Operations
- 2001-2008: Project Mgr and Certified Technician AABC for Delta T Inc.
- 2012: Passed Exam to become a NEBB Certified Technician
- 2018 to Present: QCxP Qualified Commissioning Provider

Testing and Balancing of Air and Hydronic Systems

Wesley Maimone:

- **2010 to Present:** Technician for Complete System Balance.
- **2000-2008:** Technician for Delta T Inc.
- 2012: Passed Exam to become a NEBB Certified Technician
- **2017 to Present:** QCxP Qualified Commissioning Provider

Robert Sepeda:

- 2000: Graduated Universal Technical Institute
- **2000 to Present**: Been working in Test & Balance
- 2020: Passed Exam to become a NEBB Certified Technician
- 2020 to Present: QCxP Qualified Commissioning Provider

Justin White:

- 2012 to Present: Been working in Test and Balance
- **2017:** Passed Exam to become a NEBB Certified Technician

Angel Lucas:

- **2019:** University of Texas Dallas B. S. Mechanical Engineering
- **2020 to Present**: Been working in Test & Balance
- 2022: Passed Exam to become a NEBB Certified Technician

Noah Babineau:

- 2021: Graduated from Texas State Technical College
- 2022: Passed Exam to become a NEBB Certified Technician

<u>Justin Elijah:</u>

- 2019: Graduated from Georgia Southern B.S. Mechanical Engineering
- **2022:** Passed Exam to become NEBB Certified Technician

Testing and Balancing of Air and Hydronic Systems

Rodney Joseph:

- 2020: Graduated from University of Louisiana Lafayette -B.S.
 Industrial Technology
- **2022:** Passed Exam to become NEBB Certified Technician

Garrett Marcantile:

- 2018: Graduated from Austin College B.S of Arts & Communications
- 2019: Graduated Galveston College Associates in HVAC
- **2020-Present**: Test and Balance Trainee
- **2023:** Scheduled for NEBB Certified Tech Exam

Chris Taylor:

- December 1, 2020 to the present Field Supervisor for Complete System Balance
- January 7th, 2019 to August 1, 2020 Field Technician for Climatec Controls
- February 3, 2014 to September 11, 2018 Dallas Branch- Division Manager for TAB Technologies
- December 3, 1990 to January 23, 2014 Project Coordinator for Engineered Air Balance Company
- 2021 Re-certified as NEBB Certified Test and Balance Technician
- 2015 -2020 NEBB Certified Professional (Did not re-new Certification)
- **2014-2015** NEBB Certified Test and Balance Technician
- 2004-2014 AABC Certified Test and Balance Technician
- 1988 1990 Graduated with Associate of Applied Science from Texas State Technical College
- 1988 Certification in Geothermal HVAC Installation

Submittal

Contract Document Examination

Plan Review

We have examined the plans to ensure that all the dampers, valves, test ports, temp wells, and flow-control devices are shown on plans where we need them.

Submittal Review

Once we receive an approved submittal, we review it to ensure the design and submitted data match.

Project Record Document Review

We will review project record documents provided to Complete System Balance.

Control Drawing and Sequence Review

Once we are provided control drawings and sequences, we will review them ensuring they meet design intent.

Submittal

Strategies & Procedures

Preparation

We complete readiness checks which shall consist of walking the job to verify the following

- 1. Permanent power is provided.
- 2. Hydronic systems are filled, clean, and free of air.
- 3. EMS is ready and working
- 4. Equipment & duct access doors are closed
- 5. All dampers are open
- 6. All Valves are open
- 7. Ceilings are installed 8. Windows and doors are shut.

Procedures for Air Balance

The procedures that we use for balancing is detailed in the **NEBB Procedural Standards** & and as called for in the specifications.

