

Welcome to the JEA Awards Meeting

You have been joined to the meeting with your **audio muted** by default.

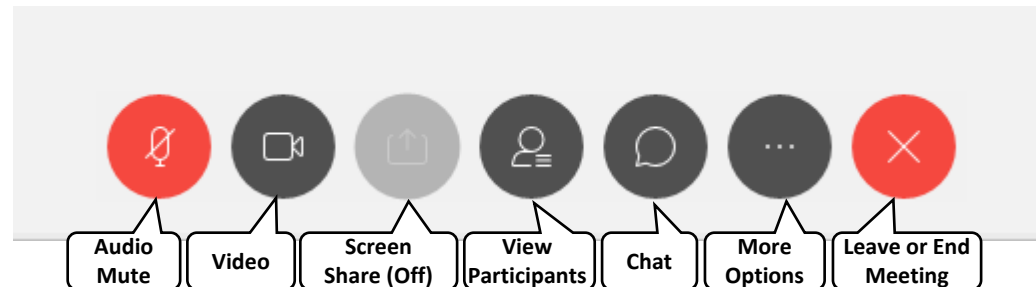
We will unmute your lines during the public comment time and provide opportunity for you to speak.

During the meeting, interested persons can also email **Halley Stewart** at **reimhj@jea.com** to submit public comments to be read during the meeting regarding any matter on the agenda for consideration.

Public comments by e-mail must be received no later than 9:00 a.m. to be read during the public comment portion of the meeting.

Please contact **Halley Stewart** by telephone at **(904) 665-8815** or by email at **reimhj@jea.com** if you experience any technical difficulties during the meeting.

Below is a summary of the meeting controls you will see at the bottom of your screen.



AWARDS COMMITTEE AGENDA

DATE: Thursday, March 3, 2022

TIME: 10:00 A.M.

PLACE: JEA, Customer Center, Bid Office, 1st Floor, 21 West Church Street, Jacksonville, FL 32202 OR
WebEx/Teleconference
WebEx Meeting Number (access code): 160 199 4252
WebEx Password: pxP6CqUSt63

Public Comments:

Awards:

1. Approval of the minutes from the last meeting (02/24/2022).
2. 1410563246– Request approval to award a five (5) year contract to Presidio Network Solutions for Cisco SmartNet Maintenance in the amount of \$2,297,150.21, subject to the availability of lawfully appropriated funds.
3. Request approval to award a one year contract renewal and increase to Grainger (\$94,000.00), World Electric Supply (\$468,000.00) and Jo Kell, Inc. (\$676,000.00) to provide Maintenance, Repair and Overhaul (MRO) materials for a total amount of \$1,238,000.00, and new not to exceed amount for all three contracts of \$10,819,000.00, subject to availability of lawfully appropriated funds.
4. Request approval to award a contract increase to Warren Asphalt Inc. for Restoration of Disturbed Asphalt Paved Areas in the amount \$1,229,593.17, for a new not to exceed amount of \$25,326,363.32, subject to the availability of lawfully appropriated funds.
5. 1410512246– Request approval to award a contract to D.B.E. Management, LLC dba DBE Utility Services for construction services for the Construction Services for the SR200 – William Burgess Blvd to Police Lodge Rd - Trans – RW project in the amount of \$5,027,563.06, subject to the availability of lawfully appropriated funds.
6. Request approval to award a change order to Hazen and Sawyer for additional engineering for the Lakeshore WTP - Reservoir and Wellhead No. 2 Rehabilitation project in the amount of \$91,660.00, for a new not-to-exceed amount of \$650,756.00, subject to the availability of lawfully appropriated funds.
7. Request approval to award a contract increase to Perdue, Inc. for furniture procurement, delivery and service for the new JEA headquarters for the third phase for a total amount of \$1,272,654.75, for a new not-to-exceed amount of \$3,280,577.55, subject to the availability of lawfully appropriated funds.
8. 1410334650 – Request approval to award a contract to The Haskell Company for the Progressive Design-Build Services for the Commonwealth Service Center (CWSC) Renovation Project in the amount of \$527,961.00, subject to the availability of lawfully appropriated funds.
9. 1410460646 – Request approval to award a contract to A Sanctuary House of North Florida Inc. in the amount of \$113,448.00, Freedom Landscape and Lawn Maintenance Inc. in the amount of \$442,745.70 and J&D Maintenance and Services of North Florida, LLC in the amount of \$1,656,919.34 for Facilities Landscaping – Open Market for a total not-to-exceed amount of \$2,213,113.04, subject to the availability of lawfully appropriated funds.

10. Request approval to award Phase 2 Progressive Design Build Services to Auld & White Constructors, LLC for the JEA Utility Training Center (JUTC) Renovation Project in the amount of \$5,290,700.00, for a new not-to-exceed amount of \$5,455,000.00, subject to the availability of lawfully appropriated funds.
11. Request approval to award an amended contract increase to Vesta modular for Leased Modular Buildings for Technical Training at NGS in the amount of \$79,950.00, for a new not-to-exceed amount of \$470,620.66, subject to the availability of lawfully appropriated funds.
12. 1410510446-21– Request approval to award contracts to Gresco Supply Inc. for Item CAIRH012 carried in JEA’s inventory stock for a total amount of \$454,500.00 subject to the availability of lawfully appropriated funds.
13. 1410526846 - Request approval to award a contract to PTI Transformers LP for the supply of the West Jax. T-1 transformer in the amount of \$3,310,828.00, subject to the availability of lawfully approved funds.
14. Request approval to award an amendment for increase to the contract with Orlando Freightliner in the amount of \$320,548.00 for the purchase vehicles for JEA’s FY22 and FY23 heavy duty fleet capital requirements, for a total not-to-exceed amount of \$2,592,575.17, subject to the availability of lawfully appropriated funds.

Informational Items: N/A

Open Discussion: N/A

Public Notice: N/A

General Business: N/A

SPECIAL NOTES: Copies of the above items are available in JEA Procurement, if needed for review. If a person decides to appeal any decision made by the Awards Committee, with respect to any matter considered at this meeting, that person will need a record of the proceedings, and, for such purpose, needs to ensure that a verbatim record of the proceedings is made, which record includes the evidence and testimony upon which the appeal is to be based. If you have a disability that requires reasonable accommodations to participate in the above meeting, please call 665-8625 by 8:30 a.m. the day before the meeting and we will provide reasonable assistance for you.

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| <u>Award #</u> | <u>Type of Award</u> | <u>Business Unit</u> | <u>Estimated/Budgeted Amount</u> | <u>Amount</u> | <u>Awardee</u> | <u>Term</u> | <u>Summary</u> |
|----------------|---------------------------------------|----------------------|----------------------------------|---|--|---|---|
| 1 | Minutes | N/A | N/A | N/A | N/A | N/A | Approval of minutes from the 02/24/2022 meeting. |
| 2 | Invitation for Bid (IFB) 3 Bidders | Krol | \$2,600,000.00 | \$2,297,150.21 | Presidio Networked Solutions LLC | Five (5) Years w/ One (1) Yr. Renewal | <p><u>Cisco Smartnet Support and Maintenance of JEA's Infrastructure</u></p> <p>To purchase SmartNet Support and Maintenance of JEA's Cisco Infrastructure with a Cisco Gold Partner Member(s) for five (5) years starting on 04/01/2022 to 03/31/2027. Cisco SmartNet supports software and hardware for all of JEA's Cisco branded network and server devices.</p> <p>This award is for \$2,297,150.21 and five (5) years from 04/01/2022 to 03/31/2027 for SmartNet support and maintenance on JEA Cisco network infrastructure equipment. The annual payment will be approximately \$459,430.04. The services included under this procurement are covered hardware repair/replacement , Cisco SMART license and subscription renewals, required software upgrades which include critical information security patches and escalated troubleshooting support as needed. JEA has approximately 900 items of CISCO equipment that will require a maintenance agreement to ensure operational readiness and maintain its budgetary controls.</p> <p>JEA Procurement did a comparison of like for like items. When compared to the prior contract, Presidio maintained or exceeded its current 20% discount from Cisco's published list price. The majority of items contained in this award were discounted between 22% and 27% from Cisco's published list price. JEA completed a budget transfer from 30901 to 30903 to fund the first year of this award request.</p> <p>1410563246– Request approval to award a five (5) year contract to Presidio Network Solutions for Cisco SmartNet Maintenance in the amount of \$2,297,150.21, subject to the availability of lawfully appropriated funds.</p> |
| 3 | Contract Renewal | Vu | N/A | \$94,000.00 \$468,000.00 \$676,000.00 | Grainger World Electric Supply Jo-Kell, Inc. | Three (3) Years w/Two (2) - 1 Yr. Renewals | <p><u>Maintenance, Repair and Overhaul (MRO) Material Blankets</u></p> <p>Previously awarded informal blanket purchase agreements to support processing orders on blankets in lieu of P-cards. Use of blanket purchase agreement will allow spend consolidation and facilitate ordering.</p> <p>Vendors commit to provide JEA a minimum of ten percent (10%) discount on materials purchased either off P-Card or blankets for their JEA account. Jo Kell, Inc., Grainger and World Electric Supply are the three (3) largest MRO P-Card spends at JEA.</p> <p>Award amount contract increases were estimated by using current spend rates and forecasting over the remaining term of the contract (estimate</p> |

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| | | | | | | | <p>calculations are attached as backup). Note, these MRO qualification agreements are non-requirements contracts that cover the whole organization. The approval to spend the funds takes place on the requisition from the already-approved fiscal year budget or capital project. This award will exercise the last renewal option for all three vendors.</p> <p>Request approval to award a one year contract renewal and increase to Grainger (\$94,000.00), World Electric Supply (\$468,000.00) and Jo Kell, Inc. (\$676,000.00) to provide Maintenance, Repair and Overhaul (MRO) materials for a total amount of \$1,238,000.00, and new not to exceed amount for all three contracts of \$10,819,000.00, subject to availability of lawfully appropriated funds.</p> |
| 4 | Contract Increase | Vu | \$1,229,593.17 | \$1,229,593.17 | Warrens Asphalt, Inc. | Five (5) Years w/ One (1) - One (1) Year Renewal | <p><u>Restoration of Disturbed Asphalt Paved Areas</u> Originally bid and approved by the Awards Committee on 06/09/2016 in the amount of \$11,868,359.46 to Warren Asphalt Inc. A copy of the previous award is attached as backup.</p> <p>This contract increase request is to add \$1,229,593.17 to finish out the remaining four (4) months on the contract. This contract increase amount includes expected annual increases due to Consumer Price Index (CPI) adjustments that can be exercised annually on the contract. Due to increases in the number of cave-ins and manhole failures JEA has had over the past three (3) years, this contract has been used more extensively than originally anticipated. A new solicitation for asphalt paved site restoration has been comprised and the bid is in evaluation. This process, because it is an evaluated bid, will not be completed by the time existing contract funding expires, so this contract increase is expected to cover funding for the existing contract term.</p> <p>Request approval to award a contract increase to Warren Asphalt Inc. for Restoration of Disturbed Asphalt Paved Areas in the amount \$1,229,593.17, for a new not to exceed amount of \$25,326,363.32, subject to the availability of lawfully appropriated funds.</p> |
| 5 | Invitation for Bid (IFB 5 Bidders | Vu | \$6,520,317.00 | \$5,027,563.06 | D.B.E. Management, LLC dba DBE Utility Services | Project Completion (Expected: June 2023) | <p><u>Construction Services for the SR200 – William Burgess Blvd to Police Lodge Rd - Trans – RW Project</u> The scope of work for this solicitation includes construction services to install 11,832 LF of 16-inch PVC DR18 reclaimed water main by open cut method, 644 LF of 20-inch HDPE DR-11 under Main Waterway - Plummer Creek, 746 LF of 20-inch HDPE DR-11 under Minor Branch - Plummer Creek, 1,413 LF of 20-inch HDPE DR-11, 145 LF of 24-inch Jack-and-Bore under Three Rivers Drive, and 145 LF of 24-inch Jack-and-Bore under Edwards Rd in Nassau County. The new main will provide reclaimed water for irrigation service in the area.</p> <p>The award amount of \$5,027,563.06 is approximately 22.9% lower than the budget estimate due to the contractor self-performing the trenchless</p> |

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| | | | | | | | <p>crossings, and the overestimating unsuitable soil replacement costs. The costs have been reviewed by the JEA project staff and deemed reasonable compared to past bids.</p> <p>Request approval to award a contract to D.B.E. Management, LLC dba DBE Utility Services for construction services for the Construction Services for the SR200 – William Burgess Blvd to Police Lodge Rd - Trans – RW project in the amount of \$5,027,563.06, subject to the availability of lawfully appropriated funds.</p> |
| 6 | Change Order | Vu | \$100,000.00 | \$91,660.00 | Hazen and Sawyer | <p>Project Completion (Expected: February 2024)</p> | <p><u>Lakeshore WTP - Reservoir and Wellhead No. 2 Rehabilitation</u> Originally approved by Awards Committee on 10/05/2017 in the amount of \$559,096.00 to Hazen and Sawyer. A copy of the original award is attached as backup.</p> <p>This award request is for a change order to the design contract of Hazen and Sawyer for the Lakeshore WTP - Reservoir and Wellhead No. 2 Rehabilitation project. During the initial design services for this project in 2018 an inspection was performed on the water reservoirs and the reservoirs were in better condition than expected. Hazen and Sawyer finished the design documents, and JEA delayed the construction portion until the FY22 and FY23 budget years. This award request is to bring the 100% design documents up to the current JEA 2022 standards. A copy of the quote from Hazen and Sawyer is attached for reference. The hourly rates for have been increased via the consumer-price-index (CPI) to determine the hourly rates for this amendment.</p> <p>JEA paid Hazen and Sawyer \$414,172.00 out of the original award amount for the completion of the 100% design documents. The quote for this change order includes the cost for updating the prior design to current standards, and updating the fees for the previously approved services during construction (SDC) with the current hourly rates. The difference needed from the original award amount for this change order is \$91,660.00.</p> <p>Request approval to award a change order to Hazen and Sawyer for additional engineering for the Lakeshore WTP - Reservoir and Wellhead No. 2 Rehabilitation project in the amount of \$91,660.00, for a new not-to-exceed amount of \$650,756.00, subject to the availability of lawfully appropriated funds.</p> |
| 7 | Contract Increase | McElroy | \$5,000,000.00 | \$1,272,654.75 | Perdue, Inc. | <p>Project Completion (Expected: September 30, 2022)</p> | <p><u>Furniture Procurement, Delivery and Service for New Headquarters</u> The purpose of this Request for Proposal (RFP) is to evaluate and select a firm ("Firm" or "Company" or "Proposer") from the prior Request for Qualifications, 101180 Furniture Procurement, Delivery and Service for New JEA Headquarters Qualified Category List in order for JEA to select the best value for providing furniture initially including workstations and standard office furniture. "Best Value" means the highest overall value to</p> |

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| | | | | | | <p>JEA with regards to pricing, quality, warranty and service, ability to meet project timeline and other selection criteria.</p> <p>This contract increase is for the purchase of phase three, which includes the majority of the ancillary furniture. The ancillary items include furniture for board/multi-purpose room, much of customer center area, additional workstations for pre-service, security offices and special purpose office spaces, agile training rooms, customer care training rooms, innovation lab, tech depot, work cafés (breakrooms), respite/quiet rooms, executive office suite areas, collaboration spaces including open collaboration, team and huddle rooms, small waiting and gathering areas and phone rooms. Furniture remaining to be ordered includes a portion of the lobby furniture, outdoor furniture, lockers, standard file cabinets, limited office and reception furniture, and other miscellaneous items. The additional ancillary furniture will be grouped in upcoming phases.</p> <p>Request approval to award a contract increase to Perdue, Inc. for furniture procurement, delivery and service for the new JEA headquarters for the third phase for a total amount of \$1,272,654.75, for a new not-to-exceed amount of \$3,280,577.55, subject to the availability of lawfully appropriated funds.</p> |
| 8 | Request for Proposal (RFP) 4 Proposers | McElroy | \$6,201,400.00 | \$527,961.00 | The Haskell Company | <p>Project Completion: (Phase I Design Expected: October 2023)</p> <p><u>Progressive Design-Build Services for the Commonwealth Service Center (CWSC) Renovation Project</u></p> <p>The purpose of this Request for Proposals (RFP) is to evaluate and select a vendor that can provide Progressive Design Build services for the Commonwealth Service Center (CWSC) renovation project (collectively, the "Work" or "Services"). The scope of work for this project includes architectural, engineering, and contractor services which will be competitively sourced as a single team through this solicitation process. The selected team will create a 10% drawing (floor plan), to be approved by all stakeholders. The 30%, 60%, 90% and 100% design documents will then be created, with stakeholder review at each phase. The required construction documents will be forwarded to Capital Planning for information and review.</p> <p>Negotiations with The Haskell Company were successfully completed for Phase 1 of this project. This project will be delivered using the progressive design-build method, splitting the effort into two (2) phases. Phase 1 includes engineering design up to sixty percent (60%), support services and pre-construction services, which is approximately nine percent (9%) of the estimated project cost. The Phase 1 negotiated fees proposed were compared with similar facilities design projects and have been deemed reasonable. After Phase 1, a Guaranteed Maximum Price (GMP) will be established, with an option of an "off ramp" if construction pricing is not acceptable. Upon acceptance of the GMP and subsequent approval of the Awards Committee, Phase 2 will commence. Phase 2 will include the final design, services during construction (SDC) and construction costs.</p> |

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| | | | | | | | 1410334650 – Request approval to award a contract to The Haskell Company for the Progressive Design-Build Services for the Commonwealth Service Center (CWSC) Renovation Project in the amount of \$527,961.00, subject to the availability of lawfully appropriated funds. |
| 9 | Request for Proposal (RFP) 4 Proposers | McElroy | \$1,844,855.00 | \$113,448.00 \$442,745.70 \$1,656,919.34 | A Sanctuary House of North Florida, Inc. Freedom Landscape and Lawn Maintenance, Inc. J&D Maintenance and Services of North Florida, LLC | One (1) Year w/Two (2) – One (1) Yr. Renewals | <p><u>Facilities Landscaping – Open Market</u></p> <p>The purpose of this Request for Proposal (RFP) is to evaluate and select a vendor or multiple vendors that can provide economical pricing for basic landscape maintenance and chemical spraying. These services must be performed in a safe manner, and the results must be aesthetically pleasing as these facilities represent JEA to the rate-paying public. Landscaping will be performed at approximately 918 JEA facilities located in Duval, Nassau, St. Johns and Clay Counties in Florida, including St. Johns River Power Park (SJRPP) and Pelotes Island. These locations include exteriors of buildings, lots, lift stations, electric substations, wells, water treatment plants, wastewater treatment plants, communication towers, road access, fences, areas around electric power lines, highways, the exterior of generating plants, and trails. Contracts are to be awarded as follows: Contract number 1 (District 2), Contract number 2 (District 3a, 3b and 3c) and Contract number 3 (District 6ESS, District 7, SJRPP and Kennedy Generating Station (KGS)).</p> <p>The award amount of \$2,213,113.04 is approximately eighteen percent (18%) higher than the budgeted estimate. When compared to the previous contract there was a thirty-six percent 36% normalized increase in rates (\$528,467.04) and the addition of 63 sites requiring services (\$206,392.00) driving the overall contract increase of \$734,859.04. Additional funding for FY22 is being utilized from an approved one-time project.</p> <p>1410460646 – Request approval to award a contract to A Sanctuary House of North Florida Inc. in the amount of \$113,448.00, Freedom Landscape and Lawn Maintenance Inc. in the amount of \$442,745.70 and J&D Maintenance and Services of North Florida, LLC in the amount of \$1,656,919.34 for Facilities Landscaping – Open Market for a total not-to-exceed amount of \$2,213,113.04, subject to the availability of lawfully appropriated funds.</p> |
| 10 | Contract Increase | McElroy | \$6,857,939.00 | \$5,290,700.00 | Auld & White Constructors LLC | Project Completion (Expected: 02/2023) | <p><u>Progressive Design-Build Services for the JEA Utility Training Center Renovation Project</u></p> <p>JEA is requesting Responses from qualified Design-Build (DB) firms to provide design and construction services for the renovation of the JEA Utility Training Center (JUTC) facility (the “Work”). The scope of work includes, but is not necessarily limited to, those items listed below which are considered basic to the Solicitation response:</p> <p>Complete reformatting and upgrading of all occupied spaces, including offices, classroom, open areas, break room and restrooms; includes finishes, furniture, and fixtures. Restrooms need to be expanded and upgraded to meet current ADA requirements for access.</p> |

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| | | | | | | <p>Construction of new support and storage spaces, including server room, copy room, and closets/lockable storage.</p> <p>Upgrade of all operating systems (HVAC, plumbing, electrical) and related fixtures (toilets, sinks, light fixtures, etc.) HVAC work includes controls; plumbing includes supply and drain/waste/vent lines.</p> <p>Upgrade of warehouse doors and storefront systems to Miami-Dade standards.</p> <p>Upgrade of locksets, keying systems, and card access to building entrances, exits, and gates.</p> <p>Upgrade with new guard shack built to JEA generating station requirements which includes multiple access-controlled gates, gate arms, lanes of entrance and exit, and network fiber optic.</p> <p>Negotiations with Auld & White Constructors were successfully completed for Phase 2 of this project. The Guaranteed Maximum Price (GMP) in the amount of \$5,290,700.00 has been deemed reasonable based on the scope of work and previous projects. This is a Progressive Design-Build contract which splits the effort into two (2) phases. Phase 1 included engineering design up to sixty percent (60%), support services and pre-construction services. Phase 2 includes the final design, services during construction and construction costs. The Phase 2 Proposal has been attached as backup.</p> <p>Request approval to award Phase 2 Progressive Design Build Services to Auld & White Constructors, LLC for the JEA Utility Training Center (JUTC) Renovation Project in the amount of \$5,290,700.00, for a new not-to-exceed amount of \$5,455,000.00, subject to the availability of lawfully appropriated funds.</p> |
| 11 | Contract Increase (Amended) | McElroy | \$79,950.00 | \$79,950.00 | Vesta Housing Solutions LLC dba Vesta Modular | <p>Leased Modular Buildings to House Technical Training at NGS</p> <p>The purpose of this contract increase is to continue to lease the modular buildings currently being used to house JEA's technical training at NGS utilizing the Houston-Galveston Area Council Government Cooperative Agreement (HGAC).</p> <p>JEA originally anticipated needing these units for approximately thirty six (36) months at \$3,640.00 per month, and intended to purchase a site and build a permanent JEA Utility Training Center (JUTC) within that time period. After the original contract was signed it was discovered the team would also need two storage containers and ramps for the buildings which increased the monthly amount to \$6,150.00. Due to the construction of JUTC not being complete, a contract extension was awarded on 12/03/2020 in the amount of \$92,250.00 to cover the needs through completion. The JUTC construction project was delayed due to various design plan changes and discussions about value add alternatives, which is now at 60% design. JEA is requesting to extend this contract with Vesta Modular for an additional thirteen (13) months at the same rate of \$6,150.00 per month in the amount of \$79,950.00 to get us through completion of the project and</p> |

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| | | | | | | | <p>allow for a transition period for move-in. The previous award and agreement are attached as backup.</p> <p>Request approval to award an amended contract increase to Vesta modular for Leased Modular Buildings for Technical Training at NGS in the amount of \$79,950.00, for a new not-to-exceed amount of \$470,620.66, subject to the availability of lawfully appropriated funds.</p> |
| 12 | Invitation for Bid (IFB) 2 Bidders | McElroy | \$383,000.00 | \$454,500.00 | Gresco Supply Inc. | One-time purchase | <p>CAIRH012 Cable for Inventory Stock</p> <p>The purpose of this Invitation for Bid (IFB) is to solicit pricing for Item CAIRH012 (CABLE, 500KCM, 37 STRAND, 3-1/C PARALLELED). During the last 12 months, the commodity spend for this item was \$164,529.60. At the time of the bid release, the inventory balance for the item found in this solicitation was \$2,989.80 with the average current lead time of 56 days. The evaluation criteria for this bid was that the total lowest cost provider for the item would win, as long as the minimum qualifications were met, and they quoted the correct JEA approved manufacturer and manufacturer part number.</p> <p>CAIRH012 is a product consisting of three separate cables ran together for three (3) phase applications primarily in downtown Jacksonville underground. CAIRH012 was developed and approved by JEA Standards in early 2020 as alternative and eventual replacement to the CAIRH008; the newly created CAIRH012 incorporates different colored jackets per phase (black, red and blue) as opposed to the all-black jackets in CAIRH008. The color-coded jackets offer a primary advantage to the all-black jackets of CAIRH008 in its ability to quickly identify the phases which has caused issues in the past for JEA. One instance of when this is particularly useful in situations where there is not enough visible cable to see the printed phasing; when utilizing the CAIRH008 it was required to identify the proper phasing via the printing on the jacket which is increasingly difficult with limited amounts of cable, this is eliminated when only needing to identify the color for proper phase identification. Secondly, the colored jackets help in general installations and maintenance as one can easily identify the phases via color to provide a quick way to check the safety of the connection by phase.</p> <p>The past slow usage was largely based on repairs and maintenance of those cables as needed, because service growth in the network has been largely stagnant for some time. These days, with development and expansion on the rise downtown, JEA is seeing an increase in demand for these applications (CAIRH008 & CAIRH012 collectively) as we are doing more in the way of much needed upgrades/replacements to strengthen the network in preparation for some of that. JEA will continue to see decreasing usage of the CAIRH008 as they switch to the CAIRH012 multi-colored product. Lastly regarding consumption, at the request of the</p> |

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| | | | | | | | <p>business, and after validation from last storm, both CAIRH008 and CAIRH012 are identified as items to have additional inventory as part of the underground cable storm stock item requirements in 2022.</p> <p>JEA will realize an estimated cost increase via unit price increase totaling \$228,000.00 for this contract, or 101% from last time item was bought in 2020. This increase in cost is primarily attributed to the cost increases of copper, labor, and transportation that have impacted all wire and cable over this time.</p> <p>1410510446-21– Request approval to award contracts to Gresco Supply Inc. for Item CAIRH012 carried in JEA's inventory stock for a total amount of \$454,500.00 subject to the availability of lawfully appropriated funds.</p> |
| 13 | Request for Proposal (RFP) 3 Proposers | Erixton | \$3,000,000.00 | \$3,310,828.00 | PTI Transformers LP | One-Time Purchase | <p>West Jax Substation T-1 Transformer</p> <p>JEA is soliciting Bids for the equipment design, fabrication, and delivery of one (1) one 230kV to 69 kV transformer for the West Jax Substation (the "Work" or "Services").</p> <p>Basic Transformer Specifications: 180/240/300 MVA, ONAN/ONAF/ONAF @ 65°C Rise. The autotransformer shall be capable of transforming the minimum MVA rating continuously, self-cooled at rated voltage and frequency without exceeding an average winding temperature rise of 65 degrees C.</p> <p>Voltage : 230kV GRDY / 69kV GRDY, 13.8 KV Tertiary Buried Delta</p> <p>The transformer description is oil immersed, three phase, outdoor type, step-down autotransformer with self-contained voltage regulating equipment on the low voltage side, automatic thermostatically controlled forced-air cooling equipment and other accessories, spare parts and appurtenances hereinafter specified. Delivery shall be F.O.B autotransformer pad. Manufacturer is responsible for offloading.</p> <p>It should be noted that SPX discovered a price error in their proposal post opening and JEA was not willing to accept an updated bid amount since the pricing was released to all Bidders through an intent to award. JEA believed this would create an unfair advantage, so we allowed SPX to withdrawal their proposal per the terms in the solicitation. Additionally, SPX's proposal had price adjustment through delivery as a base negotiation position, which JEA found less responsive. PTI has agreed to a fixed price through delivery which has a 60 week lead time vs. SPX's 104 week lead time.</p> |

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| | | | | | | | <p>The award amount is 9.3% more than the budget estimate, which is deemed reasonable given the current market conditions. For reference, the 2021 PPI for Large Specialty transformers was up approximately 30% in 2021.</p> <p>1410526846 - Request approval to award a contract to PTI Transformers LP for the supply of the West Jax. T-1 transformer in the amount of \$3,310,828.00, subject to the availability of lawfully approved funds.</p> |
| 14 | Contract Amendment | McElroy | \$2,054,000.00 | <p>\$0.00</p> <p>\$0.00</p> <p>\$320,548.00</p> | <p>Cumberland International Trucks of Florida, LLC</p> <p>Kenworth of Jacksonville</p> <p>Orlando Freightliner</p> | Project Completion | <p>Heavy Duty Vehicle Procurement Contract Amendment</p> <p>The purpose of this contract amendment is to modify the original Award amounts from the February 3, 2022 Award Committee. The purpose of the original Invitation to Negotiate (the "ITN") was to solicit pricing for the purchase of eleven (11) heavy duty vehicles for JEA's FY22 and FY23 requirements. This purchase is for planned and budgeted replacement of JEA's Fleet Water (Water Replacement – 1 units) and Electric (Electric Replacement – 8 units) assets along with expansion units for JEA's Fleet Water (Water Expansion - 2 Units) associated with the Fleet Capital Procurement Plan.</p> <p>JEA is requesting this contract amendment based on an emergent need to fulfill JEA Water Department FY23 Expansion needs. JEA Water Department is adding additional crews at the Pearl Street Service Center and these, along with other items not included in this award, are essential equipment used to complete daily tasks. This would double the amount of Group Four (4) assets, 5 Ton - 19 Cubic Yard Dump Trucks, with the new amount being purchased at a total quantity of four (4) units.</p> <p>The basis of award for the original solicitation is to the contract to the highest ranked Respondent for each heavy duty vehicle groupings included in this solicitation, and companies were encouraged to bid multiple groupings for efficiency purposes. After the Best and Final Offers (BAFO) were submitted, Orlando Freightliner, was deemed the lowest cost responsible and responsive Respondents for the heavy duty vehicle groupings that is being requested to increase as part of this award.</p> <p>Request approval to award an amendment for increase to the contract with Orlando Freightliner in the amount of \$320,548.00 for the purchase vehicles for JEA's FY22 and FY23 heavy duty fleet capital requirements, for a total not-to-exceed amount of \$2,592,575.17, subject to the availability of lawfully appropriated funds.</p> |
| Total Award | | | | \$23,354,221.23 | | | |

03-03-2022 Awards Committee

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JEA AWARDS COMMITTEE

FEBRUARY 24, 2022 MEETING MINUTES

The JEA procurement Awards Committee met on February 24, 2022, in person with a WebEx option.

WebEx Meeting Number (access code): 160 199 4252

WebEx Password: pxP6CqUSt63

Members in attendance were Jenny McCollum as Chief Procurement Officer, Stephen Datz as Chairperson (on site), Hai Vu as Vice Chairperson (on site), Steven Elmore as Budget Representative, Regina Ross as Office of General Counsel Representative; with Ricky Erixton, Joe Orfano, and Laura Dutton (on site). Unless otherwise indicated, all attendees were via WebEx.

Chair Datz called the meeting to order at 09:59 a.m., introduced the Awards Committee Members, and confirmed that there was an in-person quorum of the Committee membership present.

Public Comments:

Chair Datz recognized the public comment speaking period and opened the meeting floor to public comments. No public comments were provided by email, phone or videoconference.

Awards:

1. Approval of the minutes from the last meeting (02/17/2022). Chair Datz verbally presented the Committee Members the proposed February 17, 2022 minutes as presented.

MOTION: Laura Dutton made a motion to approve the February 17, 2022 minutes (Award Item 1). The motion was seconded by Hai Vu and approved unanimously by the Awards Committee (5-0).

The Committee Members reviewed and discussed the following Awards Items 2 -7:

2. 1410578846 - Request approval to award a contract to Presidio Networked Solutions for Cisco network equipment for new JEA Headquarters in the amount of \$1,352,199.97, subject to the availability of lawfully appropriated funds.

MOTION: Joe Orfano made a motion to approve Award Item 2 as presented in the committee packet. The motion was seconded by Hai Vu and approved unanimously by the Awards Committee (5-0).

3. 1410503646 - Request approval to award a contract to Software House International Inc. for Microsoft Enterprise Agreement (licensing and maintenance) in the amount of \$6,855,088.38, subject to the availability of lawfully appropriated funds.

MOTION: Laura Dutton made a motion to approve Award Item 3 as presented in the committee packet. The motion was seconded by Hai Vu and approved unanimously by the Awards Committee (5-0).

4. Request approval to award a contract increase to Hazen and Sawyer for additional engineering and consulting for the Innovative Wastewater Collection and Treatment Program in the amount of \$5,593,024.00, for a new not-to exceed amount of \$7,179,435.00, subject to the availability of lawfully

appropriated funds.

MOTION: Laura Dutton made a motion to approve Award Item 4 as presented in the committee packet. The motion was seconded by Hai Vu and approved unanimously by the Awards Committee (5-0).

5. Request approval to award a contract increase to Stantec Consulting Services Inc. in the amount of \$696,462.00 for supplemental design for transmission and substation engineering services, for a total new not-to-exceed amount of \$4,368,962.00, subject to the availability of lawfully appropriated funds.

MOTION: Joe Orfano made a motion to approve Award Item 5 as presented in the committee packet. The motion was seconded by Hai Vu and approved unanimously by the Awards Committee (5-0).

6. Request approval to award payment to Florida Department of Transportation for the FDOT Joint Project 447149-1-56-01 SR 202 (J Turner Blvd) at Kernan Blvd. Utilities Replacement project in the amount of \$336,307.65, subject to the availability of lawfully appropriated funds.

MOTION: Hai Vu made a motion to approve Award Item 6 as presented in the committee packet. The motion was seconded by Joe Orfano and approved unanimously by the Awards Committee (5-0).

7. Request approval to award payment to Florida Department of Transportation for the FDOT Timuquana Rd. Resurfacing from Wesconnett Blvd to US 17 project in the amount of \$1,524,977.33, subject to the availability of lawfully appropriated funds.

MOTION: Hai Vu made a motion to approve Award Item 7 as presented in the committee packet. The motion was seconded by Ricky Erixton and approved unanimously by the Awards Committee (5-0).

Informational Item:

No informational items were presented to the Awards Committee.

Ratifications:

No ratifications were presented to the Awards Committee

Public Comments:

No additional public comment speaking period was taken.

Adjournment:

Chair Datz adjourned the meeting at 10:33 a.m.

NOTE: These minutes provide a brief summary only of the Awards Committee meeting. For additional detail regarding the content of these minutes or discussions during the meeting, please review the meeting recording. The recording of this meeting as well as other relevant documents can be found at the link below:

https://www.jea.com/About/Procurement/Awards_Meeting_Agendas_and_Minutes/



Formal Bid and Award System

Award #2 March 3, 2022

Type of Award Request: INVITATION FOR BID (IFB)
Request #: 250
Requestor Name: Williams, Clint J. - Manager Technical Services
Requestor Phone: (904) 665-6028
Project Title: Cisco SmartNet Support and Maintenance of JEA's Infrastructure
Project Number: 30903
Project Location: JEA
Funds: O&M
Budget Estimate: \$2,600,000.00 (\$520,000.00 per year BL30903)

Scope of Work:

The purpose of this solicitation is to purchase SmartNet Support and Maintenance of JEA's Cisco Infrastructure with a Cisco Gold Partner Member(s) for five (5) years starting on 04/01/2022 to 03/31/2027. Cisco SmartNet supports software and hardware for all of JEA's Cisco branded network and server devices.

JEA IFB/RFP/State/City/GSA#: #1410563246
Purchasing Agent: Dambrose, Nick
Is this a ratification?: NO

RECOMMENDED AWARDEE(S):

| Name | Contact Name | Email | Address | Phone | Amount |
|----------------------------------|--------------|-----------------------|--|----------------|----------------|
| PRESIDIO NETWORKED SOLUTIONS LLC | Ray Watkins | rwatkins@presidio.com | 8647 Baypine Road, Suite 100, Building 1, Jacksonville, FL 32256 | 1.904.236.5503 | \$2,297,150.21 |

Amount for entire term of Contract/PO: \$2,297,150.21

Award Amount for remainder of this FY: \$459,430.04

Length of Contract/PO Term: Five (5) Years w/ One (1) - 1 Yr. Renewal

Begin Date (mm/dd/yyyy): 04/01/2022

End Date (mm/dd/yyyy): 03/31/2027

Renewal Options: One (1) - 1 Yr. Renewal

JSEB Requirement: N/A – Optional

Respondents:

| Respondent | Amount | Rank |
|------------------------------|----------------|------|
| Presidio Networked Solutions | \$2,297,150.21 | 1 |
| Netsync Network Solutions | \$2,408,435.00 | 2 |
| SHI International | \$2,636,908.33 | 3 |

Background/Recommendations:

Advertised on 01/20/2022. JEA did not host a pre-bid meeting for this Solicitation. At Bid opening on 02/17/2022, JEA received three (3) bids. After review, JEA evaluated the companies on price only and Cisco Gold Partner status. Presidio Networked Solutions is deemed to be the lowest responsive and responsible Respondent. Cisco Network Equipment and associated support is a JEA standard. A copy of the Response Workbook is attached as backup.

This award is for \$2,297,150.21 and five (5) years from 04/01/2022 to 03/31/2027 for SmartNet support and maintenance on JEA Cisco network infrastructure equipment. The annual payment will be approximately \$459,430.04. The services included under this procurement are covered hardware repair/replacement, Cisco SMART license and subscription renewals, required software upgrades which include critical information security patches and escalated troubleshooting support as needed. JEA has approximately 900 items of CISCO equipment that will require a maintenance agreement to ensure operational readiness and maintain its budgetary controls.

JEA Procurement did a comparison of like for like items. When compared to the prior contract, Presidio maintained or exceeded its current 20% discount from Cisco's published list price. The majority of items contained in this award were discounted between 22% and 27% from Cisco's published list price. JEA completed a budget transfer from 30901 to 30903 to fund the first year of this award request.

