MASTER ENABLING AGREEMENT COMMISSIONING Ret. 2017-0725

This AGREEMENT is made and entered into this first day of July, 2019 pursuant to the Public Contract Code 10700, et seq., by and between the Trustees of the California State University on behalf of

| Campus, hereafter referred to as Trustees, and | Amendment No.: | Agreement No.: | Project No.: |
|---|----------------|----------------------------|-------------------------------|
| California State University | N/A | 180466 | Systemwide - MEA |
| Service Provider, hereafter referred to as Service Provider. Glumac | | CSU Vendor ID No.: 4589 | License or DIR No.: M22941 |

WITNESSETH: That the Service Provider in consideration of the statements and conditions herein contained, agrees to furnish labor, materials, and equipment and to perform work necessary to complete, in a skillful manner the following:

The Service Provider shall provide Commissioning Services for public works projects submitted by the California State University. This agreement is a master enabling agreement under which each campus and the administrative office of the California State University may engage the services of Service Provider as provided herein. Campuses and the administrative office shall execute a Service Order and Authorization to Proceed (Exhibit A) to secure Service Provider's peer review services under this Agreement.

The Service Provider shall provide such services as more fully described in the following Rider and Exhibits, which by this reference are incorporated herein and made part of this Agreement:

Rider A - Agreement General Provisions, consisting of three (3) pages;

Exhibit A – Scope of Work, consisting of ten (10) pages;

Exhibit B – Fee and Payment Schedule, consisting of one (1) page;

Exhibit C – Service Order & Authorization to Proceed, consisting of one (1) page.

The term shall begin upon receipt of an executed Agreement from July 1, 2019 and shall end as of June 30, 2021, with the option given the Trustees of extending the Agreement with the same items and conditions for one (1) additional one (1) year period.

The Service Provider shall not perform services in excess of the Agreement without prior written authorization to proceed from the Trustees. Service Provider shall report to: California State University, Aaron Klemm, Chief of Energy and Sustainability, Capital Planning, Design and Construction, (562)-951-4122.

The basic services amount to be expended under this Agreement shall be determined by the overall usage of each participating campus and the administrative office of the California State University. Payment shall be made in accordance with Exhibit A, and Exhibit B.

| Trustees of the California | State Unive | ersity | | | Service Provider | | | | | | |
|---|-------------|---------|---|--|------------------|-----------------|-----------------|-------------------|----------------|--------------------|------------|
| Campus | | | | | Firm Name | | | | | | |
| The California State University | , Office of | the (| Chancellor | | G | lumac | | | | | |
| By (Trustees' Authorized Signature) | | | | By (Authorized Signature) Steve Carrol By (Authorized Signature) Steve Carrol By C-US Evecarol Sphamac Com, By Charac Cx, OU-Cx, Chysley Carrol Cytopic C | | | | | | | |
| Printed Name and Title of Person Sign | ing | | | | Pri | inted Name a | ind Tit | le of Person Sign | ning | | |
| Elvyra F. San Juan, Assistant V | ice Chance | ellor | | | М | r. Steve C | arroll | . Principal | | | |
| Address of Campus Project Administrator Capital Planning, Design and Construction 401 Golden Shore, Long Beach, CA 90802 | | | Address of Service Provider 18200 Von Karman Avenue; Suite 100 Irvine, CA 92612 | | | | | | | | |
| SCO Fund Sub Fund Acet Data: | Agency | Yr. | Ref/Item | Categor | У | Program | Eler | ment Compon | ent Chapter | Fiscal Yr. | Legal Ref. |
| | | | PS Fu 485C | | PS Dep 1007 | t. ID | PS Program | PS Class | 1 ' | ect/Grant 00PRJ | |
| Amount Encumbered | I hereby ce | rtify u | pon my perso | nal knowl | edge | e that budge | ted fu | nds are available | for the period | and purpose | of the |
| \$0.00 | expenditur | es stat | ed above. | | | | | | | / | |
| Amount of Increase | V | V | in | | | | | | | 9/19/ | 10 |
| \$0.00 Signature of Accounting Officer | | | | | | | | | Date | / / | |
| Amount of Decrease I hereby certify that I have examined the | | | wri | tten Agreem | ent af | d find the same | to be in accord | ance with the | | | |
| \$0.00 requirements of California State Univers | | | ity C | Contract Law | G/AN | IDREW JONES, O | General Counsel | | 1 | | |
| Total Amount Encumbered \$0.00 By Attorney | | | | | 70 | h | | | Date 0/ | 21/10 | |

Rider A - Agreement General Provisions

- 1. Trustees agrees to pay for the services and materials to be furnished by Service Provider as provided by this Agreement. Payment in arrears shall be made upon Service Provider's completion of the services required by this Agreement to the satisfaction of the Trustees and upon Service Provider's submission of billings as shall be prescribed by the Trustees.
- 2. Service Provider, in the performance of this Agreement, is an independent contractor and is not an employee, agent, or officer of the Trustees.
- 3. Trustees may cancel this Agreement should Service Provider fail to perform as herein provided. In the event of such cancellation, Trustees shall be relieved of the obligation to make any payment to Service Provider and Trustees may proceed with the work in any manner the Trustees deem proper.
- 4. Trustees may terminate this Agreement either upon giving fifteen (15) days written notice or upon the immediate notice with payment of \$25.00 to Service Provider. Payment shall be complete by mailing payment to Service Provider at the address appearing on the face of this Agreement. In the event of such termination, Service Provider shall be paid only for the work satisfactorily completed.
- 5. Service Provider shall not assign benefits or delegate duties under this Agreement in whole or in part without the prior written approval of the Trustees. Thus, Service Provider may not assign any moneys due or to become due hereunder without the written consent of Trustees.
- 6. The provisions of this Agreement shall extend to and be binding upon and inure to the benefit of the heirs, executors, administrators, successors and assigns to the parties hereto.
- 7. No alteration or variation of the terms of this Agreement shall be valid unless made in writing and signed by the parties. Oral understandings or other agreements not incorporated herein shall not be binding.
- 8. Trustees may issue a written order with respect to the services to be performed under this Agreement at any time before the completion of the services. Trustees shall pay Service Provider an amount for such services as provided in this Agreement, or if not so provided, Trustees shall pay Service Provider a reasonable amount, which shall be agreed upon by the parties.
- 9. Any notice, which may be proper or necessary for either of the parties hereto to serve on the other, in case of Trustees, may be served effectually upon Trustees by delivering it in writing, addressed to the Trustees of the California State University, attention of the official executing this Agreement for Trustees, at CSU Office of the Chancellor, 401 Golden Shore, Long Beach, CA 90802, or by depositing it in a United States mail deposit box with first class postage thereon fully prepaid and addressed to Trustees at the above-mentioned address. In the case of Service Provider, notice may be served effectually upon Service Provider by delivering it in writing to Service Provider at the address appearing on the first page of this Agreement or depositing it in a United States mail deposit box with first class postage thereon fully prepaid, and addressed to Service Provider at the Service Provider's above-mentioned address. Any notice may also be served effectually by delivering or mailing it, as in this section provided, addressed to Trustees or Service Provider at any other place or places which Trustees or Service Provider, by written notice served upon the other, may designate, provided, however, that nothing herein shall preclude the giving of notice by personal service.
- 10. In the performance of this Agreement, the Service Provider will not discriminate against any employee or applicant for employment because of race, color, religion, ancestry, sex, age, national origin, physical handicap, medical condition, or marital status. The Service Provider will take-action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, ancestry, sex, age, national origin, physical handicap, medical condition, or marital status as prohibited by the California Fair Employment and Housing Act (Government Code Section 12900 et seq.).
- 11. Service Provider shall not utilize any information, not a matter of public record, which is received by reason of this Agreement, for pecuniary gain not contemplated by the terms of this Agreement, regardless of whether Service Provider is or is not under contract at the time such gain is realized (Education Code Section 89006).
- 12. The report, survey, or other product developed by Service Provider pursuant to this Agreement is the property of Trustees, and shall not be used in any manner by Service Provider unless authorized by Trustees.
- 13. In executing this service agreement, Service Provider swears, under penalty of perjury, that no more than one final unappealable finding of contempt of court by a federal court has been issued against Service Provider within the immediately preceding two-year period because of Service Provider's failure to comply with an order of a federal court which orders Service Provider to comply with an order of the National Labor Relations Board. Trustees may rescind this contract if Service Provider falsely swears to this statement (Public Contract Code Section 10296).