- 1. We prepare a take-off for the job, including the design information and rated information on the actual sheets that we use to record data.
- 2. We look through the "as built" drawings to match design/specified intent.
- 3. For variable air volume systems, we determine diversity. By looking through the VAVs or Fan powered boxes to find which ones to open and which ones to close to meet diversity.
- 4. We decide where to lay out traverse points to get the most accurate air volume readings. This shall be in a straight run of duct.
- 5. We check all airflow patterns on outside air dampers, louvers, as we shall also do with exhaust and mixed air.
- 6. We verify motor starters at each individual drive to ensure they have the proper size overloads. We also ensure that the VFDs are correctly properly.

- 7. We move the branch dampers in order to get air to the desired path if need be.
- 8. We check for blockages in the ductwork. If we determine a blockage, we pinpoint it and let the mechanical company correct or remove the blockage.
- 9. We check condensate drains to make sure they are correctly piped, and the pipes are air-sloped adequately.
- 10. We check all ductwork to make sure it is sealed. This is also verified though our traverse points when we finalize the AHU.

Balancing Air Systems

We balance air systems using the ratio or the proportional balance method. This is detailed in the following reference material.

- 1. NEBB Procedural Standards
- 2. Environmental System Technology
- 3. AABC Technician Training Manual
- 4. Kahoe Field Manual

Procedures for Hydronic Systems

- 1. We prepare a take-off for the job, which shall include the design information and rated information on the actual sheets that we use to record data.
- 2. We look through the "as built" drawings to make sure that they match design/specified intent.
- 3. We prepare the hydronic system for balancing. This includes but is not limited to the following.
 - A. Make sure all manual valves are open both at the branch level and the coil level.
 - B. We check the expansion tank level if applicable.
 - C. We check flow control valves for specified sequence and set them to indicated flow.
 - D. We check makeup water to make sure we have enough water in the system.
 - E. We go to the highest point of the system to make sure there is an air bleed-off valve. Then we check to make sure all air is bled out of the system.

- F. We check to make sure the water is clean and properly flushed and that all strainers are clean.
- G. We check to make sure the pump is not running over maximum horsepower. If so, we cut back the discharge valve until the pump is under maximum horsepower.
- H. We set all automatic valves to 100% open.
- I. We check the pump impeller size by doing a block-off and comparing it to the pump curve.
- 4. We balance the system using the ratio or proportional balance method.
- 5. After all the coils are air balanced and the balancing valves air calibrated, we check the pump using the pump curve.
- 6. We report any flows that are not within the plus or minus 5 percent of design.

Procedures for Variable Flow Hydronic Systems

We balance systems with all three-way valves with the maximum flow going through the heat exchange terminal.

Balancing of Hydronic Systems

We balance hydronic systems using the ratio or the proportional balance method. This is detailed in the following reference material.

- 1. NEBB Procedural Standards
- 2. Environmental System Technology
- 3. AABC Technician Training Manual
- 4. Kahoe Field Manual

Tolerances

We balance all systems to within the tolerances called for in the specifications. If the system cannot obtain the tolerance, it is reported.

References

Mike Clendenin Professional Engineer EMA Engineering and Consulting 903-521-5087

Gary Bristow Professional Engineer EMA Engineering and Consulting 903-581-2677

Scott Clendenin Professional Engineer EMA Engineering and Consulting 903-520-6338

Wes Jordan Professional Engineer Purtle & Associates an EMA Company 318-425-4501

Will Hill Professional Engineer EMA Engineering and Consulting 903-581-2677

Rick Romine Professional Engineer Romine, Romine, and Burgess Engineers 817-336-4633

Leonard Stephens Professional Engineer Stephens Engineering 936-564-1474

Adam Rich Executive Director Facility Services Killeen ISD 254-290-5966

Floyd Kinkaid Project Manager of Construction McKinney ISD 469-302-4110

Tommy Osborne Executive Director of Construction Northwest ISD 817-215-0994

Terry Vandenburg Mechanical/HVAC Department Head Carrollton-Farmers Branch ISD 972-968-6100

Patrick Farr Bond Manager for Community ISD Mavery LLC 972-968-6100

More References available upon request.