1410563246— Request approval to award a five (5) year contract to Presidio Network Solutions for Cisco SmartNet Maintenance in the amount of \$2,297,150.21, subject to the availability of lawfully appropriated funds.

| | |
|------------------|---|
| Manager: | Williams, Clint J. - Manager Technical Services |
| Director: | Traylor, Kymberly A. - Dir Network & Telecommunication Services |
| VP: | Datz, Stephen H. - VP Technical Services |
| Chief: | Krol, Bradley D. - Chief Information Officer |

APPROVALS:

| | |
|-----------------------------------|-------------|
| Chairman, Awards Committee | Date |
|-----------------------------------|-------------|

| | |
|------------------------------|-------------|
| Budget Representative | Date |
|------------------------------|-------------|

APPENDIX B- RESPONSE WORKBOOK TAB 1 NETWORK-TELEPHONY (ENTER DATA IN YELLOW CELLS ONLY)

Cisco Quote #14292001

CISCO

| SERIAL NUMBER | PRODUCT LINE | PRODUCT NUMBER | PRODUCT DESCRIPTION | ANNUAL LIST PRICE | DISCOUNT FROM ANNUAL LIST PRICE | FINAL NET PRICE (3 Years 10/1/2016-9/30/2019) |
|---------------|--------------|------------------|--|-------------------|---------------------------------|---|
| 72808858 | Network | CISCO7206VXR | Cisco 7206VXR, 6-slot chassis, 1 AC Supply w/IP Software | \$4,754.00 | 20% | \$11,409.60 |
| SMG0916N31K | Network | WS-C6509-E | Catalyst 6500 Enhanced 9-slot chassis, 14RU, no PS, no Fan | \$6,825.00 | 20% | \$10,920.00 |
| SAD0808019C | Network | WS-SVC-FWM-1-K9= | *Firewall blade for 6500 and 7600, VFW License Separate | \$18,744.00 | 20% | \$29,990.40 |
| SMC0923001Q | Network | WS-C6509-E | Catalyst 6500 Enhanced 9-slot chassis, 14RU, no PS, no Fan | \$6,825.00 | 20% | \$10,920.00 |
| SAD0918067U | Network | WS-SVC-FWM-1-K9= | *Firewall blade for 6500 and 7600, VFW License Separate | \$18,744.00 | 20% | \$29,990.40 |
| SMG1019NJJJ | Network | WS-C6509-E | Catalyst 6500 Enhanced 9-slot chassis, 14RU, no PS, no Fan | \$6,825.00 | 20% | \$10,920.00 |
| SMG1019NJMF | Network | WS-C6509-E | Catalyst 6500 Enhanced 9-slot chassis, 14RU, no PS, no Fan | \$6,825.00 | 20% | \$10,920.00 |
| SMG1025NMVM | Network | WS-C6509-E | Catalyst 6500 Enhanced 9-slot chassis, 14RU, no PS, no Fan | \$6,825.00 | 20% | \$10,920.00 |
| SAD112505GL | Network | ACE10-6500-K9= | *Application Control Engine Service Module | \$6,324.00 | 20% | \$2,616.23 |
| SMG1034NV89 | Network | WS-C6509-E | Catalyst 6500 Enhanced 9-slot chassis, 14RU, no PS, no Fan | \$6,825.00 | 20% | \$10,920.00 |
| SMG1035NWWAC | Network | WS-C6509-E | Catalyst 6500 Enhanced 9-slot chassis, 14RU, no PS, no Fan | \$6,825.00 | 20% | \$10,920.00 |
| SMG1034NV8L | Network | WS-C6509-E | Catalyst 6500 Enhanced 9-slot chassis, 14RU, no PS, no Fan | \$6,825.00 | 20% | \$10,920.00 |
| SMG1035NWW5A | Network | WS-C6509-E | Catalyst 6500 Enhanced 9-slot chassis, 14RU, no PS, no Fan | \$6,825.00 | 20% | \$10,920.00 |
| SMG1035NWW5G | Network | WS-C6509-E | Catalyst 6500 Enhanced 9-slot chassis, 14RU, no PS, no Fan | \$6,825.00 | 20% | \$10,920.00 |
| SMG1034NVKE | Network | WS-C6509-E | Catalyst 6500 Enhanced 9-slot chassis, 14RU, no PS, no Fan | \$6,825.00 | 20% | \$10,920.00 |
| FOC1211T0A3 | Network | WS-CBS3020-HPQ | *Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1211T0AD | Network | WS-CBS3020-HPQ | *Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1212T025 | Network | WS-CBS3020-HPQ | *Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1212T029 | Network | WS-CBS3020-HPQ | *Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1209T01M | Network | WS-CBS3020-HPQ | *Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1208T1RX | Network | WS-CBS3020-HPQ | *Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOX1226HJNG | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FOX1226HJMS | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FOX1226HJMK | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FOX1226HJML | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FOX1226HJMW | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FOC1229W0CS | Network | WS-C3750G-48PS-E | *Catalyst 3750 48 10/100/1000T PoE + 4 SFP + IPS Image | \$1,026.00 | 20% | \$1,641.60 |
| FOC1229W07X | Network | WS-C3750G-48PS-E | *Catalyst 3750 48 10/100/1000T PoE + 4 SFP + IPS Image | \$1,026.00 | 20% | \$1,641.60 |
| FOC1229W07F | Network | WS-C3750G-48PS-E | *Catalyst 3750 48 10/100/1000T PoE + 4 SFP + IPS Image | \$1,026.00 | 20% | \$1,641.60 |
| FOC1229W08Q | Network | WS-C3750G-48PS-E | *Catalyst 3750 48 10/100/1000T PoE + 4 SFP + IPS Image | \$1,026.00 | 20% | \$1,641.60 |
| FOC1228T0WC | Network | WS-CBS3020-HPQ | *Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1228T0VM | Network | WS-CBS3020-HPQ | *Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1228T0JT | Network | WS-CBS3020-HPQ | *Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1228T0NZ | Network | WS-CBS3020-HPQ | *Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1228T0S7 | Network | WS-CBS3020-HPQ | *Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1224W23C | Network | WS-C3750G-48PS-E | *Catalyst 3750 48 10/100/1000T PoE + 4 SFP + IPS Image | \$1,026.00 | 20% | \$1,641.60 |
| FOC1224W017 | Network | WS-C3750G-48PS-E | *Catalyst 3750 48 10/100/1000T PoE + 4 SFP + IPS Image | \$1,026.00 | 20% | \$1,641.60 |
| FOC1224W22L | Network | WS-C3750G-48PS-E | *Catalyst 3750 48 10/100/1000T PoE + 4 SFP + IPS Image | \$1,026.00 | 20% | \$1,641.60 |
| FOC1224W23A | Network | WS-C3750G-48PS-E | *Catalyst 3750 48 10/100/1000T PoE + 4 SFP + IPS Image | \$1,026.00 | 20% | \$1,641.60 |
| FOC1224W242 | Network | WS-C3750G-48PS-E | *Catalyst 3750 48 10/100/1000T PoE + 4 SFP + IPS Image | \$1,026.00 | 20% | \$1,641.60 |
| FOC1224W22D | Network | WS-C3750G-48PS-E | *Catalyst 3750 48 10/100/1000T PoE + 4 SFP + IPS Image | \$1,026.00 | 20% | \$1,641.60 |
| FOX1229G3XD | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FOX1229G3XF | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FOX1229G8QS | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FOX1229G8R8 | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FOX1229G8RK | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |

EOS 2/28/2017

| | | | | | | |
|-------------|---------|--------------------|---|-------------|-----|-------------|
| FOX1229G8RM | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FOX1228HACC | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FOX1229G3XJ | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FOX1229G3XZ | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FOC1228T0UG | Network | WS-CBS3020-HPQ | ^Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1228T0UY | Network | WS-CBS3020-HPQ | ^Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1228T0UK | Network | WS-CBS3020-HPQ | ^Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1228T0PJ | Network | WS-CBS3020-HPQ | ^Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1228T1C3 | Network | WS-CBS3020-HPQ | ^Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1228T1GR | Network | WS-CBS3020-HPQ | ^Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1231Y1QH | Network | WS-C3750G-48PS-E | ^Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1231Y1S4 | Network | WS-C3750G-48PS-E | ^Catalyst 3750 48 10/100/1000T PoE + 4 SFP + IPS Image | \$1,026.00 | 20% | \$1,641.60 |
| FOC1228T1BS | Network | WS-CBS3020-HPQ | ^Catalyst 3750 48 10/100/1000T PoE + 4 SFP + IPS Image | \$1,026.00 | 20% | \$1,641.60 |
| FOC1228T1EM | Network | WS-CBS3020-HPQ | ^Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1228T0ZA | Network | WS-CBS3020-HPQ | ^Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1228T1L9 | Network | WS-CBS3020-HPQ | ^Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1228T1FK | Network | WS-CBS3020-HPQ | ^Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1228T1MA | Network | WS-CBS3020-HPQ | ^Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1413Z1ZD | Network | WS-C2960-48PST-L | ^Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1419Z1XH | Network | WS-C2960-48PST-L | ^Catalyst 2960 48 10/100 PoE + 2 1000BT +2 SFP LAN Bas | \$325.00 | 20% | \$520.00 |
| FOC1533Z199 | Network | WS-C3750G-48PS-S | ^Catalyst 2960 48 10/100 PoE + 2 1000BT +2 SFP LAN Bas | \$325.00 | 20% | \$520.00 |
| FGL163640UJ | Network | ASA5545-IPS-K9 | ^Catalyst 3750 48 10/100/1000T PoE + 4 SFP + IPB Image | \$1,026.00 | 20% | \$1,641.60 |
| FGL163640HD | Network | ASA-IC-6GE-CU-C | ASA 5545-X with IPS, SW, 8GE Data, 1GE Mgmt, AC, 3DE | \$5,255.00 | 20% | \$8,408.00 |
| SAL1617B58C | Network | WS-SVC-WISM2-3-K9= | ASA 5545-X/5555-X Interface Card 6-port 10/100/1000, RJ- | \$600.00 | 20% | \$960.00 |
| SAL1617B58K | Network | WS-SVC-WISM2-3-K9= | Wireless Services Module:WiSM-2: w/ 300 AP Support Lice | \$7,149.00 | 20% | \$11,438.40 |
| FOC1646Y064 | Network | WS-C3560C-12PC-S | Wireless Services Module:WiSM-2: w/ 300 AP Support Lice | \$7,149.00 | 20% | \$11,438.40 |
| FOC1649Y197 | Network | WS-C3560C-12PC-S | Catalyst 3560C Switch 12 FE PoE, 2 x Dual Uplink, IP Base | \$107.00 | 20% | \$171.20 |
| FOC1649Y175 | Network | WS-C3560C-12PC-S | Catalyst 3560C Switch 12 FE PoE, 2 x Dual Uplink, IP Base | \$107.00 | 20% | \$171.20 |
| FOC1649Y165 | Network | WS-C3560C-12PC-S | Catalyst 3560C Switch 12 FE PoE, 2 x Dual Uplink, IP Base | \$107.00 | 20% | \$171.20 |
| JAF1732BKTR | Network | N7K-C7010-B2S2E | Catalyst 3560C Switch 12 FE PoE, 2 x Dual Uplink, IP Base | \$107.00 | 20% | \$171.20 |
| JAF1732BLBE | Network | N7K-C7010-B2S2E | Nexus 7010 Bundle (Chassis,1xSUP2E,5xFAB2),No Power | \$10,576.00 | 20% | \$16,921.60 |
| JAF1732AKAM | Network | N7K-C7010-B2S2E | Nexus 7010 Bundle (Chassis,1xSUP2E,5xFAB2),No Power | \$10,576.00 | 20% | \$16,921.60 |
| JAF1732BKTK | Network | N7K-C7010-B2S2E | Nexus 7010 Bundle (Chassis,1xSUP2E,5xFAB2),No Power | \$10,576.00 | 20% | \$16,921.60 |
| FOC1745Z32H | Network | WS-C3560C-12PC-S | Nexus 7010 Bundle (Chassis,1xSUP2E,5xFAB2),No Power | \$10,576.00 | 20% | \$16,921.60 |
| FOC1809Y629 | Network | WS-C3560C-12PC-S | Catalyst 3560C Switch 12 FE PoE, 2 x Dual Uplink, IP Base | \$107.00 | 20% | \$171.20 |
| FOC1809Y637 | Network | WS-C3560C-12PC-S | Catalyst 3560C Switch 12 FE PoE, 2 x Dual Uplink, IP Base | \$107.00 | 20% | \$171.20 |
| FOC1809Y618 | Network | WS-C3560C-12PC-S | Catalyst 3560C Switch 12 FE PoE, 2 x Dual Uplink, IP Base | \$107.00 | 20% | \$171.20 |
| FOC1812R105 | Network | N6K-C6001-64T | Catalyst 3560C Switch 12 FE PoE, 2 x Dual Uplink, IP Base | \$107.00 | 20% | \$171.20 |
| FOC1808R2BR | Network | N6K-C6001-64T | Nexus 6001, 1RU switch, fixed 48p of 10G BASE-T and 4p | \$1,680.00 | 20% | \$2,688.00 |
| SSI1808072N | Network | N5K-C5548UP-FA | Nexus 6001, 1RU switch, fixed 48p of 10G BASE-T and 4p | \$1,680.00 | 20% | \$2,688.00 |
| SSI180804VQ | Network | N5K-C5548UP-FA | Nexus 5548 UP Chassis, 32 10GbE Ports, 2 PS, 2 Fans | \$1,528.00 | 20% | \$2,444.80 |
| FOC1808R2BS | Network | N6K-C6001-64T | Nexus 5548 UP Chassis, 32 10GbE Ports, 2 PS, 2 Fans | \$1,528.00 | 20% | \$2,444.80 |
| FOC1808R2CD | Network | N6K-C6001-64T | Nexus 6001, 1RU switch, fixed 48p of 10G BASE-T and 4p | \$1,680.00 | 20% | \$2,688.00 |
| FOC1818R035 | Network | N6004-B-24Q | Nexus 6001, 1RU switch, fixed 48p of 10G BASE-T and 4p | \$1,680.00 | 20% | \$2,688.00 |
| FOC1816R33H | Network | N6004-B-24Q | Nexus 6004 EF chassis 24x40GE Ports/FCoE Bundle; 6PS, | \$3,812.00 | 20% | \$6,099.20 |
| FOC1818R030 | Network | N6004-B-24Q | Nexus 6004 EF chassis 24x40GE Ports/FCoE Bundle; 6PS, | \$3,812.00 | 20% | \$6,099.20 |
| FOC1818R02H | Network | N6004-B-24Q | Nexus 6004 EF chassis 24x40GE Ports/FCoE Bundle; 6PS, | \$3,812.00 | 20% | \$6,099.20 |
| FOX1820G3ZP | Network | N2248TP-E-FA-BUN | Nexus 6004 EF chassis 24x40GE Ports/FCoE Bundle; 6PS, | \$3,812.00 | 20% | \$6,099.20 |
| FOX1820G3ZN | Network | N2248TP-E-FA-BUN | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fa | \$236.00 | 20% | \$377.60 |
| FOX1820G3ZR | Network | N2248TP-E-FA-BUN | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fa | \$236.00 | 20% | \$377.60 |
| FOX1820G3XN | Network | N2248TP-E-FA-BUN | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fa | \$236.00 | 20% | \$377.60 |
| FCH1830V340 | Network | SNS-3415-K9 | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fa | \$236.00 | 20% | \$377.60 |
| FCH1830V20Q | Network | SNS-3415-K9 | Small Secure Network Server for ISE, NAC, & ACS Applicat | \$1,652.00 | 20% | \$2,643.20 |
| FDO1931E0CP | Network | WS-C3650-24TS-E | Small Secure Network Server for ISE, NAC, & ACS Applicat | \$1,652.00 | 20% | \$2,643.20 |
| KQ29GV1 | Network | ISE-3315-K9 | Cisco Catalyst 3650 24 Port Data 4x1G Uplink IP Services | \$491.00 | 20% | \$785.60 |
| | | | ^Cisco Identity Services Engine 3315 Hardware Appliance | \$2,749.00 | 20% | \$4,398.40 |

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|-------------|--------------------|--------------------|--|------------|-----|-------------|
| KQ29GV8 | Network | ISE-3315-K9 | *Cisco Identity Services Engine 3315 Hardware Appliance | \$2,749.00 | 20% | \$4,398.40 |
| SSI16450CD1 | Network | ASR1001 | Cisco ASR1001 System,Crypto, 4 built-in GE, Dual P/S | \$2,010.00 | 20% | \$3,216.00 |
| N/A | Network | SLASR1-AIS | Cisco ASR 1000 Advanced IP Services License | \$659.00 | 20% | \$1,054.40 |
| SSI1644084T | Network | ASR1001 | Cisco ASR1001 System,Crypto, 4 built-in GE, Dual P/S | \$2,010.00 | 20% | \$3,216.00 |
| N/A | Network | SLASR1-AIS | Cisco ASR 1000 Advanced IP Services License | \$659.00 | 20% | \$1,054.40 |
| FTX1028A0DZ | Network | CISCO2821-AC-IP | *2821 w/ AC+POE,2GE,4HWIC,3PVDM,1NME-X,2AIM,IPB | \$777.00 | 20% | \$1,243.20 |
| FTX1404AHHD | Network | CISCO2811-AC-IP | *2811 w/ AC+POE,2FE,4HWICs,2PVDMs,1NME,2AIMS,IPB | \$622.00 | 20% | \$995.20 |
| FGL164140UA | Network | ASA5545-K8 | ASA 5545-X with SW, 8GE Data, 1GE Mgmt, AC, DES | \$3,454.00 | 20% | \$5,526.40 |
| FGL163640US | Network | ASA-IC-6GE-CU-C | ASA 5545-X/5555-X Interface Card 6-port 10/100/1000, RJ- | \$960.00 | 20% | \$1,536.00 |
| 3112J149E77 | Network | DCNM-SAN-N7K-K9 | DCNM for SAN Advanced Edition for Nexus 7000 | \$4,200.00 | 20% | \$6,720.00 |
| 3112J5C1494 | Network | DCNM-SAN-N7K-K9 | DCNM for SAN Advanced Edition for Nexus 7000 | \$4,200.00 | 20% | \$6,720.00 |
| 3112J31BEBB | Network | DCNM-SAN-N7K-K9 | DCNM for SAN Advanced Edition for Nexus 7000 | \$4,200.00 | 20% | \$6,720.00 |
| 3112J621A22 | Network | DCNM-SAN-N7K-K9 | DCNM for SAN Advanced Edition for Nexus 7000 | \$4,200.00 | 20% | \$6,720.00 |
| 6011J722784 | Network | DCNM-LS-N61-K9 | DCNM for SAN and LAN Advanced Edt. for Nexus 6001 swi | \$1,500.00 | 20% | \$2,400.00 |
| 6011J4FB6E4 | Network | DCNM-LS-N61-K9 | DCNM for SAN and LAN Advanced Edt. for Nexus 6001 swi | \$1,500.00 | 20% | \$2,400.00 |
| 5511J5936F6 | Network | DCNM-LAN-N5K-K9 | DCNM for LAN Advanced Edt. for Nexus 5000 | \$200.00 | 20% | \$320.00 |
| 3231J382BCB | Network | DCNM-SAN-N5K-K9 | DCNM for SAN License for Nexus 5000 | \$1,400.00 | 20% | \$2,240.00 |
| 5511JCC4BE4 | Network | DCNM-LAN-N5K-K9 | DCNM for LAN Advanced Edt. for Nexus 5000 | \$200.00 | 20% | \$320.00 |
| 3231J386494 | Network | DCNM-SAN-N5K-K9 | DCNM for SAN License for Nexus 5000 | \$1,400.00 | 20% | \$2,240.00 |
| 5511J498242 | Network | DCNM-LAN-N5K-K9 | DCNM for LAN Advanced Edt. for Nexus 5000 | \$200.00 | 20% | \$320.00 |
| 3231J5C8C45 | Network | DCNM-SAN-N5K-K9 | DCNM for SAN License for Nexus 5000 | \$1,400.00 | 20% | \$2,240.00 |
| 5511J356802 | Network | DCNM-LAN-N5K-K9 | DCNM for LAN Advanced Edt. for Nexus 5000 | \$200.00 | 20% | \$320.00 |
| 3231J10A941 | Network | DCNM-SAN-N5K-K9 | DCNM for SAN License for Nexus 5000 | \$1,400.00 | 20% | \$2,240.00 |
| 6011J7C9D55 | Network | DCNM-LS-N61-K9 | DCNM for SAN and LAN Advanced Edt. for Nexus 6001 swi | \$1,500.00 | 20% | \$2,400.00 |
| 6011J662295 | Network | DCNM-LS-N61-K9 | DCNM for SAN and LAN Advanced Edt. for Nexus 6001 swi | \$1,500.00 | 20% | \$2,400.00 |
| N/A | Network | N1K-VLCPU-01 | Nexus 1000V Adv Ed Paper Multi-Hypervisor License Qty1 | \$174.00 | 20% | \$278.40 |
| 6011J625448 | Network | DCNM-SAN-N64-K9 | DCNM for SAN Advanced Edt. for Nexus 6004 switches | \$2,000.00 | 20% | \$3,200.00 |
| 6011J33628E | Network | DCNM-LAN-N64-K9 | DCNM for LAN Advanced Edt. for Nexus 6004 switches | \$800.00 | 20% | \$1,280.00 |
| 6011J6944C9 | Network | DCNM-SAN-N64-K9 | DCNM for SAN Advanced Edt. for Nexus 6004 switches | \$2,000.00 | 20% | \$3,200.00 |
| 6011J2CAF93 | Network | DCNM-LAN-N64-K9 | DCNM for LAN Advanced Edt. for Nexus 6004 switches | \$800.00 | 20% | \$1,280.00 |
| 6011J2CEC8F | Network | DCNM-SAN-N64-K9 | DCNM for SAN Advanced Edt. for Nexus 6004 switches | \$2,000.00 | 20% | \$3,200.00 |
| 6011J7C9E50 | Network | DCNM-LAN-N64-K9 | DCNM for LAN Advanced Edt. for Nexus 6004 switches | \$800.00 | 20% | \$1,280.00 |
| 6011J1BD6B3 | Network | DCNM-SAN-N64-K9 | DCNM for SAN Advanced Edt. for Nexus 6004 switches | \$2,000.00 | 20% | \$3,200.00 |
| 6011J2B6B05 | Network | DCNM-LAN-N64-K9 | DCNM for LAN Advanced Edt. for Nexus 6004 switches | \$800.00 | 20% | \$1,280.00 |
| 7381J60DD1B | Network | FS-VMW-10-SW-K9 | Cisco Firepower Management Center,(VMWare) for 10 devi | \$400.00 | 20% | \$640.00 |
| JMX1112L0G8 | Network | ASA5510-AIP10-K8 | *ASA 5510 Appliance with AIP-SSM-10, SW, 5FE, DES | \$1,538.00 | 20% | \$2,460.80 |
| JAD171300TT | Network | ASA-SSM-AIP-10-K9= | *ASA 5500 AIP Security Services Module-10 | \$1,590.00 | 20% | \$2,544.00 |
| FGL163640UN | Network | ASA5545-IPS-K9 | ASA 5545-X with IPS, SW, 8GE Data, 1GE Mgmt, AC, 3DE | \$5,255.00 | 20% | \$8,408.00 |
| FGL163640UP | Network | ASA-IC-6GE-CU-C | ASA 5545-X/5555-X Interface Card 6-port 10/100/1000, RJ- | \$600.00 | 20% | \$960.00 |
| JAD171300WE | Network | ASA-SSM-AIP-10-K9= | *ASA 5500 AIP Security Services Module-10 | \$1,590.00 | 20% | \$2,544.00 |
| SAD1130000M | Network | ACE10-6500-K9= | *Application Control Engine Service Module | \$6,324.00 | 20% | \$2,616.23 |
| SAD1130000G | Network | ACE10-6500-K9= | *Application Control Engine Service Module | \$6,324.00 | 20% | \$2,616.23 |
| SMG1209N676 | Network | WS-C6509-E-ACE-K9 | *ACE 8G 6509 Bundle | \$9,811.00 | 20% | \$15,697.60 |
| SAD115201VN | Network | ACE10-6500-K9 | *Application Control Engine Service Module | \$6,324.00 | 20% | \$2,616.23 |
| N/A | Contact Center | VMW-VC5-STD-1A= | VMware vCenter 5 Server Standard, 1 yr support required | \$1,460.00 | 20% | \$2,336.00 |
| N/A | Business Telephony | ER90-USR-10-NEW | *EMRGNCY RSPNDR 90 USR LIC 10 PHNS NEW | \$24.00 | 20% | \$38.40 |
| N/A | Business Telephony | ER90-USR-10-NEW | *EMRGNCY RSPNDR 90 USR LIC 10 PHNS NEW | \$24.00 | 20% | \$38.40 |
| N/A | Business Telephony | LIC-CUCM-9X-ENH-A | UC Manager-9.x Enhanced Single User License | \$33.00 | 20% | \$52.80 |
| N/A | Business Telephony | LIC-CUCM-9X-ENH-A | UC Manager-9.x Enhanced Single User License | \$33.00 | 20% | \$52.80 |
| N/A | Business Telephony | LIC-CUCM-9X-ENH-A | UC Manager-9.x Enhanced Single User License | \$33.00 | 20% | \$52.80 |
| N/A | Business Telephony | LIC-CUCM-9X-ENH-A | UC Manager-9.x Enhanced Single User License | \$33.00 | 20% | \$52.80 |
| N/A | Business Telephony | LIC-CUCM-9X-ENH-A | UC Manager-9.x Enhanced Single User License | \$33.00 | 20% | \$52.80 |
| N/A | Business Telephony | LIC-CUCM-9X-ENH-A | UC Manager-9.x Enhanced Single User License | \$33.00 | 20% | \$52.80 |
| N/A | Business Telephony | LIC-CUCM-9X-ENH-A | UC Manager-9.x Enhanced Single User License | \$33.00 | 20% | \$52.80 |
| N/A | Business Telephony | LIC-CUCM-9X-ENH-A | UC Manager-9.x Enhanced Single User License | \$33.00 | 20% | \$52.80 |
| N/A | Business Telephony | LIC-CUCM-9X-ENH-A | UC Manager-9.x Enhanced Single User License | \$33.00 | 20% | \$52.80 |

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| N/A | Contact Center | LIC-CUCM-USR-A | Unified Communications Manager Enhanced Single User | \$33.00 | 20% | \$52.80 |
| N/A | Contact Center | LIC-CUCM-USR-A | Unified Communications Manager Enhanced Single User | \$33.00 | 20% | \$52.80 |
| N/A | Contact Center | LIC-CUCM-USR-A | Unified Communications Manager Enhanced Single User | \$33.00 | 20% | \$52.80 |
| N/A | Contact Center | LIC-CUCM-USR-A | Unified Communications Manager Enhanced Single User | \$33.00 | 20% | \$52.80 |
| N/A | Contact Center | LIC-CUCM-USR-A | Unified Communications Manager Enhanced Single User | \$33.00 | 20% | \$52.80 |
| N/A | Contact Center | LIC-CUCM-USR-A | Unified Communications Manager Enhanced Single User | \$33.00 | 20% | \$52.80 |
| N/A | Contact Center | LIC-CUCM-USR-A | Unified Communications Manager Enhanced Single User | \$33.00 | 20% | \$52.80 |
| N/A | Contact Center | CVP-8X-PTS | CVP 8.X Port License | \$144.00 | 20% | \$230.40 |
| N/A | Contact Center | CVP-STU-85= | ^CVP 8.5 Studio | \$880.00 | 20% | \$1,408.00 |
| N/A | Contact Center | IPCE-DIALPORT-L | IPCC ENTERPRISE OUTBOUND DIALER PORT | \$96.00 | 20% | \$153.60 |
| N/A | Contact Center | IPCE-PREMAGT-L | IPCC ENTERPRISE PREMIUM AGENT | \$272.00 | 20% | \$435.20 |
| N/A | Contact Center | IPCE-PROMOAGT-L | ICM to UCCE Promo - ICM Desktop to CCE Premium Agent | \$272.00 | 20% | \$435.20 |
| N/A | Contact Center | UNITYCN8-USR | ^One Unity Connection 8.x User - All user Features | \$15.00 | 20% | \$24.00 |
| FOX1809G7G8 | Network | N2K-C2248TPE-FA-B | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fa | \$205.00 | 20% | \$328.00 |
| FOX1808GKMU | Network | N2K-C2248TPE-FA-B | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fa | \$205.00 | 20% | \$328.00 |
| SSI180805ZM | Network | N5K-C5548UP-BUN | Nexus 5548UP in N5548UP-N2K Bundle | \$1,283.00 | 20% | \$2,052.80 |
| FOX1808GKNV | Network | N2K-C2248TPE-FA-B | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fa | \$205.00 | 20% | \$328.00 |
| FOX1809G7GT | Network | N2K-C2248TPE-FA-B | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fa | \$205.00 | 20% | \$328.00 |
| FOX1808GKNZ | Network | N2K-C2248TPE-FA-B | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fa | \$205.00 | 20% | \$328.00 |
| FOX1809GEDQ | Network | N2K-C2248TPE-FA-B | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fa | \$205.00 | 20% | \$328.00 |
| FOX1809GEGQ | Network | N2K-C2248TPE-FA-B | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fa | \$205.00 | 20% | \$328.00 |
| FOX1808GKL1 | Network | N2K-C2248TPE-FA-B | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fa | \$205.00 | 20% | \$328.00 |
| SSI180805ZK | Network | N5K-C5548UP-BUN | Nexus 5548UP in N5548UP-N2K Bundle | \$1,283.00 | 20% | \$2,052.80 |
| SMG1025NML8 | Network | WS-C6509-E | Catalyst 6500 Enhanced 9-slot chassis,14RU,no PS,no Fan | \$6,825.00 | 20% | \$10,920.00 |
| SAD112505H0 | Network | ACE10-6500-K9= | ^Application Control Engine Service Module | \$6,324.00 | 20% | \$2,616.23 |
| FOC1807R21H | Network | N2K-B22HP-F | Cisco Nexus B22 Fabric Extender for HP with FETs | \$249.00 | 20% | \$398.40 |
| FOC1807R21A | Network | N2K-B22HP-F | Cisco Nexus B22 Fabric Extender for HP with FETs | \$249.00 | 20% | \$398.40 |
| FOC1807R219 | Network | N2K-B22HP-F | Cisco Nexus B22 Fabric Extender for HP with FETs | \$249.00 | 20% | \$398.40 |
| FOC1807R211 | Network | N2K-B22HP-F | Cisco Nexus B22 Fabric Extender for HP with FETs | \$249.00 | 20% | \$398.40 |
| FOC1807R200 | Network | N2K-B22HP-F | Cisco Nexus B22 Fabric Extender for HP with FETs | \$249.00 | 20% | \$398.40 |
| FOC1749R1C6 | Network | N2K-B22HP-F | Cisco Nexus B22 Fabric Extender for HP with FETs | \$249.00 | 20% | \$398.40 |
| FOC1807R20B | Network | N2K-B22HP-F | Cisco Nexus B22 Fabric Extender for HP with FETs | \$249.00 | 20% | \$398.40 |
| FOC1807R20A | Network | N2K-B22HP-F | Cisco Nexus B22 Fabric Extender for HP with FETs | \$249.00 | 20% | \$398.40 |
| FOC1807R1ZV | Network | N2K-B22HP-F | Cisco Nexus B22 Fabric Extender for HP with FETs | \$249.00 | 20% | \$398.40 |
| FOC1807R1ZG | Network | N2K-B22HP-F | Cisco Nexus B22 Fabric Extender for HP with FETs | \$249.00 | 20% | \$398.40 |
| FOC1807R21M | Network | N2K-B22HP-F | Cisco Nexus B22 Fabric Extender for HP with FETs | \$249.00 | 20% | \$398.40 |
| FOC1807R21L | Network | N2K-B22HP-F | Cisco Nexus B22 Fabric Extender for HP with FETs | \$249.00 | 20% | \$398.40 |
| FOC1807R21K | Network | N2K-B22HP-F | Cisco Nexus B22 Fabric Extender for HP with FETs | \$249.00 | 20% | \$398.40 |
| FOC1807R21F | Network | N2K-B22HP-F | Cisco Nexus B22 Fabric Extender for HP with FETs | \$249.00 | 20% | \$398.40 |
| FOC1746R0WVW | Network | N2K-B22HP-F | Cisco Nexus B22 Fabric Extender for HP with FETs | \$249.00 | 20% | \$398.40 |
| FOC1745R18L | Network | N2K-B22HP-F | Cisco Nexus B22 Fabric Extender for HP with FETs | \$249.00 | 20% | \$398.40 |
| FOC1735R1MR | Network | N2K-B22HP-F | Cisco Nexus B22 Fabric Extender for HP with FETs | \$249.00 | 20% | \$398.40 |
| FOC1733R3D7 | Network | N2K-B22HP-F | Cisco Nexus B22 Fabric Extender for HP with FETs | \$249.00 | 20% | \$398.40 |
| N/A | Network | VMW-VS5-ST-1A= | VMware vSphere 6 Standard (1 CPU), 1yr, Support Require | \$378.00 | 20% | \$604.80 |
| N/A | Contact Center | VMW-VS5-ST-1A= | VMware vSphere 6 Standard (1 CPU), 1yr, Support Require | \$378.00 | 20% | \$604.80 |
| N/A | Contact Center | VMW-VS5-ST-1A= | VMware vSphere 6 Standard (1 CPU), 1yr, Support Require | \$378.00 | 20% | \$604.80 |
| N/A | Contact Center | VMW-VS5-ST-1A= | VMware vSphere 6 Standard (1 CPU), 1yr, Support Require | \$378.00 | 20% | \$604.80 |
| N/A | Contact Center | VMW-VS5-ST-1A= | VMware vSphere 6 Standard (1 CPU), 1yr, Support Require | \$378.00 | 20% | \$604.80 |
| N/A | Contact Center | VMW-VS5-ST-1A= | VMware vSphere 6 Standard (1 CPU), 1yr, Support Require | \$378.00 | 20% | \$604.80 |
| N/A | Contact Center | VMW-VS5-ST-1A= | VMware vSphere 6 Standard (1 CPU), 1yr, Support Require | \$378.00 | 20% | \$604.80 |
| N/A | Contact Center | VMW-VS5-ST-1A= | VMware vSphere 6 Standard (1 CPU), 1yr, Support Require | \$378.00 | 20% | \$604.80 |
| N/A | Contact Center | VMW-VS5-ST-1A= | VMware vSphere 6 Standard (1 CPU), 1yr, Support Require | \$378.00 | 20% | \$604.80 |
| N/A | Contact Center | VMW-VS5-ST-1A= | VMware vSphere 6 Standard (1 CPU), 1yr, Support Require | \$378.00 | 20% | \$604.80 |
| N/A | Contact Center | VMW-VS5-ST-1A= | VMware vSphere 6 Standard (1 CPU), 1yr, Support Require | \$378.00 | 20% | \$604.80 |
| N/A | Contact Center | VMW-VS5-ST-1A= | VMware vSphere 6 Standard (1 CPU), 1yr, Support Require | \$378.00 | 20% | \$604.80 |
| N/A | Contact Center | VMW-VS5-ST-1A= | VMware vSphere 6 Standard (1 CPU), 1yr, Support Require | \$378.00 | 20% | \$604.80 |

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| N/A | Contact Center | VMW-VS5-ST-1A= | VMware vSphere 6 Standard (1 CPU), 1yr, Support Require | \$378.00 | 20% | \$604.80 |
| N/A | Contact Center | VMW-VS5-ST-1A= | VMware vSphere 6 Standard (1 CPU), 1yr, Support Require | \$378.00 | 20% | \$604.80 |
| N/A | Contact Center | VMW-VS5-ST-1A= | VMware vSphere 6 Standard (1 CPU), 1yr, Support Require | \$378.00 | 20% | \$604.80 |
| N/A | Contact Center | VMW-VS5-ST-1A= | VMware vSphere 6 Standard (1 CPU), 1yr, Support Require | \$378.00 | 20% | \$604.80 |
| N/A | Network | L-ISE-ADV-S-1K= | Cisco ISE 1K EndPoint Advanced Subscription License | \$17,600.00 | 20% | \$28,160.00 |
| FTX1849ALA2 | Contact Center | CISCO3925E-V/K9 | Cisco 3925E Voice Bundle,PVDM3-64, UC License PAK, FL | \$2,034.00 | 20% | \$3,254.40 |
| FTX1849ALA1 | Contact Center | CISCO3925E-V/K9 | Cisco 3925E Voice Bundle,PVDM3-64, UC License PAK, FL | \$2,034.00 | 20% | \$3,254.40 |
| QCI1523A42J | Contact Center | UCS-C210M2-VCD2 | ^Bare Metal UCS C210M2 Svr.,2xE5640 CPU,48GB RAM,1 | \$749.00 | 20% | \$1,198.40 |
| QCI1522A8XZ | Contact Center | UCS-C210M2-VCD2 | ^Bare Metal UCS C210M2 Svr.,2xE5640 CPU,48GB RAM,1 | \$749.00 | 20% | \$1,198.40 |
| QCI1631A03Y | Contact Center | R210-2121605W | UCS C210 M2 Svr w/1PSU, w/o CPU, mem, HDD, DVD or | \$501.00 | 20% | \$801.60 |
| FTX1704AKRF | Contact Center | CISCO3945-V/K9 | Cisco 3945 Voice Bundle, PVDM3-64, UC License PAK, FL | \$1,622.00 | 20% | \$2,595.20 |
| FCH1703V1WT | Contact Center | UCUCS-EZ-C220M3S | UCS C220 M3 SFF dual-4-core/3.3 GHz, 64 GB RAM, 8x30 | \$276.00 | 20% | \$441.60 |
| FCH1703V1XV | Contact Center | UCUCS-EZ-C220M3S | UCS C220 M3 SFF dual-4-core/3.3 GHz, 64 GB RAM, 8x30 | \$276.00 | 20% | \$441.60 |
| FCH1934V0VG | Center / Business Te | BE7M-M4-K9 | Cisco Business Edition 7000M Svr (M4), Export Restricted S | \$424.00 | 20% | \$678.40 |
| FCH1934V0VF | Center / Business Te | BE7M-M4-K9 | Cisco Business Edition 7000M Svr (M4), Export Restricted S | \$424.00 | 20% | \$678.40 |
| FCH1934V0ZD | Center / Business Te | BE7M-M4-K9 | Cisco Business Edition 7000M Svr (M4), Export Restricted S | \$424.00 | 20% | \$678.40 |
| FCH1933V2KW | Center / Business Te | BE7M-M4-K9 | Cisco Business Edition 7000M Svr (M4), Export Restricted S | \$424.00 | 20% | \$678.40 |
| FCH1934V0VL | Center / Business Te | BE7M-M4-K9 | Cisco Business Edition 7000M Svr (M4), Export Restricted S | \$424.00 | 20% | \$678.40 |
| FCH1934V0SL | Center / Business Te | BE7M-M4-K9 | Cisco Business Edition 7000M Svr (M4), Export Restricted S | \$424.00 | 20% | \$678.40 |
| FCH1933V2T5 | Center / Business Te | BE7M-M4-K9 | Cisco Business Edition 7000M Svr (M4), Export Restricted S | \$424.00 | 20% | \$678.40 |
| FCH1934V0VJ | Center / Business Te | BE7M-M4-K9 | Cisco Business Edition 7000M Svr (M4), Export Restricted S | \$424.00 | 20% | \$678.40 |
| QCI1632A0AK | Contact Center | R210-2121605W | UCS C210 M2 Svr w/1PSU, w/o CPU, mem, HDD, DVD or | \$501.00 | 20% | \$801.60 |
| QCI1632A08X | Contact Center | R210-2121605W | UCS C210 M2 Svr w/1PSU, w/o CPU, mem, HDD, DVD or | \$501.00 | 20% | \$801.60 |
| QCI1632A0AT | Contact Center | R210-2121605W | UCS C210 M2 Svr w/1PSU, w/o CPU, mem, HDD, DVD or | \$501.00 | 20% | \$801.60 |
| QCI1631A014 | Contact Center | R210-2121605W | UCS C210 M2 Svr w/1PSU, w/o CPU, mem, HDD, DVD or | \$501.00 | 20% | \$801.60 |
| FTX1637ALM8 | Contact Center | CISCO3925-V/K9 | Cisco 3925 Voice Bundle, PVDM3-64, UC License PAK, FL | \$1,133.00 | 20% | \$1,812.80 |
| FTX1637ALL8 | Contact Center | CISCO3925-V/K9 | Cisco 3925 Voice Bundle, PVDM3-64, UC License PAK, FL | \$1,133.00 | 20% | \$1,812.80 |
| FTX1637ALMG | Contact Center | CISCO3925-V/K9 | Cisco 3925 Voice Bundle, PVDM3-64, UC License PAK, FL | \$1,133.00 | 20% | \$1,812.80 |
| FTX1637ALM7 | Contact Center | CISCO3925-V/K9 | Cisco 3925 Voice Bundle, PVDM3-64, UC License PAK, FL | \$1,133.00 | 20% | \$1,812.80 |
| JMX193880FS | Network CIP | FS750-K9 | Cisco Firepower Management Center 750 Chassis, 1U | \$2,591.00 | 20% | \$4,145.60 |
| JMX193880FQ | Network CIP | FS750-K9 | Cisco Firepower Management Center 750 Chassis, 1U | \$2,591.00 | 20% | \$4,145.60 |
| FDO1931E0CR | Network CIP | WS-C3650-24TS-L | Cisco Catalyst 3650 24 Port Data 4x1G Uplink LAN Base | \$214.00 | 20% | \$342.40 |
| FDO1931P09L | Network CIP | WS-C3650-24TS-L | Cisco Catalyst 3650 24 Port Data 4x1G Uplink LAN Base | \$214.00 | 20% | \$342.40 |
| FDO1931E0CY | Network CIP | WS-C3650-24TS-L | Cisco Catalyst 3650 24 Port Data 4x1G Uplink LAN Base | \$214.00 | 20% | \$342.40 |
| FDO1931E0CN | Network CIP | WS-C3650-24TS-L | Cisco Catalyst 3650 24 Port Data 4x1G Uplink LAN Base | \$214.00 | 20% | \$342.40 |
| FTX193910ZG | Network CIP | ASA5545-FPWR-K9 | ASA 5545-X with FirePOWER Services, 8GE, AC, 3DES/AB | \$2,303.00 | 20% | \$3,684.80 |
| FTX193910ZK | Network CIP | ASA5545-FPWR-K9 | ASA 5545-X with FirePOWER Services, 8GE, AC, 3DES/AB | \$2,303.00 | 20% | \$3,684.80 |
| FTX193910ZP | Network CIP | ASA5545-FPWR-K9 | ASA 5545-X with FirePOWER Services, 8GE, AC, 3DES/AB | \$2,303.00 | 20% | \$3,684.80 |
| FTX193910ZM | Network CIP | ASA5545-FPWR-K9 | ASA 5545-X with FirePOWER Services, 8GE, AC, 3DES/AB | \$2,303.00 | 20% | \$3,684.80 |
| FDO1933E1MB | Network CIP | WS-C3650-48TS-E | Cisco Catalyst 3650 48 Port Data 4x1G Uplink IP Services | \$939.00 | 20% | \$1,502.40 |
| FDO1943Q104 | Network CIP | WS-C3650-48TS-E | Cisco Catalyst 3650 48 Port Data 4x1G Uplink IP Services | \$939.00 | 20% | \$1,502.40 |
| FCH18389FJ1 | Business Telephony | CP-9951-C-CAM-K9= | Cisco UC Phone 9951, Charcoal, Std Hndst with Camera | \$24.00 | 20% | \$38.40 |
| FCH19208M0M | Business Telephony | CP-9951-C-CAM-K9= | Cisco UC Phone 9951, Charcoal, Std Hndst with Camera | \$24.00 | 20% | \$38.40 |
| FCH19208MGA | Business Telephony | CP-9951-C-CAM-K9= | Cisco UC Phone 9951, Charcoal, Std Hndst with Camera | \$24.00 | 20% | \$38.40 |
| FCH19208MK0 | Business Telephony | CP-9951-C-CAM-K9= | Cisco UC Phone 9951, Charcoal, Std Hndst with Camera | \$24.00 | 20% | \$38.40 |
| FCH19208MKB | Business Telephony | CP-9951-C-CAM-K9= | Cisco UC Phone 9951, Charcoal, Std Hndst with Camera | \$24.00 | 20% | \$38.40 |
| FCH19208MUF | Business Telephony | CP-9951-C-CAM-K9= | Cisco UC Phone 9951, Charcoal, Std Hndst with Camera | \$24.00 | 20% | \$38.40 |
| 80A60944 | Business Telephony | CTI-TMS-SW-K9 | Cisco TelePresence Management Suite - Includes 10 Syste | \$912.00 | 20% | \$1,459.20 |
| N/A | Business Telephony | LIC-VCS-10 | Video Comm Server 10 Add Non-traversal Network Calls | \$950.00 | 20% | \$1,520.00 |
| N/A | Business Telephony | LIC-MOVI-25 | ^TMSPE - Add 25 Active Jabber Video Client Registrations | \$432.00 | 20% | \$691.20 |
| FCH2010V0B7 | Contact Center | BE7M-M4-K9 | Cisco Business Edition 7000M Svr (M4), Export Restricted S | \$424.00 | 20% | \$678.40 |
| FCH2011V1GM | Contact Center | BE7M-M4-K9 | Cisco Business Edition 7000M Svr (M4), Export Restricted S | \$424.00 | 20% | \$678.40 |
| FCH2011V1HK | Contact Center | BE7M-M4-K9 | Cisco Business Edition 7000M Svr (M4), Export Restricted S | \$424.00 | 20% | \$678.40 |
| FCH2011V1HL | Contact Center | BE7M-M4-K9 | Cisco Business Edition 7000M Svr (M4), Export Restricted S | \$424.00 | 20% | \$678.40 |
| F0C0931U2JT | Network | WS-C3750G-24PS-S | ^Catalyst 3750 24 10/100/1000T PoE + 4 SFP + IPB Image | \$516.00 | 20% | \$825.60 |