General Provisions

- 14. If the Agreement exceeds \$10,000, the contracting parties shall be subject to the examination and audit of the State Auditor of the State of California for a period of three (3) years after final payment under the Agreement. This examination and audit shall be confined to those matters connected with the performance of this contract, including, but not limited to, the cost of administering this Agreement (Government Code Section 8546.7).
- 15. The Service Provider hereby certifies compliance with Government Code Sections 8355, 8356, and 8357 in matters relating to providing a drug-free workplace. In accordance with Government Code Section 8355, the Service Provider shall:
 - A. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations;
 - B. Establish a Drug-Free Awareness Program to inform employees about all of the following:
 - (1) The dangers of drug abuse in the workplace,
 - (2) The Service Provider's policy of maintaining a drug-free workplace,
 - (3) Any available counseling, rehabilitation, and employee assistance programs, and
 - (4) Penalties that may be imposed upon employees for drug abuse violations;
 - C. Require that each employee engaged in the performance of the Agreement be given a copy of the statement required by subpart A, and require that each employee, as a condition of employment on the Agreement, agree to abide by the terms of the statement.
- 16. Responsive to direction from the State Legislature (Public Contract Code Section 10115 et seq.), the Trustees are seeking to increase the statewide participation of disabled veteran business enterprises in contract awards. To this end, Service Provider shall inform the Trustees of any contractual arrangements with consultants or suppliers that are certified disabled veteran business enterprises.
- 17. If the Service Provider is a natural person, the Service Provider certifies by signing this Agreement that s/he is a citizen or national of the United States or otherwise qualified to receive public benefits under the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (P.L. 104-193; 110 STAT. 2105, 2268-69), State of California Governor's Executive Order W-135-96.
- 18. If the Service Provider is a corporation, the Service Provider certifies and declares by signing this Agreement that it is eligible to contract with the State of California pursuant to the California Taxpayer and Shareholder Protection Act of 2003 (Public Contract Code Section 10286 et seq.).
- 19. The Service Provider shall not commence work until it has obtained all the insurance required in this Article, and such insurance has been approved by the Trustees.
 - A. Service Provider shall obtain and maintain the following policies and coverage. The insurance furnished by the Service Provider under this Article shall provide coverage in amounts not less than the following, unless a different amount is stated on the Cover Page of this Agreement:
 - (1) <u>Comprehensive or Commercial Form General Liability Insurance</u>: on an occurrence basis, covering work done or to be done by or on behalf of the Service Provider and providing insurance for bodily injury, personal injury, property damage, and contractual liability. The aggregate limit shall apply separately to the work. Limits of Liability:

\$2,000,000.00 General Aggregate

\$1,000,000.00 Each Occurrence—combined single limit for bodily injury and property damage.

- (2) <u>Business Automobile Liability Insurance</u>: on an occurrence basis, covering owned, scheduled, hired, and non-owned automobiles used by or on behalf of the Service Provider and providing insurance for bodily injury, property damage, and contractual liability. Limits of Liability:
 - \$1,000,000.00 Each Accident—combined single limit for bodily injury and property damage.
- (3) Workers' Compensation: including Employers Liability limits of \$1,000,000.00 and other limits as required under California law.
- (4) Errors and Omissions Insurance: on an occurrence basis is preferred, covering work done or to be done by or on behalf of the Service Provider and providing insurance for errors and omissions in the amount of \$1,000,000.00 each occurrence. At a minimum, Service Provider shall obtain and maintain errors and omissions insurance on a claimsmade basis for no less than \$1,000,000.00 each claim and \$2,000,000.00 annual aggregate, and certification of coverage shall be submitted to the Trustees upon signing of this Agreement. If the total contract amount exceeds \$1,000,000, Service Provider shall renew and keep such insurance in effect for at least five (5) years after the recordation of the notice of completion.

General Provisions 06/2019

- B. Service Provider shall submit to the Trustees certificates of insurance and original endorsements to the policies of insurance required by the agreement as evidence of the insurance coverage. The scope of coverage and deductible shall be shown on the certificate of insurance. The certificates of insurance and endorsements shall provide for no cancellation of coverage without thirty (30) days written notice to the Trustees, as specified in Section 19-C (3). Renewal certifications and endorsements shall be timely filed by the Service Provider for all coverage until the work is accepted as complete. The Trustees reserve the right to require the Service Provider to furnish the Trustees complete, certified copies of all required insurance policies. The Service Provider shall notify the Trustees in writing of any material change in insurance coverage.
- C. The insurance policies shall contain, or be endorsed to contain, the following provisions:
 - (1) For the general and automobile liability policies, the State of California, the Trustees of the California State University, the University, their officers, employees, representatives, volunteers, and agents shall be covered as additional insureds.
 - (2) For any claims related to the work, the Service Provider's insurance coverage shall be primary insurance as respects the State of California, the Trustees of the California State University, the University, their officers, employees, representatives, volunteers, and agents. Any insurance or self-insurance maintained by the State of California, the Trustees of the California State University, the University, their officers, employees, representatives, volunteers, and agents shall be in excess of the Service Provider's insurance and shall not contribute with it.
 - (3) Each insurance policy required by this Article shall state that coverage shall not be canceled by either party, except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the Trustees.
 - (4) The State of California, the Trustees of the California State University, the University, their officers, employees, representatives, volunteers, and agents shall not by reason of their inclusion as additional insureds incur liability to the insurance carriers for payment of premiums for such insurance.
- D. Insurers shall be licensed by the State of California to transact insurance and shall hold a current A.M. Best's rating of no less than A:VII or equivalent carrier otherwise acceptable to the Trustees.
- E. Miscellaneous:
 - (1) Any deductible under any policy of insurance required in this Article shall be Service Provider's liability.
 - (2) Acceptance of certificates of insurance by the Trustees shall not limit the Service Provider's liability under the agreement.
 - (3) In the event the Service Provider does not comply with these insurance requirements, the Trustees may, at its option, provide insurance coverage to protect the Trustees. The Service Provider shall pay the cost of the insurance and, if prompt payment is not received by the insurance carrier from the Service Provider, the Trustees may pay for the insurance from agreement sums otherwise due the Service Provider.
 - (4) If the Trustees are damaged by the failure of Service Provider to provide or maintain the required insurance, the Service Provider shall pay the Trustees for all such damages.
 - (5) The Service Provider's obligations to obtain and maintain all required insurance are non-delegable duties under this agreement.
- 20. The Service Provider agrees to hold harmless, defend, and indemnify the State of California, the Trustees of the California State University, the University, and the officers, employees representatives, and agents of each of them from any and all claims, damages, losses, causes of action and demands, and all costs and expenses incurred in connection therewith, resulting from or in any manner arising out of or in connection with any negligent act or omission or willful misconduct on the part of the Service Provider, its officers, agents, and employees, in the performance of this Agreement. This provision shall survive the expiration or termination of this Agreement.
- 21. In accordance with Labor Code Section 1720 et seq., Service Provider must pay employees at least the prevailing rate wages for public works performed on the Project, including preconstruction inspection and surveying. If and to the extent the Project will involve public works, Service Provider must register with the Department of Industrial Relations (DIR) to bid and/or perform work on the Project, and Service Provider must submit certified payroll records to DIR at least monthly for such work. The Project is subject to DIR monitoring and enforcement.

End of Rider A

General Provisions 06/2019

Exhibit A - Scope of Work CSU Commissioning (Cx)

1. Commissioning (Cx) Objectives

By statute, Title 24 of the California Code of Regulations (CCR), Part 6- California Energy Code, and Part 11 - California Green Building Standards [CALGreen], requires a building system commissioning effort in most cases for new construction of 10,000SF and greater. Commissioning shall be included in addition to the requirements of the Title 24 CCR, for all California State University (CSU) construction projects with \$3,000,000 or greater in construction costs.

The objective of the CSU commissioning process is to provide a systematic quality assurance process that spans the entire design and construction process, including verifying and documenting that building systems and components are planned, designed, installed, tested, operated and maintained to the applicable codes and standards as well as meet the CSU's project requirements.

The 'Cx Scope – Base Commissioning Scope (Section 2) applies to all projects. Each project shall also adhere to one of the identified supplemental scope packages (Sections 3, 4, 5, or 6) described herein. The specific scope to be used for this project is identified in Section 13 - Modifications to Scope Summary.

Cx scope of work for each project will vary based on project cost/size and complexity. The supplemental scopes align with project construction costs and become more comprehensive as project cost/complexity increase. The supplemental scope cost thresholds is a recommended paring. For smaller, but mechanically demanding projects it may be more appropriate to utilize a more comprehensive commissioning scope. Conversely for larger, but mechanically simple projects a lesser commissioning scope may be appropriate.

- A. Confirm the applicability and extent of commissioning to be provided on each individual project with the campus at the onset of each project.
- B. The Service Provider engaged for this work is hereby designated as the Commissioning Agent (CxA) for the project. In this role the CxA acts as a campus agent and as a consulting campus advisor to the design team and contractor on issues that affect commissioning. The CxA's role is advisory. The Architect/Engineer and Contractor under their own separate contracts with the University are the respective Architect/Engineer-of-Record and Contractor-of-Record.
- C. The CxA shall perform to the selected individual Scope of Work using the most current CSU Commissioning Guidelines (available on the CSU CPDC website) as a reference. The CxA shall seek direction from the campus where guideline or scope requirements relative to the specific project appear inappropriate.
- D. The CxA Scope of Work will involve the CxA from the onset of project through its completion and potentially a one-year post-occupancy period thereafter. The scope of involvement will vary based on the project and its construction delivery method.
 - (1) <u>During the pre-design phase</u>, the CxA shall work with the campus project team to challenge and define project performance expectations and document project performance and commissioning goals. In the case of a design-build delivery the CxA shall develop commissioning requirements suitable for use in a project RFQ/RFP.
 - (2) <u>During the design phases</u>, the role of the CxA is to develop commissioning specification and testing plan recommendations for the design team. In a design-build delivery the CxA shall be impartially available to each proposing design team to offer independent and non-partisan recommendations relative to each respective design-build team's development of their own outline commissioning plan.
 As the design is developed the CxA shall monitor to ensure that the project design documents are generally consistent with the commissioning recommendations as to quality, constructability, operability and campus-identified objectives. In the case of a design-build delivery, the CxA shall confirm that the selected design-build team is developing the
 - (3) <u>During construction</u>, the CxA shall monitor to ensure commission related tasks are completed consistent with the approved Construction Documents and the commissioning testing plan incorporated therein.
 - (4) <u>During the one-year post-occupancy period</u>, if requested, the CxA shall provide an independent assessment of warranty claims relative to MEP commissioning issues.