TESTING AND BALANCING OF AIR AND HYDRONIC SYSTEMS

Below is a list of various districts/colleges that Complete System Balance has worked for or in:

Northwest Independent School District Rockwall Independent School District Tyler Independent School District

Castleberry ISD

Carrollton-Farmers Branch ISD

McKinney Independent School District Community Independent School District

Royse City Independent School District

Sherman Independent School District

Nacogdoches ISD

Killeen Independent School District

Denton Independent School District

Lewisville Independent School District

Duncanville ISD

Dallas Independent School District

Fort Worth Independent School District

Brownshoro ISD

Jacksonville ISD

Quitman Independent School District

Pittsburg Independent School District

Princeton Independent School District

Longview Independent School District

Rusk Independent School District

Lancaster Independent School District

Alba-Golden ISD

Lindale Independent School District

Van Independent School District

Gorman Catholic School

Whitehouse Independent School District

Frankston Independent School District

Grand Prairie ISD

Tatum Independent School District

Troup Independent School District

Arlington Independent School District

Henderson Independent School District

Hust-Eueless-Bedford ISD

Needville Independent School District

Lucas Independent School District

Center Independent School District

Galena Park Independent School District

Fort Bend Independent School District

Lipan Independent School District

Bullard Independent School District

Wills-Point Independent School District

Lapoyner Independent School District

Irving Independent School District

Marshall Independent School District

Argyle Independent School District

Mexia Independent School District

Celina Independent School District

Prosper Independent School District

New Diana Independent School District

Alvin Independent School District

Birdville Independent School District

Coppell Independent School District

Quinlan Independent School District

Bonham Independent School District

Anna Independent School District

Melissa Independent School District

Cleburne Independent School District

Wylie Independent School District

Classical Academy Private Schools

Winona Independent School District

Burleson Independent School District

Woodville Independent School District

Redwater Independent School District

Hayes Independent School District

Crowley Independent School District

Gilmer Independent School District

Little Elm Independent School District

Alvarado Independent School District

Cedar Hill Independent School District

Aubrey Independent School District

Lufkin Independent School District

Sanger Independent School District

Highland Park ISD

DeSoto Independent School District

Gladewater ISD

Allen Independent School District
Arp Independent School District

Hallsville Independent School District Carthage Independent School District

Texas A&M University University of North Texas

Grayson College

Texas Womens University

Baylor University

Frost Independent School District
Pewitt Independent School District
Eustace Independent School District
Decatur Independent School District
Pottsboro Independent School District
Pflugerville Independent School District
Mineola Independent School District
Godley Independent School District

McLennan Community College

Tyler Junior College Kilgore College

University of Texas Tyler

Below is a list of General Contractors that Complete System Balance has worked directly for:

Balfour Beatty Construction

Pogue Construction
Jackson Construction
NorthStar Builders Group

Cadence McShane Construction

CORE Construction

Adolphson & Peterson Inc.
Joeris General Contractors
WRL General Contractors
RLM General Contractors

Gallagher Construction Services

Lee Lewis Construction

Lincoln Builders
Pearson Construction

Buford Thompson Construction (BTC)

Garrett & Associates American Constructors Berry & Clay Construction Crossland Construction

JPJ Construction

Heritage Constructors

Rogers-O'Brien Construction HGR General Contractors

Cloud Construction Mazanec Construction Steele & Freeman Inc Plyler Construction

More projects available upon request

Architect: WRA Architects

Engineer: Reed, Wells & Benson

Construction Manager: Pogue Construction

Project Name: Community High School
Location: Nevada, TX
Client Name: Community Independent School District
<u>Firm's Role:</u> Complete System Balance was hired by the district to perform the Testing, Adjusting and Balancing in accordance to project specifications.
Test & Balance Budget: \$115,000.00
Test & Balance Start Date: 2/26/20
Test & Balance Completion Date: 1/13/21

Project Name: Prosper High School #2

Location: Prosper, TX

Client Name: Prosper Independent School District

<u>Firm's Role:</u> Complete System Balance was hired by the Construction Manager to perform the Testing, Adjusting and Balancing in accordance to project specifications.