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|-------------|---------|--------------------|---|------------|-----|-------------|
| FOC0931U2KJ | Network | WS-C3750G-24PS-S | ^Catalyst 3750 24 10/100/1000T PoE + 4 SFP + IPB Image | \$516.00 | 20% | \$825.60 |
| FOC0931U2KD | Network | WS-C3750G-24PS-S | ^Catalyst 3750 24 10/100/1000T PoE + 4 SFP + IPB Image | \$516.00 | 20% | \$825.60 |
| FOC0935U28K | Network | WS-C3750G-24PS-S | ^Catalyst 3750 24 10/100/1000T PoE + 4 SFP + IPB Image | \$516.00 | 20% | \$825.60 |
| FOC0935U24C | Network | WS-C3750G-24PS-S | ^Catalyst 3750 24 10/100/1000T PoE + 4 SFP + IPB Image | \$516.00 | 20% | \$825.60 |
| FOC0936U1AE | Network | WS-C3750G-24PS-S | ^Catalyst 3750 24 10/100/1000T PoE + 4 SFP + IPB Image | \$516.00 | 20% | \$825.60 |
| FOC1007Y31C | Network | WS-C3750G-24PS-S | ^Catalyst 3750 24 10/100/1000T PoE + 4 SFP + IPB Image | \$516.00 | 20% | \$825.60 |
| FTX1028A2C1 | Network | CISCO2821-AC-IP | ^2821 w/ AC+POE,2GE,4HWIC,3PVDM,1NME-X,2AIM,IPB | \$777.00 | 20% | \$1,243.20 |
| FOC1114Y0K5 | Network | WS-C3750G-24PS-S | ^Catalyst 3750 24 10/100/1000T PoE + 4 SFP + IPB Image | \$516.00 | 20% | \$825.60 |
| FOC1114Y0K4 | Network | WS-C3750G-24PS-S | ^Catalyst 3750 24 10/100/1000T PoE + 4 SFP + IPB Image | \$516.00 | 20% | \$825.60 |
| FOC1115Z3D2 | Network | WS-C3750G-24PS-S | ^Catalyst 3750 24 10/100/1000T PoE + 4 SFP + IPB Image | \$516.00 | 20% | \$825.60 |
| FOC1217Y0WZ | Network | WS-C3750G-24PS-S | ^Catalyst 3750 24 10/100/1000T PoE + 4 SFP + IPB Image | \$516.00 | 20% | \$825.60 |
| FOC1228T0P9 | Network | WS-CBS3020-HPQ | ^Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1224W23K | Network | WS-C3750G-48PS-E | ^Catalyst 3750 48 10/100/1000T PoE + 4 SFP + IPS Image | \$1,026.00 | 20% | \$1,641.60 |
| FOC1231Y1R4 | Network | WS-C3750G-48PS-E | ^Catalyst 3750 48 10/100/1000T PoE + 4 SFP + IPS Image | \$1,026.00 | 20% | \$1,641.60 |
| FOC1231Y1R0 | Network | WS-C3750G-48PS-E | ^Catalyst 3750 48 10/100/1000T PoE + 4 SFP + IPS Image | \$1,026.00 | 20% | \$1,641.60 |
| SMG1235N4E3 | Network | VS-C6509E-S720-10G | Catalyst Chassis+Fan Tray+Sup720-10G; IP Base ONLY in | \$6,825.00 | 20% | \$10,920.00 |
| SMG1233N2SH | Network | VS-C6509E-S720-10G | Catalyst Chassis+Fan Tray+Sup720-10G; IP Base ONLY in | \$6,825.00 | 20% | \$10,920.00 |
| FOC1237W2B8 | Network | WS-C3750G-24PS-S | ^Catalyst 3750 24 10/100/1000T PoE + 4 SFP + IPB Image | \$516.00 | 20% | \$825.60 |
| FOC1232Z2EZ | Network | WS-C3750G-48PS-E | ^Catalyst 3750 48 10/100/1000T PoE + 4 SFP + IPS Image | \$1,026.00 | 20% | \$1,641.60 |
| FOC1241W4W6 | Network | WS-C3750G-24PS-S | ^Catalyst 3750 24 10/100/1000T PoE + 4 SFP + IPB Image | \$516.00 | 20% | \$825.60 |
| FTX1404AHH7 | Network | CISCO2811-AC-IP | ^2811 w/ AC+POE,2FE,4HWICs,2PVDMs,1NME,2AIMS,IPB | \$622.00 | 20% | \$995.20 |
| FTX1404AHH9 | Network | CISCO2811-AC-IP | ^2811 w/ AC+POE,2FE,4HWICs,2PVDMs,1NME,2AIMS,IPB | \$622.00 | 20% | \$995.20 |
| FDO1353Z0E1 | Network | WS-C3750V2-24PS-S | Catalyst 3750V2 24 10/100 PoE + 2 SFP Standard Image | \$288.00 | 20% | \$460.80 |
| FDO1353Z0CL | Network | WS-C3750V2-24PS-S | Catalyst 3750V2 24 10/100 PoE + 2 SFP Standard Image | \$288.00 | 20% | \$460.80 |
| FDO1353Z0EC | Network | WS-C3750V2-24PS-S | Catalyst 3750V2 24 10/100 PoE + 2 SFP Standard Image | \$288.00 | 20% | \$460.80 |
| FOC1418T1YH | Network | WS-CBS3020-HPQ | ^Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1418T1P0 | Network | WS-CBS3020-HPQ | ^Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1418T1YJ | Network | WS-CBS3020-HPQ | ^Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1418T1YG | Network | WS-CBS3020-HPQ | ^Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1418T1JY | Network | WS-CBS3020-HPQ | ^Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FOC1418T1JJ | Network | WS-CBS3020-HPQ | ^Cisco Catalyst Blade Switch 3020 for HP, RESTRICTED P | \$179.00 | 20% | \$286.40 |
| FTX1508AJBC | Network | CISCO2811-AC-IP | ^2811 w/ AC+POE,2FE,4HWICs,2PVDMs,1NME,2AIMS,IPB | \$622.00 | 20% | \$995.20 |
| FOC1502Y4B7 | Network | WS-C3750G-48PS-S | ^Catalyst 3750 48 10/100/1000T PoE + 4 SFP + IPB Image | \$1,026.00 | 20% | \$1,641.60 |
| FOC1502Y4BH | Network | WS-C3750G-48PS-S | ^Catalyst 3750 48 10/100/1000T PoE + 4 SFP + IPB Image | \$1,026.00 | 20% | \$1,641.60 |
| FOX1415GBH7 | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FOC1612V09M | Network | WS-C3750G-48PS-S | ^Catalyst 3750 48 10/100/1000T PoE + 4 SFP + IPB Image | \$1,026.00 | 20% | \$1,641.60 |
| FOX1609GVRX | Network | WS-C4510RE-S7+96V+ | 4510R+E Chassis, Two WS-X4748-RJ45V+E, Sup7-E | \$2,841.00 | 20% | \$4,545.60 |
| FXS1634Q2GB | Network | WS-C4507RE+96V+ | WS-C4507R+E Chassis, two WS-X4648-RJ45V+E, Sup7L- | \$1,341.00 | 20% | \$2,145.60 |
| FXS1634Q2CK | Network | WS-C4507RE+96V+ | WS-C4507R+E Chassis, two WS-X4648-RJ45V+E, Sup7L- | \$1,341.00 | 20% | \$2,145.60 |
| FDO1630R31Q | Network | WS-C3750X-48PF-E | Catalyst 3750X 48 Port Full PoE IP Services | \$882.00 | 20% | \$1,411.20 |
| FOC1642Y5J8 | Network | WS-C3560C-12PC-S | Catalyst 3560C Switch 12 FE PoE, 2 x Dual Uplink, IP Base | \$107.00 | 20% | \$171.20 |
| FDO1636Y24J | Network | WS-C3750G-12S-S-WS | Cat3750 12 SFP Std. Multilayer Image REFURBISHED | \$966.00 | 20% | \$1,545.60 |
| FOC1844U0ZD | Network | WS-C3850-48U-E | Cisco Catalyst 3850 48 Port UPOE IP Services | \$1,386.00 | 20% | \$2,217.60 |
| FCW1852B4PS | Network | WS-C2960X-24PS-L | Catalyst 2960-X 24 GigE PoE 370W, 4 x 1G SFP, LAN Bas | \$201.00 | 20% | \$321.60 |
| FCW1852A63N | Network | WS-C2960X-24PS-L | Catalyst 2960-X 24 GigE PoE 370W, 4 x 1G SFP, LAN Bas | \$201.00 | 20% | \$321.60 |
| FJC1904A086 | Network | CISCO2921/K9 | Cisco 2921 w/3 GE,4 EHWIC,3 DSP,1 SM,256MB CF,512M | \$567.00 | 20% | \$907.20 |
| FJC1904A087 | Network | CISCO2921/K9 | Cisco 2921 w/3 GE,4 EHWIC,3 DSP,1 SM,256MB CF,512M | \$567.00 | 20% | \$907.20 |
| FJC1904A089 | Network | CISCO2921/K9 | Cisco 2921 w/3 GE,4 EHWIC,3 DSP,1 SM,256MB CF,512M | \$567.00 | 20% | \$907.20 |
| FJC1904A088 | Network | CISCO2921/K9 | Cisco 2921 w/3 GE,4 EHWIC,3 DSP,1 SM,256MB CF,512M | \$567.00 | 20% | \$907.20 |
| FXS1903Q08U | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FXS1903Q0AH | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FXS1903Q099 | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FXS1903Q0AC | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FXS1903Q0A7 | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FXS1902Q03L | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |

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|-------------|---------|--------------------|--|-------------|-----|-------------|
| FXS1902Q044 | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FXS1903Q09Q | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FXS1903Q08W | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FXS1903Q08Z | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FXS1902Q03K | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FXS1902Q06K | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FOC1912R0KF | Network | N2348UPQ-FA-BUN | Port Side Exhaust, airflow pack: N2K-C2348UPQ, 2AC PS, | \$249.00 | 20% | \$398.40 |
| FOC1907R13J | Network | N2348UPQ-FA-BUN | Port Side Exhaust, airflow pack: N2K-C2348UPQ, 2AC PS, | \$249.00 | 20% | \$398.40 |
| FOC1907R14X | Network | N2348UPQ-FA-BUN | Port Side Exhaust, airflow pack: N2K-C2348UPQ, 2AC PS, | \$249.00 | 20% | \$398.40 |
| FOC1910R0MU | Network | N2348UPQ-FA-BUN | Port Side Exhaust, airflow pack: N2K-C2348UPQ, 2AC PS, | \$249.00 | 20% | \$398.40 |
| FOC1907R143 | Network | N2348UPQ-FA-BUN | Port Side Exhaust, airflow pack: N2K-C2348UPQ, 2AC PS, | \$249.00 | 20% | \$398.40 |
| FOC1912R0DE | Network | N2348UPQ-FA-BUN | Port Side Exhaust, airflow pack: N2K-C2348UPQ, 2AC PS, | \$249.00 | 20% | \$398.40 |
| FCH1920V1D1 | Network | SNS-3495-K9 | Large Secure Server for ISE, ACS and NAC Applications | \$3,362.00 | 20% | \$5,379.20 |
| FCH1920V1CY | Network | SNS-3495-K9 | Large Secure Server for ISE, ACS and NAC Applications | \$3,362.00 | 20% | \$5,379.20 |
| FOC1933R1BY | Network | N2348UPQ-FA-BUN | Port Side Exhaust, airflow pack: N2K-C2348UPQ, 2AC PS, | \$249.00 | 20% | \$398.40 |
| FOC1933R0P9 | Network | N2348UPQ-FA-BUN | Port Side Exhaust, airflow pack: N2K-C2348UPQ, 2AC PS, | \$249.00 | 20% | \$398.40 |
| FOC1933R199 | Network | N2348UPQ-FA-BUN | Port Side Exhaust, airflow pack: N2K-C2348UPQ, 2AC PS, | \$249.00 | 20% | \$398.40 |
| FOC1934R2KD | Network | N2348UPQ-FA-BUN | Port Side Exhaust, airflow pack: N2K-C2348UPQ, 2AC PS, | \$249.00 | 20% | \$398.40 |
| FXS1944Q2N3 | Network | WS-C4510R+E | Catalyst 4500E 10 slot chassis for 48Gbps/slot, fan, no ps | \$5,250.00 | 20% | \$8,400.00 |
| FXS1944Q2Q9 | Network | WS-C4510R+E | Catalyst 4500E 10 slot chassis for 48Gbps/slot, fan, no ps | \$5,250.00 | 20% | \$8,400.00 |
| FXS1949Q2F5 | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FXS1949Q2FT | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| SPE1946002Q | Network | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | \$1,940.00 | 20% | \$3,104.00 |
| FOC1649Y16A | Network | WS-C3560C-12PC-S | Catalyst 3560C Switch 12 FE PoE, 2 x Dual Uplink, IP Base | \$107.00 | 20% | \$171.20 |
| FTX190410TY | Network | ASA5545-K9 | ASA 5545-X with SW, 8GE Data, 1GE Mgmt, AC, 3DES/AE | \$2,159.00 | 20% | \$3,454.40 |
| FTX190411K4 | Network | ASA5545-K9 | ASA 5545-X with SW, 8GE Data, 1GE Mgmt, AC, 3DES/AE | \$2,159.00 | 20% | \$3,454.40 |
| FTX190411K1 | Network | ASA5545-K9 | ASA 5545-X with SW, 8GE Data, 1GE Mgmt, AC, 3DES/AE | \$2,159.00 | 20% | \$3,454.40 |
| FTX1905106J | Network | ASA5545-K9 | ASA 5545-X with SW, 8GE Data, 1GE Mgmt, AC, 3DES/AE | \$2,159.00 | 20% | \$3,454.40 |
| FCH1921V093 | Network | SNS-3415-K9 | Small Secure Network Server for ISE, NAC, & ACS Applicat | \$1,652.00 | 20% | \$2,643.20 |
| FCH1920V1ER | Network | SNS-3415-K9 | Small Secure Network Server for ISE, NAC, & ACS Applicat | \$1,652.00 | 20% | \$2,643.20 |
| FCH1920V2SW | Network | SNS-3415-K9 | Small Secure Network Server for ISE, NAC, & ACS Applicat | \$1,652.00 | 20% | \$2,643.20 |
| FCH1921V0AN | Network | SNS-3495-K9 | Large Secure Server for ISE, ACS and NAC Applications | \$3,362.00 | 20% | \$5,379.20 |
| FGL163640UL | Network | ASA5545-IPS-K9 | ASA 5545-X with IPS, SW, 8GE Data, 1GE Mgmt, AC, 3DE | \$5,255.00 | 20% | \$8,408.00 |
| FGL163640HB | Network | ASA-IC-6GE-CU-C | ASA 5545-X/5555-X Interface Card 6-port 10/100/1000, RJ-45 | \$600.00 | 20% | \$960.00 |
| FTX1404AHH7 | Network | CISCO2811-AC-IP | ^2811 w/ AC+POE,2FE,4HWICs,2PVDMS,1NME,2AIMS,1P | \$52.83 | 20% | \$84.53 |
| FOX1808GKNV | Network | N2K-C2248TPE-FA-B | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fa | \$205.00 | 20% | \$328.00 |
| FOX1809G7GT | Network | N2K-C2248TPE-FA-B | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fa | \$205.00 | 20% | \$328.00 |
| FOX1809G7G8 | Network | N2K-C2248TPE-FA-B | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fa | \$205.00 | 20% | \$328.00 |
| FOX1808GKMU | Network | N2K-C2248TPE-FA-B | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fa | \$205.00 | 20% | \$328.00 |
| SSI180805ZM | Network | N5K-C5548UP-BUN | Nexus 5548UP in N5548UP-N2K Bundle | \$1,283.00 | 20% | \$2,052.80 |
| FOX1808GKL1 | Network | N2K-C2248TPE-FA-B | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fa | \$205.00 | 20% | \$328.00 |
| SSI180805ZK | Network | N5K-C5548UP-BUN | Nexus 5548UP in N5548UP-N2K Bundle | \$1,283.00 | 20% | \$2,052.80 |
| FOX1808GKNZ | Network | N2K-C2248TPE-FA-B | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fa | \$205.00 | 20% | \$328.00 |
| FOX1809GEDQ | Network | N2K-C2248TPE-FA-B | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fa | \$205.00 | 20% | \$328.00 |
| FOX1809GEGQ | Network | N2K-C2248TPE-FA-B | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fa | \$205.00 | 20% | \$328.00 |
| JMX1112L0E5 | Network | ASA5510-AIP10-K8 | ^ASA 5510 Appliance with AIP-SSM-10, SW, 5FE, DES | \$1,538.00 | 20% | \$2,460.80 |
| N/A | Network | N1K-VLCPU-01 | Nexus 1000V Adv Ed Paper Multi-Hypervisor License Qty1 | \$174.00 | 20% | \$278.40 |
| N/A | Network | L-ASA5545-TAM= | Cisco ASA5545 FirePOWER IPS and AMP Licenses | \$30,020.00 | 20% | \$48,032.00 |
| N/A | Network | L-ASA5545-TAM= | Cisco ASA5545 FirePOWER IPS and AMP Licenses | \$8,060.16 | 20% | \$12,896.26 |
| N/A | Network | L-CSACS-5-LRG-LIC= | | \$2,000.00 | 20% | \$3,200.00 |
| FCH1934V02U | Network | PI-UCS-APL-K9 | Cisco Prime Infrastructure UCS Physical HW Appliance | \$1,920.00 | 20% | \$3,072.00 |
| FCH1935V070 | Network | AIR-CT5520-K9 | Cisco 5520 Wireless Controller w/rack mounting kit | \$2,600.00 | 20% | \$4,160.00 |
| FCH1935V07E | Network | AIR-CT5520-K9 | Cisco 5520 Wireless Controller w/rack mounting kit | \$2,600.00 | 20% | \$4,160.00 |
| FCH1946V349 | Network | AIR-MSE-3365-K9 | MSE 3365 Appliance | \$1,840.00 | 20% | \$2,944.00 |
| FCW2020F05F | Network | C1-WSC3850-12X48UL | Cisco ONE Catalyst 3850 48Port (12mGig+36Gig) UPoE LA | \$221.92 | 20% | \$355.07 |

| | | | | | | |
|-------------|---------|--------------------|--|-------------|-----|----------------|
| FCW2023C1H5 | Network | C1-WSC3850-12X48UL | Cisco ONE Catalyst 3850 48Port (12mGig+36Gig) UPoE LA | \$221.92 | 20% | \$355.07 |
| FCW2023D0EZ | Network | C1-WSC3850-12X48UL | Cisco ONE Catalyst 3850 48Port (12mGig+36Gig) UPoE LA | \$221.92 | 20% | \$355.07 |
| FOC2022U0VL | Network | C1-WSC3850-12X48UL | Cisco ONE Catalyst 3850 48Port (12mGig+36Gig) UPoE LA | \$221.92 | 20% | \$355.07 |
| FOC2023U0P3 | Network | C1-WSC3850-12X48UL | Cisco ONE Catalyst 3850 48Port (12mGig+36Gig) UPoE LA | \$221.92 | 20% | \$355.07 |
| FOC2023U0QV | Network | C1-WSC3850-12X48UL | Cisco ONE Catalyst 3850 48Port (12mGig+36Gig) UPoE LA | \$221.92 | 20% | \$355.07 |
| FOC2023X0F7 | Network | C1-WSC3850-12X48UL | Cisco ONE Catalyst 3850 48Port (12mGig+36Gig) UPoE LA | \$221.92 | 20% | \$355.07 |
| MSA202000LD | Network | ASA5500X-SSD120= | ASA 5512-X through 5555-X 120 GB MLC SED SSD (Spare | \$6.12 | 20% | \$9.79 |
| MSA20130973 | Network | ASA5500X-SSD120= | ASA 5512-X through 5555-X 120 GB MLC SED SSD (Spare | \$6.12 | 20% | \$9.79 |
| MSA2024077Z | Network | ASA5500X-SSD120= | ASA 5512-X through 5555-X 120 GB MLC SED SSD (Spare | \$6.12 | 20% | \$9.79 |
| MSA20240789 | Network | ASA5500X-SSD120= | ASA 5512-X through 5555-X 120 GB MLC SED SSD (Spare | \$6.12 | 20% | \$9.79 |
| FCW2032C0C2 | Network | C1-WSC3850-12X48UL | Cisco ONE Catalyst 3850 48Port (12mGig+36Gig) UPoE LA | \$221.92 | 20% | \$355.07 |
| FCW2032D0EL | Network | C1-WSC3850-12X48UL | Cisco ONE Catalyst 3850 48Port (12mGig+36Gig) UPoE LA | \$221.92 | 20% | \$355.07 |
| FCW2033F0AB | Network | C1-WSC3850-12X48UL | Cisco ONE Catalyst 3850 48Port (12mGig+36Gig) UPoE LA | \$221.92 | 20% | \$355.07 |
| FOC2032U0KP | Network | C1-WSC3850-12X48UL | Cisco ONE Catalyst 3850 48Port (12mGig+36Gig) UPoE LA | \$221.92 | 20% | \$355.07 |
| FOC2033X08J | Network | C1-WSC3850-12X48UL | Cisco ONE Catalyst 3850 48Port (12mGig+36Gig) UPoE LA | \$221.92 | 20% | \$355.07 |
| N/A | Network | C1APAIRK9 | Cisco ONE Advanced Perpetual - Wireless | \$6,900.00 | 20% | \$11,040.00 |
| N/A | Network | C1APAIRK9 | Cisco ONE Advanced Perpetual - Wireless | \$6,900.00 | 20% | \$11,040.00 |
| FCH1934V0VY | Network | C1-AIR-CT5520-K9 | Cisco ONE - 5520 Wireless Controller w/rack mounting kit | \$2,600.00 | 20% | \$4,160.00 |
| N/A | Network | C1FPAIRK9 | Cisco ONE Foundation Perpetual - Wireless | \$15,900.00 | 20% | \$25,440.00 |
| FCH1934V0X6 | Network | C1-AIR-CT5520-K9 | Cisco ONE - 5520 Wireless Controller w/rack mounting kit | \$2,600.00 | 20% | \$4,160.00 |
| N/A | Network | C1FPAIRK9 | Cisco ONE Foundation Perpetual - Wireless | \$15,900.00 | 20% | \$25,440.00 |
| JAB1010N0QE | Network | DS-C9509-HV-K9 | *MDS 9000 HV Bundle: 32-port FC Module 32 SFPs | \$340.88 | 20% | \$545.41 |
| JAE1010XBR6 | Network | DS-X9032-HV= | *MDS 9509 Base Config: Chassis 2 Sups 2 AC Power Sup | \$703.71 | 20% | \$1,125.94 |
| JAE1010XBU1 | Network | DS-X9032-HV= | *MDS 9000 HV Bundle: 32-port FC Module 32 SFPs | \$703.71 | 20% | \$1,125.94 |
| JAE1010XBQJ | Network | DS-X9032-HV= | *MDS 9000 HV Bundle: 32-port FC Module 32 SFPs | \$703.71 | 20% | \$1,125.94 |
| JAB1011N0V1 | Network | DS-C9509-HV-K9 | *MDS 9000 HV Bundle: 32-port FC Module 32 SFPs | \$340.88 | 20% | \$545.41 |
| JAE1010XBTL | Network | DS-X9032-HV= | *MDS 9509 Base Config: Chassis 2 Sups 2 AC Power Sup | \$703.71 | 20% | \$1,125.94 |
| JAE1008WCE2 | Network | DS-X9032-HV= | *MDS 9000 HV Bundle: 32-port FC Module 32 SFPs | \$703.71 | 20% | \$1,125.94 |
| JAE1008WGAB | Network | DS-X9032-HV= | *MDS 9000 HV Bundle: 32-port FC Module 32 SFPs | \$703.71 | 20% | \$1,125.94 |
| JAE1010XBR1 | Network | DS-X9032-HV= | *MDS 9000 HV Bundle: 32-port FC Module 32 SFPs | \$703.71 | 20% | \$1,125.94 |
| JAB1011N0US | Network | DS-C9509-HV-K9 | *MDS 9000 HV Bundle: 32-port FC Module 32 SFPs | \$340.88 | 20% | \$545.41 |
| JAB1011N0UT | Network | DS-C9509-HV-K9 | *MDS 9509 Base Config: Chassis 2 Sups 2 AC Power Sup | \$340.88 | 20% | \$545.41 |
| JAE1008WCE4 | Network | DS-X9032-HV= | *MDS 9509 Base Config: Chassis 2 Sups 2 AC Power Sup | \$703.71 | 20% | \$1,125.94 |
| JAE1010XBT3 | Network | DS-X9032-HV= | *MDS 9000 HV Bundle: 32-port FC Module 32 SFPs | \$703.71 | 20% | \$1,125.94 |
| JAE1010XCF3 | Network | DS-X9032-HV= | *MDS 9000 HV Bundle: 32-port FC Module 32 SFPs | \$703.71 | 20% | \$1,125.94 |
| JAE1010XG1V | Network | DS-X9032-HV= | *MDS 9000 HV Bundle: 32-port FC Module 32 SFPs | \$703.71 | 20% | \$1,125.94 |
| JAE1010XBQ3 | Network | DS-X9032-HV= | *MDS 9000 HV Bundle: 32-port FC Module 32 SFPs | \$703.71 | 20% | \$1,125.94 |
| JAE1011Y333 | Network | DS-X9016-HV= | *MDS 9000 HV Bundle: 32-port FC Module 32 SFPs | \$703.71 | 20% | \$1,125.94 |
| | | | | | 20% | \$1,070,715.17 |

TOTAL 3 YEAR COST
TRANSFER THIS
AMOUNT TO
APPENDIX B



APPENDIX B- RESPONSE WORKBOOK TAB 2 VOICE-ECMU (ENTER DATA IN YELLOW CELLS ONLY)

Cisco Quote #14292001

| INSTANCE NUMBER | PRODUCT LINE | ITEM NAME | QUANTITY | SITE ID | SERVICE LEVEL | NOTES | ANNUAL LIST PRICE | DISCOUNT FROM ANNUAL LIST PRICE | FINAL NET PRICE (3 Years Three Years 10/1/2016-9/30/2019) |
|-----------------|--------------------|--------------------|----------|------------|---------------|------------------------|-------------------|---------------------------------|---|
| N/A | Business Telephony | ER10-USR-1 | 2810 | | ECMU | ADD ON - No Version 10 | \$5,622.00 | 21% | \$13,319.40 |
| N/A | Business Telephony | LIC-CUCM-10X-ENH-A | 1710 | | ECMU | ADD ON - No Version 10 | \$56,463.00 | 21% | \$133,739.10 |
| 1730430498 | Contact Center | LIC-CUCM-10X-ENH-A | 7 | 2000254036 | ECMU | SWSS - Active | \$187.42 | 21% | \$547.47 |
| 1734784894 | Contact Center | LIC-CUCM-10X-ENH-A | 6 | 2000907934 | ECMU | SWSS - Active | \$157.77 | 21% | \$469.26 |
| 1778483704 | Contact Center | LIC-CUCM-10X-ENH-A | 1 | 2000616008 | ECMU | SWSS - Active | \$41.95 | 21% | \$78.21 |
| 1707516928 | Contact Center | LIC-CUCM-10X-ENH-A | 6 | 2000804189 | ECMU | SWSS - Active | \$197.91 | 21% | \$469.26 |
| 1707514239 | Contact Center | LIC-CUCM-10X-ENH-A | 15 | 2000804192 | ECMU | SWSS - Active | \$445.27 | 21% | \$1,173.15 |
| 1713829236 | Contact Center | LIC-CUCM-10X-ENH-A | 6 | 2000826264 | ECMU | SWSS - Active | \$188.69 | 21% | \$469.26 |
| 1522519696 | Contact Center | LIC-CUCM-10X-ENH-A | 1 | 417573526 | ECMU | SWSS - Expired | \$66.00 | 21% | \$78.21 |
| 1522519695 | Contact Center | LIC-CUCM-10X-ENH-A | 1 | 417573526 | ECMU | SWSS - Expired | \$66.00 | 21% | \$78.21 |
| 1522519674 | Contact Center | LIC-CUCM-10X-ENH-A | 1 | 417573526 | ECMU | SWSS - Expired | \$66.00 | 21% | \$78.21 |
| 1561512849 | Business Telephony | LIC-CUCM-10X-ENH-A | 3 | 415233116 | ECMU | SWSS - Expired | \$132.00 | 21% | \$234.63 |
| N/A | Business Telephony | LIC-CUCM-10X-ESS-A | 698 | 415233116 | ECMU | ADD ON - No Version 10 | \$4,194.00 | 21% | \$9,925.56 |
| N/A | Business Telephony | UNITYCN10-STD-USR | 2000 | 415233116 | ECMU | ADD ON - No Version 10 | \$30,015.00 | 21% | \$71,100.00 |
| 1707519207 | Business Telephony | UNITYCN10-STD-USR | 6 | 415233116 | ECMU | SWSS - Active | \$89.96 | 21% | \$213.30 |
| 1561512833 | Contact Center | IPCE-DIALPORT-L | 96 | 405617417 | ECMU | SWSS - Expired | \$9,312.00 | 21% | \$21,841.92 |
| 100903752 | Contact Center | IPCE-PREMAGT-L | 20 | 400051708 | ECMU | SWSS - Expired | \$5,712.00 | 21% | \$12,892.80 |
| 1561512754 | Contact Center | IPCE-PROMOAGT-L | 47 | 404422608 | ECMU | SWSS - Expired | \$13,056.00 | 21% | \$30,298.08 |
| 1756950272 | Contact Center | CCEH-FINESSE-SVR-L | 1 | 2000819471 | ECMU | SWSS - Active | \$231.45 | 21% | \$264.92 |
| TOTALS: | | | | | | | | 21% | \$297,270.95 |

TOTAL 3 YEAR COST
TRANSFER THIS
AMOUNT TO
APPENDIX B

Terms of Quote

The prices outlined in this proposal will remain valid for 60 days until: 15-OCT-16

Please include this quote number on all purchase orders and correspondence.

The attached List Price Quotation is provided by Cisco subject to the following terms and conditions:

1. Prices are shown in the same currency as the CSCC quote.
2. Pricing is valid for 60 days and was prepared using the Cisco Global Price List effective on the date of preparation.
3. The attached List Price Quotation was based on the detailed equipment inventory list and effective contract coverage dates for each chassis as recorded in the current SMARTnet contract. Items in red have reached "End of Support" and pricing may be pro-rated for these items. Any change to the equipment inventory list or effective contract coverage date(s) will require preparation of a revised quotation.
4. Cisco subscription pricing is based on a twelve-month subscription contract with payment made in full for the entire twelve-month period of performance. Partial year contracts (period of performance less than twelve months) will include a ten percent adjustment; requests for any payment term other than the pre-paid twelve months in advance will include an additional ten percent adjustment. Such adjustments will be added to the List Price Quotation and require preparation of a revised quotation.
5. This SMARTnet pricing is based on continuous SMARTnet coverage of the Cisco equipment. The SMARTnet renewal start date must be effective on the day immediately following the expiration date of the current SMARTnet subscription contract. Gaps in SMARTnet coverage will make the equipment subject to inspection and re-certification to confirm suitability prior to contract renewal. Inspection fees and any associated re-certification costs are the responsibility of:
6. Cisco Services and the obligations of the parties in performance of the services purchased are described in detail at www.cisco.com/go/servicedescriptions. Additionally, associated entitlements and other collateral related to Cisco Services are shown on the following Cisco.com website:
http://www.cisco.com/en/US/partner/products/svcs/ps3034/ps2827/serv_category_home.html
7. A SMARTnet subscription renewal is contingent upon the receipt by Cisco of a fully funded purchase order from an authorized Cisco partner or reseller. Final pricing terms and conditions are to be negotiated between JEA and the authorized Cisco partner or reseller.