Scope of Work 7/1/2019

design and commissions consistent with the RFP award.

The Base Commissioning Scope

The Base Cx scope in this section is applicable to all CSU commissioning projects. Each project shall also adhere to a supplemental scope package (Section 3, 4, 5, or 6). This will be identified in Section 13 - Scope Summary. The 'Base Cx Scope' and the selected 'Supplementary Scope' for the project shall be read as complimentary and additive. The appointed Commissioning Agent shall:

A. Base Scope - Cx Pre-Design Phase 1

- (1) Actively coordinate the commissioning work effort during pre-design and all design phases. Provide a brief written assessment to the University at the completion of each design phase on the progress of the commissioning effort.
- (2) Develop commissioning plan and specification recommendations for design team use. We reiterate that the Cx Agent's role here is to provide advisory support. The project A/E retains record authority for the functionality and appropriateness of the design.
- (3) Consistent with Title 24 of the CCR, Part 6- California Energy Code, and CALGreen requirements, develop an Owner's Project Requirement document (OPR) to memorialize the project's functional requirements, expectations of building use and operation as it relates to systems being commissioned.

B. Base Scope - Cx Pre-Design Phase 2

- Develop commissioning specification recommendations for each system to be commissioned.
- (2) Commissioning specification recommendations shall generally include:
 - a. Reporting and documentation requirements
 - b. Alerts to coordination issues
 - c. Construction checklist and startup requirements
 - d. Contractor functional test requirements. Include testing conditions and acceptance criteria for each piece of equipment and systems being commissioned. The following resources offer model guidelines for content, rigor and format of Cx specifications:
 - i. Model Commissioning Plan and Guide Specifications, USDOE/FEMP; Portland Energy Conservation, Inc. (PECI), http://www.peci.org/model-commissioning-plans-guide-specifications
 - ii. The HVAC Commissioning Process, ASHRAE Guideline http://www.ashrae.org
- (3) Provide commissioning plan and specification recommendations to design team and contractor.
- (4) Monitor for incorporation into the Construction Documents. Review to ensure that Cx specifications incorporate the elements specified by Title 24 of the CCR, Part 6- California Energy Code, and CALGreen. Periodically advise the campus as to efficacy of this effort.
- (5) Review Design Team's Basis of Design (BOD) report. Ensure that it adequately describes the building systems being commissioned and design assumptions made.

C. Base Scope - Cx Construction Phase 3

- (1) Coordinate as required to ensure that commissioning activities occur in a logical and efficient manner using consistent protocols and forms. Coordinate as required to ensure that clear, effective and regular communications with all parties on commissioning related items occurs.
- (2) Monitor to ensure that commissioning activities are appropriately incorporated into the contractor's project construction schedule.
- (3) Monitor construction meeting minutes. Participate periodically in construction meetings as needed to ensure that commissioning activities are adequately and effectively represented. At appropriate points during the construction process the CxA shall call for and conduct a commissioning-centric meeting. The CxA shall draft and issue minutes for these meetings.
- (4) Seek to be notified on and participate in the resolution of RFI's, Substitution Requests and proposed Change Orders where they impact commissioning objectives. Where the University approves changes to the Contract that materially impact commissioning objectives work with the project team to ensure that the commissioning requirements accommodate the planned Change Order work.
- (5) Participate as an owner's advocate in reviews related to commissioning, I.e., HVAC and lighting submittals, testing and balancing submittals and systems Operations and Maintenance materials.
- (6) Monitor construction progress and conduct periodic site observations sufficient to confirm commissioning activities are being appropriately completed consistent with the progress of the completion of the work.
- (7) Review HVAC piping pressure testing and flushing documentation, sufficient to assess that proper procedures were followed and satisfactory results obtained.
- (8) Review HVAC ductwork testing and cleaning documentation sufficient to assess that proper procedures were followed and satisfactory results were obtained.

- (9) Review systems startup reports to ensure satisfactory results were achieved. Conduct related site observations as may be warranted.
- (10) Review air and water balancing reports. Conduct related site observations as may be warranted. Provide written assessment to the University recommending acceptance (or not) of the test and balance report.
- (11) Analyze functional performance trend logs and monitoring data to verify planned system(s) performance is realized. Provide written assessment recommending acceptance (or not) to the University.
- (12) Witness and document functional performance tests by the installing mechanical sub-contractors.
- (13) Functional testing is expected to include operation of the mechanical systems and components through all specified sequences of operation. I.e., startup, shutdown, unoccupied mode, manual mode, staging, miscellaneous alarms, power failure, security alarm, etc.
- (14) Confirm correct functioning of interlocks with other systems or equipment.
- (15) Confirm that sensors and actuators are appropriately calibrated by the installing contractors.
- (16) Witness re-testing as necessary until satisfactory performance is achieved. Provide written assessment recommending acceptance (or not) to the University.
- (17) Confirm calibration and certification of utility meters (gas, water, electric). For electric meters ensure that tests are against a known standard or load to ensure correct values. Provide written assessment recommending acceptance (or not) to the University.
- (18) Confirm integrity of utility meters data connection to building Energy Management Systems. Verify reliable communication, consistency, and accuracy of values being recorded by EMS. If a central utility metering system connection is provided, verify same for that data connection. Provide written assessment recommending acceptance (or not) to the University.
- (19) Witness tests on HVAC equipment to verify heating and cooling operation. The override of certain control values to simulate seasonal conditions may be necessary. Verify functional testing using conventional manual methods, control system trend logs, and/or stand-alone data loggers, as necessary to confirm proper and reliable system function. Provide written assessment recommending acceptance (or not) to the University.
- (20) Review/audit for adequacy systems training provided by the contractor. Review records that training of campus personnel was completed and that a licensed copy of the control system's operational software is provided. Review to ensure that scope and content of training complies with requirements of Title 24 of the CCR, Part 6- California Energy Code, and CALGreen. Provide written assessment recommending acceptance (or not) to the University.
- (21) Review for adequacy the O&M manuals on commissioned equipment and systems provided by the contractor. Provide written assessment recommending acceptance (or not) to the University.
- (22) Where and if present, identify non or marginally compliant commissioned elements. If present each non-compliance issue shall be referenced to the specific functional test, inspection, trend log, etc. where the deficiency is documented. Provide written assessments to the University.
- (23) Compile a Project Commissioning Reference Manual. This manual shall include:
 - a. Campus Project Requirements
 - b. Basis of Design; Performance Metrics, completed during design
 - c. Space and use descriptions; single-line drawings and schematics for major systems
 - d. Control drawings, sequences of operation
 - e. Recommendations for re-commissioning frequency by equipment type
 - f. Energy tracking recommendations
 - g. Annotated building trend logs with a brief description of acceptable readings and variances
- (24) Compile a <u>Commissioning Record</u>. This record shall include:
 - a. A summary report that includes a list of participants and roles, facility/building description, description of commissioning and testing scope, and a general narrative of testing and verification methods.
 - b. For each piece of commissioned equipment and system, the report shall contain an assessment by the CxA of the following:
 - i. Equipment and systems compliance with contract documents
 - ii. Equipment and systems installation
 - iii. Functional performance
 - iv. Provision of systems O &M documentation
 - v. Operator training