Test & Balance Budget: \$185,000.00

Test & Balance Start Date: 10/14/19

Test & Balance Completion Date: 12/7/20

Architect: Huckabee Architects

Engineer: Romine, Romine & Burgess Mechanical and Electrical Engineers

Construction Manager: Pogue Construction

Project Name: Highland Park High School Ph II and Ph III

Location: Dallas, TX

Client Name: Highland Park Independent School District

<u>Firm's Role:</u> Complete System Balance was hired by the Construction Manager to perform the Testing, Adjusting and Balancing in accordance to project specifications.

Test & Balance Budget: \$77,000.00

Test & Balance Start Date: 4/27/20

Test & Balance Completion Date: Phased project which is still in construction

Architect: Stantec Architects

Engineer: EMA Engineering and Consulting

Construction Manager: Lee Lewis Construction

Project Name: Hyer Elementary School

Location: Dallas, TX

Client Name: Highland Park Independent School District

<u>Firm's Role:</u> Complete System Balance was hired by the Construction Manager to perform the Testing, Adjusting and Balancing in accordance to project specifications.

Test & Balance Budget: \$52,000.00

Test & Balance Start Date: 8/22/20

Test & Balance Completion Date: 7/30/21

Architect: Stantec Architects

Engineer: Stantec Engineering

Construction Manager: Balfour Beatty Construction

Pro [°]	<u>ject Name:</u>	New	Sherman	High	School

Location: Sherman, TX

Client Name: Sherman Independent School District

<u>Firm's Role:</u> Complete System Balance was hired by the district to perform the Testing, Adjusting and Balancing in accordance to project specifications.

Test & Balance Budget: \$189,000.00

Test & Balance Start Date: 1/18/21

Test & Balance Completion Date: 1/1/22.

Architect: VLK Architects

Engineer: Reed, Wells & Benson

Construction Manager: Cadence McShane Construction





Firm Certification

Complete System Balance

HAS MET ALL REQUIREMENTS FOR NEBB CERTIFIED
STATUS IN THE FOLLOWING DISCIPLINE

Testing, Adjusting and Balancing of Environmental Systems

3451

NEBB Certification Number

March 31, 2024

Expiration Date



NEBB President





HAS MET ALL REQUIREMENTS FOR NEBB CERTIFIED PROFESSIONAL STATUS IN THE FOLLOWING DISCIPLINE

Testing, Adjusting and Balancing of Environmental Systems

This Certificate, as well as individual affiliation with a NEBB Certified Firm and associated NEBB Certification Stamp are REQUIRED to provide a NEBB Certified Report. Participation in the NEBB Quality Assurance Program requires the Certificant be affiliated with a NEBB Certified Firm.

CP-23648

NEBB Certification Number

March 31, 2024

Expiration Date



NEBB President





ANDREW TY BOYER

HAS MET ALL REQUIREMENTS FOR NEBB CERTIFIED PROFESSIONAL STATUS IN THE FOLLOWING DISCIPLINE

Testing, Adjusting and Balancing of Environmental Systems

This Certificate, as well as individual affiliation with a NEBB Certified Firm and associated NEBB Certification Stamp are REQUIRED to provide a NEBB Certified Report. Participation in the NEBB Quality Assurance Program requires the Certificant be affiliated with a NEBB Certified Firm

CP-24428

NEBB Certification Number

December 31, 2023

Expiration Date

NEBB President





Brady Allen

HAS MET ALL REQUIREMENTS FOR NEBB CERTIFIED TECHNICIAN STATUS IN THE FOLLOWING DISCIPLINE

Testing, Adjusting and Balancing of Environmental Systems

This Certificate, as well as individual affiliation with a NEBB Certified Firm and associated NEBB Certification Stamp are REQUIRED to provide a NEBB Certified Report. Participation in the NEBB Quality Assurance Program requires the Certificant be affiliated with a NEBB Certified Firm.