| 1410563246 IFB - SmartNet Support and Maintenance of JEA's Cisco Infrastructure (2) | | | | | | | | | | | | | | |
|---|--------------------|--|----------------|-----------------|------------------------|---------------|---------|-------------|-------------|----------|------------------------|---|---|--|
| Addendum 3 APPENDIX A RESPONSE WORKBOOK (Revised V2) (Enter % Discount Column in Orange Only) | | | | | | | | | | | | | | |
| Item # | Product Number | Product Description | PAK/Serial Num | Instance Number | Parent Instance Number | Service Level | Service | Start Date | End Date | Quantity | Unit Annual List Price | Respondent Discount % Off Prorated List Price | Total 5 Year Price (01-Oct-2021 to 30-Sep-2026) | |
| 1 | WS-C4507R-E+96V+ | WS-C4507R-E Chassis, two WS-X4648-RJ45V+E, Sup7-L-E, LAN Base | FXS1634Q2GB | 1012566323 | 1012566323 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,180.72 | 27.89% | \$5,639.52 | |
| 17 | CISCO3925-V/K9 | ^Cisco 3925 Voice Bundle, PVDMM3-64, UC License PAK, FL-CUBE10 | FTX1637ALM8 | 1014860427 | 1014860427 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,651.00 | 22.50% | \$964.02 | |
| 36 | CISCO3945-V/K9 | ^Cisco 3945 Voice Bundle, PVDMM3-64, UC License PAK, FL-CUBE10 | FTX1704AKRF | 1209543137 | 1209543137 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,366.00 | 22.50% | \$1,381.52 | |
| 89 | PWR-C45-6000ACV/2 | Catalyst 4500 6000W AC dual input Power Supply (Data + PoE) | AZS17340ACO | 1453976903 | 1453976903 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$0.00 | 22.50% | \$0.00 | |
| 90 | N7K-C7010-B252E | Nexus 7010 Bundle (Chassis,1xSUP2E,5xFAB2),No Power Supplies | JAF1732BKTR | 1458039023 | 1458039023 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$13,447.00 | 27.89% | \$47,659.61 | |
| 110 | N7K-C7010-B252E | Nexus 7010 Bundle (Chassis,1xSUP2E,5xFAB2),No Power Supplies | JAF1732BLBE | 1458039448 | 1458039448 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$13,447.00 | 27.89% | \$47,659.61 | |
| 130 | N7K-C7010-B252E | Nexus 7010 Bundle (Chassis,1xSUP2E,5xFAB2),No Power Supplies | JAF1732AKAM | 1458039814 | 1458039814 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$13,447.00 | 27.89% | \$47,659.61 | |
| 150 | N7K-C7010-B252E | Nexus 7010 Bundle (Chassis,1xSUP2E,5xFAB2),No Power Supplies | JAF1732BKTK | 1458040143 | 1458040143 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$13,447.00 | 27.89% | \$47,659.61 | |
| 170 | N6K-C6001-64T | ^Nexus 6001, 1RU switch, fixed 48p of 10G BASE-T and 4p QSFP+ | FOC1812R105 | 1534276676 | 1534276676 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,031.00 | 22.50% | \$129.37 | |
| 182 | N6K-C6001-64T | ^Nexus 6001, 1RU switch, fixed 48p of 10G BASE-T and 4p QSFP+ | FOC1808R2BR | 1534276897 | 1534276897 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,031.00 | 22.50% | \$129.37 | |
| 194 | N5K-C5548UP-FA | ^Nexus 5548 UP Chassis, 32 10GbE Ports, 2 PS, 2 Fans | SSI1808072N | 1534277062 | 1534277062 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,991.00 | 25.58% | \$3,211.03 | |
| 203 | N5K-C5548UP-FA | ^Nexus 5548 UP Chassis, 32 10GbE Ports, 2 PS, 2 Fans | SSI180804VQ | 1534288271 | 1534288271 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,991.00 | 25.58% | \$3,211.03 | |
| 212 | N5548UP-4N2248TP | ^Nexus 5548UP/4xN2248TP | 1065718371 | 1534593491 | 1534593491 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$0.00 | 22.50% | \$0.00 | |
| 214 | N2K-C2248TP-E-FA-B | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fan | FOX1809G7GT | 1534514352 | 1534593491 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$256.00 | 27.89% | \$923.01 | |
| 215 | N2K-C2248TP-E-FA-B | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fan | FOX1808GKNV | 1534514334 | 1534593491 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$256.00 | 27.89% | \$923.01 | |
| 217 | N5K-C5548UP-BUN | ^Nexus 5548UP in N5548UP-N2K Bundle | SSI180805M | 1534514395 | 1534593491 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,673.00 | 25.58% | \$2,698.17 | |
| 222 | N2K-C2248TP-E-FA-B | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fan | FOX1809G7GB | 1534514369 | 1534593491 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$256.00 | 27.89% | \$923.01 | |
| 223 | N2K-C2248TP-E-FA-B | Standard Airflow pack:N2K-C2248TP-E-1GE, 2 AC PS, 1Fan | FOX1808GKMU | 1534514382 | 1534593491 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$256.00 | 27.89% | \$923.01 | |
| 227 | N6K-C6001-64T | ^Nexus 6001, 1RU switch, fixed 48p of 10G BASE-T and 4p QSFP+ | FOX1808R2BS | 1535073433 | 1535073433 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,031.00 | 22.50% | \$129.37 | |
| 238 | N6K-C6001-64T | ^Nexus 6001, 1RU switch, fixed 48p of 10G BASE-T and 4p QSFP+ | FOC1808R2CD | 1535073665 | 1535073665 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,031.00 | 22.50% | \$129.37 | |
| 249 | N6004-B-24Q | ^Nexus 6004 EF chassis 24x40GE Ports/FCoE Bundle; 6PS,4 FAN | FOC1818R035 | 1548048431 | 1548048431 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$4,608.00 | 22.50% | \$293.52 | |
| 272 | N6004-B-24Q | ^Nexus 6004 EF chassis 24x40GE Ports/FCoE Bundle; 6PS,4 FAN | FOC1816R33H | 1548048975 | 1548048975 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$4,608.00 | 22.50% | \$293.52 | |
| 295 | N6004-B-24Q | ^Nexus 6004 EF chassis 24x40GE Ports/FCoE Bundle; 6PS,4 FAN | FOC1818R02H | 1548206075 | 1548206075 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$4,608.00 | 22.50% | \$293.52 | |
| 346 | CISCO3925E-V/K9 | ^Cisco 3925E Voice Bundle,PVDM3-64, UC License PAK, FL-CUBE10 | FTX1849ALAE | 1609806281 | 1609806281 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$3,517.00 | 22.50% | \$2,053.59 | |
| 362 | CISCO3925E-V/K9 | ^Cisco 3925E Voice Bundle,PVDM3-64, UC License PAK, FL-CUBE10 | FTX1849ALAE | 1609806525 | 1609806525 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$3,517.00 | 22.50% | \$2,053.59 | |
| 378 | WS-C4948E-F-S | ^Cat 4948E-F, IPB, 48x 10/100/1000+ 4 SFP+, AC PS, Fr Ext | CAT1846506X | 1616902604 | 1616902604 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,803.00 | 22.50% | \$819.25 | |
| 380 | WS-C4948E-F-S | ^Cat 4948E-F, IPB, 48x 10/100/1000+ 4 SFP+, AC PS, Fr Ext | CAT184851W1 | 1619261736 | 1619261736 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,803.00 | 22.50% | \$819.25 | |
| 382 | WS-C4948E-F-S | ^Cat 4948E-F, IPB, 48x 10/100/1000+ 4 SFP+, AC PS, Fr Ext | CAT184952D1 | 1619262868 | 1619262868 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,803.00 | 22.50% | \$819.25 | |
| 384 | WS-C4948E-F-S | ^Cat 4948E-F, IPB, 48x 10/100/1000+ 4 SFP+, AC PS, Fr Ext | CAT184752Y1 | 1619262972 | 1619262972 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,803.00 | 22.50% | \$819.25 | |
| 386 | WS-C4948E-F-S | ^Cat 4948E-F, IPB, 48x 10/100/1000+ 4 SFP+, AC PS, Fr Ext | CAT184752WP | 1619968852 | 1619968852 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,803.00 | 22.50% | \$819.25 | |
| 388 | FS-VMW-10-SW-K9 | Cisco Firepower Management Center,(VMWare) for 10 devices | 7361J60DD1B | 1625005376 | 1625005376 | ECMU | SWSS | 01-Apr-2022 | 31-Mar-2027 | 2 | \$414.00 | 27.89% | \$2,985.35 | |
| 389 | ASA5545-K9 | ^ASA 5545-X with SW, 8GE Data, 1GE Mgmt, AC, 3DES/AES | FTX190411K4 | 1626375452 | 1626375452 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,915.76 | 27.89% | \$7,361.82 | |
| 398 | CISCO2921/K9 | ^Cisco 2921 w/3 GE,4 EHWIC,3 DSP,1 5M,256MB CF,512MB DRAM,IPB | FIC1904A086 | 1627311876 | 1627311876 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,017.00 | 22.50% | \$593.83 | |
| 409 | WS-C4506-E | Cat4500 E-Series 6-Slot Chassis, fan, no ps | FXS1903Q0AH | 1638673430 | 1638673430 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,591.44 | 27.89% | \$6,701.67 | |
| 519 | PI-UCS-APL-K9 | ^Cisco Prime Infrastructure UCS Physical HW Appliance | FCH1934V02U | 1711295906 | 1711295906 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,273.41 | 25.58% | \$3,805.56 | |
| 537 | C1-AIR-CT5520-K9 | Cisco ONE - 5520 Wireless Controller w/rack mounting kit | FCH1934V0VY | 1711833923 | 1711833923 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,948.26 | 27.89% | \$10,286.30 | |
| 552 | C1-AIR-CT5520-K9 | Cisco ONE - 5520 Wireless Controller w/rack mounting kit | FCH1934V0X6 | 1711834104 | 1711834104 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,948.26 | 27.89% | \$10,286.30 | |
| 567 | AIR-CT5520-K9 | Cisco 5520 Wireless Controller w/rack mounting kit | FCH1935V07F | 1713574928 | 1713574928 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,804.69 | 27.89% | \$9,785.39 | |
| 584 | BE7M-M4-K9 | ^Cisco Business Edition 7000M Svr (M4), Export Restricted SW | FCH1934V0VF | 1714513844 | 1714513844 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$424.00 | 22.50% | \$410.53 | |
| 612 | BE7M-M4-K9 | ^Cisco Business Edition 7000M Svr (M4), Export Restricted SW | FCH1934V0VL | 1714515567 | 1714515567 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$424.00 | 22.50% | \$410.53 | |
| 640 | BE7M-M4-K9 | ^Cisco Business Edition 7000M Svr (M4), Export Restricted SW | FCH1933V2T5 | 1714516758 | 1714516758 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$424.00 | 22.50% | \$410.53 | |
| 668 | WS-C2960X-24TS-L | Catalyst 2960-X 24 GigE, 4 x 1G SFP, LAN Base | FCW1936B26H | 1715385650 | 1715385650 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$188.27 | 27.89% | \$678.81 | |
| 673 | WS-C3650-24TS-L | Cisco Catalyst 3650 24 Port Data 4x1G Uplink LAN Base | FDO1931E0CR | 1716186674 | 1716186674 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$306.00 | 27.89% | \$1,012.00 | |
| 677 | WS-C3650-24TS-E | Cisco Catalyst 3650 24 Port Data 4x1G Uplink IP Services | FDO1931E0CP | 1716225643 | 1716225643 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$743.57 | 27.89% | \$2,459.12 | |
| 681 | WS-C3650-48TS-E | Cisco Catalyst 3650 48 Port Data 4x1G Uplink IP Services | FDO1933E1MB | 1718247612 | 1718247612 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,311.00 | 27.89% | \$4,335.71 | |
| 682 | WS-C2960X-24PS-L | Catalyst 2960-X 24 GigE PoE 370W, 4 x 1G SFP, LAN Base | FCW1947A47Q | 1751044957 | 1751044957 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$251.94 | 27.89% | \$908.37 | |
| 683 | C2921-VSEC/K9 | ^Cisco 2921 Voice Sec. Bundle, PVDMM3-32, UC&SEC Lic,FL-CUBE10 | FIC2010A25X | 1773461571 | 1773461571 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$824.00 | 22.50% | \$481.14 | |
| 697 | C3945E-VSEC/K9 | ^Cisco 3945E Voice Sec Bundle, PVDMM3-64, UC&SEC Lic,FL-CUBE10 | FIC2014D0AY | 1780967619 | 1780967619 | SNT | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$3,969.00 | 22.50% | \$2,317.51 | |
| 713 | BE7M-M4-K9 | ^Cisco Business Edition 7000M Svr (M4), Export Restricted SW | FCH2010V0B7 | 1787575732 | 1787575732 | SNT | SNTC 24 | 01-Apr-2022 | 31-Mar-2027 | 1 | \$639.00 | 22.50% | \$618.69 | |
| 741 | BE7M-M4-K9 | ^Cisco Business Edition 7000M Svr (M4), Export Restricted SW | FCH2011V1GM | 1787576102 | 1787576102 | SNT | SNTC 24 | 01-Apr-2022 | 31-Mar-2027 | 1 | \$639.00 | 22.50% | \$618.69 | |
| 769 | BE7M-M4-K9 | ^Cisco Business Edition 7000M Svr (M4), Export Restricted SW | FCH2011V1HK | 1787576464 | 1787576464 | SNT | SNTC 24 | 01-Apr-2022 | 31-Mar-2027 | 1 | \$639.00 | 22.50% | \$618.69 | |
| 797 | BE7M-M4-K9 | ^Cisco Business Edition 7000M Svr (M4), Export Restricted SW | FCH2011V1HL | 1787576818 | 1787576818 | SNT | SNTC 24 | 01-Apr-2022 | 31-Mar-2027 | 1 | \$639.00 | 22.50% | \$618.69 | |
| 825 | C1-WSC3850-12X48UL | ^Cisco ONE Catalyst 3850 48Port (12mGig+36Gig) UPoE LAN Base | FCW2020F0F5 | 1807789603 | 1807789603 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$859.77 | 27.89% | \$2,223.43 | |
| 841 | ASA5545-K8 | ^ASA 5545-X with SW, 8GE Data, 1GE Mgmt, AC, DES | FWL1750411U | 1830856188 | 1830856188 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,909.48 | 27.89% | \$7,345.97 | |
| 846 | ASA-IC-6GE-CU-C | ^ASA 5545-X/5555-X Interface Card 6-port 10/100/1000, RJ-45 | FTX2319V00D2 | 5365215904 | 1830856188 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$714.00 | 27.89% | \$1,802.74 | |
| 848 | IE-2000-16TC-G-L | IE2000 with 16FE Copper, 2GE SFP/T and 2FE SFP (Lan Lite) | FDO204250L2 | 1852115224 | 1852115224 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$244.00 | 27.89% | \$879.74 | |
| 849 | WS-C3650-24PS-E | Cisco Catalyst 3650 24 Port PoE 4x1G Uplink IP Services | FDO2041E079 | 5064716280 | 5064716280 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$821.98 | 27.89% | \$2,718.44 | |
| 855 | UCSC-C240-M4S2= | ^UCS C240 M4 SFF 16 HD w/o CPU,mem,HD,PCle,PS,rail w/expndr | FCW2048V1X9 | 5072926345 | 5072926345 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$536.00 | 22.50% | \$795.52 | |
| 883 | WS-C3850-12X48U-L | ^Cisco Catalyst 3850 48 Port (12 mGig+36 Gig) UPoE LAN Base | FCW2049F077 | 5073937615 | 5073937615 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$854.59 | 27.89% | \$2,210.04 | |
| 890 | WS-C3850-24XU-L | ^Cisco Catalyst 3850 24 mGig Port UPoE LAN Base | FCW2051D03G | 5075837010 | 5075837010 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$853.98 | 27.89% | \$2,208.46 | |
| 899 | WS-C3850-48U-E | ^Cisco Catalyst 3850 48 Port UPoE IP Services | FCW2052D00A | 5085435928 | 5085435928 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,738.50 | 27.89% | \$4,495.90 | |
| 907 | WS-C4503-E | Cat4500 E-Series 3-Slot Chassis, fan, no ps | FXS2049Q10C | 5086205006 | 5086205006 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,215.40 | 27.89% | \$5,729.20 | |
| 917 | WS-C3650-48FD-E | Cisco Catalyst 3650 48 Port Full PoE 2x10G Uplink IP Services | FDO2051201P | 5087071056 | 5087071056 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,663.00 | 27.89% | \$5,499.84 | |
| 923 | ASA5516-FTD-K9 | ASA 5516-X with Firepower Threat Defense, 8GE, AC | JMX2105Y10F | 5087417737 | 5087417737 | | | | | | | | | |

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|------|--------------------|--|-----------------------------|------------|------------|-----------|-------------|-------------|-------------|------------|------------|-------------|-------------|
| 1409 | DS-X9706-FAB1 | MDS 9706 Crossbar Switching Fabric-1 Module | JAE2143081U | 5173910844 | 5173910844 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$160.00 | 27.89% | \$519.35 |
| 1410 | DS-X9706-FAB1 | MDS 9706 Crossbar Switching Fabric-1 Module | JAE213404B5 | 5173910849 | 5173910849 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$160.00 | 27.89% | \$519.35 |
| 1411 | DS-X9706-FAB1 | MDS 9706 Crossbar Switching Fabric-1 Module | JAE212902NY | 5173910855 | 5173910855 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$160.00 | 27.89% | \$519.35 |
| 1412 | DS-X9706-FAB1 | MDS 9706 Crossbar Switching Fabric-1 Module | JAE2143082T | 5173910862 | 5173910862 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$160.00 | 27.89% | \$519.35 |
| 1413 | DS-X9706-FAB1 | MDS 9706 Crossbar Switching Fabric-1 Module | JAE21340474 | 5173910868 | 5173910868 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$160.00 | 27.89% | \$519.35 |
| 1414 | BE7M-M4-K9 | *Cisco Business Edition 7000M Svr (M4), Export Restricted SW | FCH2052V2HZ | 5190840586 | 5190840586 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$424.00 | 22.50% | \$410.53 |
| 1442 | BE7M-M4-K9 | *Cisco Business Edition 7000M Svr (M4), Export Restricted SW | FCH2052V2HU | 5193988529 | 5193988529 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$424.00 | 22.50% | \$410.53 |
| 1470 | CP-DX80-K9= | Cisco Webex DX80 | FOC2202N2YF | 5198783501 | 5198783501 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$431.19 | 27.89% | \$1,193.46 |
| 1472 | CP-DX80-K9= | Cisco Webex DX80 | FOC2202N33F | 5198783550 | 5198783550 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$431.19 | 27.89% | \$1,193.46 |
| 1474 | CP-DX80-K9= | Cisco Webex DX80 | FOC2202N31L | 5198783574 | 5198783574 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$431.19 | 27.89% | \$1,193.46 |
| 1476 | CP-DX80-K9= | Cisco Webex DX80 | FOC2202N340 | 5198783586 | 5198783586 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$431.19 | 27.89% | \$1,193.46 |
| 1478 | CP-DX80-K9= | Cisco Webex DX80 | FOC2202N2ZR | 5198783604 | 5198783604 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$431.19 | 27.89% | \$1,193.46 |
| 1480 | CP-DX80-K9= | Cisco Webex DX80 | FOC2202N3AR | 5198783617 | 5198783617 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$431.19 | 27.89% | \$1,193.46 |
| 1482 | CP-DX80-K9= | Cisco Webex DX80 | FOC2202N2KZ | 5198783639 | 5198783639 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$431.19 | 27.89% | \$1,193.46 |
| 1484 | CP-DX80-K9= | Cisco Webex DX80 | FOC2147NAPB | 5198783654 | 5198783654 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$431.19 | 27.89% | \$1,193.46 |
| 1486 | CP-DX80-K9= | Cisco Webex DX80 | FOC2202N36L | 5198783672 | 5198783672 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$431.19 | 27.89% | \$1,193.46 |
| 1488 | CP-DX80-K9= | Cisco Webex DX80 | FOC2202N38N | 5198783689 | 5198783689 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$431.19 | 27.89% | \$1,193.46 |
| 1490 | CP-DX80-K9= | Cisco Webex DX80 | FOC2148NFAH | 5198783708 | 5198783708 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$431.19 | 27.89% | \$1,193.46 |
| 1492 | CP-DX80-K9= | Cisco Webex DX80 | FOC2202N2XQ | 5198783727 | 5198783727 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$431.19 | 27.89% | \$1,193.46 |
| 1494 | CP-DX80-K9= | Cisco Webex DX80 | FOC2202N39Y | 5198783744 | 5198783744 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$431.19 | 27.89% | \$1,193.46 |
| 1496 | CP-DX80-K9= | Cisco Webex DX80 | FOC2202N372 | 5198783760 | 5198783760 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$431.19 | 27.89% | \$1,193.46 |
| 1498 | CP-DX80-K9= | Cisco Webex DX80 | FOC2202N37B | 5198783837 | 5198783837 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$431.19 | 27.89% | \$1,193.46 |
| 1500 | EXPWY-E-BDL-K9 | *Expressway-E Appliance Bundle | FCH2223V01U | 5246009954 | 5246009954 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,061.00 | 22.50% | \$1,371.96 |
| 1528 | EXPWY-E-BDL-K9 | *Expressway-E Appliance Bundle | FCH2222V3YX | 5246009955 | 5246009955 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,061.00 | 22.50% | \$1,371.96 |
| 1600 | C1-N9K-C93180LC-EX | **Cisco ONE Nexus 9300 Series, 24p 40/50G and 6p 100G | FOD22210HK7 | 5255172680 | 5255172680 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$764.00 | 27.89% | \$1,883.69 |
| 1610 | C1-N9K-C93180LC-EX | **Cisco ONE Nexus 9300 Series, 24p 40/50G and 6p 100G | FOD22270VJU | 5255172682 | 5255172682 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$764.00 | 27.89% | \$1,883.69 |
| 1620 | C1-N9K-C93180LC-EX | **Cisco ONE Nexus 9300 Series, 24p 40/50G and 6p 100G | FOD22210J9X | 5255172685 | 5255172685 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$764.00 | 27.89% | \$1,883.69 |
| 1631 | NK9-C504-B3-E | Nexus 9504 chassis bundle with 1Sup, 3PS, 25C, 4 FM-E, 3Fan | FOX2223PAV6 | 5259183419 | 5259183419 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$4,070.67 | 27.89% | \$14,676.80 |
| 1644 | NXOS-AD-M4 | NX-OS Advantage License for Nexus Modular 4 Slot | 2ED2UOVY7OZ | 5259183444 | 5259183449 | ECMU | SWSS | 01-Apr-2022 | 31-Mar-2027 | 1 | \$7,685.00 | 27.89% | \$27,708.27 |
| 1658 | N7702-S2E-40G-P1 | Nexus 7702 40G Promotional Bundle | JPG213000U9 | 5261514153 | 5261514153 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$5,386.00 | 27.89% | \$19,419.22 |
| 1673 | N7702-S2E-40G-P1 | Nexus 7702 40G Promotional Bundle | JPG221800FA | 5261514156 | 5261514156 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$5,386.00 | 27.89% | \$19,419.22 |
| 1688 | C9500-32QC-A | Catalyst 9500 32p 40/100G only, Advantage | CAT2209U0LN | 5266327754 | 5266327754 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,454.00 | 27.89% | \$8,552.16 |
| 1691 | C9500-DNA-32QC-A | C9500 DNA Advantage, Term License | 5266327775 | 5266327775 | SSTCM | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$4,337.96 | 41.50% | \$12,688.54 | |
| 1696 | HX220C-M5SX | Cisco HyperFlex HX220c M5 Node | WZP222514Z3 | 5268173333 | 5268173333 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,274.47 | 27.89% | \$4,595.10 |
| 1721 | HX220C-M5SX | Cisco HyperFlex HX220c M5 Node | WZP222514Z5 | 5268173338 | 5268173338 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,274.47 | 27.89% | \$4,595.10 |
| 1746 | HX220C-M5SX | Cisco HyperFlex HX220c M5 Node | WZP222514ZE | 5268173339 | 5268173339 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,274.47 | 27.89% | \$4,595.10 |
| 1771 | SPARK-BOARD55-K9 | *Cisco Spark Board 55 | FGL2235601E | 5268747267 | 5268747267 | ECDN | ESS WIT | 01-Apr-2022 | 31-Mar-2027 | 1 | \$855.36 | 27.89% | \$3,084.00 |
| 1777 | SPARK-BOARD55-K9 | *Cisco Spark Board 55 | FGL2235601K | 5268747268 | 5268747268 | ECDN | ESS WIT | 01-Apr-2022 | 31-Mar-2027 | 1 | \$855.36 | 27.89% | \$3,084.00 |
| 1783 | SPARK-BOARD55-K9 | *Cisco Spark Board 55 | FGL2235601G | 5268747269 | 5268747269 | ECDN | ESS WIT | 01-Apr-2022 | 31-Mar-2027 | 1 | \$855.36 | 27.89% | \$3,084.00 |
| 1789 | SPARK-BOARD55-K9 | *Cisco Spark Board 55 | FGL2235601D | 5268747270 | 5268747270 | ECDN | ESS WIT | 01-Apr-2022 | 31-Mar-2027 | 1 | \$855.36 | 27.89% | \$3,084.00 |
| 1796 | FS-VMW-10-SW-K9 | Cisco Firepower Management Center,(VMWare) for 10 devices | 5286147970 | 5286147970 | ECMU | SWSS | 01-Apr-2022 | 31-Mar-2027 | 2 | \$414.00 | 27.89% | \$2,985.35 | |
| 1797 | SPARK-BOARD55-K9 | *Cisco Spark Board 55 | FGL22456145 | 5292425012 | 5292425012 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,045.00 | 27.89% | \$3,767.75 |
| 1803 | SPARK-BOARD55-K9 | *Cisco Spark Board 55 | FGL22456146 | 5292425013 | 5292425013 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,045.00 | 27.89% | \$3,767.75 |
| 1809 | PWR-C45-6000ACV | Catalyst 4500 6000W AC dual input Power Supply (Data + PoE) | ART1907F6DA | 5296359458 | 5296359458 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$0.00 | 22.50% | \$0.00 |
| 1810 | C9300-48T-E | Catalyst 9300 48-port data only, Network Essentials | FOC2247Q0PX | 5302153800 | 5302153800 | SNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$624.66 | 27.89% | \$2,252.21 |
| 1811 | C9300-DNA-E-48 | C9300 DNA Essentials, 48-Port Term Licenses | stance number to 5302154321 | 5302153800 | SSTC | re Subscr | 17-Feb-2022 | 31-Mar-2027 | 1 | \$442.40 | 41.50% | \$1,324.50 | |
| 1820 | C9300-48T-E | Catalyst 9300 48-port data only, Network Essentials | FOC2247Q0PS | 5302153820 | 5302153820 | SNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$624.66 | 27.89% | \$2,252.21 |
| 1821 | C9300-DNA-E-48 | C9300 DNA Essentials, 48-Port Term Licenses | stance number to 5302154335 | 5302153820 | SSTC | re Subscr | 17-Feb-2022 | 31-Mar-2027 | 1 | \$442.40 | 41.50% | \$1,324.50 | |
| 1830 | C9300-48T-E | Catalyst 9300 48-port data only, Network Essentials | FCW2247C0PA | 5302153832 | 5302153832 | SNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$624.66 | 27.89% | \$2,252.21 |
| 1831 | C9300-DNA-E-48 | C9300 DNA Essentials, 48-Port Term Licenses | stance number to 5302154357 | 5302153832 | SSTC | re Subscr | 17-Feb-2022 | 31-Mar-2027 | 1 | \$442.40 | 41.50% | \$1,324.50 | |
| 1840 | C9300-48T-E | Catalyst 9300 48-port data only, Network Essentials | FOC2247Q0PR | 5302153838 | 5302153838 | SNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$624.66 | 27.89% | \$2,252.21 |
| 1841 | C9300-DNA-E-48 | C9300 DNA Essentials, 48-Port Term Licenses | stance number to 5302154370 | 5302153838 | SSTC | re Subscr | 17-Feb-2022 | 31-Mar-2027 | 1 | \$442.40 | 41.50% | \$1,324.50 | |
| 1850 | C9300-48T-E | Catalyst 9300 48-port data only, Network Essentials | FOC2247Q0PT | 5302153856 | 5302153856 | SNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$624.66 | 27.89% | \$2,252.21 |
| 1851 | C9300-DNA-E-48 | C9300 DNA Essentials, 48-Port Term Licenses | stance number to 5302154383 | 5302153856 | SSTC | re Subscr | 17-Feb-2022 | 31-Mar-2027 | 1 | \$442.40 | 41.50% | \$1,324.50 | |
| 1860 | C9300-48T-E | Catalyst 9300 48-port data only, Network Essentials | FOC2247Z0NE | 5302153875 | 5302153875 | SNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$624.66 | 27.89% | \$2,252.21 |
| 1861 | C9300-DNA-E-48 | C9300 DNA Essentials, 48-Port Term Licenses | stance number to 5302154395 | 5302153875 | SSTC | re Subscr | 17-Feb-2022 | 31-Mar-2027 | 1 | \$442.40 | 41.50% | \$1,324.50 | |
| 1870 | C9300-48T-E | Catalyst 9300 48-port data only, Network Essentials | FCW2247C0PJ | 5302153995 | 5302153995 | SNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$624.66 | 27.89% | \$2,252.21 |
| 1871 | C9300-DNA-E-48 | C9300 DNA Essentials, 48-Port Term Licenses | stance number to 5302154541 | 5302153995 | SSTC | re Subscr | 17-Feb-2022 | 31-Mar-2027 | 1 | \$442.40 | 41.50% | \$1,324.50 | |
| 1880 | C9300-48T-E | Catalyst 9300 48-port data only, Network Essentials | FOC2247Q0PV | 5302154016 | 5302154016 | SNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$624.66 | 27.89% | \$2,252.21 |
| 1881 | C9300-DNA-E-48 | C9300 DNA Essentials, 48-Port Term Licenses | stance number to 5302154554 | 5302154016 | SSTC | re Subscr | 17-Feb-2022 | 31-Mar-2027 | 1 | \$442.40 | 41.50% | \$1,324.50 | |
| 1890 | C9300-48T-E | Catalyst 9300 48-port data only, Network Essentials | FCW2247D0MQ | 5302154028 | 5302154028 | SNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$624.66 | 27.89% | \$2,252.21 |
| 1891 | C9300-DNA-E-48 | C9300 DNA Essentials, 48-Port Term Licenses | stance number to 5302154570 | 5302154028 | SSTC | re Subscr | 17-Feb-2022 | 31-Mar-2027 | 1 | \$442.40 | 41.50% | \$1,324.50 | |
| 1900 | C9300-48T-E | Catalyst 9300 48-port data only, Network Essentials | FCW2247E0M8 | 5302154057 | 5302154057 | SNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$624.66 | 27.89% | \$2,252.21 |
| 1901 | C9300-DNA-E-48 | C9300 DNA Essentials, 48-Port Term Licenses | stance number to 5302154581 | 5302154057 | SSTC | re Subscr | 17-Feb-2022 | 31-Mar-2027 | 1 | \$442.40 | 41.50% | \$1,324.50 | |
| 1910 | C9300-48T-E | Catalyst 9300 48-port data only, Network Essentials | FCW2247C0PL | 5302154089 | 5302154089 | SNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$624.66 | 27.89% | \$2,252.21 |
| 1911 | C9300-DNA-E-48 | C9300 DNA Essentials, 48-Port Term Licenses | stance number to 5302154600 | 5302154089 | SSTC | re Subscr | 17-Feb-2022 | 31-Mar-2027 | 1 | \$442.40 | 41.50% | \$1,324.50 | |
| 1920 | C9300-48T-E | Catalyst 9300 48-port data only, Network Essentials | FCW2247E0ME | 5302154107 | 5302154107 | SNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$624.66 | 27.89% | \$2,252.21 |
| 1921 | C9300-DNA-E-48 | C9300 DNA Essentials, 48-Port Term Licenses | stance number to 5302154609 | 5302154107 | SSTC | re Subscr | 17-Feb-2022 | 31-Mar-2027 | 1 | \$442.40 | 41.50% | \$1,324.50 | |
| 1930 | C881-K9 | Cisco 880 Series Integrated Services Routers | FJC2303L1QX | 5313358027 | 5313358027 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$98.16 | 27.89% | \$253.85 |
| 1938 | C881-K9 | Cisco 880 Series Integrated Services Routers | FJC2303L1QU | 5313358050 | 5313358050 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$88.59 | 27.89% | \$229.10 |
| 1946 | C881-K9 | Cisco 880 Series Integrated Services Routers | FJC2303L1QW | 5313358071 | 5313358071 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$88.59 | 27.89% | \$229.10 |
| 1954 | C881-K9 | Cisco 880 Series Integrated Services Routers | FJC2303L1QV | 5313358104 | 5313358104 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$88.59 | 27.89% | \$229.10 |
| 1962 | C881-K9 | Cisco 880 Series Integrated Services Routers | FJC2303L1QY | 5313358116 | 5313358116 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$88.59 | 27.89% | \$229.10 |
| 1970 | UCSB-B200-M5-U | UCS B200 M5 Blade w/o CPU, mem, HDD, mezz (UPG) | FLM230503C3 | 5317400454 | 5317400454 | SNT | SNTC 8X | 01-Apr-2022 | | | | | |

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|------|--------------------|--|--------------|------------|------------|-------|----------|-------------|-------------|-----|------------|--------|-------------|
| 3653 | UCS-SP-5108-AC | UCS SP Select 5108 AC2 Chassis w/2208 IO, 4x SFP cable 3m | FOX2245P63W | 5317653373 | 5317653373 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$397.08 | 27.89% | \$1,431.67 |
| 3678 | UCS-SP-5108-AC | UCS SP Select 5108 AC2 Chassis w/2208 IO, 4x SFP cable 3m | FOX2246P4GA | 5317653374 | 5317653374 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$397.08 | 27.89% | \$1,431.67 |
| 3703 | C9300-48U-E | Catalyst 9300 48-port UPOE, Network Essentials | FCW2248BHX1 | 5317657361 | 5317657361 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 3711 | N9K-C9504-B3-E | Nexus 9504 chassis bundle with 1Sup, 3P5, 25C, 4 FM-E, 3Fan | FOX2248PLG2 | 5318353754 | 5318353754 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$4,070.67 | 27.89% | \$14,676.80 |
| 3722 | NXOS-AD-M4 | NX-OS Advantage License for Nexus Modular 4 Slot | 00BWH1JG1E7 | 5318354031 | 5318353754 | ECMU | SWSS | 01-Apr-2022 | 31-Mar-2027 | 1 | \$7,685.00 | 27.89% | \$27,708.27 |
| 3738 | C1-N5K-C5672UP | Cisco OneNexus5672UP 1RU,32x10G SFP+,16pxUP SFP+,6x40G QSFP+ | FOC2235R2YN | 5318755013 | 5318755013 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,898.30 | 27.89% | \$5,704.23 |
| 3743 | C1A2PNEX56721K9 | Cisco ONE Advanced Perpetual Nexus 5672 | | 5318755086 | 5318755013 | ECMUS | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,900.00 | 27.89% | \$5,709.33 |
| 3758 | C1F2PNEX56721K9 | Cisco ONE Foundation Perpetual Nexus 5672 | | 5318755099 | 5318755013 | ECMUS | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,280.00 | 27.89% | \$6,851.20 |
| 3759 | C1-N5K-C5672UP | Cisco OneNexus5672UP 1RU,32x10G SFP+,16pxUP SFP+,6x40G QSFP+ | FOC2235R32M | 5318755025 | 5318755025 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,898.30 | 27.89% | \$5,704.23 |
| 3764 | C1F2PNEX56721K9 | Cisco ONE Foundation Perpetual Nexus 5672 | | 5318755104 | 5318755025 | ECMUS | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,280.00 | 27.89% | \$6,851.20 |
| 3773 | C1A2PNEX56721K9 | Cisco ONE Advanced Perpetual Nexus 5672 | | 5318755089 | 5318755025 | ECMUS | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,900.00 | 27.89% | \$5,709.33 |
| 3780 | C1-N5K-C5672UP | Cisco OneNexus5672UP 1RU,32x10G SFP+,16pxUP SFP+,6x40G QSFP+ | FOC2235R32A | 5318755029 | 5318755029 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,898.30 | 27.89% | \$5,704.23 |
| 3784 | C1F2PNEX56721K9 | Cisco ONE Foundation Perpetual Nexus 5672 | | 5318755106 | 5318755029 | ECMUS | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,280.00 | 27.89% | \$6,851.20 |
| 3795 | C1A2PNEX56721K9 | Cisco ONE Advanced Perpetual Nexus 5672 | | 5318755091 | 5318755029 | ECMUS | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,900.00 | 27.89% | \$5,709.33 |
| 3801 | C1-N5K-C5672UP | Cisco OneNexus5672UP 1RU,32x10G SFP+,16pxUP SFP+,6x40G QSFP+ | FOC2235R2U1 | 5318755030 | 5318755030 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,898.30 | 27.89% | \$5,704.23 |
| 3803 | C1F2PNEX56721K9 | Cisco ONE Foundation Perpetual Nexus 5672 | | 5318755108 | 5318755030 | ECMUS | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,280.00 | 27.89% | \$6,851.20 |
| 3813 | C1A2PNEX56721K9 | Cisco ONE Advanced Perpetual Nexus 5672 | | 5318755093 | 5318755030 | ECMUS | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,900.00 | 27.89% | \$5,709.33 |
| 3822 | C1-N5K-C5672UP | Cisco OneNexus5672UP 1RU,32x10G SFP+,16pxUP SFP+,6x40G QSFP+ | FOC2235R32N | 5318755033 | 5318755033 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,898.30 | 27.89% | \$5,704.23 |
| 3824 | C1F2PNEX56721K9 | Cisco ONE Foundation Perpetual Nexus 5672 | | 5318755110 | 5318755033 | ECMUS | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,280.00 | 27.89% | \$6,851.20 |
| 3835 | C1A2PNEX56721K9 | Cisco ONE Advanced Perpetual Nexus 5672 | | 5318755095 | 5318755033 | ECMUS | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,900.00 | 27.89% | \$5,709.33 |
| 3843 | UCS-SP-Fi6454 | (Not sold standalone) UCS 6454 FI | FDO224925XE | 5319284375 | 5319284375 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,339.00 | 27.89% | \$8,433.26 |
| 3859 | UCS-SP-Fi6454 | (Not sold standalone) UCS 6454 FI | FDO2249269S | 5319284398 | 5319284398 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,339.00 | 27.89% | \$8,433.26 |
| 3875 | UCS-SP-Fi6454 | (Not sold standalone) UCS 6454 FI | FDO224926HMH | 5319284407 | 5319284407 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,339.00 | 27.89% | \$8,433.26 |
| 3891 | UCS-SP-Fi6454 | (Not sold standalone) UCS 6454 FI | FDO224926BX | 5319284415 | 5319284415 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,339.00 | 27.89% | \$8,433.26 |
| 3907 | N9K-C9336C-FX2-B2 | 2xNexus 9336C-FX2 w/ 8x 100G Optics | | 5320146294 | 5320146294 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$0.00 | 22.50% | \$0.00 |
| 3916 | NXOS-AD-XF | NX-OS Advantage License for Nexus 9300 (10G+) Platforms | SXWWLYSPIVV | 5320147147 | 5320146294 | ECMUS | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,685.00 | 27.89% | \$6,075.27 |
| 3920 | N9K-C9336C-FX2-B | Nexus 9336C-FX2 bundle PID | FDO23031G8A | 5320146508 | 5320146294 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,757.00 | 27.89% | \$6,334.86 |
| 3927 | N9K-C9336C-FX2-B | Nexus 9336C-FX2 bundle PID | FDO23031G4G | 5320146365 | 5320146294 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,757.00 | 27.89% | \$6,334.86 |
| 3937 | N9K-C9336C-FX2-B2 | 2xNexus 9336C-FX2 w/ 8x 100G Optics | | 5320146334 | 5320146334 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$0.00 | 22.50% | \$0.00 |
| 3942 | NXOS-AD-XF | NX-OS Advantage License for Nexus 9300 (10G+) Platforms | TEYMH8XEA7N | 5320147155 | 5320146334 | ECMUS | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,685.00 | 27.89% | \$6,075.27 |
| 3963 | N9K-C9336C-FX2-B | Nexus 9336C-FX2 bundle PID | FDO23031G5E | 5320146485 | 5320146334 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,757.00 | 27.89% | \$6,334.86 |
| 3966 | N9K-C9336C-FX2-B | Nexus 9336C-FX2 bundle PID | FDO23031G4C | 5320146485 | 5320146334 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,757.00 | 27.89% | \$6,334.86 |
| 3967 | CS-BOARD705-M-K9 | ^Cisco Webex Board 705 (MSRP) | FGL2307408K | 5323060707 | 5323060707 | ECDN | ESS WIT | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,645.87 | 27.89% | \$9,539.68 |
| 3971 | ASR1001-HX | Cisco ASR1001-HX System,4x10GE+4x1Ge,2xP/S, optional crypto | TTM2305003P | 5323570591 | 5323570591 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$5,536.00 | 27.89% | \$19,960.05 |
| 3977 | SIASR1-AES | Cisco ASR 1000 Advanced Enterprise Services License | | 5323570852 | 5323570591 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$897.00 | 27.89% | \$3,234.13 |
| 3979 | M-ASR1001HX-16GB | Cisco ASR1001-HX 16GB DRAM | STP22510037 | 5323570960 | 5323570591 | SW | SNTC NC | 01-Apr-2022 | 31-Mar-2027 | 1 | \$641.00 | 27.89% | \$2,311.13 |
| 3992 | CS-KIT-MINI-K9 | Room Kit Mini with microphone array, speakers and Navigator | FOC2311PYDP | 5333515149 | 5333515149 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$395.85 | 27.89% | \$1,427.24 |
| 4003 | LIC-CT5520-UPG | Top Level SKU for 5520 AP Adder Licenses | | 5338368628 | 5338368628 | ECMU | SWSS | 01-Apr-2022 | 31-Mar-2027 | 1 | \$0.00 | 22.50% | \$0.00 |
| 4004 | LIC-CT5520-1A | Cisco 5520 Wireless Controller 1 AP Adder License | | 5338368630 | 5338368628 | ECMU | SWSS | 01-Apr-2022 | 31-Mar-2027 | 150 | \$27.00 | 27.89% | \$14,602.28 |
| 4005 | LIC-CT5520-UPG | Top Level SKU for 5520 AP Adder Licenses | | 5338374844 | 5338374844 | ECMU | SWSS | 01-Apr-2022 | 31-Mar-2027 | 1 | \$0.00 | 22.50% | \$0.00 |
| 4006 | LIC-CT5520-1A | Cisco 5520 Wireless Controller 1 AP Adder License | | 5338374845 | 5338374844 | ECMU | SWSS | 01-Apr-2022 | 31-Mar-2027 | 150 | \$27.00 | 27.89% | \$14,602.28 |
| 4027 | C9300-DNA-E-48= | C9300 DNA Essentials, 48-Port Term Licenses Spare | | 5346960497 | 5346960497 | SSTC | Software | 01-Apr-2022 | 31-Mar-2027 | 1 | \$401.46 | 41.50% | \$1,129.88 |
| 4028 | C9500-48Y4C-A-BUN | 2 x C9500-48Y4C, 8 x QSFP-40/100-SRBD | JMX2314105K | 5363274065 | 5363274065 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$3,491.00 | 27.89% | \$12,586.80 |
| 4052 | DNA-AIR-RENEW | Cisco DNA for Wireless - CHOOSE ONLY QTY 1 HERE | | 5372548225 | 5372548225 | SSTC | Software | 01-Apr-2022 | 31-Mar-2027 | 1 | \$0.00 | 41.50% | \$0.00 |
| 4056 | AIR-DNA-A | Wireless Cisco DNA On-Prem Advantage, Term Lic | | 5372548227 | 5372548225 | SSTC | Wireless | 01-Apr-2022 | 31-Mar-2027 | 1 | \$198.94 | 46.50% | \$489.88 |
| 4057 | IC3000-2C2F-K9 | Industrial Compute appliance | FCH2307Y028 | 5374547208 | 5374547208 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$275.02 | 27.89% | \$991.58 |
| 4059 | IXM-LPWA-90U-16-K9 | Cisco 900MHz LoRAWAN Gateway, IP67, 16-Channels, TDOA | FOC23195XER | 5378005259 | 5378005259 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$361.86 | 27.89% | \$1,304.69 |
| 4065 | IE3300-DNA-E= | Cisco DNA Essentials license for IE3300 Series | | 5378797224 | 5378797224 | SSTC | Software | 07-Sep-2022 | 06-Sep-2027 | 3 | \$144.10 | 41.50% | \$1,264.44 |
| 4066 | AIR-AP1562I-B-K9 | 802.11ac W2 Low-Profile Outdoor AP, Internal Ant, B Reg Dom. | FJC2331F030 | 5380055399 | 5380055399 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$77.98 | 27.89% | \$281.16 |
| 4070 | IR510-OFDM-FCC/K9 | IR510 915Mhz WPAN router w/ 2 serial,1 FE LAN | FCW23170HJZ | 5380834642 | 5380834642 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$170.46 | 27.89% | \$614.59 |
| 4073 | ANT-WPAN-OD-OUT-N | WPAN Dipole Antenna 863-928MHz, Direct Connect,1.5dBi gain | | 5380834645 | 5380834642 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$8.00 | 27.89% | \$28.84 |
| 4076 | C9300-DNA-A-48= | C9300 48P, DNA Adv Lic, Prime Infra LF+AS, ThousandEyes | | 5380867256 | 5380867256 | SSTC | Software | 01-Apr-2022 | 31-Mar-2027 | 2 | \$1,351.36 | 41.50% | \$7,186.36 |
| 4077 | IE-3300-8P25-E | Catalyst IE3300 with 8 GE PoE+ and 2 GE SFP, Modular, NE | FOC2331V07F | 5380951414 | 5380951414 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$701.84 | 27.89% | \$2,530.48 |
| 4078 | IE-3300-8P25-E | Catalyst IE3300 with 8 GE PoE+ and 2 GE SFP, Modular, NE | FOC2331V07B | 5380951425 | 5380951425 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$701.84 | 27.89% | \$2,530.48 |
| 4079 | IE-3300-8P25-E | Catalyst IE3300 with 8 GE PoE+ and 2 GE SFP, Modular, NE | FOC2331V04P | 5380951429 | 5380951429 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$701.84 | 27.89% | \$2,530.48 |
| 4080 | CGR1240/K9 | CGR1240 w/ 4 module slots,2 GE,2 serial,4 FE LAN,Wi-Fi,GPS | FTX2332G00P | 5381662866 | 5381662866 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,070.43 | 27.89% | \$3,859.44 |
| 4094 | UCSB-B200-M5-U | UCS B200 M5 Blade w/o CPU, mem, HDD, mezz (UPG) | FLM233103M6 | 5384939915 | 5384939915 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$350.00 | 27.89% | \$1,261.93 |
| 4119 | UCSB-B200-M5-U | UCS B200 M5 Blade w/o CPU, mem, HDD, mezz (UPG) | FLM233103PN | 5384939924 | 5384939924 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$350.00 | 27.89% | \$1,261.93 |
| 4144 | UCSB-B200-M5-U | UCS B200 M5 Blade w/o CPU, mem, HDD, mezz (UPG) | FLM233103O9 | 5384948597 | 5384948597 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$350.00 | 27.89% | \$1,261.93 |
| 4169 | UCSB-B200-M5-U | UCS B200 M5 Blade w/o CPU, mem, HDD, mezz (UPG) | FLM233103JC | 5384948610 | 5384948610 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$350.00 | 27.89% | \$1,261.93 |
| 4194 | UCSB-B200-M5-U | UCS B200 M5 Blade w/o CPU, mem, HDD, mezz (UPG) | FLM233105DU | 5384951709 | 5384951709 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$350.00 | 27.89% | \$1,261.93 |
| 4213 | UCSB-B200-M5-U | UCS B200 M5 Blade w/o CPU, mem, HDD, mezz (UPG) | FLM233103HC | 5384951726 | 5384951726 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$350.00 | 27.89% | \$1,261.93 |
| 4232 | UCSB-B200-M5-U | UCS B200 M5 Blade w/o CPU, mem, HDD, mezz (UPG) | FLM233105F3 | 5384951732 | 5384951732 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$350.00 | 27.89% | \$1,261.93 |
| 4251 | UCSB-B200-M5-U | UCS B200 M5 Blade w/o CPU, mem, HDD, mezz (UPG) | FLM233105E9 | 5384951744 | 5384951744 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$350.00 | 27.89% | \$1,261.93 |
| 4270 | UCSB-B200-M5-U | UCS B200 M5 Blade w/o CPU, mem, HDD, mezz (UPG) | FLM233103QU | 5384951754 | 5384951754 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$350.00 | 27.89% | \$1,261.93 |
| 4289 | UCSB-B200-M5-U | UCS B200 M5 Blade w/o CPU, mem, HDD, mezz (UPG) | FLM23300BAT | 5384951762 | 5384951762 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$350.00 | 27.89% | \$1,261.93 |
| 4308 | UCSB-B200-M5-U | UCS B200 M5 Blade w/o CPU, mem, HDD, mezz (UPG) | FLM233105F9 | 5384951777 | 5384951777 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$350.00 | 27.89% | \$1,261.93 |
| 4327 | UCSB-B200-M5-U | UCS B200 M5 Blade w/o CPU, mem, HDD, mezz (UPG) | FLM233105E7 | 5384951790 | 5384951790 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$350.00 | 27.89% | \$1,261.93 |
| 4346 | UCSB-B200-M5-U | UCS B200 M5 Blade w/o CPU, mem, HDD, mezz (UPG) | FLM233105EA | 5384951799 | 5384951799 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$350.00 | 27.89% | \$1,261.93 |
| 4365 | UCSB-B200-M5-U | UCS B200 M5 Blade w/o CPU, mem, HDD, mezz (UPG) | FLM2331011T | 5384951813 | 5384951813 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$350.00 | 27.89% | \$1,261.93 |
| 4384 | C9410R-96U-BNDL-A | Catalyst 9400 Series 10 slot,Sup, 2xC9400-LC-48U, DNA-A LIC | FXS2330Q1KC | 5394346899 | 5394346899 | SNT | SNTC 8 | | | | | | |