- (25) The Commissioning Record shall meet all requirements of Title 24 of the CCR, Part 6- California Energy Code, and CALGreen for a 'Commissioning Report'.
- (26) Deliver the Project Commissioning Record and Project Commissioning Manual to campus. Set up a meeting and review the document package with staff. Pick up requested edits and/or clarifications.
- D. Base Scope Cx Post-Occupancy Phase 4
 - (1) The post-occupancy phase of this commissioning work begins with the acceptance of the project by the campus and extends for approximately a one (1) year period to coincide with the contractor's warranty expiration date for the project. It is critical that all post-occupancy commissioning work under this agreement be identified and completed in advance of this date.
 - (2) During the post-occupancy period the CxA shall be available to provide an independent knowledgeable opinion on whether an issue should be considered as a warranty or construction contract scope item.
 - (3) Return to the project site at ten months into the twelve-month post-occupancy period. Coordinate with the campus and the contractor to identify and schedule testing dates.
 - (4) Interview facility staff and identify any problems or concerns relative to operating the facility as originally intended. Document any outstanding issues related to the original commissioning effort.
 - (5) Develop corrective action plan recommendations based on the post-occupancy testing, staff interviews and observed operational concerns. Compile the final corrective action plan testing documentation and assessment as an amendment to finalize and complete the <u>Project Commissioning Record</u>. Deliver/present to campus.
 - (6) Document Energy Use intensity for first twelve (12) months of operations and provide a copy of documentation to CPDC.
- 3. Cx Scope of Services Very Small Projects (less than 10,000SF and less than \$6 Million)
 - A. In addition to the requirements of the Title 24 of the CCR, Part 6- California Energy Code, and CALGreen See Section 13, Scope Summary to identify if this section applies (or not) to this work.
 - B. The following systems and assemblies shall be commissioned:
 - (1) Building energy management and control (EMS) systems
 - (2) Heating, ventilating and air conditioning systems
 - (3) Indoor lighting system and controls
 - (4) Laboratory, hoods and relative rooms pressurization systems (where present)
 - (5) Domestic water systems
 - (6) Landscape irrigation systems (where present)
 - (7) Water reuse systems (where present)
 - (8) Title 24 of CCR:
 - a. Projects less than 10,000 SF shall comply with the design review requirements specified in the Title 24 of the CCR, Part 6- California Energy Code, and shall include any measures or requirements necessary for completing the review in the construction documents in a manner that meets or exceeds code requirements.
 - b. Projects greater than 10,000 SF shall meet all mandated commissioning of systems not otherwise listed above using test procedures that meet or exceed Title 24 CCR requirements.
 - C. The following companion Supplemental Checklist applies:
 - (1) Very Small Projects Checklist
 - D. For this project the following MODIFICATIONS TO SCOPE apply:
 - (1) If applicable, modifications to this scope are listed in Section 13 Scope Summary
 - E. Very Small Projects Checklist (♥= required)

| Design Area | Review Description | Schematic Design | Design Development | Construction Docs 50% | Construction Docs 95% |
|--|---|---------------------|-----------------------|-----------------------|-----------------------|
| Owner's Project Requirements | Document project functional requirements, expectations of building use and operational considerations for systems to be commissioned. | • | 0 | | |
| Basis of Design | Ensure that Basis of Design is clear, complete and meets stated campus project requirements. | 0 | | | O |
| Commissioning facilitation | Ensure that the design will accommodate effective commissioning (i.e., appropriate system access, test ports, monitoring points, etc.). | | O | O | O |
| Control system & strategies | Review lighting controls, building energy management controls, and HVAC sequences of operation for effectiveness, efficiency and reliability. | | | | O |
| Operations and maintenance (O&M) | Ensure that proposed design support O&M (i.e., equipment access, system control, consumables, etc.). | 0 | | | O |
| Indoor environmental quality | Ensure that HVAC systems provide end user comfort and a pleasant work environment. Review for thermal, visual, acoustical, distribution and air quality issues. | | | | 0 |
| O&M documentation | Verify adequacy of system Operations and Maintenance documentation. | | | | ٥ |
| Training | Verify adequacy of operator training. | | | 0 | ٥ |
| Commissioning specifications | Verify that bid documents adequately specify building commissioning and supporting testing requirements. | | | O | O |
| Campus design guideline or standards | Verify that the design complies with the CSU policies on energy efficiency. | 0 | 0 | | O |
| Environmental sustainability | Ensure that building sustainable features are well-integrated, practical and durable. | | 0 | O | O |
| MEP systems | Review MEP systems design for functionality, efficiency, and durability. | | 0 | 0 | |
| Life cycle costs | Review that life cycle assessments provide consideration of viable alternatives. | 0 | | | |

- 4. Cx Scope of Services Small Projects (from \$6 Million to \$15 Million)
 - A. See Section 13, Scope Summary to identify if this section applies (or not) to this work.
 - B. The following systems and assemblies shall be commissioned:
 - (1) Building energy management and control (EMS) systems.
 - (2) Heating, ventilating and air conditioning systems.
 - (3) Indoor lighting system and controls.
 - (4) Laboratory, hoods and relative rooms pressurization systems (where present.)

- (5) Domestic water systems.
- (6) Landscape irrigation systems (where present.)
- (7) Water reuse systems (where present.)
- (8) Title 24 of CCR: If the project is greater than 10,000 SF, all Title 24 of CCR mandated systems not otherwise listed above shall be commissioned, using test procedures that meet or exceed Title 24 of CCR requirements.
- C. The following companion Supplemental Checklist applies:
 - (1) <u>Small</u> Projects Checklist.
- D. For this project the following MODIFICATIONS TO SCOPE apply:
 - (1) If applicable, modifications to this scope are listed in Section 13 Scope Summary.
- E. <u>Small Projects Checklist</u> (**©**= required)

| Design Area Review Description | | Schematic Design | Design Development | Const Docs 50% | Const Docs 95% |
|--------------------------------------|---|---------------------|-----------------------|----------------------|----------------------|
| Owner's Project Requirements | Document project functional requirements, expectations of building use and operational considerations for systems to be commissioned. | O | 0 | | |
| Basis of Design | Ensure that Basis of Design is clear, complete and meets stated campus project requirements (above). | 0 | | | 0 |
| Commissioning facilitation | Ensure that the design will accommodate effective commissioning (I.e., appropriate system access, test ports, monitoring points, etc.). | | 0 | ٥ | 0 |
| Control system & strategies | Review lighting controls, building energy management controls, and HVAC sequences of operation for effectiveness, efficiency and reliability. | | | | O |
| Operations and maintenance (O&M) | Ensure that proposed design support O&M (I.e., equipment access, system control, consumables, etc.). | O | | | 0 |
| Indoor environmental quality | Ensure that HVAC systems provide end user comfort and a pleasant work environment. Review for thermal, visual, acoustical, distribution and air quality issues. | | | | 0 |
| O&M documentation | Verify adequacy of system Operations and Maintenance documentation. | | | | ٥ |
| Training | Verify adequacy of operator training. | | | ٥ | 0 |
| Commissioning specifications | Verify that bid documents adequately specify building commissioning and supporting testing requirements. | | | ٥ | O |
| Campus design guideline or standards | Verify that the design complies with the CSU policies on energy efficiency. | 0 | 0 | | 0 |
| Environmental sustainability | Ensure that building sustainable features are well-integrated, practical and durable. | | O | O | O |
| MEP systems | Review MEP systems design for functionality, efficiency, and durability. | | 0 | ٥ | |
| Life cycle costs | Review that life cycle assessments provide consideration of viable alternatives. | O | | | |

Scope of Work

- 5. Cx Scope of Services Medium Projects (From \$15 Million to less than \$30 Million)
 - A. See Section 12, Scope Summary to identify if this section applies (or not) to this work.
 - B. The following systems and assemblies shall be commissioned:
 - (1) Building energy management and control (EMS) systems
 - (2) Heating, ventilating and air conditioning systems
 - (3) Indoor lighting system and controls
 - (4) Laboratory, hoods and relative rooms pressurization systems (where present)
 - (5) Domestic water systems
 - (6) Landscape irrigation systems (where present)
 - (7) Water reuse systems (where present)
 - (8) Title 24 of CCR: if the project is greater than 10,000 SF, all Title 24 of CCR mandated systems not otherwise listed above shall be commissioned, using test procedures that meet or exceed Title 24 of CCR requirements.
 - (9) Scheduled or occupancy sensor lighting controls
 - (10) Daylight diming controls (where present)
 - (11) Emergency power generators and transfer switch (where present)
 - (12) Uninterruptable Power Supply (UPS) systems (where present)
 - C. The following companion Supplemental Checklist applies:
 - (1) <u>Medium</u> Projects Checklist
 - D. For this project the following MODIFICATIONS TO SCOPE apply:
 - (1) If applicable, modifications to this scope are listed in Section 13 Scope Summary
 - E. <u>Medium</u> Projects Checklist (**②**= required)

| Design Area | Review Description | Schematic Design | Design Development | Const Docs 50% | Const Docs 95% |
|----------------------------------|---|---------------------|-----------------------|----------------------|----------------------|
| Owner's Project Requirements | Document project functional requirements, expectations of building use and operational considerations for systems to be commissioned. | • | • | | |
| Basis of Design | Ensure that Basis of Design is clear, complete and meets stated campus project requirements (above). | 0 | 0 | | 0 |
| Commissioning facilitation | Ensure that the design will accommodate effective commissioning (I.e., appropriate system access, test ports, monitoring points, etc.). | | • | 0 | 0 |
| Control system & strategies | Review lighting controls, building energy management controls, and HVAC sequences of operation for effectiveness, efficiency and reliability. | | 0 | | 0 |
| Operations and maintenance (O&M) | Ensure that proposed design support O&M (I.e., equipment access, system control, consumables, etc.). | 0 | | | 0 |
| Indoor environmental quality | Ensure that HVAC systems provide end user comfort and a pleasant work environment. Review for thermal, visual, acoustical, distribution and air quality issues. | | • | | 0 |
| O&M documentation | Verify adequacy of system Operations and Maintenance documentation. | | | | 0 |
| Training | Verify adequacy of operator training. | | | 0 | 0 |
| Commissioning specifications | Verify that bid documents adequately specify building commissioning and supporting testing requirements. | | | 0 | O |

| Campus design guideline or standards | Verify that the design complies with the CSU policies on energy efficiency. | 0 | 0 | | O |
|--------------------------------------|---|---|---|---|---|
| Environmental sustainability | Ensure that building sustainable features are well-integrated, practical and durable. | | 0 | 0 | 0 |
| MEP systems | Review MEP systems design for functionality, efficiency, and durability. | | 0 | • | |
| Life cycle costs | Review that life cycle assessments provide consideration of viable alternatives. | • | | | |