CT-21301

NEBB Certification Number

March 31, 2024

Expiration Date



NEBB President





Wesley Maimone

HAS MET ALL REQUIREMENTS FOR NEBB CERTIFIED TECHNICIAN STATUS IN THE FOLLOWING DISCIPLINE

Testing, Adjusting and Balancing of Environmental Systems

This Certificate, as well as individual affiliation with a NEBB Certified Firm and associated NEBB Certification Stamp are REQUIRED to provide a NEBB Certified Report. Participation in the NEBB Quality Assurance Program requires the Certificant be affiliated with a NEBB Certified Firm.

CT-21300

NEBB Certification Number

March 31, 2024

Expiration Date



NEBB President





Justin D. White

HAS MET ALL REQUIREMENTS FOR NEBB CERTIFIED TECHNICIAN STATUS IN THE FOLLOWING DISCIPLINE

Testing, Adjusting and Balancing of Environmental Systems

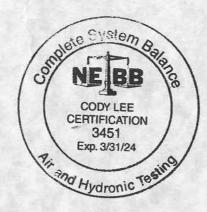
This Certificate, as well as individual affiliation with a NEBB Certified Firm and associated NEBB Certification Stamp are REQUIRED to provide a NEBB Certified Report. Participation in the NEBB Quality Assurance Program requires the Certificant be affiliated with a NEBB Certified Firm.

CT-21864

NEBB Certification Number

March 31, 2024

Expiration Date



NERR President





Christopher J. Taylor

HAS MET ALL REQUIREMENTS FOR NEBB CERTIFIED TECHNICIAN STATUS IN THE FOLLOWING DISCIPLINE

Testing, Adjusting and Balancing of Environmental Systems

This Certificate, as well as individual affiliation with a NEBB Certified Firm and associated NEBB Certification Stamp are REQUIRED to provide a NEBB Certified Report. Participation in the NEBB Quality Assurance Program requires the Certificant be affiliated with a NEBB Certified Firm.

CT-22267

NEBB Certification Number

March 31, 2024

Expiration Date



NEBB President





Robert Sepeda

HAS MET ALL REQUIREMENTS FOR NEBB CERTIFIED TECHNICIAN STATUS IN THE FOLLOWING DISCIPLINE

Testing, Adjusting and Balancing of Environmental Systems

This Certificate, as well as individual affiliation with a NEBB Certified Firm and associated NEBB Certification Stamp are REQUIRED to provide a NEBB Certified Report. Participation in the NEBB Quality Assurance Program requires the Certificant be affiliated with a NEBB Certified Firm.

CT-22162

NEBB Certification Number

March 31, 2024

Expiration Date



NEBB President





Noah Wilson Babineau

HAS MET ALL REQUIREMENTS FOR NEBB CERTIFIED TECHNICIAN STATUS IN THE FOLLOWING DISCIPLINE

Testing, Adjusting and Balancing of Environmental Systems

This Certificate, as well as individual affiliation with a NEBB Certified Firm and associated NEBB Certification Stamp are REQUIRED to provide a NEBB Certified Report. Participation in the NEBB Quality Assurance Program requires the Certificant be affiliated with a NEBB Certified Firm.

CT-22348

NEBB Certification Number

March 31, 2024

Expiration Date



NEBB President





Angel Alexander Lucas

HAS MET ALL REQUIREMENTS FOR NEBB CERTIFIED TECHNICIAN STATUS IN THE FOLLOWING DISCIPLINE

Testing, Adjusting and Balancing of Environmental Systems

This Certificate, as well as individual affiliation with a NEBB Certified Firm and associated NEBB Certification Stamp are REQUIRED to provide a NEBB Certified Report. Participation in the NEBB Quality Assurance Program requires the Certificant be affiliated with a NEBB Certified Firm.