| | | | | | | | | | | | | | |
|------|-------------------|--|-------------|------------|------------|-------|---------|-------------|-------------|----|------------|--------|------------|
| 4908 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FCW2420D0SB | 5468190832 | 5468190832 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 4920 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420U14E | 5468190837 | 5468190837 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 4932 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420W0TV | 5468190843 | 5468190843 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 4944 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420U0Q4 | 5468190854 | 5468190854 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 4956 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420D172 | 5468190859 | 5468190859 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 4968 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FCW2420C0VX | 5468190866 | 5468190866 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 4980 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FCW2420G0VB | 5468190874 | 5468190874 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 4992 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FCW2420C14G | 5468190882 | 5468190882 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5004 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FCW2420D0SA | 5468190890 | 5468190890 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5016 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FCW2420C0W7 | 5468190898 | 5468190898 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5028 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420X14T | 5468190908 | 5468190908 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5040 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420W12Q | 5468190919 | 5468190919 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5052 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FCW2420D0SK | 5468190928 | 5468190928 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5064 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FCW2420D0SV | 5468190934 | 5468190934 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5076 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FCW2420G0V6 | 5468190944 | 5468190944 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5088 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FCW2420C0W4 | 5468190951 | 5468190951 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5100 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420W0TY | 5468190961 | 5468190961 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5112 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420W0TX | 5468190972 | 5468190972 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5124 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420X0U5 | 5468190980 | 5468190980 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5136 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420X0U3 | 5468190991 | 5468190991 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5148 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FCW2420D172 | 5468191000 | 5468191000 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5160 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420W111 | 5468191011 | 5468191011 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5172 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FCW2420C165 | 5468191021 | 5468191021 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5184 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420X0UZ | 5468191030 | 5468191030 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5196 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420U0TX | 5468191041 | 5468191041 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5208 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420X0V2 | 5468191055 | 5468191055 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5220 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FCW2420G14V | 5468191071 | 5468191071 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5232 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FCW2420G14T | 5468191079 | 5468191079 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5244 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FCW2420C0W3 | 5468191088 | 5468191088 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5256 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FCW2420D175 | 5468191096 | 5468191096 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5268 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FCW2420D177 | 5468191113 | 5468191113 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5280 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FCW2420C1DF | 5468191124 | 5468191124 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5292 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420W10W | 5468191135 | 5468191135 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5304 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420X1C7 | 5468191151 | 5468191151 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5316 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420U1CB | 5468191160 | 5468191160 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5328 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420X0UQ | 5468191172 | 5468191172 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5340 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420X16D | 5468191181 | 5468191181 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5352 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420X14X | 5468191197 | 5468191197 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5364 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FOC2420X1C2 | 5468191206 | 5468191206 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5376 | C9300-48U-A | Catalyst 9300 48-port UPOE, Network Advantage | FCW2420G0TZ | 5468191220 | 5468191220 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$823.23 | 27.89% | \$2,968.16 |
| 5388 | IR807G-LTE-NA-K9 | 807 Low-power Industrial ISR, 4G/LTE multimode for N.America | FCW24030H6B | 5471729545 | 5471729545 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$166.00 | 27.89% | \$518.82 |
| 5398 | LIC-CT5520-UPG | Top Level SKU for 5520 AP Adder Licenses | | 5481516136 | 5481516136 | ECMU | SWSS | 01-Apr-2022 | 31-Mar-2027 | 1 | \$0.00 | 22.50% | \$0.00 |
| 5399 | LIC-CT5520-1A | Cisco 5520 Wireless Controller 1 AP Adder License | | 5481516137 | 5481516136 | ECMU | SWSS | 01-Apr-2022 | 31-Mar-2027 | 16 | \$27.00 | 27.89% | \$1,557.58 |
| 5400 | AIR-AP1852E-B-K9 | 802.11ac Wave 2; 4x4:4SS; Ext Ant; B Reg Dom | KWC241800PY | 5483062981 | 5483062981 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$49.00 | 27.89% | \$176.67 |
| 5406 | AIR-AP1852E-B-K9 | 802.11ac Wave 2; 4x4:4SS; Ext Ant; B Reg Dom | KWC241800NA | 5483063011 | 5483063011 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$49.00 | 27.89% | \$176.67 |
| 5412 | AIR-AP1852E-B-K9 | 802.11ac Wave 2; 4x4:4SS; Ext Ant; B Reg Dom | KWC241800GS | 5483063021 | 5483063021 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$49.00 | 27.89% | \$176.67 |
| 5418 | AIR-AP1852E-B-K9 | 802.11ac Wave 2; 4x4:4SS; Ext Ant; B Reg Dom | KWC241800QC | 5483063030 | 5483063030 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$49.00 | 27.89% | \$176.67 |
| 5424 | AIR-AP1852E-B-K9 | 802.11ac Wave 2; 4x4:4SS; Ext Ant; B Reg Dom | KWC241800PA | 5483063042 | 5483063042 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$49.00 | 27.89% | \$176.67 |
| 5430 | AIR-AP1852E-B-K9 | 802.11ac Wave 2; 4x4:4SS; Ext Ant; B Reg Dom | KWC241800ND | 5483063047 | 5483063047 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$49.00 | 27.89% | \$176.67 |
| 5436 | AIR-AP1852I-B-K9 | 802.11ac Wave 2; 4x4:4SS; Int Ant; B Reg Dom | KWC241705MD | 5484443707 | 5484443707 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$44.64 | 27.89% | \$160.95 |
| 5441 | AIR-AP1852I-B-K9 | 802.11ac Wave 2; 4x4:4SS; Int Ant; B Reg Dom | KWC241705KJ | 5484443734 | 5484443734 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$44.64 | 27.89% | \$160.95 |
| 5446 | AIR-AP1852I-B-K9 | 802.11ac Wave 2; 4x4:4SS; Int Ant; B Reg Dom | KWC241705MA | 5484443753 | 5484443753 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$44.64 | 27.89% | \$160.95 |
| 5451 | AIR-AP1852I-B-K9 | 802.11ac Wave 2; 4x4:4SS; Int Ant; B Reg Dom | KWC241705LH | 5484443767 | 5484443767 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$44.64 | 27.89% | \$160.95 |
| 5456 | AIR-AP1852I-B-K9 | 802.11ac Wave 2; 4x4:4SS; Int Ant; B Reg Dom | KWC241705MC | 5484443784 | 5484443784 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$44.64 | 27.89% | \$160.95 |
| 5461 | AIR-AP1852I-B-K9 | 802.11ac Wave 2; 4x4:4SS; Int Ant; B Reg Dom | KWC241705MF | 5484443802 | 5484443802 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$44.64 | 27.89% | \$160.95 |
| 5466 | AIR-AP1852I-B-K9 | 802.11ac Wave 2; 4x4:4SS; Int Ant; B Reg Dom | KWC241705LK | 5484443818 | 5484443818 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$44.64 | 27.89% | \$160.95 |
| 5471 | AIR-AP1852I-B-K9 | 802.11ac Wave 2; 4x4:4SS; Int Ant; B Reg Dom | KWC242009W4 | 5484443849 | 5484443849 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$44.64 | 27.89% | \$160.95 |
| 5476 | AIR-AP1852I-B-K9 | 802.11ac Wave 2; 4x4:4SS; Int Ant; B Reg Dom | KWC241705M0 | 5484443860 | 5484443860 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$44.64 | 27.89% | \$160.95 |
| 5481 | AIR-AP1852I-B-K9 | 802.11ac Wave 2; 4x4:4SS; Int Ant; B Reg Dom | KWC241705LR | 5484443873 | 5484443873 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$44.64 | 27.89% | \$160.95 |
| 5486 | FIR1140-NGFW-K9 | Cisco Firepower 1140 NGFW Appliance, 1U | JMX2429X0B9 | 5484444690 | 5484444690 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$621.00 | 27.89% | \$2,239.02 |
| 5492 | IR1101-K9 | Cisco IR1101 Industrial Integrated Services Router Rugged | | 5484478951 | 5484478951 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$120.00 | 27.89% | \$432.66 |
| 5500 | AIR-CT5520-K9 | Cisco 5520 Wireless Controller w/rack mounting kit | FCH2420L0AC | 5490901927 | 5490901927 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$2,804.69 | 27.89% | \$9,785.39 |
| 5517 | CS-KITPLUS-K9 | Room Kit Plus w/Codec Plus, Quad Camera and Room Navigator | FJC2433Q03R | 5494452021 | 5494452021 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,610.74 | 27.89% | \$5,807.52 |
| 5526 | CS-KITPLUS-K9 | Room Kit Plus w/Codec Plus, Quad Camera and Room Navigator | FJC2433Q04S | 5494452025 | 5494452025 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,610.74 | 27.89% | \$5,807.52 |
| 5535 | C9500-16X-A | Catalyst 9500 16-port 10Gig switch, Advantage | FJB2430E05A | 5494779609 | 5494779609 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,232.42 | 27.89% | \$4,443.49 |
| 5543 | C9500-16X-A | Catalyst 9500 16-port 10Gig switch, Advantage | FJB2430E06G | 5494779636 | 5494779636 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,232.42 | 27.89% | \$4,443.49 |
| 5551 | CS-KITP60-K9 | Room Kit Plus P60 - Codec Plus, P60 Camera and Navigator | FJC2435Q06P | 5500436341 | 5500436341 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,649.00 | 27.89% | \$5,844.48 |
| 5559 | CS-KITPLUS-K9 | Room Kit Plus w/Codec Plus, Quad Camera and Room Navigator | FGL2436L2WT | 5500706957 | 5500706957 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,610.74 | 27.89% | \$5,807.52 |
| 5568 | CS-KITP60-K9 | Room Kit Plus P60 - Codec Plus, P60 Camera and Navigator | FJC2437Q07A | 5503876479 | 5503876479 | SSSNT | SOLN SU | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,649.00 | 27.89% | \$5,844.48 |
| 5576 | HS-WL-730-BUNAS-C | 730 Wireless Dual On-ear Headset+Stand USB-A Bundle-Carbon | | 5510732619 | 5510732619 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$80.00 | 27.89% | \$288.44 |
| 5579 | DNA-CAT-RENEW | DNA SUBSCRIPTION RENEW | | 5513468296 | | | | | | | | | |

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|---|-------------------|--|--------------|------------|------------|------|----------|-------------|-------------|---|----------------|--------|-------------|
| 5887 | R-IOTFND-V-K9 | IoTfND software license for RF Mesh Management | 773LPHUWITL | 5464878844 | 5464878802 | ECMU | SWSS | 01-Apr-2022 | 31-Mar-2027 | 1 | \$1,920.00 | 25.58% | \$3,163.07 |
| 5888 | L-IOTFND-LORAWAN | IoTfND device license for managing LoRaWAN gateway | PHKPCZCQDV0I | 5464878866 | 5464878802 | ECMU | SWSS | 01-Apr-2022 | 31-Mar-2027 | 2 | \$110.00 | 25.58% | \$362.44 |
| 5889 | C9500-48Y4C-A-BUN | 2 x C9500-48Y4C, 8 x QSFP-40/100-SRBD | | 5507992428 | 5507992428 | SNT | SNTC 8X | 01-Apr-2022 | 31-Mar-2027 | 1 | \$3,491.00 | 22.50% | \$4,039.76 |
| 5918 | DNA-AIR-RENEW | CISCO DNA for Wireless - CHOOSE ONLY QTY 1 HERE | | 5518149575 | 5518149575 | SSTC | Software | 01-Apr-2022 | 31-Mar-2027 | 1 | \$0.00 | 41.50% | \$0.00 |
| 5922 | AIR-DNA-A | Wireless Cisco DNA On-Prem Advantage, Term Lic | | 5518149587 | 5518149575 | SSTC | Wireless | 01-Apr-2022 | 31-Mar-2027 | 5 | \$297.87 | 41.50% | \$1,150.55 |
| 5992 | C9400-DNA-P | C9400 DNA-Premier License | | 5394347282 | | SSTC | C9400 D | 01-Apr-2022 | 31-Mar-2027 | 1 | \$6,407.29 | 41.50% | \$16,584.80 |
| Total Bid Price Transfer to Bid Form in Zycus | | | | | | | | | | | \$2,297,150.21 | | |



Formal Bid and Award System

Award #3 March 3, 2022

Type of Award Request: CONTRACT RENEWAL
Requestor Name: Smith, Thaliah D.
Requestor Phone: (904) 665-8165
Project Title: Maintenance, Repair and Overhaul (MRO) Material Blankets
Project Number: Various (see attached)
Project Location: JEA
Funds: Capital & O&M
Award Estimate: N/A (See background)

Scope of Work:

JEA has previously issued an open qualification to invite vendors to submit discount pricing to JEA to provide Maintenance, Repair and Overhaul (MRO) materials on blanket orders, in lieu of purchasing cards (P-cards).

Blanket POs facilitate the buying of materials on a per release basis and tracking in the ERP system, in an expedited process as compared to pricing a purchase order or contract.

This request is to renew the contracts and increase the funds on the three (3) blankets.

JEA IFB/RFP/State/City/GSA#: 93087
Purchasing Agent: King, David
Is this a Ratification?: NO

RECOMMENDED AWARDEE(S):

| Name | Contact Name | Address | Phone | Original Amount | Previous Increases | Increase Amount (this Award) | New Not to Exceed Amount |
|-----------------------|------------------|--|----------------|-----------------|--------------------|------------------------------|--------------------------|
| GRAINGER | Eileen Walker | 720 Suemac Road Jacksonville, FL 32254 | (904) 781-4913 | \$2,700,000.00 | \$0.00 | \$94,000.00 | \$2,794,000.00 |
| WORLD ELECTRIC SUPPLY | Gerald Raulerson | 569 Stuart Lane Jacksonville, FL 32254 | (904) 378-4000 | \$1,800,000.00 | \$1,634,000.00 | \$468,000.00 | \$3,902,000.00 |
| JO KELL INC. | Carl Alvstad | 9655 Florida Mining Blvd W. Ste. 301 Jacksonville, FL 32257 | (904) 260-8420 | \$1,200,000.00 | \$2,247,000.00 | \$676,000.00 | \$4,123,000.00 |

Amount of Original Award: \$5,700,000.00

Date of Original Award: 03/22/2018

Contract Increase Amount: \$1,238,000.00

List of Previous Change Order/Amendments

| CPA # | Vendor | Date | Amount |
|--------|-----------------------|------------|----------------|
| 173419 | WORLD ELECTRIC SUPPLY | 11/21/2019 | \$1,000,000.00 |
| 173421 | JO KELL INC. | 11/21/2019 | \$1,400,000.00 |

| | | | |
|--------|-----------------------|------------|--------------|
| 173419 | WORLD ELECTRIC SUPPLY | 03/25/2021 | \$634,000.00 |
| 173421 | JO KELL INC. | 03/25/2021 | \$847,000.00 |

New Not-To-Exceed Amount: \$10,819,000.00
Length of Contract/PO Term: Three (3) Years w/Two (2) - 1 Yr. Renewals
Begin Date (mm/dd/yyyy): 03/22/2018
End Date (mm/dd/yyyy): 03/21/2023
Renewal Options: NO – No remaining renewals
JSEB Requirement: N/A

Background/Recommendations:

Previously awarded informal blanket purchase agreements to support processing orders on blankets in lieu of P-cards. Use of blanket purchase agreement will allow spend consolidation and facilitate ordering.

Vendors commit to provide JEA a minimum of ten percent (10%) discount on materials purchased either off P-Card or blankets for their JEA account. Jo Kell, Inc., Grainger and World Electric Supply are the three (3) largest MRO P-Card spends at JEA.

Award amount contract increases were estimated by using current spend rates and forecasting over the remaining term of the contract (estimate calculations are attached as backup). Note, these MRO qualification agreements are non-requirements contracts that cover the whole organization. The approval to spend the funds takes place on the requisition from the already-approved fiscal year budget or capital project. This award will exercise the last renewal option for all three vendors.

Request approval to award a one year contract renewal and increase to Grainger (\$94,000.00), World Electric Supply (\$468,000.00) and Jo Kell, Inc. (\$676,000.00) to provide Maintenance, Repair and Overhaul (MRO) materials for a total amount of \$1,238,000.00, and new not to exceed amount for all three contracts of \$10,819,000.00, subject to availability of lawfully appropriated funds.

Manager: Ruiz-Adams, Melinda M. - Manager Business Operations
Director: Smith, Carole F. - Director, W/WW Asset Mgmt & Performance
VP: Vu, Hai X. – VP Water/Wastewater Systems

APPROVALS:

Chairman, Awards Committee **Date**

Budget Representative **Date**



Formal Bid and Award System

Award #11 March 25, 2021

Type of Award Request: CONTRACT RENEWAL
Requestor Name: Smith, Thaliah D.
Requestor Phone: (904) 665-8165
Project Title: Maintenance, Repair and Overhaul (MRO) Material Blankets
Project Number: Various (see attached)
Project Location: JEA
Funds: Capital & O&M
Award Estimate: N/A

Scope of Work:

JEA has previously issued an open qualification to invite vendors to submit discount pricing to JEA to provide Maintenance, Repair and Overhaul (MRO) materials on blanket orders, in lieu of purchasing cards (P-cards).

Blanket POs facilitate the buying of materials on a per release basis and tracking in the ERP system, in an expedited process as compared to pricing a purchase order or contract.

This request is to renew the contracts and increase the funds on two (2) of the three (3) blankets.

JEA IFB/RFP/State/City/GSA#: 93087
Purchasing Agent: King, David
Is this a Ratification?: YES (partial - \$41,000.00 to Jo Kell)

RECOMMENDED AWARDEE(S):

| Name | Contact Name | Address | Phone | Original Amount | Increase Amount (this Award) | New Not to Exceed Amount (including Previous Increase) |
|-----------------------|------------------|---|----------------|-----------------|------------------------------|--|
| GRAINGER | Eileen Walker | 720 Suemac Road Jacksonville, FL 32254 | (904) 781-4913 | \$2,700,000.00 | \$0.00 | \$2,700,000.00 |
| WORLD ELECTRIC SUPPLY | Gerald Raulerson | 569 Stuart Lane Jacksonville, FL 32254 | (904) 378-4000 | \$1,800,000.00 | \$634,000.00 | \$3,434,000.00 |
| JO KELL INC. | Carl Alvstad | 9655 Florida Mining Blvd W. Ste. 301 Jacksonville, FL 32257 | (904) 260-8420 | \$1,200,000.00 | \$847,000.00 | \$3,447,000.00 |

Amount of Original Award: \$5,700,000.00
Date of Original Award: 03/22/2018
Contract Increase Amount: \$1,481,000.00
List of Previous Change Order/Amendments

| CPA # | Vendor | Date | Amount |
|--------|-----------------------|------------|----------------|
| 173419 | WORLD ELECTRIC SUPPLY | 11/21/2019 | \$1,000,000.00 |
| 173421 | JO KELL INC | 11/21/2019 | \$1,400,000.00 |

New Not-To-Exceed Amount: \$9,581,000.00
Length of Contract/PO Term: Three (3) Years w/Two (2) - 1 Yr. Renewals
Begin Date (mm/dd/yyyy): 03/22/2018
End Date (mm/dd/yyyy): 03/21/2022
Renewal Options: Yes - One (1) Yr. Renewal
JSEB Requirement: N/A

Background/Recommendations:

Previously awarded informal blanket purchase agreements to support processing orders on blankets in lieu of P-cards. Use of blanket purchase agreement will allow spend consolidation and facilitate ordering.

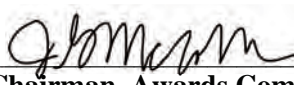
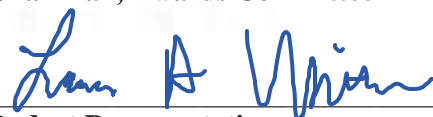
Vendors commit to provide JEA a minimum of ten percent (10%) discount on materials purchased either off P-Card or blankets for their JEA account. Jo Kell, Inc., Grainger and World Electric Supply are the three (3) largest MRO P-Card spends at JEA.

Award amount contract increases were estimated by using current spend rates and forecasting over the remaining term of the contract (estimate calculations are attached as backup). Note, these MRO qualification agreements are non-requirements contracts that cover the whole organization. The approval to spend the funds takes place on the requisition from the already-approved fiscal year budget or capital project. This award will exercise one of the renewal options for all three vendors.

Request approval to award a one year contract renewal to Grainger, World Electric Supply, and Jo Kell, Inc, and contract increases to World Electric Supply in the amount of \$634,000.00, and Jo Kell, Inc. in the amount of \$847,000.00 to provide Maintenance, Repair and Overhaul (MRO) materials for a total amount of \$1,481,000.00, and new not to exceed amount for all three contracts of \$9,581,000.00, subject to availability of lawfully appropriated funds.

Manager: Ruiz-Adams, Melinda M. - Manager Business Operations
VP: Vu, Hai X. – VP Water/Wastewater Systems

APPROVALS:

 03/25/2021
 Chairman, Awards Committee Date
 3/25/21
 Budget Representative Date



Formal Bid and Award System

Award #4 March 3, 2022

Type of Award Request: CONTRACT INCREASE
Request #: 6607
Requestor Name: Schoettler, Kyle C. - Mgr W/WW System Operations & Customer Response
Requestor Phone: (904) 665-8165
Project Title: Restoration of Disturbed Asphalt Paved Areas
Project Number: Various
Project Location: JEA
Funds: Capital and O&M (line 691)
Budget Estimate: \$1,229,593.17

Scope of Work:

The purpose of this Invitation to Negotiate (ITN) is to solicit competitive Responses from asphalt restoration companies that can provide all materials, labor, equipment, supervision, delivery, and disposal of waste materials services as described in this ITN. JEA crews disturb paved areas during planned and unplanned maintenance/construction efforts. This contract provides for the restoration of those areas.

JEA IFB/RFP/State/City/GSA#: 050-16
Purchasing Agent: Brown, Darriel D.
Is this a Ratification?: NO

RECOMMENDED AWARDEE(S):

| Name | Contact Name | Email | Address | Phone | Amount |
|---------------------|--------------|-------------------------|--|----------------|----------------|
| WARREN ASPHALT INC. | WAYNE WARREN | admin@warrenasphalt.com | 144 S Arlington Rd Ste 1, Jacksonville, FL 32225 | (904) 721-5520 | \$1,229,593.17 |

Amount of Original Award: \$11,868,359.46
Date of Original Award 06/09/2016
Contract Increase Amount: \$1,229,593.17
New Not-To-Exceed Amount: \$25,326,363.32

List of Previous Change Order/Amendments

| CPA # | Date | Amount |
|--------|------------|-----------------|
| 155699 | 05/09/2019 | \$11,228,410.69 |
| 155699 | 06/30/2021 | \$1,000,000.00 |

Length of Contract/PO Term: Five (5) Years w/ One (1) – 1 Yr. Renewal
Begin Date (mm/dd/yyyy): 06/17/2016
End Date (mm/dd/yyyy): 06/16/2022

Renewal Options: Yes - One (1) – 1 Yr. Renewal

JSEB Requirement: Ten Percent (10%) Goal

Comments on JSEB Requirements:

Original Award

Donna Hamilton (Materials) – 10%

DJ Contracting (Materials) – 5%

National Tire (Materials) – 1%

Total: 16%

Background/Recommendations:

Originally bid and approved by the Awards Committee on 06/09/2016 in the amount of \$11,868,359.46 to Warren Asphalt Inc. A copy of the previous award is attached as backup.

This contract increase request is to add \$1,229,593.17 to finish out the remaining four (4) months on the contract. This contract increase amount includes expected annual increases due to Consumer Price Index (CPI) adjustments that can be exercised annually on the contract. Due to increases in the number of cave-ins and manhole failures JEA has had over the past three (3) years, this contract has been used more extensively than originally anticipated. A new solicitation for asphalt paved site restoration has been comprised and the bid is in evaluation. This process, because it is an evaluated bid, will not be completed by the time existing contract funding expires, so this contract increase is expected to cover funding for the existing contract term.

Request approval to award a contract increase to Warren Asphalt Inc. for Restoration of Disturbed Asphalt Paved Areas in the amount \$1,229,593.17, for a new not to exceed amount of \$25,326,363.32, subject to the availability of lawfully appropriated funds.

Manager: Schoettler, Kyle C. - Mgr W/WW System Operations & Customer Response

Director: Scheel, Jackie B. – Dir W/WW Reuse Delivery & Collection

VP: Vu, Hai X. – VP Water/Wastewater Systems

APPROVALS:

Chairman, Awards Committee **Date**

Budget Representative **Date**



Formal Bid and Award System

CPA 155699

Award #5 May 9, 2019

Type of Award Request: CONTRACT INCREASE
Request #: 6607
Requestor Name: Smith, Thaliah D. – Contract Specialist
Requestor Phone: (904) 665-8165
Project Title: Restore Disturbed Asphalt Paved Areas
Project Number: Various
Project Location: JEA
Funds: Capital and O&M (lines 417, 758)
Budget Estimate: 11,686,359.46 (Original Budget/ 5 year term)
Scope of Work:

The purpose of this Invitation to Negotiate (ITN) is to solicit competitive Responses from asphalt restoration companies that can provide all materials, labor, equipment, supervision, delivery and disposal of waste materials services as described in this ITN. JEA crews disturb paved areas during planned and unplanned maintenance/construction efforts. This contract provides for the restoration of those areas.

This award will impact the following Measures of Value:

- Community Impact Value: JEA has a responsibility to our customers in our service territories to maintain excellent site rehabilitation when maintenance and construction work completion impacts surrounding roadways.

JEA IFB/RFP/State/City/GSA#: 050-16
Purchasing Agent: Kruck, Daniel R.
Is this a Ratification?: NO

RECOMMENDED AWARDEE(S):

| Name | Contact Name | Email | Address | Phone | Amount |
|---------------------|--------------|-------------------------|--|----------------|-----------------|
| WARRENS ASPHALT INC | WAYNE WARREN | admin@warrenasphalt.com | 144 S Arlington Rd Ste 1, Jacksonville, FL 32225 | (904) 721-5520 | \$11,228,410.69 |

Amount of Original Award: \$11,686,359.46
Date of Original Award 06/09/2016
Contract Increase Amount: \$11,228,410.69
New Not-To-Exceed Amount: \$22,914,770.15
Length of Contract/PO Term: Five (5) Years w/ Onc (1) - One (1) Year Renewal
Begin Date (mm/dd/yyyy): 06/17/2016
End Date (mm/dd/yyyy): 06/17/2021

Renewal Options:

Yes - One (1) - One (1) Year Renewal

JSEB Requirement:

Ten Percent (10%) Goal

Comments on JSEB Requirements:Original Award

Donna Hamilton (Materials) – 10%

DJ Contracting (Materials) – 5%

National Tire (Materials) – 1%

Total: 16%

Background/Recommendations:

Originally bid and approved by the Awards Committee on 06/09/2016 in the amount of \$11,686,359.46 to Warrens Asphalt Inc. A copy of the original award is attached as backup.

This contract increase request is to add \$11,228,410.69 to finish out the remaining twenty-six (26) months on the contract. This contract increase amount includes expected annual increases due to Consumer Price Index (CPI) adjustments that can be exercised annually on the contract. Due to increases in the number of cave-ins and manhole failures JEA has had over the past three (3) years, this contract has been used more extensively than originally anticipated. The original contract budget estimate was split evenly between O&M and Capital funds, however, a review of the actual spend shows an average of 60% capital and 40% O&M spend.

The contract details are below:

- Original Budget: \$11,686,359.46
 - O&M Budget (50%): \$5,843,174.73
 - Capital Budget (50%): \$5,843,174.73
 - Historical Fiscal Year Spend
 - FY16 = \$735,836.97
 - FY17 = \$3,521,211.99
 - FY18 = \$4,551,795.70
 - FY19 (Annualized) = \$5,007,560.28
- Revised Budget: \$22,914,770.15
 - O&M Budget (40%): \$9,165,908.06
 - Capital Budget (60%): \$13,748,862.09
- Estimate at Contract Completion w/1 year renewal: \$28,307,364.87
 - O&M Budget: \$11,322,945.95
 - Capital Budget: \$16,984,418.92

Major Changes/Issues:

Over the past three (3) years JEA has experienced over a 100% increase in the number of cave-ins and manhole failures than when this contract was awarded. Contract was fixed for the first two years with CPI adjustments for the remaining years. The new budget amounts include the anticipated CPI adjustments.

Request approval to award a contract increase to Warrens Asphalt Inc. to Restore Disturbed Asphalt Paved Areas in the amount \$11,228,410.69, for a new not to exceed amount of \$22,914,770.15, subject to the availability of lawfully appropriated funds.

Manager:

Schoettler, Kyle C. - Mgr W/WW System Operations & Customer Response

Director:

Scheel, Jackie B. – Dir W/WW Reuse Delivery & Collection

VP:


Calhoun, Deryle I. - VP/GM Water Wastewater Systems

APPROVALS:


Chairman, Awards Committee

5/9/19

Date


Manager, Operating Budgets

5/9/19

Date



Approved by

Date 6/9/16

Committee

4a

Formal Bid and Award System

Award # 4

June 9, 2016

Type of Award Request:

PROPOSAL (ITN)

Request #:

527

Requestor Name:

Scheel, Jackie B. - Manager, W&S Customer Service Response

Requestor Phone:

(904) 665-8473

Project Title:

Restore Disturbed Asphalt Paved Areas

Project Number:

Various O&M and Capital

Project Location:

JEA

Funds:

Capital and O&M

Award Estimate:

N/A

Description of Request:

The purpose of this Invitation to Negotiate (ITN) is to solicit competitive Responses from asphalt restoration service companies that can provide all materials, labor, equipment, supervision, delivery and disposal of waste materials services as described in this ITN (the "Work").

Requisition Number:**JEA IFB/RFP/State/City/GSA#:**

050-16

Purchasing Agent:

Lovgren, Rodney Dennis

Is this a ratification?:

NO

If yes, explain:**RECOMMENDED AWARDEE(S):**

155699

| Name | Contact Name | Email | Address | Phone | Amount |
|---------------------|--------------|-------------------------|--|----------------|-----------------|
| WARRENS ASPHALT INC | WAYNE WARREN | admin@warrenasphalt.com | 144 S Arlington Rd Ste 1, Jacksonville FL 32225 | (904) 721-5520 | \$11,868,359.46 |

Amount for entire term of Contract/PO:

\$11,838,359.46

Award Amount for remainder of this FY:

\$1,950,000.00

Length of Contract/PO Term:

Five (5) Years w/ One (1) - 1 Yr. Renewal

Begin Date (mm/dd/yyyy):

06/01/2016

End Date (mm/dd/yyyy):

05/31/2021

Renewal Options:

YES - One (1) - 1 Yr. Renewal

JSEB Requirement:

Ten percent (10%)

Comments on JSEB Requirements:

Warrens Asphalt named Donna Hamilton 10%;
DJ Contracting 5%; National Tire 1%

BIDDER:

| Name | Bid | Disqualified |
|---------------------|----------------|--------------|
| WARRENS ASPHALT INC | \$8,697,325.00 | NO |

Background/Recommendations:

Advertised 4/1/2016. Two (2) companies attended the mandatory pre-response meeting on 4/11/2016. At Response opening on 4/26/2016, JEA received one (1) response.

The reason for the low competition is this work is for small job scopes and volume intensive in nature. Currently Warrens is the only supplier in Jacksonville that can meet the mobilization, quality and coordination requirements satisfactorily. The second company that attended the pre-bid, usually subcontracts to Warrens, as even Warrens runs into project volume coordination at times. Additionally this contract requires MOT, and not all companies can provide this service.

The contract is to perform asphalt restoration work. The work includes excavation, filling, compacting, paving and settling issues within JEA's service territory. This contract supports both Capital and O&M efforts companywide: Electric, Water & Sewer, Customer Service and Facilities. Services provided may be required twenty-four (24) hours a day, seven (7) days a week on an emergency basis due to the nature of our utility infrastructure, and the necessity to ensure the roadways are passable. The contract term is for five (5) years with one (1) optional renewal.

The difference from the bid price and the award amount is due to the addition of \$3.6M of forecasted work for Facilities, budgeted over the next five years. Warrens' initial price showed a five (5%) percent increase from the 2011 pricing. A \$248,255.00 aggregate reduction was achieved through negotiations which included the additional work scope, reduced bonding requirements, and adding a provision for a CPI adjustment upon completion of year three (3) of the contract. The net result of these negotiations brings pricing back on an aggregate comparison to the same as 2011 pricing.

050-16 - Request approval to award a five (5) year contract to Warrens Asphalt for asphalt restoration work, in the amount of \$11,868,359.46, subject to the availability of lawfully appropriated funds.

Manager: Scheel, Jackie - Mgr W/WW Customer Response
Director: Cadle, Robert B. - Dir W/WW Reuse Delivery & Collection
VP: Roche, Brian J. - VP/GM Water Wastewater Systems

APPROVALS:

 6/9/16
 Chairman, Awards Committee Date

 9 Jun 2016
 Manager, Capital Budget Planning Date
 Operating Budgets

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APPENDIX B RESPONSE FORM
050-16 DISTURBED ASPHALT RESTORATION SERVICES
Best and Final Offer (BAFO)

The Respondent shall submit one signed copy of the following response form along with the Response Rates Workbook to Rodney Lovgren; lovgrd@jea.com.

PROPOSER INFORMATION:

COMPANY NAME: Warren Asphalt Inc.
BUSINESS ADDRESS: 7411 Silver Lake Terrace
CITY, STATE, ZIP CODE: Jacksonville, FL 32216
TELEPHONE: 904-721-5520
FAX: 904-725-9408
EMAIL ADDRESS: admin@warrenasphalt.com

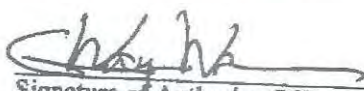
Proposer's Certification

By submitting this Response, the Respondent certifies (1) that it has read and reviewed all of the documents pertaining to this ITN and agrees to abide by the terms and conditions set forth therein, (2) that the person signing below is an authorized representative of the Respondent, and (3) that the Respondent is legally authorized to do business and maintains an active status in the State of Florida. The Respondent certifies that its recent, current, and projected workload will not interfere with the Respondent's ability to work in a professional, diligent and timely manner.