- 6. Cx Scope of Services <u>Large</u> Projects (>\$30MM)
 - A. The following systems and assemblies shall be commissioned:
 - (2) Building energy management and control (EMS) systems
 - (3) Heating, ventilating and air conditioning systems
 - (4) Indoor lighting system and controls
 - (5) Laboratory, hoods and relative rooms pressurization systems (where present)
 - (6) Domestic water systems
 - (7) Landscape irrigation systems (where present)
 - (8) Water reuse systems (where present)
 - (9) Title 24 of CCR: If the project is greater than 10,000 SF, all Title 24 of CCR mandated systems not otherwise listed above shall be commissioned, using test procedures that meet or exceed Title 24 of CCR requirements.
 - (10) Scheduled or occupancy sensor lighting controls
 - (11) Daylight diming controls (where present)
 - (12) Emergency power generators and transfer switch (where present)
 - (13) Uninterruptable Power Supply (UPS) systems (where present)
 - (14) Data and communication. Review line quality tests.
 - B. The following companion Supplemental Checklist applies:
 - (1) Large Projects Checklist
 - C. For this project the following MODIFICATIONS TO SCOPE apply:
 - (1) If applicable, modifications to this scope are listed in Section 13 Scope Summary
 - D. <u>Large Projects Checklist</u> (©= required)

| Design Area | Review Description | Schematic Design | Design Development | Const Docs 50% | Const Docs 95% |
|----------------------------------|---|---------------------|-----------------------|----------------------|----------------------|
| Owner's Project Requirements | Document project functional requirements, expectations of building use and operational considerations for systems to be commissioned. | 0 | 0 | | |
| Basis of Design | Ensure that Basis of Design is clear, complete and meets stated campus project requirements (above). | O | • | | 0 |
| Commissioning facilitation | Ensure that the design will accommodate effective commissioning (I.e., appropriate system access, test ports, monitoring points, etc.). | | 0 | 0 | O |
| Control system & strategies | Review lighting controls, building energy management controls, and HVAC sequences of operation for effectiveness, efficiency and reliability. | | 0 | | • |
| Operations and maintenance (O&M) | Ensure that proposed design support O&M (I.e., equipment access, system control, consumables, etc.). | O | | | Û |

| Indoor environmental quality | Ensure that HVAC systems provide end user comfort and a pleasant work environment. Review for thermal, visual, acoustical, distribution and air quality issues. | | o | | O |
|--------------------------------------|---|---|---|---|---|
| O&M documentation | Verify adequacy of system Operations and Maintenance documentation. | | | | 0 |
| Training | Verify adequacy of operator training. | | | 0 | • |
| Commissioning specifications | Verify that bid documents adequately specify building commissioning and supporting testing requirements. | | | O | O |
| Campus design guideline or standards | Verify that the design complies with the CSU policies on energy efficiency. | 0 | O | | 0 |
| Environmental sustainability | Ensure that building sustainable features are well-integrated, practical and durable. | | O | 0 | O |
| MEP systems | Review MEP systems design for functionality, efficiency, and durability. | | O | 0 | |
| Life cycle costs | Review that life cycle assessments provide consideration of viable alternatives. | ø | | | |

7. Service Duration

The term of the service authorization shall begin at the onset of Schematic Design and conclude at the end of the Post-Occupancy phase.

8. Fee

- A. Commissioning fee for this project shall be provided on an hourly rate in accordance with the Billing Rate Table agreed and attached hereto as Exhibit B with a maximum 'not to exceed' amount identified. Invoicing for services shall be provided monthly.
- B. The work effort shall generally align to the percentage's ranges below. Advise the trustees at the earliest opportunity if it is anticipated that the required effort will vary materially from these ranges.

| Percentage of fee | Payment milestone |
|-------------------|-------------------------------|
| 25% | Completion of Schematic Phase |
| 25% | Completion of Design |
| | Development Phase |
| 0% | Bidding |
| 20% | 50% construction completion |
| 25% | 100% construction completion |
| 5% | 1-year Post-Occupancy review |
| 3/0 | and report |

9. Deliverables:

- A. Provide electronic copies of report. Deliver via email or FTP, Drop box, etc.
- B. Provide 2 print report copies to campus.
- C. Provide 1 electronic report copy to CPDC Office of the Chancellor.

10. Reimbursables

Reasonable non-local travel and outsourced reprographic expenses are reimbursable under this agreement. Claims for reimbursable items shall be without mark-up for directly related project charges incurred. Provide supporting documentation as a part of claim submittal. In general, travel reimbursement will be provided for project-related travel within the following limitations:

A. Local travel, less than thirty (30) miles to campus, contractor, or project site is not reimbursable.

- B. Reasonable travel costs for distances greater than thirty (30) miles are reimbursable.
 - (1) Commercial Air Travel: Reasonable airfare costs will be reimbursed when air travel is required. Reimbursement shall be limited to reasonable air fare charges incurred for refundable economy class travel. Generically reasonable example: Southwest Airlines into San Jose with a rental car into Monterey. Generically unreasonable example United Airlines into Monterey and needing to incur similar rental car charges where that cost is disproportionately higher than the San Jose cost.
 - (2) General Aviation: General aviation travel is reimbursable. <u>Total</u> reimbursement (including fuel and tie down) shall be conservatively limited to approximate equivalent fare amounts that would otherwise be incurred via reasonable commercial air travel from a serving regional airport.
 - (3) Rental Car: Reasonable rental car costs will be reimbursed when air travel is required.
 - (4) Private Automobile Mileage: Travel by personal automobile beyond a thirty (30) mile radius will be reimbursed at current federal mileage rates.
 - (5) Lodging: Lodging costs will be reimbursed up to the maximum CSU per diem maximum.
 - (6) Meals: Meal costs will be reimbursed when overnight travel is required at the CSU per diem maximum.

11. Extra Services

- A. This agreement may authorize extras services via issue of an Extra Service Work Authorization describing the supplemental related project work and agreed fee. Such work must be countersigned by the Service Provider to take effect.
- B. Extra service work MUST be authorized in advance.

12. Invoicing

This work includes:

- A. Payment for services will be made upon presentation of a written invoice in arrears of work completed to the satisfaction of the trustees.
- B. Prepare monthly invoicing using supplied invoicing template. For each invoice provide supporting back-up information identifying staff performing work, hourly rate, previous invoiced amounts, payments received and hours being billed.

13. SCOPE SUMMARY

| ☑ Section 2 - Cx Scope - All Projects |
|--|
| And the following supplemental scope: |
| □ Section 3 - Very Small Projects (less than 10,000SF and less than \$6 Million) □ Section 3 - Small Projects (\$6 Million to \$15 Million) □ Section 3 - Medium Projects (greater than \$15 Million to less than \$30 Million) □ Section 3 - Large Projects (greater than \$30 Million) |
| This combined scope is modified as follows: |
| ☐ No modifications☐ As listed below: |
| All correspondence regarding New Construction and/or Building Code Activities and Processes shall be sent to Ebi Saberi, University |

Architect, with a copy to Aaron Klemm, Chief of Energy and Sustainability.

End of Exhibit A

Exhibit B – Fee and Payment Schedule

| <u>Discipline</u> | Maximum Rate |
|--------------------------------------|-----------------|
| Senior Program/Project Mgr. PE, CLMP | \$ 200 Per Hour |
| Senior Energy Engineer PE | \$ 180 Per Hour |
| Energy Engineer | \$ 150 Per Hour |
| Energy Analyst / Junior Engineer | \$ 125 Per Hour |
| Field technician | \$ 165 Per Hour |
| CAD Operator | \$ 110 Per Hour |
| Engineering/Administrative Assistant | \$ 100 Per Hour |

Billing Rate Table

THE CALIFORNIA STATE UNIVERSITY

Exhibit C – Service Order & Authorization to Proceed Commissioning Services

| [Date] | |
|--|---|
| Glumac 18200 Von Karman Avenue; Suite 100 Irvine, CA 92612 | |
| Attn: Mr. Steve Caroll: | |
| [Project Name], [Project Number] [Campus] Service Order & Authorization to Proceed Number: [insert #] | |
| In accordance with the provisions of the Systemwide Master Enal [commissioning (Cx)] services for the [subject project]. Services provi CSU Projects] "Scope of Services" [for small, medium or large – (trad | ded shall be in accordance with [MEA Exhibit A: Commissioning for |
| Additionally, please provide the following related extra service(s): [inse | ert brief description] |
| The Service Provider shall not perform services in excess of this Ser University. | rvice Order without prior written authorization to proceed from the |
| Service Provider [CSU Cam [Campus D [Executive Facility Officer or des [Campus [Campus <u>Project Man</u> | pus Name] repartment] ignated campus project manager] Address] |
| The total amount to be expended under this Service Order shall not e regardless of Service Provider's cost in performing these services. It is days to complete] Service Provider shall submit all invoices in duplica number on each copy to the project manager named above. | s expected that this project will be completed within [insert number of |
| Questions regarding this authorization shall be directed to the above-r | named project manager. |
| Approved, | Fund Certified, |
| [Name] [Department Head] [Department] | [Name] [Accounting/Fiscal Officer] [Department] |



CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY) 09/30/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

| PRODUCER AON Risk Insurance Services West, Inc. Los Angeles CA Office 707 Wilshire Boulevard Suite 2600 Los Angeles CA 90017-0460 USA | CONTACT NAME: | | | | |
|---|---|-----------|--|--|--|
| | PHONE (A/C. No. Ext): 866283712 FAX (A/C. No.): (800) | 363-0105 | | | |
| | E-MAIL ADDRESS: | | | | |
| | INSURER(S) AFFORDING COVERAGE | NAIC# | | | |
| INSURED | INSURER A: Lexington Insurance Company | 19437 | | | |
| Glumac, A Tetra Tech Company | INSURER B: Zurich American Ins Co | 16535 | | | |
| 150 California St., 3rd Floor San Francisco CA 94111 USA | INSURER C: AIG Europe Limited | AA1120841 | | | |
| | INSURER D: | | | | |
| | INSURER E: | | | | |
| | INSURER F: | | | | |

COVERAGES CERTIFICATE NUMBER: 570073377609 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUICH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUICED BY PAID CLAIMS

| | XCEUSIONS AND CONDITIONS OF SUCH | | | | | | Lillio oli | own are as requested | | |
|----------|---|------|-------------------------|---|----------------------------|----------------------------|---|----------------------------|-----------|-------------|
| INSR | TYPE OF INSURANCE | ADDU | SUBR | POLICY NUMBER | POLICY EFF (MM/DD/YYYY) | POLICY EXP (MM/DD/YYYY) | LIMIT | S | | |
| В | X COMMERCIAL GENERAL LIABILITY | | | GL0181740600 | 10/01/2018 | 10/01/2019 | EACH OCCURRENCE | \$2,000,000 | | |
| | CLAIMS-MADE X OCCUR | | | | | | DAMAGE TO RENTED PREMISES (Ea occurrence) | \$1,000,000 | | |
| | | | | | | | MED EXP (Any one person) | \$10,000 | | |
| | | | | | | | PERSONAL & ADV INJURY | \$2,000,000 | | |
| | GEN'L AGGREGATE LIMIT APPLIES PER | | | | | | GENERAL AGGREGATE | \$4,000,000 | | |
| | POLICY X PRO- JECT X LOC | | | | | | PRODUCTS - COMP/OP AGG | \$4,000,000 | | |
| l | OTHER: | | | | | | | | | |
| В | AUTOMOBILE LIABILITY | | | BAP 1857085-00 | 10/01/2018 | 10/01/2019 | COMBINED SINGLE LIMIT (Ea accident) | \$2,000,000 | | |
| | X ANY AUTO | | | | | | BODILY INJURY (Per person) | | | |
| | OWNED SCHEDULED | | | | | | BODILY INJURY (Per accident) | | | |
| | AUTOS ONLY HIRED AUTOS ONLY AUTOS NON-OWNED AUTOS ONLY AUTOS ONLY | | | | | | PROPERTY DAMAGE (Per accident) | | | |
| | | | | | | | | | | |
| С | X UMBRELLA LIAB X OCCUR | | | 62785232 | | 10/01/2019 | EACH OCCURRENCE | \$5,000,000 | | |
| | EXCESS LIAB CLAIMS-MADE | | EXCESS LIAB CLAIMS-MADE | | | SIR applies per policy ter | ms & condit | tions | AGGREGATE | \$5,000,000 |
| | DED X RETENTION | | | | | | | | | |
| В | WORKERS COMPENSATION AND EMPLOYERS' LIABILITY | | | wc254061600 | | 10/01/2019 | X PER OTH- | | | |
| В | ANY PROPRIETOR / PARTNER / EXECUTIVE | | | WC185708700 | 10/01/2018 | 10/01/2019 | E.L. EACH ACCIDENT | \$1,000,000 | | |
| | (Mandatory in NH) | N/A | | | | | E.L. DISEASE-EA EMPLOYEE | \$1,000,000 | | |
| | If yes, describe under DESCRIPTION OF OPERATIONS below | | | | | | E.L. DISEASE-POLICY LIMIT | \$1,000,000 | | |
| A | Env Contr Prof | | | 028182375 Prof/Poll Liab SIR applies per policy ter | | 1 ' ' | Each Claim Aggregate | \$1,000,000 \$2,000,000 | | |
| <u> </u> | | 1 | | | | <u> </u> | <u> </u> | | | |

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: Project Number: SY600PRJ, CSU Vendor ID Number: 4589, License DIR Number: M23267, Project Number: System wide-MEA. State of California, the Trustees of the California State University, the University, their officers, employees, representatives, volunteers and agents are included as Additional Insured in accordance with the policy provisions of the General Liability and Automobile Liability policies as required by written contract. General Liability and Automobile Liability Policies evidenced herein are Primary and Non-Contributory to other insurance available to an Additional Insured, but only in accordance with the policy's provisions as required by written contract. A Waiver of Subrogation is granted in favor of State of California, the Trustees of the California State University, the University, their officers, employees, representatives, volunteers and agents

| CERTIFICATE | HOLDER |
|-------------|--------|
| ~=::::::: | |

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

CSU The California State University, Office of the Chancellor Attn: Cecelia Fuentes 401 Golden Shore, 2nd Floor Long Beach CA 90802-4210 USA

Aon Prisk Insurance Services West, Inc.

AGENCY CUSTOMER ID: 570000036654

LOC #:

ACORD®

ADDITIONAL REMARKS SCHEDULE

Page of

| / IDDITION/IE | TEMP II TITO GOTTE BOLL |
|--|------------------------------|
| AGENCY | NAMED INSURED |
| Aon Risk Insurance Services West, Inc. | Glumac, A Tetra Tech Company |
| POLICY NUMBER See Certificate Number: 570073377609 | |
| CARRIER | AIC CODE |
| See Certificate Number: 570073377609 | EFFECTIVE DATE: |

ADDITIONAL REMARKS

| ADDITIONAL NEWATING |
|---|
| THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM, |
| FORM NUMBER: ACORD 25 FORM TITLE: Certificate of Liability Insurance |
| Additional Description of Operations / Locations / Vehicles: |
| in accordance with the policy provisions of the General Liability, Automobile Liability and Workers' Compensation policies as required by written contract. Stop Gap Coverage for the following states: OH, ND, WA, WY. |



Additional Insured – Automatic – Owners, Lessees Or Contractors

| Policy No. | Eff. Date of Pol. | Exp. Date of Pol. | Eff. Date of End. | Producer No. | Add'l. Prem | Return Prem. |
|----------------|-------------------|-------------------|-------------------|--------------|-------------|--------------|
| GLO 1817406-00 | 10/01/2018 | 10/01/2019 | 10/01/2018 | 7527200 | | |

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

Named Insured:

Address (including ZIP Code):

This endorsement modifies insurance provided under the:

Commercial General Liability Coverage Part

- A. Section II Who Is An Insured is amended to include as an additional insured any person or organization whom you are required to add as an additional insured on this policy under a written contract or written agreement. Such person or organization is an additional insured only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:
 - 1. Your acts or omissions; or
 - 2. The acts or omissions of those acting on your behalf,

in the performance of your ongoing operations or "your work" as included in the "products-completed operations hazard", which is the subject of the written contract or written agreement.

However, the insurance afforded to such additional insured:

- 1. Only applies to the extent permitted by law; and
- 2. Will not be broader than that which you are required by the written contract or written agreement to provide for such additional insured.
- B. With respect to the insurance afforded to these additional insureds, the following additional exclusion applies:

This insurance does not apply to:

"Bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of, or failure to render, any professional architectural, engineering or surveying services including:

- a. The preparing, approving or failing to prepare or approve maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
- **b.** Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of or the failure to render any professional architectural, engineering or surveying services.