CT-22351

NEBB Certification Number

March 31, 2024

Expiration Date



NEBB President





CertificationJustin Devon Elijah

HAS MET ALL REQUIREMENTS FOR NEBB CERTIFIED TECHNICIAN STATUS IN THE FOLLOWING DISCIPLINE

Testing, Adjusting and Balancing of Environmental Systems

This Certificate, as well as individual affiliation with a NEBB Certified Firm and associated NEBB Certification Stamp are REQUIRED to provide a NEBB Certified Report. Participation in the NEBB Quality Assurance Program requires the Certificant be affiliated with a NEBB Certified Firm.

CT-22417

NEBB Certification Number

December 31, 2022

Expiration Date



NEBB President





Rodney Joseph, Jr.

HAS MET ALL REQUIREMENTS FOR NEBB CERTIFIED TECHNICIAN STATUS IN THE FOLLOWING DISCIPLINE

Testing, Adjusting and Balancing of Environmental Systems

This Certificate, as well as individual affiliation with a NEBB Certified Firm and associated NEBB Certification Stamp are REQUIRED to provide a NEBB Certified Report. Participation in the NEBB Quality Assurance Program requires the Certificant be affiliated with a NEBB Certified Firm.

CT-22394

NEBB Certification Number

December 31, 2022

Expiration Date



NEBB President



Cody Lee

this certificate for successfully completing all of the requirements for Certification as Accredited

Qualified Commissioning Process Provider

with the designation of

QCP or QCxP

valid until

December 31, 2027

Edward G. Borbely, Chair of the Certification Committee

Ian McIntosh, Committee Member



The College of Engineering and the Department of Engineering Professional Development proudly presents to

Brady Allen

this certificate for successfully completing all of the requirements for

Certification as Accredited

Qualified Commissioning Process Provider

with the designation of

QCP or QCxP

valid until December 31, 2024

Douglas T Boind Chair of the Cartification Committee

Joy J. Altwies, Committee Member

QCP and QCxP are Service Marks of the University of Wisconsin-Madison.

John Davis, Committee Member



The College of Engineering and the Department of Engineering Professional Development proudly presents to

Wesley Maimone

this certificate for successfully completing all of the requirements for

Certification as Accredited

Qualified Commissioning Process Provider

with the designation of

QCP or QCxP

valid until December 31, 2023

Douglas T. Reindl. Chair of the Certification Committee

Joy E. altures.
Joy Altwies, Committee Member

QCP and QCxP are Service Marks of the University of Wisconsin-Madison.

John Davis, Committee Member



The College of Engineering and Engineering Professional Development proudly present to

Robert Sepeda

this certificate for successfully completing all of the requirements for

Certification as Accredited

Qualified Commissioning Process Provider

with the designation of

QCP or QCxP

valid until December 31, 2025

Edward Borbely, Chair of the Certification Committee

Joy C. (LUSTES)
Joy C. Altwies, Committee Member

John Davis Committee Member



Angel Lucas

this certificate for successfully completing all of the requirements for Certification as Accredited

Qualified Commissioning Process Provider

with the designation of

QCP or QCxP

valid until

December 31, 2027

Edward G. Borbely, Chair of the Certification Committee

Joy E. Altwies, Committee Member

Ian McIntosh, Committee Member



Christopher Taylor

this certificate for successfully completing all of the requirements for Certification as Accredited

Qualified Commissioning Process Provider

with the designation of

QCP or QCxP

valid until

December 31, 2027

Edward G. Borbely, Chair of the Certification Committee

Joy E. Altwies, Committee Member

Jan Mointosh, Committee Member



Rodney Joseph

this certificate for successfully completing all of the requirements for Certification as Accredited

Qualified Commissioning Process Provider

with the designation of

QCP or QCxP

valid until

December 31, 2027

Edward G. Borbely, Chair of the Certification Committee

Joy E. Altwies, Committee Member

Ian McIntosh, Committee Member