The Respondent certifies, under penalty of perjury, that it holds all licenses, permits, certifications, insurances, bonds, and other credentials required by law, contract or practice to perform the Work. The Respondent also certifies that, upon the prospect of any change in the status of applicable licenses, permits, certifications, insurances, bonds or other credentials, the Respondent shall immediately notify JEA of status change.

| | |
|--|------------------|
| Total From Response Rates Workbook (Total Price) | \$ 11,868,359.46 |
| Payment and Performance Bond | \$ 500,000.00 |

We have received addenda 1&2 through 2


Signature of Authorize Officer of Respondent or Agent

Wayne Warren / President
Printed Name & Title

6/1/16
Date

904-721-5520
Phone Number

4c

050-16 DISTURBED ASPHALT RESTORATION RESPONSE WORKBOOK BAFO

| No. | Description | UOM | 5 Year Forecast | BAFO Pricing, based on negotiation points (Warrens Please Populate) | BAFO Extended Price |
|--|--|------|-----------------|---|---------------------|
| Small Restoration Jobs (Restoration Area - Under 200 SY) | | | | | |
| 1 | Priority Response | EA | | | |
| 2 | A-3 Fill | CY | 2,500 | \$ 50.00 | \$ 125,000.00 |
| 3 | Limerock- 8" Thick | S.Y. | 11,676 | \$ 8.20 | \$ 95,743.20 |
| 4 | Asphalt Milling | S.Y. | 54,545 | \$ 10.20 | \$ 556,359.00 |
| 5 | Asphalt Milling Mobilization | S.Y. | 26,250 | \$ 7.75 | \$ 203,437.50 |
| 6 | Asphalt Removal | S.Y. | 10,250 | \$ 4.85 | \$ 49,712.50 |
| | City of Jacksonville Asphalt Repair | | 6,634 | \$ 8.00 | \$ 53,072.00 |
| 7a | Asphalt 1" thick | S.Y. | | | |
| 7b | Mobilization Fee- Each ticket | EA | 56,250 | \$ 27.50 | \$ 1,546,875.00 |
| | FDOT Asphalt Repair | | 8,500 | \$ 50.00 | \$ 425,000.00 |
| 8a | Asphalt 1" thick | S.Y. | | | |
| | St. Johns County Asphalt Repair | | 7,500 | \$ 27.50 | \$ 206,250.00 |
| 9a | Asphalt 1" thick | S.Y. | | | |
| 9b | Mobilization Fee- Each ticket | EA | 3,750 | \$ 27.50 | \$ 103,125.00 |
| 9c | Right of Way Permit | EA | 500 | \$ 72.30 | \$ 36,150.00 |
| | Nassau County Asphalt Repair | | 500 | \$ 145.00 | \$ 72,500.00 |
| 10a | Asphalt 1" thick | S.Y. | | | |
| 10b | Mobilization Fee- Each ticket | EA | 3,750 | \$ 27.50 | \$ 103,125.00 |
| 10c | Right of Way Permit | EA | 500 | \$ 72.30 | \$ 36,150.00 |
| | Clay County Asphalt Repair | | 500 | \$ 145.00 | \$ 72,500.00 |
| 11a | Asphalt 1" thick | S.Y. | | | |
| 11b | Mobilization Fee- Each ticket | EA | 750 | \$ 27.50 | \$ 20,625.00 |
| 11c | Right of Way Permit | EA | 233 | \$ 72.30 | \$ 16,845.90 |
| | | | 100 | \$ 145.00 | \$ 14,500.00 |
| Large Restoration Jobs (Restoration area - Over 200 SY, not to exceed 1,000 SY) | | | | | |
| 12 | Priority Response | EA | | | |
| 13 | A-3 Fill | C.Y. | 500 | \$ 145.00 | \$ 72,500.00 |
| 14 | Limerock - 8" Thick | S.Y. | 52,058 | \$ 8.20 | \$ 426,875.60 |
| 15 | Asphalt Milling | S.Y. | 70,454 | \$ 10.60 | \$ 746,812.40 |
| 16 | Asphalt Milling Mobilization | S.Y. | 22,666 | \$ 14.46 | \$ 327,750.36 |
| 17 | Unsuitable Sub-base Removal | S.Y. | 450 | \$ 24.10 | \$ 10,845.00 |
| | Asphalt 1 1/2" thick | | 15,500 | \$ 24.10 | \$ 373,550.00 |
| 18a | 201 to 300 sq yds in size | S.Y. | | | |
| 18b | 301 to 400 sq yds in size | S.Y. | 43,333 | \$ 14.25 | \$ 617,495.25 |
| 18c | 401 to 500 sq yds in size | S.Y. | 35,833 | \$ 14.25 | \$ 510,620.25 |
| 18d | Greater than 500 sq yds. (not to exceed 1,000 yds) | S.Y. | 35,833 | \$ 14.25 | \$ 510,620.25 |
| Large Restoration Jobs (Restoration area - Over 200 SY, not to exceed 1,000 SY) | | | | | |
| | Asphalt 4" thick (City std./FDOT) | | | | |
| 19a | 201 to 300 sq yds in size | S.Y. | | | |
| 19b | 301 to 400 sq yds in size | S.Y. | 3,500 | \$ 27.00 | \$ 94,500.00 |
| 19c | 401 to 500 sq yds in size | S.Y. | 2,500 | \$ 27.00 | \$ 67,500.00 |
| 19d | Greater than 500 sq yds. (not to exceed 1,000 yds) | S.Y. | 2,500 | \$ 27.00 | \$ 67,500.00 |
| | Asphalt 8" thick | | | | |
| 20a | 201 to 300 sq yds in size | S.Y. | | | |
| 20b | 301 to 400 sq yds in size | S.Y. | 1,250 | \$ 36.63 | \$ 45,787.50 |
| 20c | 401 to 500 sq yds in size | S.Y. | 1,250 | \$ 36.63 | \$ 45,787.50 |
| 20d | Greater than 500 sq yds. (not to exceed 1,000 yds) | S.Y. | 1,250 | \$ 36.63 | \$ 45,787.50 |
| | Asphalt 12" thick | | | | |
| 21a | Greater than 200 sq yds. | S.Y. | | | |
| 22 | Saw Cut Asphalt | LF | 2,500 | \$ 53.00 | \$ 132,500.00 |
| 23 | Saw Cut Concrete | LF | 1,250 | \$ 1.00 | \$ 1,250.00 |
| | Mobilization Fee Each Ticket | | 1,250 | \$ 2.00 | \$ 2,500.00 |
| 24a | City of Jacksonville | EA | 250 | \$ 145.00 | \$ 36,250.00 |
| 24b | St Johns County | EA | 50 | \$ 145.00 | \$ 7,250.00 |
| 24c | Nassau County | EA | 50 | \$ 145.00 | \$ 7,250.00 |
| 24d | Clay County | EA | 50 | \$ 145.00 | \$ 7,250.00 |
| 25 | Right Of Way Permit | EA | 25 | \$ 145.00 | \$ 3,625.00 |
| | | | 125 | \$ 145.00 | \$ 18,125.00 |

4c

050-16 DISTURBED ASPHALT RESTORATION RESPONSE WORKBOOK BAFO

| No. | Description | UOM | 5 Year Forecast | BAFO Pricing, based on negotiation points (Warrens Please Populate) | BAFO Extended Price |
|---|--|--------------|-----------------|---|-------------------------|
| Miscellaneous Items These Apply to All Projects | | | | | |
| | Assist JEA On Emergency As/Needed Basis | | | | |
| 26a | Crew Hourly Rate | HR | 500 | \$ 240.00 | \$ 120,000.00 |
| 26b | After Hours/Weekend Crew Hourly Rate | HR | 250 | | |
| 26c | Compaction of Fill in 6-12" Lifts | S.Y. | 10,000 | \$ 338.00 | \$ 84,500.00 |
| 26d | Furnish and Deliver Proctored A-3 fill dirt | C.Y. | 500 | \$ 11.56 | \$ 115,600.00 |
| 26e | Furnish and Deliver LBR 40 Sub-grade Material | C.Y. | 250 | \$ 10.00 | \$ 5,000.00 |
| | | | | \$ 20.00 | \$ 5,000.00 |
| Miscellaneous Items These Apply to All Projects | | | | | |
| 27 | Laboratory/Field Testing | (Allowance) | | | \$ 35,000.00 |
| | Valve Jacket Adjustment | | | | |
| 27a | COJ Right Of Way | EA | 500 | \$ 145.00 | \$ 72,500.00 |
| 27b | FDOT Right Of Way | EA | 150 | \$ 145.00 | \$ 21,750.00 |
| 27c | County Right Of Way | EA | 25 | \$ 145.00 | \$ 3,625.00 |
| | Manhole Adjustment | | | | |
| 28a | COJ Right Of Way | EA | 500 | \$ 530.00 | \$ 265,000.00 |
| 28b | FDOT Right Of Way | EA | 150 | \$ 530.00 | \$ 79,500.00 |
| 28c | County Right Of Way | EA | 25 | \$ 530.00 | \$ 13,250.00 |
| | Pavement Markings | | | | |
| 30a | Skip Traffic Stripe Paint | L.F. | 5,000 | \$ 1.95 | \$ 9,750.00 |
| 30b | Solid Traffic Stripe Paint | L.F. | 5,000 | \$ 1.95 | \$ 9,750.00 |
| 30c | 12" Painted Stripe | L.F. | 1,500 | \$ 2.90 | \$ 4,350.00 |
| 30d | 24" Painted Stripe | L.F. | 1,500 | \$ 3.40 | \$ 5,100.00 |
| 31 | Thermoplastic Striping, Refer to note 1 below. | (Allowance) | | | \$ 50,000.00 |
| 32 | Show-up Fee (when site is not ready) | EA | 500 | \$ 145.00 | \$ 72,500.00 |
| 33 | SUPPLEMENTAL WORK AUTHORIZATION (SWA) Refer to: Note 3 below. | | | | \$ 100,000.00 |
| 34 | Cold Mix (billed as a pass through at cost) | PER TON | 14,000 | \$ 145.00 | \$ 2,030,000.00 |
| 35 | Millings (billed as a pass through at cost) | PER TON | 3,250 | \$ 18.50 | \$ 60,125.00 |
| 36 | Delivery (per truckload) # of Deliveries forecast based on 15 yard dump truck. | PER DELIVERY | 1,150 | \$ 150.00 | \$ 172,500.00 |
| TOTAL BID PRICE (ENTER THIS AMOUNT ON THE RESPONSE FORM) | | | | Revised Bid Amount | \$ 11,868,359.46 |

Extended Price, Percent Change, Delta. (negative numbers are decreases)

| Extended Price, Percent Change, Delta, (negative numbers are decreases) | | | | 2011 CONTRACT PRICING USING CURRENT FORECAST | | 080-16 FIRST ROUND PRICING USING CURRENT FORECAST | | 080-16 BAYO PRICING USING CURRENT FORECAST | | Price Change from 2011 by % | | |
|---|--|------|------------------|--|--|---|--|--|--------------|-----------------------------|---------------------|---------|
| No. | Description | EOM | \$ Year Forecast | Warrens Contract (2011 Pricing) | Warrens Previous Contract Pricing Extended | Warrens Contract (2011 Pricing) | Warrens Previous Contract Pricing Extended | Extended Bid Pricing | BAYO Pricing | | BAYO Extended Price | |
| | | | | \$ | 11,862,506.00 | 2.1% | \$ | 12,116,615.10 | \$ | 11,862,506.00 | | |
| | | | | | | | \$ | 354,109.10 | | | | |
| Small Restoration Jobs (Restoration Area - Under 200 SY) | | | | | | | | | | | | |
| 1 | Priority Response | BA | 2,500 | \$ | 50.00 | \$ | 125,000.00 | \$ | 50.00 | \$ | 125,000.00 | 0.00% |
| 2 | A-3 Fill | CY | 11,676 | \$ | 8.00 | \$ | 93,408.00 | \$ | 8.20 | \$ | 95,743.20 | 2.50% |
| 3 | Limerock - 8" Thick | S.Y. | 54,545 | \$ | 10.00 | \$ | 545,450.00 | \$ | 10.20 | \$ | 556,359.00 | 2.00% |
| 4 | Asphalt Milling | S.Y. | 26,250 | \$ | 8.00 | \$ | 210,000.00 | \$ | 7.75 | \$ | 203,371.50 | -3.13% |
| 5 | Asphalt Milling Mobilization | S.Y. | 10,250 | \$ | 5.00 | \$ | 51,250.00 | \$ | 4.85 | \$ | 49,712.50 | -3.00% |
| 6 | Asphalt Removal | S.Y. | 6,634 | \$ | 8.00 | \$ | 53,072.00 | \$ | 8.00 | \$ | 53,072.00 | 0.00% |
| 7a | City of Jacksonville Asphalt Repair | S.Y. | 56,250 | \$ | 27.00 | \$ | 1,518,750.00 | \$ | 27.50 | \$ | 1,546,875.00 | 1.85% |
| 7b | Asphalt 1" thick | EA | 8,500 | \$ | 50.00 | \$ | 425,000.00 | \$ | 50.00 | \$ | 425,000.00 | 0.00% |
| 8a | Mobilization Fee- Each ticket | S.Y. | 7,500 | \$ | 27.00 | \$ | 202,500.00 | \$ | 27.50 | \$ | 206,250.00 | 1.85% |
| 8b | FDOT Asphalt Repair | S.Y. | 3,750 | \$ | 27.00 | \$ | 101,250.00 | \$ | 27.50 | \$ | 103,125.00 | 1.85% |
| 9a | Asphalt 1" thick | EA | 500 | \$ | 75.00 | \$ | 37,500.00 | \$ | 72.00 | \$ | 36,150.00 | -3.60% |
| 9b | Mobilization Fee- Each ticket | EA | 500 | \$ | 150.00 | \$ | 75,000.00 | \$ | 145.00 | \$ | 72,500.00 | -3.33% |
| 9c | Right of Way Permit | S.Y. | 3,750 | \$ | 27.00 | \$ | 101,250.00 | \$ | 27.50 | \$ | 103,125.00 | 1.85% |
| 10a | Nassau County Asphalt Repair | S.Y. | 500 | \$ | 75.00 | \$ | 37,500.00 | \$ | 72.00 | \$ | 36,150.00 | -3.60% |
| 10b | Asphalt 1" thick | S.Y. | 750 | \$ | 27.00 | \$ | 20,250.00 | \$ | 27.50 | \$ | 20,625.00 | 1.85% |
| 10c | Mobilization Fee- Each ticket | EA | 233 | \$ | 75.00 | \$ | 17,475.00 | \$ | 72.00 | \$ | 16,845.00 | -3.60% |
| 11a | Clay County Asphalt Repair | EA | 100 | \$ | 150.00 | \$ | 15,000.00 | \$ | 145.00 | \$ | 14,500.00 | -3.33% |
| 11b | Asphalt 1" thick | BA | 500 | \$ | 150.00 | \$ | 75,000.00 | \$ | 145.00 | \$ | 72,500.00 | -3.33% |
| 11c | Mobilization Fee- Each ticket | CY | 52,058 | \$ | 8.00 | \$ | 416,464.00 | \$ | 8.20 | \$ | 426,875.20 | 2.50% |
| 12 | Priority Response | S.Y. | 70,454 | \$ | 10.00 | \$ | 704,540.00 | \$ | 10.20 | \$ | 718,640.80 | 2.00% |
| 13 | A-3 Fill | S.Y. | 22,666 | \$ | 15.00 | \$ | 339,990.00 | \$ | 14.46 | \$ | 327,750.36 | -3.60% |
| 14 | Limerock - 8" Thick | S.Y. | 450 | \$ | 750.00 | \$ | 337,500.00 | \$ | 720.00 | \$ | 324,000.00 | -3.60% |
| 15 | Asphalt Milling | S.Y. | 15,500 | \$ | 23.00 | \$ | 356,500.00 | \$ | 23.50 | \$ | 364,250.00 | 4.78% |
| 16 | Asphalt Milling Mobilization | S.Y. | 43,333 | \$ | 13.50 | \$ | 584,995.50 | \$ | 13.25 | \$ | 573,499.50 | -2.14% |
| 17 | Unsuitable Sub-base Removal | S.Y. | 35,833 | \$ | 13.50 | \$ | 483,745.50 | \$ | 13.25 | \$ | 473,499.50 | -2.14% |
| 18a | Asphalt 1 1/2" thick | S.Y. | 35,833 | \$ | 13.50 | \$ | 483,745.50 | \$ | 13.25 | \$ | 473,499.50 | -2.14% |
| 18b | 201 to 300 sq yds in size | S.Y. | 35,833 | \$ | 13.50 | \$ | 483,745.50 | \$ | 13.25 | \$ | 473,499.50 | -2.14% |
| 18c | 301 to 400 sq yds in size | S.Y. | 35,833 | \$ | 13.50 | \$ | 483,745.50 | \$ | 13.25 | \$ | 473,499.50 | -2.14% |
| 18d | 401 to 500 sq yds in size | S.Y. | 35,833 | \$ | 13.50 | \$ | 483,745.50 | \$ | 13.25 | \$ | 473,499.50 | -2.14% |
| 19a | Asphalt 4" thick (City std./FDOT) | S.Y. | 3,500 | \$ | 26.00 | \$ | 91,000.00 | \$ | 27.00 | \$ | 94,500.00 | 3.85% |
| 19b | 201 to 300 sq yds in size | S.Y. | 2,500 | \$ | 26.00 | \$ | 65,000.00 | \$ | 27.00 | \$ | 67,500.00 | 3.85% |
| 19c | 301 to 400 sq yds in size | S.Y. | 2,500 | \$ | 26.00 | \$ | 65,000.00 | \$ | 27.00 | \$ | 67,500.00 | 3.85% |
| 19d | 401 to 500 sq yds in size | S.Y. | 2,500 | \$ | 26.00 | \$ | 65,000.00 | \$ | 27.00 | \$ | 67,500.00 | 3.85% |
| 20a | Greater than 500 sq yds. (not to exceed 1,000 yds) | S.Y. | 2,500 | \$ | 26.00 | \$ | 65,000.00 | \$ | 27.00 | \$ | 67,500.00 | 3.85% |
| 20b | Asphalt 8" thick | S.Y. | 1,250 | \$ | 35.00 | \$ | 43,750.00 | \$ | 36.63 | \$ | 45,787.50 | 4.66% |
| 20c | 201 to 300 sq yds in size | S.Y. | 1,250 | \$ | 35.00 | \$ | 43,750.00 | \$ | 36.63 | \$ | 45,787.50 | 4.66% |
| 20d | 301 to 400 sq yds in size | S.Y. | 1,250 | \$ | 35.00 | \$ | 43,750.00 | \$ | 36.63 | \$ | 45,787.50 | 4.66% |
| 21a | 401 to 500 sq yds in size | S.Y. | 1,250 | \$ | 35.00 | \$ | 43,750.00 | \$ | 36.63 | \$ | 45,787.50 | 4.66% |
| 21b | Greater than 500 sq yds. (not to exceed 1,000 yds) | S.Y. | 1,250 | \$ | 35.00 | \$ | 43,750.00 | \$ | 36.63 | \$ | 45,787.50 | 4.66% |
| 22 | Asphalt 12" thick | S.Y. | 2,500 | \$ | 50.00 | \$ | 125,000.00 | \$ | 53.00 | \$ | 132,500.00 | 6.00% |
| 23 | Saw Cut Asphalt | LF | 1,250 | \$ | 1.00 | \$ | 1,250.00 | \$ | 1.00 | \$ | 1,250.00 | 0.00% |
| 24 | Saw Cut Concrete | LF | 1,250 | \$ | 1.00 | \$ | 1,250.00 | \$ | 2.00 | \$ | 2,500.00 | 100.00% |

Extended Price, Percent (Change Dates, (negative numbers are decreases)

| Extended Price, Percent Change Dates, (negative numbers are decreases) | | | | 2011 CONTRACT PRICING USING CURRENT FORECAST | | 050-16 FIRST ROUND PRICING USING CURRENT FORECAST | | 050-16 BAFO PRICING USING CURRENT FORECAST | | Price Change from 2011 by % |
|---|--|--------------|-----------------|--|--|---|----------------------|--|---------------------|-----------------------------|
| No. | Description | UOM | 5 Year Forecast | Warrens Contract (2011 Pricing) | Warrens Previous Contract Pricing Extended | Warrens Extended Price (2011 Pricing) | Extended Bid Pricing | BAFO Pricing | BAFO Extended Price | |
| | | | | | | \$ 11,862,506.00 | 2.1% | \$ 12,116,615.10 | \$ 11,869,359.40 | |
| | | | | | | | \$ 254,109.10 | | | |
| Large Restoration Jobs (Restoration area - Over 200 SY, not to exceed 1,000 SY) | | | | | | | | | | |
| 24a | Mobilization Fee Each Ticket | | | | | | | | | |
| 24b | City of Jacksonville | EA | 250 | \$ 150.00 | \$ 37,500.00 | \$ 150.00 | \$ 37,500.00 | \$ 145.00 | \$ 36,250.00 | -3.33% |
| 24c | St Johns County | EA | 50 | \$ 150.00 | \$ 7,500.00 | \$ 150.00 | \$ 7,500.00 | \$ 145.00 | \$ 7,250.00 | -3.33% |
| 24d | Nassau County | EA | 50 | \$ 150.00 | \$ 7,500.00 | \$ 150.00 | \$ 7,500.00 | \$ 145.00 | \$ 7,250.00 | -3.33% |
| 25 | Clay County | EA | 25 | \$ 150.00 | \$ 3,750.00 | \$ 150.00 | \$ 3,750.00 | \$ 145.00 | \$ 3,625.00 | -3.33% |
| 25 | Right Of Way Permit | EA | 125 | \$ 150.00 | \$ 18,750.00 | \$ 150.00 | \$ 18,750.00 | \$ 145.00 | \$ 18,125.00 | -3.33% |
| Miscellaneous Items/These Apply to All Projects | | | | | | | | | | |
| 26a | Assist JEA On Emergency As/Needed Basis | | | | | | | | | |
| 26b | Crew Hourly Rate | HR | 500 | \$ 250.00 | \$ 125,000.00 | \$ 250.00 | \$ 125,000.00 | \$ 240.00 | \$ 120,000.00 | -4.00% |
| 26c | After Hours/Weekend Crew Hourly Rate | HR | 250 | \$ 250.00 | \$ 62,500.00 | \$ 250.00 | \$ 62,500.00 | \$ 240.00 | \$ 60,000.00 | -4.00% |
| 26d | Compaction of Fill in 6-12" Lifts | S.Y. | 10,000 | \$ 12.00 | \$ 120,000.00 | \$ 12.00 | \$ 120,000.00 | \$ 11.50 | \$ 115,000.00 | -3.67% |
| 26e | Furnish and Deliver Proctored A-3 fill dirt | C.Y. | 500 | \$ 10.00 | \$ 5,000.00 | \$ 10.00 | \$ 5,000.00 | \$ 10.00 | \$ 5,000.00 | 0.00% |
| 26e | Furnish and Deliver LBR 40 Sub-grade Material | C.Y. | 250 | \$ 10.00 | \$ 2,500.00 | \$ 10.00 | \$ 2,500.00 | \$ 10.00 | \$ 2,500.00 | 0.00% |
| Miscellaneous Items/These Apply to All Projects | | | | | | | | | | |
| 27 | Laboratory/Field Testing | (Allowance) | | | | | | | | 100.00% |
| 27a | Valve Jacket Adjustment | | | | | | | | \$ 35,000.00 | |
| 27b | COJ Right Of Way | EA | 500 | \$ 150.00 | \$ 75,000.00 | \$ 150.00 | \$ 75,000.00 | \$ 145.00 | \$ 72,500.00 | -3.33% |
| 27c | FDOT Right Of Way | EA | 150 | \$ 150.00 | \$ 22,500.00 | \$ 150.00 | \$ 22,500.00 | \$ 145.00 | \$ 21,750.00 | -3.33% |
| 27c | County Right Of Way | EA | 25 | \$ 150.00 | \$ 3,750.00 | \$ 150.00 | \$ 3,750.00 | \$ 145.00 | \$ 3,625.00 | -3.33% |
| 28a | Manhole Adjustment | | | | | | | | | |
| 28b | COJ Right Of Way | EA | 500 | \$ 550.00 | \$ 275,000.00 | \$ 550.00 | \$ 275,000.00 | \$ 530.00 | \$ 265,000.00 | -3.64% |
| 28b | FDOT Right Of Way | EA | 150 | \$ 550.00 | \$ 82,500.00 | \$ 550.00 | \$ 82,500.00 | \$ 530.00 | \$ 79,500.00 | -3.64% |
| 28c | County Right Of Way | EA | 25 | \$ 550.00 | \$ 13,750.00 | \$ 550.00 | \$ 13,750.00 | \$ 530.00 | \$ 13,250.00 | -3.64% |
| 30a | Pavement Markings | | | | | | | | | |
| 30b | Skip Traffic Stripe Paint | L.F. | 5,000 | \$ 2.00 | \$ 10,000.00 | \$ 2.00 | \$ 10,000.00 | \$ 1.95 | \$ 9,750.00 | -2.50% |
| 30b | Solid Traffic Stripe Paint | L.F. | 5,000 | \$ 2.00 | \$ 10,000.00 | \$ 2.00 | \$ 10,000.00 | \$ 1.95 | \$ 9,750.00 | -2.50% |
| 30c | 12" Painted Stripe | L.F. | 1,500 | \$ 3.00 | \$ 4,500.00 | \$ 3.00 | \$ 4,500.00 | \$ 2.90 | \$ 4,350.00 | -3.33% |
| 30d | 24" Painted Stripe | L.F. | 1,500 | \$ 3.50 | \$ 5,250.00 | \$ 3.50 | \$ 5,250.00 | \$ 3.40 | \$ 5,100.00 | -2.86% |
| 31 | Thermoplastic Striping, Refer to note 1 below. | (Allowance) | | | | | | | | |
| 32 | Show-up Fee (when site is not ready) | EA | 500 | \$ 150.00 | \$ 75,000.00 | \$ 150.00 | \$ 75,000.00 | \$ 145.00 | \$ 72,500.00 | -3.33% |
| 33 | SUPPLEMENTAL WORK AUTHORIZATION (SWA) | | | | | | | | | |
| 34 | Cold Mix (billed as a pass through at cost) | PER TON | 14,000 | \$ 150.00 | \$ 2,100,000.00 | \$ 150.00 | \$ 2,100,000.00 | \$ 145.00 | \$ 2,030,000.00 | -3.33% |
| 35 | Millings (billed as a pass through at cost) | PER TON | 3,250 | \$ 19.50 | \$ 63,375.00 | \$ 19.50 | \$ 63,375.00 | \$ 18.50 | \$ 60,125.00 | -5.13% |
| 36 | Delivery (per truckload) # of Deliveries forecast based on 15 yard dump truck. | PER DELIVERY | 1,150 | \$ 150.00 | \$ 172,500.00 | \$ 150.00 | \$ 172,500.00 | \$ 150.00 | \$ 172,500.00 | 0.00% |

pf

Restore Disturbed Asphalt Paved Areas

Provide materials, labor, equipment, supervision, delivery and disposal of waste materials services for asphalt restoration.

| Budget Milestones | Date | Original Estimated Annual Spend | O&M Budget | Capital Budget | Contract Increase Amount | Contract Total/Actual Annual Spend | Major Change/Issue |
|----------------------------------|------------|---------------------------------|-----------------|-----------------|--------------------------|------------------------------------|---|
| Contract Planning | April 2016 | \$2,337,269.89 | \$5,843,174.73 | \$5,843,174.73 | - | \$11,686,349.46 | 5 Year Contract, June 2016 - June 2021 |
| FY16 | | \$584,317.47 | \$218,519.63 | \$517,318.34 | - | \$735,837.97 | 3 months of spend |
| FY17 | | \$2,337,269.89 | \$ 1,318,426.21 | \$ 2,202,786.78 | - | \$3,521,212.99 | Increased number of cave-ins and manhole failures from original projections |
| FY18 | | \$2,337,269.89 | \$ 2,159,745.80 | \$ 2,392,049.90 | - | \$4,551,795.70 | Increased number of cave-ins and manhole failures from original projections |
| FY19 spent to date | | \$1,363,407.44 | \$ 810,783.54 | \$ 1,894,639.35 | - | \$2,705,422.89 | Increased number of cave-ins and manhole failures from original projections |
| FY19 remaining | | \$975,962.45 | \$ 920,854.96 | \$ 1,381,282.43 | - | \$2,302,137.39 | Increased number of cave-ins and manhole failures from original projections |
| FY20 | | \$2,337,269.89 | \$ 2,072,937.36 | \$ 3,109,406.04 | - | \$5,182,343.40 | Increased number of cave-ins and manhole failures from original projections |
| FY21 (through June) | | \$1,752,952.42 | \$ 1,554,703.02 | \$ 2,332,054.53 | - | \$ 3,886,757.55 | Increased number of cave-ins and manhole failures from original projections |
| Change Order | May 2019 | | \$ 4,491,364.28 | \$ 6,737,046.41 | \$ 11,228,410.69 | \$ 22,914,770.15 | Increased number of cave-ins and manhole failures from original projections |
| Renewal Option | June 2021 | | \$ 2,157,037.89 | \$ 3,235,556.83 | \$ 5,392,594.72 | | Contract renewal for 1 year |
| Estimate at Completion w/renewal | | | | | | \$ 28,307,364.87 | |

| | |
|--|--|
| | |
|--|--|



Formal Bid and Award System

Award # 5 March 3, 2022

Type of Award Request: BID (IFB)
Requestor Name: Betancur, Maria A.
Requestor Phone: (904) 665-7215
Project Title: Construction Services for the SR200 – William Burgess Blvd to Police Lodge Rd - Trans – RW Project
Project Number: 8006348
Project Location: JEA
Funds: Capital
Budget Estimate: \$6,520,317.00

Scope of Work:

The scope of work for this solicitation includes construction services to install 11,832 LF of 16-inch PVC DR18 reclaimed water main by open cut method, 644 LF of 20-inch HDPE DR-11 under Main Waterway - Plummer Creek, 746 LF of 20-inch HDPE DR-11 under Minor Branch - Plummer Creek, 1,413 LF of 20-inch HDPE DR-11, 145 LF of 24-inch Jack-and-Bore under Three Rivers Drive, and 145 LF of 24-inch Jack-and-Bore under Edwards Rd in Nassau County. The new main will provide reclaimed water for irrigation service in the area.

JEA IFB/RFP/State/City/GSA#: 1410512246
Purchasing Agent: Kruck, Dan
Is this a Ratification?: NO

RECOMMENDED AWARDEE(S):

| Name | Contact Name | Email | Address | Phone | Amount |
|---|----------------------|--|---|----------------|----------------|
| D.B.E. MANAGEMENT, LLC dba DBE UTILITY SERVICES | Amy Blackwater Ganey | amy@dbehdd.com | 13387 Bryan Road, Loxahatchee, FL 33470 | (561) 508-3713 | \$5,027,563.06 |

Amount for entire term of Contract/PO: \$5,027,563.06
Award Amount for remainder of this FY: \$1,055,028.00
Length of Contract/PO Term: Project Completion
Begin Date: 06/08/2022
End Date: Project Completion (Expected: June 2023)
JSEB Requirement: Seven Percent (7%) Requirement

Comments on JSEB Requirements:

Crossbow Cattle (Sod) – 1.46%
M&J Striping, Inc. (Striping) – 0.07%
DJ Contracting of Jacksonville, Inc. (Rock, Trucking, Sand, Fill) – 4.98%
D&J Erosion Control Specialists, Inc. (Silt Fencing) – 0.35%

Bullard Fence (FDOT Fence) – 0.28%

BIDDERS:

| Name | Amount |
|---|----------------|
| D.B.E. MANAGEMENT, LLC dba DBE UTILITY SERVICES | \$5,027,563.06 |
| T.G. UTILITY COMPANY, INC. | \$5,526,747.00 |
| T B LANDMARK CONSTRUCTION, INC. | \$6,271,301.81 |
| CALLAWAY CONTRACTING, INC. | \$6,898,470.00 |
| GARNEY COMPANIES, INC. | \$7,225,585.00 |

Background/Recommendations:

Advertised on 12/21/2021. Nine (9) prime contractors attended the mandatory pre-bid meeting held on 01/11/2022. At Bid opening on 02/15/2022, JEA received five (5) Bids. D.B.E. Management, LLC dba DBE Utility Services is the lowest responsive and responsible Bidder. A copy of the Bid Form Workbook are attached as backup.

The award amount of \$5,027,563.06 is approximately 22.9% lower than the budget estimate due to the contractor self-performing the trenchless crossings, and the overestimating unsuitable soil replacement costs. The costs have been reviewed by the JEA project staff and deemed reasonable compared to past bids.

1410512246– Request approval to award a contract to D.B.E. Management, LLC dba DBE Utility Services for construction services for the Construction Services for the SR200 – William Burgess Blvd to Police Lodge Rd - Trans – RW project in the amount of \$5,027,563.06, subject to the availability of lawfully appropriated funds.

Manager: DiMeo, Elizabeth A. - Mgr W/WW Project Management
Director: Conner, Sean M. - Dir W/WW Project Engineering & Construction
VP: Vu, Hai X. - VP Water Wastewater Systems

APPROVALS:

Chairman, Awards Committee **Date**

Budget Representative **Date**

Addendum 3 - Appendix B - Bid Form
1410512246 Construction Services for SR200 – William Burgess Blvd to Police Lodge Rd - Trans – RW Project

Submit electronically through Zycus as described in Appendix C – Zycus Supplier Instructions

Company Name: DBE Management LLC dba DBE Utility Services

Company's Address: 13387 Bryan Road Loxahatchee, FL 33470

License Number: CUC1225812

Phone Number: 561-508-3708 FAX No: 561-508-3713 Email Address: amy@dbehdd.com

BID SECURITY REQUIREMENTS

- ☐ None required
☒ Certified Check or Bond Five Percent (5%)

TERM OF CONTRACT

- ☐ One Time Purchase
☐ Annual Requirements
☒ Other, Specify - Project Completion

SAMPLE REQUIREMENTS

- ☒ None required
☐ Samples required prior to Bid Opening
☐ Samples may be required subsequent to Bid Opening

SECTION 255.05, FLORIDA STATUTES CONTRACT BOND

- ☐ None required
☒ Bond required 100% of Bid Award

QUANTITIES

- ☐ Quantities indicated are exacting
☒ Quantities indicated reflect the approximate quantities to be purchased Throughout the Contract period and are subject to fluctuation in accordance with actual requirements.

INSURANCE REQUIREMENTS

Insurance required

PAYMENT DISCOUNTS

- ☐ 1% 20, net 30
☐ 2% 10, net 30
☐ Other _____
☒ None Offered

ENTER YOUR BID FOR SOLICITATION 1410512246

TOTAL BID PRICE

**Total Bid Price for the Project
(enter total from cell G59 in the Bid Workbook)**

\$ 5,027,563.06

☒ I have read and understood the Sunshine Law/Public Records clauses contained within this solicitation. I understand that in the absence of a redacted copy my proposal will be disclosed to the public "as-is".

RESPONDENT'S CERTIFICATION

By submitting this Response, the Respondent certifies that it has read and reviewed all of the documents pertaining to this Solicitation, that the person signing below is an authorized representative of the Responding Company, that the Company is legally authorized to do business in the State of Florida, and that the Company maintains in active status an appropriate contractor's license for the work (if applicable). The Respondent also certifies that it complies with all sections (including but not limited to Conflict of Interest and Ethics) of this Solicitation.

We have received addenda

1 through 3


Handwritten Signature of Authorized Officer of Company or Agent

2/15/2022

Date

Dustin Ertle, President
Printed Name and Title



Formal Bid and Award System

Award #6 March 3, 2022

Type of Award Request: CHANGE ORDER
Requestor Name: McDermet, David S.
Requestor Phone: (904) 437-7197
Project Title: Lakeshore WTP - Reservoir and Wellhead No. 2 Rehabilitation
Project Number: 8007620
Project Location: JEA
Funds: Capital
Budget Estimate: \$100,000.00

Scope of Work:

This request is for an engineering firm to provide evaluation, design, and services during construction of the rehabilitation of both the reservoirs and Well No. 2 at the Lakeshore Water Treatment Plant.

The Lakeshore Water Treatment Plant, located at 2113 Hamilton Street, was constructed in the early 1950's. The plant includes source water wells, two ground storage reservoirs, a sodium hypochlorite system for disinfection and high service pumps for conveying treated water to the distribution system. The reservoirs were inspected in 2015, and recommendations were made for rehabilitation. This includes roof resurfacing, interior and exterior wall resurfacing, new access stairs, hatches and level transmitters. In addition, the pump, wellhead and pump building for Well No. 2 were damaged in 2016 and need to be replaced.

JEA IFB/RFP/State/City/GSA#: 086-17
CPA #: 168951
Purchasing Agent: Kruck, Dan
Is this a Ratification?: NO

RECOMMENDED AWARDEE(S):

| Name | Contact Name | Email | Address | Phone | Amount |
|------------------|-----------------|---------------------------|---|----------------|-------------|
| HAZEN AND SAWYER | Jean Paul Silva | jsilva@hazenandsawyer.com | 6675 Corporate Center Pkw, Ste 330 Jacksonville, FL 32216 | (561) 997-8070 | \$91,660.00 |

Amount of Original Award: \$559,096.00
Date of Original Award: 10/05/2017
Change Order Amount: \$91,660.00
New Not-To-Exceed Amount: \$650,756.00
Length of Contract/PO Term: Project Completion
Begin Date: 10/01/2019
End Date: Project Completion (Expected: February 2024)
JSEB Requirement: Evaluation Criteria 5% Goal

Comments on JSEB Requirements:

Original Award

Comments on JSEB Requirements:

RE Holland 1.5%

Four Waters Engineering 5.9%

Complete Services Well Drilling 6.7%

This Amendment

N/A

Background/Recommendations:

Originally approved by Awards Committee on 10/05/2017 in the amount of \$559,096.00 to Hazen and Sawyer. A copy of the original award is attached as backup.

This award request is for a change order to the design contract of Hazen and Sawyer for the Lakeshore WTP - Reservoir and Wellhead No. 2 Rehabilitation project. During the initial design services for this project in 2018 an inspection was performed on the water reservoirs and the reservoirs were in better condition than expected. Hazen and Sawyer finished the design documents, and JEA delayed the construction portion until the FY22 and FY23 budget years. This award request is to bring the 100% design documents up to the current JEA 2022 standards. A copy of the quote from Hazen and Sawyer is attached for reference. The hourly rates for have been increased via the consumer-price-index (CPI) to determine the hourly rates for this amendment.

JEA paid Hazen and Sawyer \$414,172.00 out of the original award amount for the completion of the 100% design documents. The quote for this change order includes the cost for updating the prior design to current standards, and updating the fees for the previously approved services during construction (SDC) with the current hourly rates. The difference needed from the original award amount for this change order is \$91,660.00.

Request approval to award a change order to Hazen and Sawyer for additional engineering for the Lakeshore WTP - Reservoir and Wellhead No. 2 Rehabilitation project in the amount of \$91,660.00, for a new not-to-exceed amount of \$650,756.00, subject to the availability of lawfully appropriated funds.

Manager: DiMeo, Elizabeth A. - Mgr W/WW Project Management
Director: Conner, Sean M. - Dir W/WW Project Engineering & Construction
VP: Vu, Hai X. - VP Water Wastewater Systems

APPROVALS:

| | |
|-----------------------------------|-------------|
| Chairman, Awards Committee | Date |
|-----------------------------------|-------------|

| | |
|------------------------------|-------------|
| Budget Representative | Date |
|------------------------------|-------------|



CPA 168951

10/5/17

2

Formal Bid and Award System

Award #2 October 5, 2017

Type of Award Request: PROPOSAL (RFP)
Request #: 1868
Requestor Name: Gaines, Brian A.
Requestor Phone: (904) 665-6246
Project Title: Lakeshore WTP - Reservoir and Wellhead No. 2 Rehabilitation
Project Number: 8003982
Project Location: JEA
Funds: Capital
Award Estimate: \$640,000.00

Scope of Work:

This request is for an engineering firm to provide evaluation, design, and services during construction of the rehabilitation of both the reservoirs and Well No. 2 at the Lakeshore Water Treatment Plant.