C. The following is added to Paragraph 2. Duties In The Event Of Occurrence, Offense, Claim Or Suit of Section IV – Commercial General Liability Conditions:

The additional insured must see to it that:

- 1. We are notified as soon as practicable of an "occurrence" or offense that may result in a claim;
- 2. We receive written notice of a claim or "suit" as soon as practicable; and
- 3. A request for defense and indemnity of the claim or "suit" will promptly be brought against any policy issued by another insurer under which the additional insured may be an insured in any capacity. This provision does not apply to insurance on which the additional insured is a Named Insured if the written contract or written agreement requires that this coverage be primary and non-contributory.
- **D.** For the purposes of the coverage provided by this endorsement:
 - 1. The following is added to the Other Insurance Condition of Section IV Commercial General Liability Conditions:

Primary and Noncontributory insurance

This insurance is primary to and will not seek contribution from any other insurance available to an additional insured provided that:

- a. The additional insured is a Named Insured under such other insurance; and
- **b.** You are required by written contract or written agreement that this insurance be primary and not seek contribution from any other insurance available to the additional insured.
- 2. The following paragraph is added to Paragraph 4.b. of the Other Insurance Condition of Section IV Commercial General Liability Conditions:

This insurance is excess over:

Any of the other insurance, whether primary, excess, contingent or on any other basis, available to an additional insured, in which the additional insured on our policy is also covered as an additional insured on another policy providing coverage for the same "occurrence", offense, claim or "suit". This provision does not apply to any policy in which the additional insured is a Named Insured on such other policy and where our policy is required by a written contract or written agreement to provide coverage to the additional insured on a primary and non-contributory basis.

- **E.** This endorsement does not apply to an additional insured which has been added to this policy by an endorsement showing the additional insured in a Schedule of additional insureds, and which endorsement applies specifically to that identified additional insured.
- F. With respect to the insurance afforded to the additional insureds under this endorsement, the following is added to Section III Limits Of Insurance:

The most we will pay on behalf of the additional insured is the amount of insurance:

- 1. Required by the written contract or written agreement referenced in Paragraph A. of this endorsement; or
- 2. Available under the applicable Limits of Insurance shown in the Declarations,

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

All other terms and conditions of this policy remain unchanged.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Person Or Organization:

ANY PERSON OR ORGANIZATION THAT REQUIRES YOU TO WAIVE YOUR RIGHTS OF RECOVERY, IN A WRITTEN CONTRACT OR WRITTEN AGREEMENT WITH THE NAMED INSURED THAT IS EXECUTED PRIOR TO THE ACCIDENT OR LOSS.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Paragraph 8. Transfer Of Rights Of Recovery Against Others To Us of Section IV – Conditions:

We waive any right of recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard". This waiver applies only to the person or organization shown in the Schedule above.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

CONTRACTUAL LIABILITY - RAILROADS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Scheduled Railroad: Designated Job

ALL CONTRACTS FOR WORK DONE FOR RAILROADS. Site: ANY JOB SITE

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

With respect to operations performed for, or affecting, a Scheduled Railroad at a Designated Job Site, the definition of "insured contract" in the Definitions section is replaced by the following:

- 9. "Insured Contract" means:
 - a. A contract for a lease of premises. However, that portion of the contract for a lease of premises that indemnifies any person or organization for damage by fire to premises while rented to you or temporarily occupied by you with permission of the owner is not an "insured contract":
 - b. A sidetrack agreement;
 - c. Any easement or license agreement;
 - **d.** An obligation, as required by ordinance, to indemnify a municipality, except in connection with work for a municipality;
 - e. An elevator maintenance agreement;
 - f. That part of any other contract or agreement pertaining to your business (including an indemnification of a municipality in connection with work performed for a municipality) under which you assume the tort liability of another party to pay for "bodily injury" or "property damage" to a third person or organization. Tort liability means a liability that would be imposed by law in the absence of any contract or agreement.

Paragraph f. does not include that part of any contract or agreement:

- (1) That indemnifies an architect, engineer or surveyor for injury or damage arising out of:
 - (a) Preparing, approving or failing to prepare or approve maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
 - (b) Giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage;
- (2) Under which the insured, if an architect, engineer or surveyor, assumes liability for an injury or damage arising out of the insured's rendering or failure to render professional services, including those listed in Paragraph (1) above and supervisory, inspection, architectural or engineering activities.

COMMERCIAL AUTO CA 20 48 10 13

POLICY NUMBER: BAP 1857085-00

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

DESIGNATED INSURED FOR COVERED AUTOS LIABILITY COVERAGE

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM BUSINESS AUTO COVERAGE FORM MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by this endorsement.

This endorsement identifies person(s) or organization(s) who are "insureds" for Covered Autos Liability Coverage under the Who Is An Insured provision of the Coverage Form. This endorsement does not alter coverage provided in the Coverage Form.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

| Named Insured: | |
|-----------------------------|--|
| Endorsement Effective Date: | |

SCHEDULE

Name Of Person(s) Or Organization(s):

Any person or organization to whom or which you are required to provide additional insured status or additional insured status on a primary, non-contributory basis, in a written contract or written agreement executed prior to loss, except where such contract or agreement is prohibited by law.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

Each person or organization shown in the Schedule is an "insured" for Covered Autos Liability Coverage, but only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured provision contained in Paragraph A.1. of Section II – Covered Autos Liability Coverage in the Business Auto and Motor Carrier Coverage Forms and Paragraph D.2. of Section I – Covered Autos Coverages of the Auto Dealers Coverage Form.

POLICY NUMBER: BAP 1857085-00

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US (WAIVER OF SUBROGATION)

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM BUSINESS AUTO COVERAGE FORM MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

| Delow. | | | |
|----------------|--|--|--|
| Named Insured: | | | |

Endorsement Effective Date:

SCHEDULE

Name(s) Of Person(s) Or Organization(s):

ALL PERSONS AND/OR ORGANIZATIONS THAT ARE REQUIRED BY WRITTEN CONTRACT OR AGREEMENT WITH THE INSURED, EXECUTED PRIOR TO THE ACCIDENT OR LOSS, THAT WAIVER OF SUBROGATION BE PROVIDED UNDER THIS POLICY

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The Transfer Of Rights Of Recovery Against Others To Us condition does not apply to the person(s) or organization(s) shown in the Schedule, but only to the extent that subrogation is waived prior to the "accident" or the "loss" under a contract with that person or organization.

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

Schedule

ALL PERSONS AND/OR ORGANIZATIONS THAT ARE REQUIRED BY WRITTEN CONTRACT OR AGREEMENT WITH THE INSURED, EXECUTED PRIOR TO THE ACCIDENT OR LOSS, THAT WAIVER OF SUBROGATION BE PROVIDED UNDER THIS POLICY FOR WORK PERFORMED BY YOU FOR THAT PERSON AND/OR ORGANIZATION

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.

(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement

Effective:

Endorsement No.

Policy No. WC 2540616-00

Insured:

Premium \$

Insurance Company: Zurich American Insurance Company

WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY INSURANCE POLICY

WC 04 03 06 (Ed. 4-84)

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT— CALIFORNIA

This endorsement changes the policy to which it is attached effective on the inception date of the policy unless a different date is indicated below.

(The following "attaching clause" need be completed only when this endorsement is issued subsequent to preparation of the policy.)

This endorsement, effective on:

at 12:01 A.M. standard time, forms a part of

Policy No. WC 2540616-00

Endorsement No.

of the: Zurich American Insurance Company

issued to:

Premium (if any) \$

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

You must maintain payroll records accurately segregating the remuneration of your employees while engaged in the work described in the Schedule.

The additional premium for this endorsement shall be mium otherwise due on such remuneration.

% of the California workers' compensation pre-

Schedule

Person or Organization

Job Description

ALL PERSONS AND/OR ORGANIZATIONS THAT ARE REQUIRED BY WRITTEN CONTRACT OR AGREEMENT WITH THE INSURED, EXECUTED PRIOR TO THE ACCIDENT OR LOSS, THAT WAIVER OF SUBROGATION BE PROVIDED UNDER THIS POLICY FOR WORK PERFORMED BY YOU FOR THAT PERSON AND/OR ORGANIZATION



Blanket Notification to Others of Cancellation or Non-Renewal

| Policy No. | Eff. Date of Pol. | Exp. Date of Pol. | Eff. Date of End. | Producer No. | Add'l. Prem | Return Prem. |
|----------------|-------------------|-------------------|-------------------|--------------|-------------|--------------|
| GLO 1817406-00 | 10/01/2018 | 10/01/2019 | 10/01/2018 | 75272000 | | |

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

This endorsement modifies insurance provided under the:

Commercial General Liability Coverage Part

- A. If we cancel or non-renew this Coverage Part by written notice to the first Named Insured, we will mail or deliver notification that such Coverage Part has been cancelled or non-renewed to each person or organization shown in a list provided to us by the first Named Insured if you are required by written contact or written agreement to provide such notification. However, such notification will not be mailed or delivered if a conditional notice of renewal has been sent to the first Named Insured. Such list:
 - 1. Must be provided to us prior to cancellation or non-renewal;
 - 2. Must contain the names and addresses of only the persons or organizations requiring notification that such Coverage Part has been cancelled or non-renewed; and
 - 3. Must be in an electronic format that is acceptable to us.
- **B.** Our notification as described in Paragraph **A.** of this endorsement will be based on the most recent list in our records as of the date the notice of cancellation or non-renewal is mailed or delivered to the first Named Insured. We will mail or deliver such notification to each person or organization shown in the list:
 - 1. Within seven days of the effective date of the notice of cancellation, if we cancel for non-payment of premium; or
 - 2. At least 30 days prior to the effective date of:
 - a. Cancellation, if cancelled for any reason other than nonpayment of premium; or
 - b. Non-renewal, but not including conditional notice of renewal.
- **C.** Our mailing or delivery of notification described in Paragraphs **A.** and **B.** of this endorsement is intended as a courtesy only. Our failure to provide such mailing or delivery will not:
 - 1. Extend the Coverage Part cancellation or non-renewal date;
 - 2. Negate the cancellation or non-renewal; or
 - 3. Provide any additional insurance that would not have been provided in the absence of this endorsement.
- **D.** We are not responsible for the accuracy, integrity, timeliness and validity of information contained in the list provided to us as described in Paragraphs **A.** and **B.** of this endorsement.