The Lakeshore Water Treatment Plant, located at 2113 Hamilton Street, was constructed in the early 1950's. The plant includes source water wells, two ground storage reservoirs, a sodium hypochlorite system for disinfection and high service pumps for conveying treated water to the distribution system. The reservoirs were inspected in 2015, and recommendations were made for rehabilitation. This includes roof resurfacing, interior and exterior wall resurfacing, new access stairs, hatches and level transmitters. In addition, the pump, wellhead and pump building for Well No. 2 were damaged in 2016 and need to be replaced.

JEA IFB/RFP/State/City/GSA#: 086-17
Purchasing Agent: Kruck, Daniel Robert (Dan)
Is this a Ratification?: NO

RECOMMENDED AWARDEE(S):

| Name | Contact Name | Email | Address | Phone | Amount |
|------------------|-----------------|---------------------------|--|----------------|--------------|
| HAZEN AND SAWYER | Jean Paul Silva | Jsilva@Hazenandsawyer.Com | 6675 Corporate Center Pkw, Suite 330 Jacksonville, FL 32216 | (561) 997-8070 | \$559,096.00 |

Amount for entire term of Contract/PO: \$559,096.00
Award Amount for remainder of this FY: \$318,942.00
Length of Contract/PO Term: Project Completion
Begin Date (mm/dd/yyyy): 10/15/2017
End Date (mm/dd/yyyy): Project Completion
Renewal Options: No
JSEB Requirement: Evaluation Criteria (5% Goal)
Comments on JSEB Requirements:
RE Holland 1.5%; Four Waters Engineering 5.9%; Complete Services Well Drilling 6.7%

BIDDER:

| Name | Amount | Rank |
|------------------|--------------|------|
| HAZEN AND SAWYER | \$559,096.00 | 1 |

Background/Recommendations:

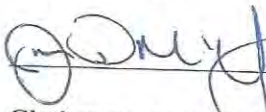
Advertised 04/07/2017. Two (2) companies attended the pre-proposal meeting on 04/19/2017. At Proposal opening on 05/09/2017, JEA received one (1) Proposal. The Companies on the Proposers List were contacted about not attending the pre-proposal meeting and stated they lacked staff availability to attend/propose. The public evaluation meeting was conducted on 6/26/2017, and JEA deemed Hazen and Sawyer the most qualified to perform the work. A copy of the evaluation matrix is attached as backup.

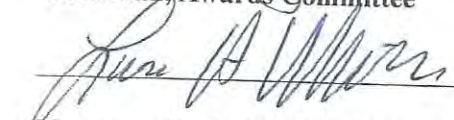
The proposed total engineering fee of \$559,096.00 is twelve percent (12%) lower than estimated and is deemed to be reasonable. Compared to estimated construction costs of \$3,300,000.00, the proposed design fee of \$422,576.00 is 12.8% of construction cost, and services during construction (SDC) fee of \$136,520.00 is 4.1% of construction cost. A copy of the negotiated fees are attached as backup.

086-17 - Request approval to award a contract to Hazen and Sawyer for the Lakeshore WTP Reservoir and Well No. 2 Rehabilitation project in the amount of \$559,096.00, subject to the availability of lawfully appropriated funds.

Director: Marshall, Raynetta C. - Dir, WWW Grid Project Eng & Construction
VP: Roche, Brian J. - VP/GM Water Wastewater Systems

APPROVALS:


Chairman, Awards Committee
10-5-17
Date


Manager, Capital Budget Planning
10/5/17
Date

086-17Lakeshore WTP Reservoir and Wellhead No. 2 Rehabilitation

| Vendor Rankings | Brian Gaines | Shawn Arnold | Hai Vu | Σ Rank | Overall Rank |
|------------------|--------------|--------------|--------|--------|--------------|
| Hazen and Sawyer | 1 | 1 | 1 | 3 | 1 |

| Brian Gaines | Professional Staff Experience (30 Points) | Design Approach and Work Plan (40 Points) | Company Experience (20 Points) | Proximity to JEA (5 Points) | JSEB (5 Points) | Total | Rank |
|------------------|---|---|--------------------------------|-----------------------------|-----------------|-------|------|
| Hazen and Sawyer | 25.58 | 25 | 19 | 3 | 4 | 76.58 | 1 |

| Shawn Arnold | Professional Staff Experience (30 Points) | Design Approach and Work Plan (40 Points) | Company Experience (20 Points) | Proximity to JEA (5 Points) | JSEB (5 Points) | Total | Rank |
|------------------|---|---|--------------------------------|-----------------------------|-----------------|-------|------|
| Hazen and Sawyer | 26.92 | 36 | 19 | 3 | 4 | 88.92 | 1 |

| Hai Vu | Professional Staff Experience (30 Points) | Design Approach and Work Plan (40 Points) | Company Experience (20 Points) | Proximity to JEA (5 Points) | JSEB (5 Points) | Total | Rank |
|------------------|---|---|--------------------------------|-----------------------------|-----------------|-------|------|
| Hazen and Sawyer | 27.58 | 33 | 19.5 | 3 | 4 | 87.08 | 1 |

| Overall Averages | Professional Staff Experience (30 Points) | Design Approach and Work Plan (40 Points) | Company Experience (20 Points) | Proximity to JEA (5 Points) | JSEB (5 Points) | Total |
|------------------|---|---|--------------------------------|-----------------------------|-----------------|-------|
| Hazen and Sawyer | 26.69 | 31.33 | 19.17 | 3.00 | 4.00 | 84.19 |



Hazen and Sawyer
6675 Corporate Center Parkway, Suite 330
Jacksonville, FL 32216 • 904-296-1503

ENGINEERING SERVICES PROPOSAL FOR JEA – Lakeshore WTP **Amendment 1 – 2022 Reservoir Rehabilitation Restart**

1/28/2022

1.0 Project Description

The Lakeshore Water Treatment Plant (WTP) has two above ground concrete water reservoirs, which were constructed in the 1950s and in need of structural assessment and rehabilitation to ensure continued service to the northern service grid. Hazen and Sawyer (Hazen) inspected the reservoirs and issued 100% drawings and specifications to JEA in 2018. Due to the reservoir condition being better than expected, JEA elected to postpone constructing improvements to the reservoirs for three years. The Lakeshore WTP Reservoir Rehabilitation project was moved to JEA's FY 2022 and 2023 budget.

The scope of services for Amendment 1, restart of the Lakeshore WTP Reservoir Rehabilitation project, will consist of updating the 100% drawings and specifications as well as completing the original Reservoir related Bidding and Services During Construction scope of services.

2.0 Scope of Services

Hazen and Sawyer (Hazen) will perform the following tasks in association with Amendment 1 to the Lakeshore WTP 2022 Reservoir Rehabilitation Restart.

Task 1 – Project Management

Hazen will provide the following services for the duration of the amendment.

- Project Coordination: Coordinate with JEA's Project Manager throughout the project via meetings, email and phone conversations to respond to questions, provide regular project updates, and discuss planning activities and other project requirements.
- Manage Budget: Manage the budget, schedule, and invoicing throughout the duration of project and conduct monthly conference calls with the team to coordinate activities and work effort.

Task 1 Deliverables:

- Project updates
- Meeting notes
- Invoices

Task 2 – Update 100% Drawings and Specifications

The purpose of this task is to review existing drawings and specifications (issued June 2018), update as discussed during the December 2021 coordination meeting (summarized below), and submit to JEA for final review. Contract Document updates include the following:

- a. Review / update specifications including 1) Reservoir B temporary blower system requirements and coordinate with the plant-wide construction sequence and 2) Revise substantial and final completion dates in tech specs to match JEA's RFP (300 days for Reservoir A and 100 days for Reservoir B)
- b. Review Building Code requirements and JEA standards for the design conformance to current code and standards; update drawings and specifications based on this review
- c. Adjust measurement and payment specification and bid form with adjusted quantities
- d. Review quantities of the JEA developed 100% Opinion of Probable Construction Costs (OPCC) and advise JEA of any changes or adjustments
- e. Assess condition of existing and exposed electrical conduits and determine if replacement is necessary. Assess condition of existing grounding. One site visit by qualified electrical personnel is anticipated for this task

Hazen will meet with JEA to review and discuss the revised 100% documents. Hazen will prepare and distribute meeting minutes as well as address minor comments based on JEA's review of the 100% submittal so as to develop and provide bid ready Contract Documents. Major comments or changes to the scope will be considered supplemental work.

Task 2 Deliverables:

- Six paper copies and one electronic copy of the 100% design documents submittal; drawings will be 22 x 34 inch "full size" sheets

Task 3 – Allowance for Miscellaneous Items

This task consists of an allowance for miscellaneous topics including the following:

- a. Unidentified or unplanned meetings
- b. Updates to Project Scoping Statement if requested during construction
- c. Coordination with JEA's chosen contractor (assume E&G Engineering) regarding P&ID drawings
- d. Permitting assistance

This is a JEA controlled allowance and no work is to be undertaken without the advanced approval of JEA.

Task 3 Deliverables:

- TBD

Task 4 – Bidding Services (original scope Task 7, relevant portions only)

Task 4.1 – Pre-Bid Conference

Hazen will attend one pre-bid conference with prospective contractor(s) for the Reservoir Rehabilitation project.

Task 4.2 – Addenda Issuance

Hazen will provide timely responses to the inquiries of prospective bidders by assisting JEA with preparing written addenda to interpret and clarify the bidding documents. JEA will develop and distribute the addenda to the bidders.

Task 4.3 – Conformed Drawings and Specifications

Hazen will provide Conformed Drawings and Specifications to JEA. JEA will be responsible for the coordination and distribution of conformed copies of the construction contract.

Task 4 Deliverables:

- Addenda
- Six hard copies and one electronic copy of Conformed Construction Documents; drawings will be 22 x 34 inch “full size” sheets

Task 5 – Services During Construction (original scope Task 8, relevant portions only)

Task 5.1 – Construction Administration

Hazen will provide the following services during the construction phase of the Reservoir rehabilitation projects, consisting of the following:

- Contract Interpretations and Clarifications – Hazen will issue technical interpretations and clarifications of the Construction Contract Documents in a timely manner, but not to exceed five working days of their request. Non-technical administrative interpretations will be issued by JEA.
- Change Orders – Changes to the Contract may be the result of unforeseen conditions or interferences identified by the Contractor during the routine progress of work, inadvertent omissions (betterment) issues in the contract documents, or minor additional improvements requested by JEA after the project bid date. JEA will review and handle justifications of change orders. Hazen will provide a maximum of 24 hours in assistance to JEA with change orders. It is noted that Hazen’s services do not include claims analysis or litigation support.

Task 5.2 – Submittal Review

Hazen will perform the following submittal review tasks.

- Shop Drawings – Hazen will review and process shop drawings and other submittals which the Construction Contractor is required to submit within 15 working days of receipt of the submittal except for special items requiring longer review time if so noted in the Construction Contract Documents. The review will be for conformance with the design intent and compliance with the information presented in the Construction Contract Documents. Hazen will determine the acceptability of materials and equipment proposed by the Construction Contractor. Shop Drawing reviews will be limited to two reviews per submittal. If the second review cannot be approved the Contractor will fund the additional reviews.
- Asset Management Information Submittals – Hazen will review asset management information submittals and completed work submitted as part of the Contractor's monthly invoice.

Task 5.3 – Record Drawings

Hazen will prepare and distribute to JEA within 60 days of the date of receipt of marked-up, red-lined field drawings from the Construction Contractor, two sets of 22 x 34 inch prints. Hazen will also deliver one AutoCAD electronic version of the record drawings in Hazen CAD standard and one pdf version of the record drawings. The record drawings will incorporate those changes made during the construction process, based on the marked-up prints, drawings and other data furnished by the Construction Contractor to Hazen.

Task 5.4 – Meetings

Hazen will attend construction meetings as follows:

- Pre-Construction Meeting – Hazen will participate at one pre-construction meeting for the Reservoir Rehabilitation project to answer technical questions that may arise.
- Construction Progress Meetings - Once every month, JEA will conduct a progress meeting with the Construction Contractor to review project status and identify issues that may affect the project schedule. Such issues may include suggested changes and/or methods to keep the project on schedule (except for the Construction Contractor's means, methods, techniques, sequences or procedures of construction). This Scope of Services has been based on one representative of Hazen attending the meetings, up to a maximum of 14 meetings. Additional staff from Hazen will also attend the meeting when required by JEA.

Task 5.5 – Specialty Inspection Services

Hazen will provide specialty inspection services during the construction phase of the projects. The inspections will be performed by the Engineer of Record and/or Structural Engineer for the duration of the construction project to observe construction and monitor work as needed. The inspections will provide observation of the construction to help determine whether the provisions of the Contract Documents are being fulfilled and to reasonably protect JEA against defects and deficiencies in the work of the Contractor. Compensation is based on an assumed 14-month project

duration, with a level of effort not to exceed three hours per week on average, a site visit substantial completion walkthrough and a site visit for final completion walkthrough. If the duration of construction is greater than 14 months at the average level of effort, additional effort for this task will be compensated under “Additional Services”. In addition:

- Hazen, working principally through JEA’s construction inspector, will assist the Contractor in the understanding the intent of the Contract Documents; and will assist in serving as JEA’s liaison with the Contractor.
- Neither Hazen nor JEA will bear any responsibility for the Contractor’s construction means or methods, nor have any responsibility for job site safety.

Task 5 Deliverables:

- Shop Drawing Reviews
- Responses to Contractor RFI’s
- Substantial Completion Construction Punchlist
- Record Drawings and Closeout Documents

3.0 Schedule

The work described in Tasks 1 and Task 2 (Design) of this Scope of services will be completed in 60 calendar days. It is assumed Task 4 (Bidding timeline controlled by JEA) will be completed in 120 calendar days from completion of Tasks 1 and 2. Task 5 will be completed in 460 calendar days from completion of Task 4.

4.0 Key Assumptions

In addition to the assumptions identified under each task, the following assumptions have also been made:

- 1) JEA will complete update to 100% OPCC.
- 2) JEA will provide the blower for Reservoir B rehabilitation.
- 3) JEA personnel are coordinating with FDEP to adjust the permit timeline.
- 4) All drawings will be prepared using Revit or AutoCAD software using Hazen’s drawing standards in effect at the time of the notice to proceed.
- 5) JEA will review all documents and provide written comments within two weeks of receipt by JEA unless otherwise noted.
- 6) A condition assessment is not included in the scope of this amendment.
- 7) Any sampling will be by JEA personnel.
- 8) Hourly rate task-level costs are estimates; Hazen reserves the right to transfer funds between hourly rate tasks and staff at different classifications with prior approval from JEA’s project manager.
- 9) JEA will prepare Bid/Contract Documents (including front-end documents) incorporating Hazen’s supplied technical specifications.
- 10) JEA will obtain any necessary property easements, including temporary easements. Surveys for easements and rights-of-way are not included in this authorization.

- 11) JEA will coordinate any necessary road blocking and traffic redirection for crane access to construction site.
- 12) JEA will coordinate any necessary protection of power lines and provide any necessary temporary light pole design.
- 13) The Construction Period is anticipated to last approximately 14 months from the Contractor's Notice-to-Proceed to Final Completion, and the fee is predicated upon such a schedule.
- 14) No hazardous materials or environmental mitigation activities are anticipated.
- 15) Mechanical improvement to the plant is limited to the addition of aerators. Design of alternate hydrogen sulfide removal system (other than aerators and upgrades to the existing ventilation) and pH adjustment are not included at this time. At an influent pH of 7.5, anticipated sulfides removal via aerators will be approximately 15% (with no pH adjustment upstream) and be limited to H₂S gas; aerators will not remove dissolved sulfide species (HS⁻ and S²⁻).
- 16) No emergency generators or other means of standby power are included.
- 17) The design of a new fence system and a site security system with card-activated slide gates is not included.
- 18) The design of temporary fencing for use during construction is not included and is assumed responsibility of Contractor.
- 19) A landscaping plan with irrigation is not included.
- 20) PLC programming and necessary HMI screen modifications under this project will be completed by JEA or [the Contractor's] System Integrator. Control strategies will be written by Hazen.

5.0 Method of Compensation

Tasks 1, 2, and 3 will be invoiced based on Lump Sum method of payment. Tasks 4 and 5 will be based on hourly rate, not-to-exceed (time and material) method of payment. The total amount for the JEA Lakeshore Reservoir Rehabilitation Restart is **\$236,584**. See **Attachment 1** for breakdown of project fee and hourly rate by classification. If additional work is required that exceeds the total amount, an amendment will be provided and subject to approval by JEA prior to proceeding with the requested work. Progress payments will be submitted monthly and if hourly rate tasks are included will identify personnel, hours worked, hourly rate, and personnel classification. Rates will be annually adjusted based on the Consumer Price Index for All Urban Consumers (CPI-U).



JEA – Lakeshore WTP
Amendment 1 – 2022 Reservoir Rehabilitation Restart

January 28, 2022

ATTACHMENT 1

Engineering Fee Breakdown

JEA LAKESHORE WTP 2022 RESERVOIR REHABILITATION RESTART (AMENDMENT 1)
Date: 1/12/2022

| Rate Category | | Senior Associate 2 | Senior Associate 1 | Senior Associate 1 | Senior Associate 2 | Senior Associate 2 | Associate | Principal Engineer | Principal Designer | Admin | Hazen Total Hours | Direct Expenses (estimated) | Total Fee (\$) |
|---|--|--------------------|--------------------|--------------------|--------------------|--------------------|------------|--------------------|--------------------|------------|-------------------|-----------------------------|-------------------|
| Rate | | \$250 | \$210 | \$210 | \$250 | \$250 | \$183 | \$135 | \$123 | \$96 | | | |
| | | PM | Structural | Various | QAQC | Electrical | Structural | Support Eng. | CAD | Clerical | | | |
| Task 1 | Project Management | 42 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | \$ 12,230 |
| | | 42 | | 8 | | | | | | | 50 | 50 | \$ 12,230 |
| Task 2 | Update 100% Drawings and Specifications | 40 | 14 | 10 | 7 | 22 | 8 | 36 | 44 | 12 | 205 | 800 | \$ 37,130 |
| a. | Review/update specs (Res B temp blower and SC/FC) | 20 | 8 | 2 | 2 | 2 | | 8 | | 12 | 54 | 200 | \$ 10,532 |
| b. | Review/update specs and drawings (Building Code/JEA Standards) | 8 | 4 | 2 | 4 | | 8 | 24 | 40 | 12 | 102 | 200 | \$ 15,236 |
| c. | Update measurement and payment spec | 2 | | 2 | 1 | | | | | | 5 | 100 | \$ 1,270 |
| d. | Review JEA provided OPCC | 8 | 2 | 2 | | 2 | | 4 | | | 18 | 100 | \$ 3,980 |
| e. | Electrical conduit / grounding condition assessment | 2 | | 2 | | 18 | | | 4 | | 26 | 200 | \$ 6,112 |
| Task 3 | Allowance for Miscellaneous Items | 16 | 16 | 16 | 0 | 16 | 0 | 40 | 8 | 8 | 120 | 500 | \$ 22,372 |
| | | 16 | 16 | 16 | | 16 | | 40 | 8 | 8 | 120 | 500 | \$ 22,372 |
| Original Scope Items to be Completed During This Effort | | 116 | 92 | 0 | 0 | 48 | 232 | 264 | 40 | 196 | 988 | 2,700 | \$ 164,852 |
| Task 4 Bidding (see original scope Task 7) | | 20 | 12 | | | 12 | | 72 | 16 | 32 | 164 | 200 | \$ 25,480 |
| Task 5 Services During Construction (see original scope Task 8) | | 96 | 80 | | | 36 | 232 | 192 | 24 | 164 | 824 | 2,500 | \$ 139,372 |
| Total | | 214 | 122 | 34 | 7 | 86 | 240 | 340 | 92 | 216 | 1363 | \$ 4,050 | \$ 236,584 |

Senior Associate 1 Roles: Mechanical, Structural

Senior Associate 2 Roles: PM, Electrical, QAQC



Formal Bid and Award System

Award #7 March 3, 2022

Type of Award Request: CONTRACT INCREASE
Request #: 233
Requestor Name: Veasey, Nancy A. - Dir Special Projects
Requestor Phone: (904) 665-6439
Project Title: Furniture Procurement, Delivery and Service for New Headquarters
Project Number: 8006820
Project Location: JEA
Funds: Capital
Budget Estimate: \$2,000,000.00 (Workstations, Standard offices, Task Chairs) and \$3,000,000.00 (Conference, Collaboration, Training, Other Ancillary)

Scope of Work:

The purpose of this Request for Proposal (RFP) is to evaluate and select a firm ("Firm" or "Company" or "Proposer") from the prior Request for Qualifications, 101180 Furniture Procurement, Delivery and Service for New JEA Headquarters Qualified Category List in order for JEA to select the best value for providing furniture initially including workstations and standard office furniture. "Best Value" means the highest overall value to JEA with regards to pricing, quality, warranty and service, ability to meet project timeline and other selection criteria.

JEA established Qualified Category List(s) for Furniture Procurement for the new headquarters with four (4) firms awarded a position on the list. The Qualified Category List will be utilized to seek response packages and bids for specified workstation, bench design and for standard office furniture. JEA intends to select one firm to provide the furniture outlined in the technical specification and may also award the majority of the ancillary and support furniture needs to the same firm. JEA reserves the right to procure all or portions of the ancillary furniture from other firms on the qualified list. The terms and conditions for this solicitation were included and agreed upon by the qualified firms during Request for Qualifications 101180.

JEA IFB/RFP/State/City/GSA#: 1410376448
Purchasing Agent: Selders, Elaine
Is this a Ratification?: NO

RECOMMENDED AWARDEE(S):

| Name | Contact Name | email | Address | Phone | Amount |
|--------------|--------------|-------------------------------|---|--------------|----------------|
| PERDUE, INC. | Justin Perez | justin.perez@perdueoffice.com | 5 W Forsyth Street, Suite 100, Jacksonville, FL 32202 | 904-256-5548 | \$1,272,654.75 |

Amount of Original Award: \$1,327,101.95
Date of Original Award: 11/18/2021
Change Order Amount: \$1,272,654.75

List of Previous Change Order/Amendments:

| CPA # | Amount | Date |
|--------|--------------|------------|
| 202226 | \$680,820.85 | 01/20/2022 |

New Not-To-Exceed Amount: \$3,280,577.55
Length of Contract/PO Term: Project Completion
Begin Date (mm/dd/yyyy): 12/01/2021
End Date (mm/dd/yyyy): Project Completion (Expected: September 30, 2022)
JSEB Requirement: N/A – Optional

Background/Recommendations:

Originally awarded and approved by the Awards Committee on 11/18/2021 to Perdue, Inc. for the first phase of furniture purchases, in the amount of \$1,327,101.95. On 01/20/2022, a contract increase was approved in the amount of \$680,820.85 for the second phase of furniture purchases for a revised not to exceed amount of \$2,007,922.80. The previous awards are attached as backup.

This contract increase is for the purchase of phase three, which includes the majority of the ancillary furniture. The ancillary items include furniture for board/multi-purpose room, much of customer center area, additional workstations for pre-service, security offices and special purpose office spaces, agile training rooms, customer care training rooms, innovation lab, tech depot, work cafés (breakrooms), respite/quiet rooms, executive office suite areas, collaboration spaces including open collaboration, team and huddle rooms, small waiting and gathering areas and phone rooms. Furniture remaining to be ordered includes a portion of the lobby furniture, outdoor furniture, lockers, standard file cabinets, limited office and reception furniture, and other miscellaneous items. The additional ancillary furniture will be grouped in upcoming phases.

Documentation for this award includes a summary spreadsheet attached as backup showing room or space descriptions by building level in the third phase order. Additionally, Perdue has prepared a highly detailed invoice summary showing how the order will be filled and delivered by floor level for installation. This document is 285 pages and available for review through Procurement. Perdue requires a fifty percent (50%) deposit to place the order. The total amount for this phase is \$1,272,654.75 and a deposit of \$636,327.38 is required upon placement of the order.

Request approval to award a contract increase to Perdue, Inc. for furniture procurement, delivery and service for the new JEA headquarters for the third phase for a total amount of \$1,272,654.75, for a new not-to-exceed amount of \$3,280,577.55, subject to the availability of lawfully appropriated funds.

Director: Veasey, Nancy A. – Dir Special Projects
Chief: McElroy, Alan D. – VP Supply Chain & Operations Support

APPROVALS:

Chairman, Awards Committee **Date**

Budget Representative **Date**



Formal Bid and Award System

Award #3 January 20, 2022

Type of Award Request: CONTRACT INCREASE
Request #: 233
Requestor Name: Veasey, Nancy A. - Dir Special Projects
Requestor Phone: (904) 665-6439
Project Title: Furniture Procurement, Delivery and Service for New Headquarters
Project Number: 8006820
Project Location: JEA
Funds: Capital
Budget Estimate: \$2,000,000.00 (Workstations, Standard offices, Task Chairs) and \$3,000,000.00 (Conference, Collaboration, Training, Other Ancillary)

Scope of Work:

The purpose of this Request for Proposal (RFP) is to evaluate and select a firm ("Firm" or "Company" or "Proposer") from the prior Request for Qualifications, 101180 Furniture Procurement, Delivery and Service for New JEA Headquarters Qualified Category List in order for JEA to select the best value for providing furniture initially including workstations and standard office furniture. "Best Value" means the highest overall value to JEA with regards to pricing, quality, warranty and service, ability to meet project timeline and other selection criteria.

JEA established Qualified Category List(s) for Furniture Procurement for the new headquarters with four (4) firms awarded a position on the list. The Qualified Category List will be utilized to seek response packages and bids for specified workstation, bench design and for standard office furniture. JEA intends to select one firm to provide the furniture outlined in the technical specification and may also award the majority of the ancillary and support furniture needs to the same firm. JEA reserves the right to procure all or portions of the ancillary furniture from other firms on the qualified list. The terms and conditions for this solicitation were included and agreed upon by the qualified firms during Request for Qualifications 101180.

JEA IFB/RFP/State/City/GSA#: 1410376448
Purchasing Agent: Selders, Elaine L.
Is this a Ratification?: NO

RECOMMENDED AWARDEE(S):

| Name | Contact Name | Email | Address | Phone | Amount |
|--------------|--------------|-------------------------------|---|--------------|--------------|
| PERDUE, INC. | Justin Perez | justin.perez@perdueoffice.com | 5 W Forsyth Street, Suite 100, Jacksonville, FL 32202 | 904-256-5548 | \$680,820.85 |

Amount of Original Award: \$1,327,101.95
Date of Original Award: 11/18/2021
Contract Increase Amount: \$680,820.85
New Not-To-Exceed Amount: \$2,007,922.80
Length of Contract/PO Term: Project Completion
Begin Date (mm/dd/yyyy): 12/01/2021

End Date (mm/dd/yyyy):

Project Completion (Expected: September 30, 2022)

JSEB Requirement:

N/A - Optional

Background/Recommendations:

Originally awarded and approved by the Awards Committee on 11/18/2021 to Perdue, Inc. for the first phase of furniture purchases, in the amount of \$1,327,101.95. The original award is attached as backup.

JEA intends to purchase the furniture in phases. During the first phase, the majority of the items for the standard workstations, bench workstations and portions of items for the standard offices were purchased. In the second phase, the task chairs, majority of conference tables and chairs, standard office storage items and tables and chairs for Level 2 traditional training rooms will be purchased. Additional ancillary furniture will be grouped in upcoming phases.

Documentation for this award includes a summary spreadsheet attached as backup showing items, unit prices and quantities in the second phase order. Additionally, Perdue has prepared a highly detailed invoice summary showing how the order will be filled and delivered by floor level for installation. This document is 76 pages and available for review through Procurement. Perdue requires a fifty percent (50%) deposit to place the order. The total amount for this phase is \$680,820.85 and a deposit of \$340,410.43 is required upon placement of the order.

Request approval to award a contract increase to Perdue, Inc. for furniture procurement, delivery and service for new JEA headquarters for the second phase for a total amount of \$680,820.85, for a new total not-to-exceed amount of \$2,007,922.80, subject to the availability of lawfully appropriated funds.

Director: Veasey, Nancy A. - Dir Special Projects

VP: McElroy, Alan D. - VP Supply Chain & Operations Support

APPROVALS:

Stephen Datz 1/20/22

Chairman, Awards Committee

Date

Laure A Whitmer 1/20/22

Budget Representative

Date



Formal Bid and Award System

Award #8 November 18, 2021

Type of Award Request: REQUEST FOR PROPOSAL (RFP)
Request #: 233
Requestor Name: Veasey, Nancy A. - Dir Special Projects
Requestor Phone: (904) 665-6439
Project Title: Furniture Procurement, Delivery and Service for New Headquarters
Project Number: 8006820
Project Location: JEA
Funds: Capital
Budget Estimate: \$2,000,000.00 (Workstations, Standard offices, Task Chairs)

Scope of Work:

The purpose of this Request for Proposal (RFP) is to evaluate and select a firm ("Firm" or "Company" or "Proposer") from the prior Request for Qualifications, 101180 Furniture Procurement, Delivery and Service for New JEA Headquarters Qualified Category List in order for JEA to select the best value for providing furniture initially including workstations and standard office furniture. "Best Value" means the highest overall value to JEA with regards to pricing, quality, warranty and service, ability to meet project timeline and other selection criteria.

JEA established Qualified Category List(s) for Furniture Procurement for the new headquarters with four (4) firms awarded a position on the list. The Qualified Category List will be utilized to seek response packages and bids for specified workstation, bench design and for standard office furniture. JEA intends to select one firm to provide the furniture outlined in the technical specification and may also award the majority of the ancillary and support furniture needs to the same firm. JEA reserves the right to procure all or portions of the ancillary furniture from other firms on the qualified list. The terms and conditions for this solicitation were included and agreed upon by the qualified firms during Request for Qualifications 101180.

JEA IFB/RFP/State/City/GSA#: 1410376448
Purchasing Agent: Selders, Elaine L.
Is this a Ratification?: NO

RECOMMENDED AWARDEE(S):

| Name | Contact Name | Email | Address | Phone | Amount |
|--------------|--------------|-------------------------------|---|--------------|----------------|
| PERDUE, INC. | Justin Perez | justin.perez@perdueoffice.com | 5 W Forsyth Street, Suite 100, Jacksonville, FL 32202 | 904-256-5548 | \$1,327,101.95 |

Amount for entire term of Contract/PO: \$1,327,101.95
Award Amount for remainder of this FY: \$1,327,101.95
Length of Contract/PO Term: Project Completion
Begin Date (mm/dd/yyyy): 12/01/2021
End Date (mm/dd/yyyy): Project Completion (Expected: September 30, 2022)
JSEB Requirement: N/A - Optional

PROPOSERS:

| Name | Amount | Rank |
|--------------------------------|----------------|------|
| PERDUE, INC. | \$2,705,088.37 | 1 |
| WORKSCAPES, INC. | \$2,995,610.00 | 2 |
| OFFICE ENVIRONMENTS & SERVICES | \$2,628,010.00 | 3 |

Background/Recommendations:

Advertised on 07/30/2021. At proposal opening on 08/24/2021, JEA received three (3) proposals. JEA evaluated the proposals based on pricing, quality, serviceability, timeline, ancillary furniture information, employee purchase program platforms and mockup presentations deeming Perdue, Inc. the most highly qualified company. A copy of the evaluation results and bid leveling document are attached as backup. The amounts shown on the bid leveling document and above in some instances included multiple options for the same item, examples are task and guest chairs, and additional optional items.

JEA will purchase furniture in phases. The first phase, which is considered in this award is the majority of items for the standard workstations, bench workstations and portions of items for the standard offices. There are 285 standard workstations, 174 standard bench workstations and 58 standard offices. The original proposal quantities were adjusted during the floor and furniture layouts during the interior design phase. The items not yet included for standard workstation and offices are storage options for the standard offices, accessories and task chairs. These items are being further reviewed and quantified. The estimated budget amount above was inclusive of the standard offices, workstations and task chairs. Additional workstations, office furniture, accessories and ancillary furniture and task chairs will be selected in the near future.

After determining the most highly qualified company, the JEA team reviewed alternate monitor arms, alternate storage options for bench workstations, alternate desktop power modules with wireless charging and miscellaneous accessories. The team also selected a less expensive table for the standard offices and selected a mid-priced guest chair from those proposed and presented by the top ranked firm.

Documentation for this Award includes a summary spreadsheet attached as backup showing items, unit prices and quantities in the first phase order. Additionally, Perdue has prepared a highly detailed invoice summary showing how the order will be filled and delivered by floor level for installation. This document is 81 pages and available for review through Procurement. Perdue requires a fifty percent (50%) deposit to place the order. The total amount for this phase is \$1,327,101.95 and a deposit of \$663,550.98 is required upon placement of the order. The award summary is slightly different than the individual unit item prices based on how the workstations and bench stations are grouped to be installed, i.e. groupings are typically four (4), six (6) or eight (8) workstations and each grouping requires appropriate end panels and common fence lengths.

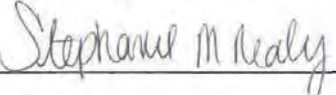
1410376448 – Request approval to award a contract to Perdue, Inc. for Furniture Procurement, Delivery and Service for New Headquarters for the first phase for a total amount of \$1,327,101.95, subject to the availability of lawfully appropriated funds.

Director: Veasey, Nancy A. - Dir Special Projects

VP: McElroy, Alan D. - VP Supply Chain & Operations Support

APPROVALS:

 11/18/21
Chairman, Awards Committee **Date**

 11/18/21
Budget Representative **Date**

JEA

ANCILLARY ALL FLOORS 3RD ORDER

| | | |
|---|-----------------|-------------------|
| <u>MANUFACTURER:</u> | | Steelcase |
| <u>DEALER:</u> | | Perdue |
| <u>ITEM/Description</u> | | |
| | | |
| <u>1ST FLOOR</u> | <u>Quantity</u> | <u>Total Cost</u> |
| MULTIPURPOSE ROOM 120C | 1 | \$98,390.52 |
| CUSTOMER SOLUTION 113 | 1 | \$16,089.07 |
| 157A/ 157B & 159 AREAS | 1 | \$8,110.84 |
| 158B/146/PHONE 149 AREAS | 1 | \$17,632.19 |
| 115/ 110B/110/110A/160B/162 AREAS | 1 | \$43,781.91 |
| SECURITY 163 | 1 | \$4,620.09 |
| | | |
| <u>2ND FLOOR</u> | <u>Quantity</u> | <u>Total Cost</u> |
| AGILE 217 | 1 | \$19,679.43 |
| AGILE TRAINING 225 | 1 | \$18,543.23 |
| INNOVATION STUDIO 216 | 1 | \$22,944.63 |
| CORRIDOR 219/ PANTRY 215/ PHONE ROOM/ PRODUCTION ROOM 212 | 1 | \$31,118.22 |
| | | |
| <u>3RD FLOOR</u> | <u>Quantity</u> | <u>Total Cost</u> |
| HUDDLE ROOMS/ CORRIDER 351/ PHONE ROOMS/ RESPITE | 1 | \$56,119.76 |
| COLLABORATION 344 | 1 | \$12,461.91 |
| TRAINING 352 | 1 | \$24,427.43 |
| TRAINING 353 | 1 | \$12,009.72 |
| WORK CAFÉ 350/ MULTIPURPOSE TRASH BIN | 1 | \$21,799.97 |
| | | |
| <u>4TH FLOOR</u> | <u>Quantity</u> | <u>Total Cost</u> |
| FIX AND BUILD 441 | 1 | \$9,844.95 |
| HUDDLE/PHONE ROOMS/OPEN AREAS | 1 | \$51,175.21 |
| RESPITE/QUIET 458 | 1 | \$10,778.33 |
| TECH DEPOT | 1 | \$25,784.66 |
| WORK CAFÉ | 1 | \$18,724.62 |
| GROUP WORK AREA | 1 | \$67,619.40 |

| 5TH FLOOR | | |
|---|----------|----------------|
| | Quantity | Total Cost |
| GROUP WORK AREA | 1 | \$59,368.55 |
| OPEN COLLAB/ HUDDLE ROOMS/ PHONE ROOMS | 1 | \$37,070.77 |
| RESPITE/QUIET 558 | 1 | \$8,795.28 |
| OPEN WORK AREA/ TEAMS ROOMS | 1 | \$32,300.71 |
| WORK CAFÉ | 1 | \$18,724.62 |
| 6TH FLOOR | | |
| | Quantity | Total Cost |
| GROUP WORK AREA | 1 | \$49,588.67 |
| CORRIDOR 609A/ HUDDLE ROOMS | 1 | \$11,267.56 |
| INFO SECURITY 641 | 1 | \$7,689.34 |
| OPEN LOUNGE/ OPEN COLLAB/ OPEN OFFICE 618/ OPEN WORK 615/ PHONE ROOMS/ TEAM ROOMS/ WELLNESS 651 | 1 | \$58,218.60 |
| WORK CAFÉ | 1 | \$18,724.62 |
| RESPITE/QUIET 658 | 1 | \$10,778.33 |
| 7TH FLOOR | | |
| | Quantity | Total Cost |
| EXEC. ADMIN | 1 | \$58,188.19 |
| EXEC OFFICES | 1 | \$102,384.50 |
| PANTRY/ CONFERENCE SOFAS/WORK CAFÉ/WAITING AREAS | 1 | \$74,585.71 |
| | | |
| FRIEGHT | | \$3,123.21 |
| DESIGN TIME | | \$28,015.00 |
| LABOR | | \$102,175.00 |
| GRAND TOTAL | | \$1,272,654.75 |



Formal Bid and Award System

Award #8 March 3, 2022

Type of Award Request: PROPOSAL (RFP)

Request #: 93

Requestor Name: Bacmeister, Jennifer O.

Requestor Phone: (904) 665-4656

Project Title: Progressive Design-Build Services for the Commonwealth Service Center (CWSC) Renovation Project

Project Number: 8006793

Project Location: JEA

Funds: Capital

Budget Estimate: \$6,201,400.00 (Total Budget)

Scope of Work:

The purpose of this Request for Proposals (RFP) is to evaluate and select a vendor that can provide Progressive Design Build services for the Commonwealth Service Center (CWSC) renovation project (collectively, the "Work" or "Services"). The scope of work for this project includes architectural, engineering, and contractor services which will be competitively sourced as a single team through this solicitation process. The selected team will create a 10% drawing (floor plan), to be approved by all stakeholders. The 30%, 60%, 90% and 100% design documents will then be created, with stakeholder review at each phase. The required construction documents will be forwarded to Capital Planning for information and review.

Long Lead Items: Facilities will purchase long lead and expensive capital items to reduce the construction timeline, where such purchase is beneficial to JEA.

The scope of services includes, but is not necessarily limited to, the items listed below. The following items are considered basic to the RFP response:

1. Complete reformatting and upgrading of all occupied spaces, including offices, classrooms, conference rooms, maintenance and testing shops, open areas, break rooms and restrooms; includes finishes, furniture and fixtures.
 - The Admin area will be separate from the Service Area, Warehouse Area and Train Well
 - Adequate storage is to be provided for materials, equipment, and record-keeping
 - The former tax collector's office will become part of the JEA space
 - Restrooms must be sized to accommodate crew assignments, not average building occupancy
2. Upgrade of warehouse doors and storefront systems (including windows) to current wind-load standards.

JEA IFB/RFP/State/City/GSA#: 1410334650

Purchasing Agent: Selders, Elaine L.