All other terms and conditions of this policy remain unchanged.



Blanket Notification to Others of Cancellation or Non-Renewal

| Policy No. | Eff. Date of Pol. | Exp. Date of Pol. | Eff. Date of End. | Producer No. | Add'l. Prem | Return Prem. |
|----------------|-------------------|-------------------|-------------------|--------------|-------------|--------------|
| BAP 1857085-00 | 10-01-2018 | 10-01-2019 | 10-01-2018 | 75272000 | | |

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

This endorsement modifies insurance provided under the:

Commercial Automobile Coverage Part

- A. If we cancel or non-renew this Coverage Part by written notice to the first Named Insured, we will mail or deliver notification that such Coverage Part has been cancelled or non-renewed to each person or organization shown in a list provided to us by the first Named Insured if you are required by written contract or written agreement to provide such notification. However, such notification will not be mailed or delivered if a conditional notice of renewal has been sent to the first Named Insured. Such list:
 - 1. Must be provided to us prior to cancellation or non-renewal;
 - 2. Must contain the names and addresses of only the persons or organizations requiring notification that such Coverage Part has been cancelled or non-renewed; and
 - 3. Must be in an electronic format that is acceptable to us.
- **B.** Our notification as described in Paragraph **A.** of this endorsement will be based on the most recent list in our records as of the date the notice of cancellation or non-renewal is mailed or delivered to the first Named Insured. We will mail or deliver such notification to each person or organization shown in the list:
 - 1. Within seven days of the effective date of the notice of cancellation, if we cancel for non-payment of premium; or
 - 2. At least 30 days prior to the effective date of:
 - a. Cancellation, if cancelled for any reason other than nonpayment of premium; or
 - b. Non-renewal, but not including conditional notice of renewal.
- **C.** Our mailing or delivery of notification described in Paragraphs **A.** and **B.** of this endorsement is intended as a courtesy only. Our failure to provide such mailing or delivery will not:
 - 1. Extend the Coverage Part cancellation or non-renewal date;
 - 2. Negate the cancellation or non-renewal; or
 - 3. Provide any additional insurance that would not have been provided in the absence of this endorsement.
- **D.** We are not responsible for the accuracy, integrity, timeliness and validity of information contained in the list provided to us as described in Paragraphs **A.** and **B.** of this endorsement.

All other terms and conditions of this policy remain unchanged.

BLANKET NOTIFICATION TO OTHERS OF CANCELLATION OR NONRENEWAL ENDORSEMENT

This endorsement adds the following to Part Six of the policy.

PART SIX CONDITIONS

Blanket Notification to Others of Cancellation or Nonrenewal

- 1. If we cancel or non-renew this policy by written notice to you, we will mail or deliver notification that such policy has been cancelled or non-renewed to each person or organization shown in a list provided to us by you if you are required by written contract or written agreement to provide such notification. However, such notification will not be mailed or delivered if a conditional notice of renewal has been sent to you. Such list:
 - a. Must be provided to us prior to cancellation or non-renewal;
 - b. Must contain the names and addresses of only the persons or organizations requiring notification that such policy has been cancelled or non-renewed; and
 - c. Must be in an electronic format that is acceptable to us.
- Our notification as described in Paragraph 1. above will be based on the most recent list in our records as of the date the notice of cancellation or non-renewal is mailed or delivered to you. We will mail or deliver such notification to each person or organization shown in the list:
 - a. Within seven days of the effective date of the notice of cancellation, if we cancel for non-payment of premium; or
 - b. At least 30 days prior to the effective date of:
 - (1) Cancellation, if cancelled for any reason other than nonpayment of premium; or
 - (2) Non-renewal, but not including conditional notice of renewal.
- 3. Our mailing or delivery of notification described in Paragraphs 1. and 2. above is intended as a courtesy only. Our failure to provide such mailing or delivery will not:
 - a. Extend the policy cancellation or non-renewal date;
 - b. Negate the cancellation or non-renewal; or
 - c. Provide any additional insurance that would not have been provided in the absence of this endorsement.
- 4. We are not responsible for the accuracy, integrity, timeliness and validity of information contained in the list provided to us as described in Paragraphs 1. and 2. above.

All other terms and conditions of this policy remain unchanged.

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated. (The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Effective 10-01-2018

Policy No. WC 2540616-00

Endorsement No. Premium \$

Insurance Company Zurich American Insurance Company

Insured

ENDORSEMENT

This endorsement, effective 12:01 AM 10/01/2017

Forms a part of policy no.: 028182375

Issued to: TETRA TECH, INC., ET AL

By: LEXINGTON INSURANCE COMPANY

ADVICE OF CANCELLATION TO ENTITIES OTHER THAN THE NAMED INSURED LIMITED TO E-MAIL NOTIFICATION

This policy is amended as follows:

In the event that the Insurer cancels this policy for any reason other than non payment of premium, and

- 1. The cancellation effective date is prior to this policy's expiration date;
- The First Named Insured is under an existing contractual obligation to notify a certificate
 holder when this policy is canceled (hereinafter, the "Certificate Holder(s)"); and has
 provided to the Insurer, either directly or through its broker of record, the email address of
 the contact at such entity,

and the Insurer received this information after the First Named Insured receives notice of cancellation of this policy and prior to this policy's cancellation effective date, via an electronic spreadsheet that is acceptable to the Insurer,

the Insurer will provide advice of cancellation (the "Advice") via e-mail to such Certificate Holders.

Proof of the Insurer emailing the Advice, using the information provided by the First Named Insured, will serve as proof that the Insurer has fully satisfied its obligations under this endorsement.

This endorsement does not affect, in any way, coverage provided under this policy or the cancellation of this policy or the effective date thereof, nor shall this endorsement invest any rights in any entity not insured under this policy.

The following Definitions apply to this endorsement:

- 1. First Named Insured means the Named Insured shown on the Declarations Page of this policy.
- 2. Insurer means the insurance company shown in the header on the Declarations Page of this policy.

All other terms, conditions and exclusions shall remain the same.

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

Schedule

| ALL PERSONS AND/OR ORGANIZATIONS THAT ARE REQUIRED BY WRITTEN CONTRACT OR AGREEMENT WITH THE INSURED |
|--|
| EXECUTED PRIOR TO THE ACCIDENT OR LOSS, THAT WAIVER OF SUBROGATION BE PROVIDED UNDER THIS POLICY FOR |
| WORK PERFORMED BY YOU FOR THAT PERSON AND/OR ORGANIZATION |

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.

(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement

Effective:

Endorsement No.

Policy No. WC 1857087-00

Insured:

Premium \$

Insurance Company: Zurich American Insurance Company

BLANKET NOTIFICATION TO OTHERS OF CANCELLATION OR NONRENEWAL ENDORSEMENT

This endorsement adds the following to Part Six of the policy.

PART SIX CONDITIONS

Blanket Notification to Others of Cancellation or Nonrenewal

- 1. If we cancel or non-renew this policy by written notice to you, we will mail or deliver notification that such policy has been cancelled or non-renewed to each person or organization shown in a list provided to us by you if you are required by written contract or written agreement to provide such notification. However, such notification will not be mailed or delivered if a conditional notice of renewal has been sent to you. Such list:
 - a. Must be provided to us prior to cancellation or non-renewal;
 - b. Must contain the names and addresses of only the persons or organizations requiring notification that such policy has been cancelled or non-renewed; and
 - c. Must be in an electronic format that is acceptable to us.
- 2. Our notification as described in Paragraph 1. above will be based on the most recent list in our records as of the date the notice of cancellation or non-renewal is mailed or delivered to you. We will mail or deliver such notification to each person or organization shown in the list:
 - a. Within seven days of the effective date of the notice of cancellation, if we cancel for non-payment of premium; or
 - b. At least 30 days prior to the effective date of:
 - (1) Cancellation, if cancelled for any reason other than nonpayment of premium; or
 - (2) Non-renewal, but not including conditional notice of renewal.
- 3. Our mailing or delivery of notification described in Paragraphs 1. and 2. above is intended as a courtesy only. Our failure to provide such mailing or delivery will not:
 - a. Extend the policy cancellation or non-renewal date;
 - b. Negate the cancellation or non-renewal; or
 - c. Provide any additional insurance that would not have been provided in the absence of this endorsement.
- 4. We are not responsible for the accuracy, integrity, timeliness and validity of information contained in the list provided to us as described in Paragraphs 1. and 2. above.

All other terms and conditions of this policy remain unchanged.

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated. (The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Effective 10-01-2018

Policy No. WC 1857087-00

Endorsement No. Premium \$

Insurance Company Zurich American Insurance Company

Insured