Is this a Ratification?: NO

RECOMMENDED AWARDEE(S):

| Name | Contact Name | Email | Address | Phone | Amount |
|---------------------|--------------|----------------------------|---------------------------------------|-------------------|--------------|
| THE HASKELL COMPANY | Ken Boeser | Kenneth.Boeser@haskell.com | 111Riverside Ave, Jacksonville, FL | (904) 357-4250 | \$527,961.00 |

Amount for entire term of Contract/PO: \$527,961.00

Award Amount for remainder of this FY: \$159,300.00

Length of Contract/PO Term: Project Completion

Begin Date (mm/dd/yyyy): 04/01/2022

End Date (mm/dd/yyyy): Project Completion (Phase 1 Design Expected: October 2023)

JSEB Requirement: Five Percent (5%) Evaluation Criteria

Comments on JSEB Requirements:

Baker Consulting & Engineering, LLC – Structural Engineering – 5%

PROPOSERS:

| Name | Amount | Rank |
|------------------------------------|--------------|------|
| THE HASKELL COMPANY | \$527,961.00 | 1 |
| AULD & WHITE CONSTRUCTORS, LLC | N/A | 2 |
| FORESIGHT CONSTRUCTION GROUP, INC. | N/A | 3 |
| MARAND BUILDERS, INC. | N/A | 4 |

Background/Recommendations:

Advertised on 06/07/2021. Fifteen (15) prime companies attended the mandatory pre-proposal meeting held on 06/17/2021. At proposal opening on 07/07/2021, JEA received four (4) Proposals. The public evaluation meeting was held on 09/24/2021 and JEA deemed The Haskell Company the most qualified to perform the work. A copy of the evaluation results and negotiated Phase 1 fees are attached as backup.

Negotiations with The Haskell Company were successfully completed for Phase 1 of this project. This project will be delivered using the progressive design-build method, splitting the effort into two (2) phases. Phase 1 includes engineering design up to sixty percent (60%), support services and pre-construction services, which is approximately nine percent (9%) of the estimated project cost. The Phase 1 negotiated fees proposed were compared with similar facilities design projects and have been deemed reasonable. After Phase 1, a Guaranteed Maximum Price (GMP) will be established, with an option of an “off ramp” if construction pricing is not acceptable. Upon acceptance of the GMP and subsequent approval of the Awards Committee, Phase 2 will commence. Phase 2 will include the final design, services during construction (SDC) and construction costs.

1410334650 – Request approval to award a contract to The Haskell Company for the Progressive Design-Build Services for the Commonwealth Service Center (CWSC) Renovation Project in the amount of \$527,961.00, subject to the availability of lawfully appropriated funds.

Manager: Crane, Christopher T. - Manager, Facilities Operations

Director: Brunell, Baley L. - Director, Facilities & Fleet Services

VP: McElroy, Alan D. - VP Supply Chain & Operations Support

APPROVALS:

| | |
|-----------------------------------|-------------|
| Chairman, Awards Committee | Date |
|-----------------------------------|-------------|

| | |
|------------------------------|-------------|
| Budget Representative | Date |
|------------------------------|-------------|

**Specification: 1410334650 - Progressive Design-Build Services for the Commonwealth Service Center (CWSC)
Renovation Project**

| Vendor Rankings | M. Poteet | J. Bacmeister | T. Skinner | B. Brunell | T. Wiertsema | Σ Rank | Rank |
|-------------------------|-----------|---------------|------------|------------|--------------|--------|----------|
| Auld & White | 3 | 1 | 2 | 2 | 1 | 9 | 2 |
| Foresight | 2 | 2 | 3 | 3 | 3 | 13 | 3 |
| Haskell | 1 | 3 | 1 | 1 | 2 | 8 | 1 |
| Marand | 4 | 4 | 4 | 4 | 4 | 20 | 4 |

| M. Poteet | Professional Staff Experience (25 Points) | Design Approach and Work Plan (40 Points) | Company Experience (30 Points) | JSEB (5 Points) | Total | Rank |
|-------------------------|---|---|--------------------------------|-----------------|-------|------|
| Auld & White | 18.89 | 32 | 27 | 4 | 81.89 | 3 |
| Foresight | 21.67 | 34.00 | 25.00 | 4 | 84.67 | 2 |
| Haskell | 18.56 | 37.00 | 27.00 | 4 | 86.56 | 1 |
| Marand | 16.00 | 22.00 | 5.00 | 0 | 43 | 4 |

| J. Bacmeister | Professional Staff Experience (25 Points) | Design Approach and Work Plan (40 Points) | Company Experience (30 Points) | JSEB (5 Points) | Total | Rank |
|-------------------------|---|---|--------------------------------|-----------------|-------|------|
| Auld & White | 21.22 | 35 | 28 | 4 | 88.22 | 1 |
| Foresight | 22.11 | 29.00 | 28.00 | 4 | 83.11 | 2 |
| Haskell | 20.22 | 35.00 | 20.00 | 4 | 79.22 | 3 |
| Marand | 19.33 | 33.00 | 20.00 | 0 | 72.33 | 4 |

| T. Skinner | Professional Staff Experience (25 Points) | Design Approach and Work Plan (40 Points) | Company Experience (30 Points) | JSEB (5 Points) | Total | Rank |
|-------------------------|---|---|--------------------------------|-----------------|-------|------|
| Auld & White | 17.89 | 26 | 26 | 4 | 73.89 | 2 |
| Foresight | 19.22 | 21.00 | 20.00 | 4 | 64.22 | 3 |
| Haskell | 18.33 | 29.00 | 24.00 | 4 | 75.33 | 1 |
| Marand | 15.11 | 13.00 | 16.00 | 0 | 44.11 | 4 |

| B. Brunell | Professional Staff Experience (25 Points) | Design Approach and Work Plan (40 Points) | Company Experience (30 Points) | JSEB (5 Points) | Total | Rank |
|-------------------------|---|---|--------------------------------|-----------------|-------|------|
| Auld & White | 17.89 | 30 | 21 | 4 | 72.89 | 2 |
| Foresight | 21.00 | 26.00 | 19.00 | 4 | 70 | 3 |
| Haskell | 20.89 | 27.00 | 26.00 | 4 | 77.89 | 1 |
| Marand | 17.00 | 24.00 | 19.00 | 0 | 60 | 4 |

| T. Wiertsema | Professional Staff Experience (25 Points) | Design Approach and Work Plan (40 Points) | Company Experience (30 Points) | JSEB (5 Points) | Total | Rank |
|-------------------------|---|---|--------------------------------|-----------------|-------|------|
| Auld & White | 18.72 | 31 | 26 | 4 | 79.72 | 1 |
| Foresight | 15.06 | 22 | 21.00 | 4 | 62.06 | 3 |
| Haskell | 16.78 | 32 | 22.00 | 4 | 74.78 | 2 |
| Marand | 14.28 | 17 | 20.00 | 0 | 51.28 | 4 |



HASKELL
America's Design-Build Leader®

November 12, 2021

**JEA - CWSC RENOVATIONS
PHASE I SERVICES
FEE PROPOSAL**

| | | | |
|----------------------|-----------------------|-----------------------------|----------------|
| PROJECT NAME: | JEA CWSC Renovations | PROJECT #: | 4400606 |
| DESCRIPTION: | Phase I Fee Proposal | PROJECT DIRECTOR: | John Albro |
| LOCATION: | JACKSONVILLE, FLORIDA | SNR DESIGN MANAGER: | Bet Lentz |
| | | PRECONSTRUCTION MNC: | Brent McMaster |

| DIRECT COSTS | | TOTALS |
|---|-------|------------------|
| <u>PRECONSTRUCTION SERVICES - THE HASKELL COMPANY</u> | | |
| PRECONSTRUCTION | | \$183,929 |
| PRECONSTRUCTION SUBTOTAL | | \$183,929 |
| <u>ARCHITECTURAL/ENGINEERING SERVICES</u> | | |
| DESIGN SERVICES - HASKELL A/E | | \$232,520 |
| VDC - LASER SCANNING | | \$9,000 |
| DESIGN SERVICES SUBTOTAL | | \$241,520 |
| <u>ALLOWANCES</u> | | |
| STRUCTURAL REVIEW - HASKELL A/E | | \$28,000 |
| CIVIL REVIEW - HASKELL A/E (40HRS @ \$137/HR) | | \$5,480 |
| PRECONSTRUCTION VALUE ENGINEERING/ALTERNATE PRICING | | \$12,540 |
| SENIOR ESTIMATE (80HRS @ \$130/HR) | | |
| PRECONSTRUCTION MANAGER (20HRS @ \$107/HR) | | |
| ALLOWANCES SUBTOTAL | | \$46,020 |
| TOTAL DIRECT COSTS | | \$471,469 |
| PROFESSIONAL LIABILITY | 1.20% | \$6,336 |
| DESIGN-BUILD FEE | 6.50% | \$34,317.45 |
| CONTINGENCY | 3% | \$15,839 |
| TOTAL | | \$527,961 |

Notes:

- 1) Pricing based on lump sum Phase I Services engagement agreement.
- 2) Fee proposal based on estimated hours as qualified herein. Please reference Scope of Services for further clarification.
- 3) Preconstruction services proposal based on estimate deliverables at 30% and 60% as further described in the attached Scope of Services.
- 4) Design services proposal based on design deliverables at 10%, 30%, and 60% as defined herein.



Formal Bid and Award System

Award #9 March 3, 2022

Type of Award Request: REQUEST FOR PROPOSALS (RFP)

Request #: 280

Requestor Name: Ventura, Mildred - Contract Specialist

Requestor Phone: (904) 665-5201

Project Title: Facilities Landscaping – Open Market

Project Number: HE30801 and D0101 (KGS)

Project Location: JEA

Funds: O&M

Budget Estimate: \$1,844,855.00

Scope of Work:

The purpose of this Request for Proposal (RFP) is to evaluate and select a vendor or multiple vendors that can provide economical pricing for basic landscape maintenance and chemical spraying. These services must be performed in a safe manner, and the results must be aesthetically pleasing as these facilities represent JEA to the rate-paying public. Landscaping will be performed at approximately 918 JEA facilities located in Duval, Nassau, St. Johns and Clay Counties in Florida, including St. Johns River Power Park (SJRPP) and Pelotes Island. These locations include exteriors of buildings, lots, lift stations, electric substations, wells, water treatment plants, wastewater treatment plants, communication towers, road access, fences, areas around electric power lines, highways, the exterior of generating plants, and trails. Contracts are to be awarded as follows: Contract number 1 (District 2), Contract number 2 (District 3a, 3b and 3c) and Contract number 3 (District 6ESS, District 7, SJRPP and Kennedy Generating Station (KGS)).

JEA IFB/RFP/State/City/GSA#: 1410460646

Purchasing Agent: Selders, Elaine L.

Is this a Ratification?: NO

RECOMMENDED AWARDEE(S):

| Name | Contact Name | Email | Address | Phone | Amount |
|--|---------------|-----------------------------|--|--------------|----------------|
| A SANCTUARY HOUSE OF NORTH FLORIDA INC. | Jasper Hatten | hattenj@att.net | 12131 Cancun Drive, Jacksonville, FL 32225 | 904-477-3743 | \$113,448.00 |
| FREEDOM LANDSCAPE AND LAWN MAINTENANCE INC. | Zakee Furqan | Zakee0126@gmail.com | 7232 Smyrna St, Jacksonville, FL 32208 | 904-343-9714 | \$442,745.70 |
| J&D MAINTENANCE AND SERVICES OF NORTH FLORIDA, LLC | Rodney Evans | office@janddmaintenance.com | 4779 Phyllis St, Jacksonville, FL 32254 | 904-384-8411 | \$1,656,919.34 |

Amount for entire term of Contract/PO: \$2,213,113.04
Award Amount for remainder of this FY: \$1,459,404.80 and \$27,680.00 (KGS)
Length of Contract/PO Term: One (1) Year w/Two (2) – One (1) Yr. Renewals
Begin Date (mm/dd/yyyy): 04/01/2022
End Date (mm/dd/yyyy): 03/30/2023
Renewal Options: YES - Two (2) - One (1) Yr. Renewals
JSEB Requirement: N/A – Optional
 Freedom Landscape and A Sanctuary House are both JSEB's.

PROPOSERS:

| DISTRICT 2D RANKINGS | | |
|--|----------------|--------|
| Name | Amount | Score |
| A SANCTUARY HOUSE OF NORTH FLORIDA INC. | \$113,448.00 | 91.00 |
| FREEDOM LANDSCAPE AND LAWN MAINTENANCE INC. | \$120,795.00 | 85.45 |
| EAGLE LAWN CARE OF N.E. FLORIDA, INC. | \$141,741.54 | 84.35 |
| J&D MAINTENANCE AND SERVICES OF NORTH FLORIDA, LLC | \$234,720.00 | 69.00 |
| DISTRICT 3A, 3B, 3C RANKINGS | | |
| Name | Amount | Score |
| FREEDOM LANDSCAPE AND LAWN MAINTENANCE INC. | \$442,745.70 | 89.10 |
| EAGLE LAWN CARE OF N.E. FLORIDA, INC. | \$608,953.35 | 79.95 |
| J&D MAINTENANCE AND SERVICES OF NORTH FLORIDA, LLC | \$791,670.00 | 73.56 |
| A SANCTUARY HOUSE OF NORTH FLORIDA INC. | Disqualified | |
| DISTRICT 6ESS, 7WTR, SJRPP, KGS RANKINGS | | |
| Name | Amount | Score |
| J&D MAINTENANCE AND SERVICES OF NORTH FLORIDA, LLC | \$1,656,919.34 | 100.00 |
| FREEDOM LANDSCAPE AND LAWN MAINTENANCE INC. | \$1,697,802.88 | 89.10 |
| EAGLE LAWN CARE OF N.E. FLORIDA, INC. | No Bid | |
| A SANCTUARY HOUSE OF NORTH FLORIDA INC. | Disqualified | |

Background/Recommendations:

Advertised on 11/01/2021. Seven (7) prime companies attended the optional pre-proposal meeting held on 11/09/2021. At Proposal opening on 11/23/2021, JEA received four (4) Proposals. This solicitation was split into three different sections: District 2D, District 3A, 3B, 3C and District 6ESS, 7WTR, SJRPP and KGS. A Sanctuary House of North Florida Inc. was disqualified from the two larger districts due to not meeting the minimum qualifications. JEA evaluated the companies on rates, company experience, and quality metrics. A Sanctuary House of North Florida Inc., Freedom Landscape and Lawn Maintenance Inc. and J&D Maintenance and Services of North Florida, LLC have been deemed the highest evaluated Responsive and Responsible Proposers. A copy of the Proposal Forms, Proposal Workbook Summaries and Evaluation Results are attached as backup.

The award amount of \$2,213,113.04 is approximately eighteen percent (18%) higher than the budgeted estimate. When compared to the previous contract there was a thirty-six percent 36% normalized increase in rates (\$528,467.04) and the addition of 63 sites requiring services (\$206,392.00) driving the overall contract increase of \$734,859.04. Additional funding for FY22 is being utilized from an approved one-time project.

1410460646 – Request approval to award a contract to A Sanctuary House of North Florida Inc. in the amount of \$113,448.00, Freedom Landscape and Lawn Maintenance Inc. in the amount of \$442,745.70 and J&D Maintenance and Services of North Florida, LLC in the amount of \$1,656,919.34 for Facilities Landscaping – Open Market for a total not-to-exceed amount of \$2,213,113.04, subject to the availability of lawfully appropriated funds.

Manger: Crane, Christopher T. - Manager, Facilities Operations
Director: Brunell, Baley L. - Dir Facilities & Fleet Services
VP: McElroy, Alan D. - VP Supply Chain & Operations Support

APPROVALS:

| | |
|-----------------------------------|-------------|
| Chairman, Awards Committee | Date |
|-----------------------------------|-------------|

| | |
|------------------------------|-------------|
| Budget Representative | Date |
|------------------------------|-------------|

ADDENDUM 2 - APPENDIX B - PROPOSAL FORM
1410460646 FACILITIES LANDSCAPING MAINTENANCE – OPEN MARKET

PROPOSER INFORMATION:

PROPOSER NAME: A Sanctuary House of N. FL Inc.
BUSINESS ADDRESS: 12131 Cancun Drive
CITY, STATE, ZIP CODE: Jacksonville FL 32225
TELEPHONE: 904-477-3743
FAX: _____
EMAIL OF CONTACT: hattenj@att.net
WEBSITE: N/A

QUOTATION OF RATES

Maximum score for criterion is: 60 Points

Proposer shall provide pricing for the Contract by completing the enclosed **Appendix B – Proposal Workbook and Proposal Form**. The rates provided shall be all-inclusive and shall include all profit, taxes, benefits, travel, and all other overhead items.

Please note, the rates or lump sums quoted by Proposer on the Proposal Form must be firm prices, not estimates. ANY MODIFICATIONS, EXCEPTIONS, OR OBJECTIONS CONTAINED WITHIN THE PROPOSAL FORM SHALL SUBJECT THE PROPOSAL TO DISQUALIFICATION.

| Description of Services – 1410460646 FACILITIES LANDSCAPING MAINTENANCE – OPEN MARKET | Total One (1) Year Proposal Price |
|--|-----------------------------------|
| Total One (1) Year Proposal Price – Transfer total from Appendix B – Proposal Workbook | \$ 2,089,977.00 |

PROFESSIONAL EXPERIENCE, LOCATION, AND AVAILABILITY OF PROPOSER'S STAFF

Maximum score for this criterion: 20 Points

Proposer shall provide one (1) resume for the Account Manager available to work on the JEA engagement. At minimum, the resume shall present the employee's name, title, and years of service with the company, applicable professional registrations, education and work experience. The Proposer shall also submit a verifiable local business address for this person, their availability and their expected average response time to JEA.

Maximum points for this criterion: 20 points

Proposer shall submit a written "Quality Plan" addressing, at a minimum, the following elements for JEA, and how it specifically applies to the following needs of JEA:

- 1.) Coverage, Adequacy and Frequency of Inspection
 - 1.1 How will Proposer determine if the specified Service Levels are being met across all sites?
 - 1.2 What will be inspected?
 - 1.3 Who will complete the inspections?
 - 1.4 What will be the frequency of inspections?
 - 1.5 What will be the coverage (Frequency of all sites receiving inspections)?
- 2.) Frequency and Delivery of Metric Reporting
 - 2.1 What Quality Metrics will be tracked?
 - 2.2 How often will reporting be provided to JEA?
 - 2.3 How will the data be made available to JEA?
 - 2.4 How will the reporting be delivered? Electronically or via hard copy?
- 3.) Follow Up Action Plan for Failed Inspections
 - 3.1 Please propose a "Follow Up Action Plan" for any failed inspections.

ADDENDUM 2 - APPENDIX B - PROPOSAL FORM
1410460646 FACILITIES LANDSCAPING MAINTENANCE – OPEN MARKET

4.) Chemical Weed Control Services

4.1 Do you intend to subcontract the Chemical Weed Control Services? If so, describe the experience of the subcontractor you will use and how will you manage their services? If you will not be subcontracting these services, provide details on how you will manage that portion of the contract.

Proposers's Certification

By submitting this Proposal, the Proposer certifies (1) that the Proposer has read and reviewed all of the documents pertaining to this RFP and agrees to abide by the terms and conditions set forth therein, (2) that the person signing below is an authorized representative of the Proposer, and (3) that the Proposer is legally authorized to do business and maintains an active status, in the State of Florida. The Company certifies that its recent, current, and projected workload will not interfere with the Proposer's ability to Work in a professional, diligent and timely manner.

The Proposer certifies, under penalty of perjury, that it holds all licenses, permits, certifications, insurances, bonds, and other credentials required by law, contract or practice to perform the Work. The Proposer also certifies that, upon the prospect of any change in the status of applicable licenses, permits, certifications, insurances, bonds or other credentials, the Proposer shall immediately notify JEA of status change.

Please initial below:

____ (Initials) I have read and understood the Sunshine Law/Public Records clauses contained within this solicitation. I understand that in the absence of a redacted copy my proposal will be disclosed to the public "as-is".

We have received addenda 1 through 2

Jasper Hatten
Signature of Authorized Officer of Proposer or Agent

Jasper Hatten
Printed Name & Title

11-22-2021

Date

904-477-3743

Phone Number

ADDENDUM 2 - APPENDIX B - PROPOSAL FORM
1410460646 FACILITIES LANDSCAPING MAINTENANCE – OPEN MARKET

PROPOSER INFORMATION:

PROPOSER NAME: FREEDOM LANDSCAPE & LAWN MAINTENANCE, INC.
BUSINESS ADDRESS: 7232 SMYRNA STREET
CITY, STATE, ZIP CODE JACKSONVILLE, FL 32208
TELEPHONE: (904) 343-9714
FAX: N/A
EMAIL OF CONTACT: zakee0126@gmail.com
WEBSITE: N/A

QUOTATION OF RATES

Maximum score for criterion is: 60 Points

Proposer shall provide pricing for the Contract by completing the enclosed **Appendix B – Proposal Workbook and Proposal Form**. The rates provided shall be all-inclusive and shall include all profit, taxes, benefits, travel, and all other overhead items.

Please note, the rates or lump sums quoted by Proposer on the Proposal Form must be firm prices, not estimates. ANY MODIFICATIONS, EXCEPTIONS, OR OBJECTIONS CONTAINED WITHIN THE PROPOSAL FORM SHALL SUBJECT THE PROPOSAL TO DISQUALIFICATION.

| Description of Services – 1410460646 FACILITIES LANDSCAPING MAINTENANCE – OPEN MARKET | Total One (1) Year Proposal Price |
|--|--|
| Total One (1) Year Proposal Price – Transfer total from Appendix B – Proposal Workbook | \$ 2,254,743.58 \$2,261,343.58 |

PROFESSIONAL EXPERIENCE, LOCATION, AND AVAILABILITY OF PROPOSER'S STAFF

Maximum score for this criterion: 20 Points

Proposer shall provide one (1) resume for the Account Manager available to work on the JEA engagement. At minimum, the resume shall present the employee's name, title, and years of service with the company, applicable professional registrations, education and work experience. The Proposer shall also submit a verifiable local business address for this person, their availability and their expected average response time to JEA.

Maximum points for this criterion: 20 points

Proposer shall submit a written "Quality Plan" addressing, at a minimum, the following elements for JEA, and how it specifically applies to the following needs of JEA:

- 1.) Coverage, Adequacy and Frequency of Inspection
 - 1.1 How will Proposer determine if the specified Service Levels are being met across all sites?
 - 1.2 What will be inspected?
 - 1.3 Who will complete the inspections?
 - 1.4 What will be the frequency of inspections?
 - 1.5 What will be the coverage (Frequency of all sites receiving inspections)?
- 2.) Frequency and Delivery of Metric Reporting
 - 2.1 What Quality Metrics will be tracked?
 - 2.2 How often will reporting be provided to JEA?
 - 2.3 How will the data be made available to JEA?
 - 2.4 How will the reporting be delivered? Electronically or via hard copy?
- 3.) Follow Up Action Plan for Failed Inspections
 - 3.1 Please propose a "Follow Up Action Plan" for any failed inspections.

ADDENDUM 2 - APPENDIX B - PROPOSAL FORM
1410460646 FACILITIES LANDSCAPING MAINTENANCE – OPEN MARKET

4.) Chemical Weed Control Services

4.1 Do you intend to subcontract the Chemical Weed Control Services? If so, describe the experience of the subcontractor you will use and how will you manage their services? If you will not be subcontracting these services, provide details on how you will manage that portion of the contract.

Proposers's Certification

By submitting this Proposal, the Proposer certifies (1) that the Proposer has read and reviewed all of the documents pertaining to this RFP and agrees to abide by the terms and conditions set forth therein, (2) that the person signing below is an authorized representative of the Proposer, and (3) that the Proposer is legally authorized to do business and maintains an active status, in the State of Florida. The Company certifies that its recent, current, and projected workload will not interfere with the Proposer's ability to Work in a professional, diligent and timely manner.

The Proposer certifies, under penalty of perjury, that it holds all licenses, permits, certifications, insurances, bonds, and other credentials required by law, contract or practice to perform the Work. The Proposer also certifies that, upon the prospect of any change in the status of applicable licenses, permits, certifications, insurances, bonds or other credentials, the Proposer shall immediately notify JEA of status change.

Please initial below:

 Z (Initials) I have read and understood the Sunshine Law/Public Records clauses contained within this solicitation. I understand that in the absence of a redacted copy my proposal will be disclosed to the public "as-is".

We have received addenda 1 through 2

 Zakee Furqan
Signature of Authorized Officer of Proposer or Agent

 Zakee Furqan, President
Printed Name & Title

 11-22-21

Date

 (904) 343-9714

Phone Number

APPENDIX B - PROPOSAL FORM
1410460646 FACILITIES LANDSCAPING MAINTENANCE – OPEN MARKET

PROPOSER INFORMATION:

PROPOSER NAME: J and D Maintenance and Services of North Florida, LLC.

BUSINESS ADDRESS: Mailing address: PO Box 37389 Jacksonville, FL 32236.

CITY, STATE, ZIP CODE: Physical address: 4779 Phyllis Street Jacksonville, FL 32254.

TELEPHONE: 904-384-8411

FAX: (904) 387-0851

EMAIL OF CONTACT: office@JandDMaintenance.com.

WEBSITE: janddmaintenanceandservices.com

QUOTATION OF RATES

Maximum score for criterion is: 60 Points

Proposer shall provide pricing for the Contract by completing the enclosed **Appendix B – Proposal Workbook and Proposal Form**. The rates provided shall be all-inclusive and shall include all profit, taxes, benefits, travel, and all other overhead items.

Please note, the rates or lump sums quoted by Proposer on the Proposal Form must be firm prices, not estimates. ANY MODIFICATIONS, EXCEPTIONS, OR OBJECTIONS CONTAINED WITHIN THE PROPOSAL FORM SHALL SUBJECT THE PROPOSAL TO DISQUALIFICATION.

| Description of Services – 1410460646 FACILITIES LANDSCAPING MAINTENANCE – OPEN MARKET | Total One (1) Year Proposal Price |
|--|--|
| Total One (1) Year Proposal Price – Transfer total from Appendix B – Proposal Workbook | \$ 2,677,579.34 \$2,683,309.34 |

PROFESSIONAL EXPERIENCE, LOCATION, AND AVAILABILITY OF PROPOSER’S STAFF

Maximum score for this criterion: 20 Points

Proposer shall provide one (1) resume for the Account Manager available to work on the JEA engagement. At minimum, the resume shall present the employee's name, title, and years of service with the company, applicable professional registrations, education and work experience. The Proposer shall also submit a verifiable local business address for this person, their availability and their expected average response time to JEA.

The Account Manager (AM), Garret Nelson, hereby provides his resume showing over 10 years experience. He will be assigned as the AM for any contracts awarded to J and D Maintenance by JEA. He is available during our working hours, Mon-Fri and in case of emergency, weekends. Response to JEA will be within one hour of a phone call. Rodney Evans is available as a backup emergency number.

APPENDIX B - PROPOSAL FORM
1410460646 FACILITIES LANDSCAPING MAINTENANCE – OPEN MARKET

In addition to the above criteria, J and D Maintenance would like to highlight TWO items that we addressed in our Quality Assurance Plan that are above the “minimum” requirements cited in the solicitation.

1. We have described in detail extra steps taken to keep our employees trained and updated on any change to any requirement that might be made to any site. Our detailed Safety Plan exemplifies the extra care we take to prevent problems and to increase quality of service.
2. Our Quality Assurance department inspections are constantly looking for safer, faster, more efficient and better quality services. They use their autonomy within the company to brainstorm new ideas and/or advise the Account Manager of any systemic problems.

Proposers's Certification

By submitting this Proposal, the Proposer certifies (1) that the Proposer has read and reviewed all of the documents pertaining to this RFP and agrees to abide by the terms and conditions set forth therein, (2) that the person signing below is an authorized representative of the Proposer, and (3) that the Proposer is legally authorized to do business and maintains an active status, in the State of Florida. The Company certifies that its recent, current, and projected workload will not interfere with the Proposer's ability to Work in a professional, diligent and timely manner.

The Proposer certifies, under penalty of perjury, that it holds all licenses, permits, certifications, insurances, bonds, and other credentials required by law, contract or practice to perform the Work. The Proposer also certifies that, upon the prospect of any change in the status of applicable licenses, permits, certifications, insurances, bonds or other credentials, the Proposer shall immediately notify JEA of status change.

Please initial below:

RD (Initials) I have read and understood the Sunshine Law/Public Records clauses contained within this solicitation. I understand that in the absence of a redacted copy my proposal will be disclosed to the public “as-is”.

We have received addenda 142 through 2

[Signature]
Signature of Authorized Officer of Proposer or Agent

Rodney D. Evans, Owner
Printed Name & Title

11/17/21
Date
904-384-8411
Phone Number

Appendix B - Proposal Workbook**1410460646 Facilities Landscaping Maintenance - Open Market****Company Name:****A SANCTUARY HOUSE OF N. FL, INC**

Scope of Work : It is the intent of this solicitation to secure economical pricing for basic landscape maintenance. These services must be performed in a safe manner, and the results must be aesthetically pleasing as these facilities represent JEA to the rate-paying public.

District 2D Annual Total Proposal Price**\$ 113,448.00****Districts 3A, 3B and 3C Annual Total Proposal Price****\$ 371,664.00****District 6ESS, District 7WTR, SJRPP and KGS Annual Total Proposal Price****\$ 1,604,865.00****TOTAL ANNUAL PROPOSAL PRICE****\$ 2,089,977.00**

Appendix B - Proposal Workbook**1410460646 Facilities Landscaping Maintenance - Open Market****Company Name:**

Freedom Landscape & Lawn Maintenance, Inc.

Scope of Work : It is the intent of this solicitation to secure economical pricing for basic landscape maintenance. These services must be performed in a safe manner, and the results must be aesthetically pleasing as these facilities represent JEA to the rate-paying public.

District 2D Annual Total Proposal Price

\$

120,795.00

Districts 3A, 3B and 3C Annual Total Proposal Price

\$

442,745.70

District 6ESS, District 7WTR, SJRPP and KGS Annual Total Proposal Price

\$

~~1,691,202.88~~**\$1,697,802.88****TOTAL ANNUAL PROPOSAL PRICE**

\$

~~2,254,743.58~~**\$2,261,343.58**

Appendix B - Proposal Workbook**1410460646 Facilities Landscaping Maintenance - Open Market****Company Name:****J and D MAINTENANCE AND SERVICES**

Scope of Work : It is the intent of this solicitation to secure economical pricing for basic landscape maintenance. These services must be performed in a safe manner, and the results must be aesthetically pleasing as these facilities represent JEA to the rate-paying public.

District 2D Annual Total Proposal Price**\$ 234,720.00****Districts 3A, 3B and 3C Annual Total Proposal Price****\$ 791,670.00****District 6ESS, District 7WTR, SJRPP and KGS Annual Total Proposal Price****\$ 1,651,189.34****\$1,656,919.34****TOTAL ANNUAL PROPOSAL PRICE****\$ 2,677,579.34****\$2,683,309.34**

1410460646 Facilities Landscaping Maintenance - Open Market - District 2

| Vendor Rankings | H. Thurman | S. Dunning | M. Ventura | Σ Rank | Rank | Bid Amount |
|----------------------------|------------|------------|------------|--------|----------|--------------|
| A Sanctuary House | 1 | 1 | 2 | 4 | 1 | \$113,448.00 |
| Eagle Lawn Care | 3 | 3 | 1 | 7 | 2 | \$141,741.54 |
| Freedom Landscaping | 2 | 2 | 3 | 7 | 2 | \$120,795.00 |
| J&D Maintenance | 4 | 4 | 4 | 12 | 4 | \$234,720.00 |

| H. Thurman | Quotation of Rates (60 Points) | Experience, Location, and Availability (20 Points) | Quality Metrics (20 Points) | Total | Rank |
|----------------------------|--------------------------------|--|-----------------------------|-------|------|
| A Sanctuary House | 60 | 20 | 20 | 100 | 1 |
| Eagle Lawn Care | 48.02 | 20 | 18 | 86.02 | 3 |
| Freedom Landscaping | 56.35 | 20 | 16.6 | 92.95 | 2 |
| J&D Maintenance | 29 | 20 | 20 | 69 | 4 |

| S. Dunning | Quotation of Rates (60 Points) | Experience, Location, and Availability (20 Points) | Company Experience (20 Points) | Total | Rank |
|----------------------------|--------------------------------|--|--------------------------------|-------|------|
| A Sanctuary House | 60 | 19 | 9 | 88 | 1 |
| Eagle Lawn Care | 48.02 | 19 | 13 | 80.02 | 3 |
| Freedom Landscaping | 56.35 | 17 | 11 | 84.35 | 2 |
| J&D Maintenance | 29 | 20 | 20 | 69 | 4 |

| M. Ventura | Quotation of Rates (60 Points) | Experience, Location, and Availability (20 Points) | Company Experience (20 Points) | Total | Rank |
|----------------------------|--------------------------------|--|--------------------------------|-------|------|
| A Sanctuary House | 60 | 12 | 13 | 85 | 2 |
| Eagle Lawn Care | 48.02 | 20 | 19 | 87.02 | 1 |
| Freedom Landscaping | 56.35 | 16 | 6.7 | 79.05 | 3 |
| J&D Maintenance | 29 | 20 | 20 | 69 | 4 |

| Overall Averages | Quotation of Rates (60 Points) | Experience, Location, and Availability (20 Points) | Company Experience (20 Points) | Total |
|----------------------------|--------------------------------|--|--------------------------------|-------|
| A Sanctuary House | 60.00 | 17.00 | 14.00 | 91.00 |
| Eagle Lawn Care | 48.02 | 19.67 | 16.67 | 84.35 |
| Freedom Landscaping | 56.35 | 17.67 | 11.43 | 85.45 |

1410460646 Facilities Landscaping Maintenance - Open Market - District 3

| Vendor Rankings | H. Thurman | S. Dunning | M. Ventura | Σ Rank | Rank | Bid Amount |
|---------------------|------------|------------|------------|--------|------|--------------|
| Eagle Lawn Care | 2 | 2 | 2 | 6 | 2 | \$608,953.32 |
| Freedom Landscaping | 1 | 1 | 1 | 3 | 1 | \$442,745.70 |
| J&D Maintenance | 3 | 3 | 3 | 9 | 3 | \$791,670.00 |

| H. Thurman | Quotation of Rates (60 Points) | Experience, Location, and Availability (20 Points) | Quality Metrics (20 Points) | Total | Rank |
|---------------------|--------------------------------|--|-----------------------------|-------|------|
| Eagle Lawn Care | 43.62 | 20 | 18 | 81.62 | 2 |
| Freedom Landscaping | 60 | 20 | 16.6 | 96.6 | 1 |
| J&D Maintenance | 33.56 | 20 | 20 | 73.56 | 3 |

| S. Dunning | Quotation of Rates (60 Points) | Experience, Location, and Availability (20 Points) | Company Experience (20 Points) | Total | Rank |
|---------------------|--------------------------------|--|--------------------------------|-------|------|
| Eagle Lawn Care | 43.62 | 19 | 13 | 75.62 | 2 |
| Freedom Landscaping | 60 | 17 | 11 | 88 | 1 |
| J&D Maintenance | 33.56 | 20 | 20 | 73.56 | 3 |

| M. Ventura | Quotation of Rates (60 Points) | Experience, Location, and Availability (20 Points) | Company Experience (20 Points) | Total | Rank |
|---------------------|--------------------------------|--|--------------------------------|-------|------|
| Eagle Lawn Care | 43.62 | 20 | 19 | 82.62 | 2 |
| Freedom Landscaping | 60 | 16 | 6.7 | 82.7 | 1 |
| J&D Maintenance | 33.56 | 20 | 20 | 73.56 | 3 |

| Overall Averages | Quotation of Rates (60 Points) | Experience, Location, and Availability (20 Points) | Company Experience (20 Points) | Total |
|---------------------|--------------------------------|--|--------------------------------|-------|
| Eagle Lawn Care | 43.62 | 19.67 | 16.67 | 79.95 |
| Freedom Landscaping | 60.00 | 17.67 | 11.43 | 89.10 |
| J&D Maintenance | 33.56 | 20.00 | 20.00 | 73.56 |

1410460646 Facilities Landscaping Maintenance - Open Market - Districts 6, 7, SJRPP, KGS

| Vendor Rankings | H. Thurman | S. Dunning | M. Ventura | Σ Rank | Rank | Bid Amount |
|----------------------------|------------|------------|------------|--------|----------|----------------|
| Freedom Landscaping | 2 | 2 | 2 | 6 | 2 | \$1,697,802.88 |
| J&D Maintenance | 1 | 1 | 1 | 3 | 1 | \$1,656,919.34 |

| H. Thurman | Quotation of Rates (60 Points) | Experience, Location, and Availability (20 Points) | Quality Metrics (20 Points) | Total | Rank |
|----------------------------|--------------------------------|--|-----------------------------|-------|------|
| Freedom Landscaping | 58.56 | 20 | 16.6 | 95.16 | 2 |
| J&D Maintenance | 60 | 20 | 20 | 100 | 1 |

| S. Dunning | Quotation of Rates (60 Points) | Experience, Location, and Availability (20 Points) | Company Experience (20 Points) | Total | Rank |
|----------------------------|--------------------------------|--|--------------------------------|-------|------|
| Freedom Landscaping | 58.56 | 17 | 11 | 86.56 | 2 |
| J&D Maintenance | 60 | 20 | 20 | 100 | 1 |

| M. Ventura | Quotation of Rates (60 Points) | Experience, Location, and Availability (20 Points) | Company Experience (20 Points) | Total | Rank |
|----------------------------|--------------------------------|--|--------------------------------|-------|------|
| Freedom Landscaping | 58.56 | 16 | 6.7 | 81.26 | 2 |
| J&D Maintenance | 60 | 20 | 20 | 100 | 1 |

| Overall Averages | Quotation of Rates (60 Points) | Experience, Location, and Availability (20 Points) | Company Experience (20 Points) | Total |
|----------------------------|--------------------------------|--|--------------------------------|--------|
| Freedom Landscaping | 58.56 | 17.67 | 11.43 | 87.66 |
| J&D Maintenance | 60.00 | 20.00 | 20.00 | 100.00 |



Formal Bid and Award System

Award #10 March 3, 2022

Type of Award Request: CONTRACT INCREASE

Request #: 6707

Requestor Name: Griffin, Gregg R.

Requestor Phone: (904) 665-6334

Project Title: Progressive Design-Build Services for the JEA Utility Training Center Renovation Project

Project Number: 8005318

Project Location: JEA

Funds: Capital

Budget Estimate: \$6,857,939.00

Scope of Work:

JEA is requesting Responses from qualified Design-Build (DB) firms to provide design and construction services for the renovation of the JEA Utility Training Center (JUTC) facility (the "Work"). The scope of work includes, but is not necessarily limited to, those items listed below which are considered basic to the Solicitation response:

- Complete reformatting and upgrading of all occupied spaces, including offices, classroom, open areas, break room and restrooms; includes finishes, furniture, and fixtures. Restrooms need to be expanded and upgraded to meet current ADA requirements for access.
- Construction of new support and storage spaces, including server room, copy room, and closets/lockable storage.
- Upgrade of all operating systems (HVAC, plumbing, electrical) and related fixtures (toilets, sinks, light fixtures, etc.) HVAC work includes controls; plumbing includes supply and drain/waste/vent lines.
- Upgrade of warehouse doors and storefront systems to Miami-Dade standards.
- Upgrade of locksets, keying systems, and card access to building entrances, exits, and gates.
- Upgrade with new guard shack built to JEA generating station requirements which includes multiple access-controlled gates, gate arms, lanes of entrance and exit, and network fiber optic.

JEA IFB/RFP/State/City/GSA#: 060-21

Purchasing Agent: Selders, Elaine L.

Is this a Ratification?: NO

RECOMMENDED AWARDEE(S):

| Name | Contact Name | Email | Address | Phone | Amount |
|-------------------------------|--------------|----------------------|--|----------------|----------------|
| AULD & WHITE CONSTRUCTORS LLC | Cindy Reis | creis@auld-white.com | 4168 Southpoint Pkwy Ste 101, Jacksonville, FL | (904) 296-2555 | \$5,290,700.00 |

Amount of Original Award: \$164,300.00

Date of Original Award: 03/25/2021

Change Order Amount: \$5,290,700.00

New Not-To-Exceed Amount: \$5,455,000.00

Length of Contract/PO Term: Project Completion

Begin Date (mm/dd/yyyy): 04/31/2021
End Date (mm/dd/yyyy): Project Completion (Expected: 02/2023)
JSEB Requirement: Five Percent (5%) Evaluation Criteria
Comments on JSEB Requirements:

Original Award
N/A

This Contract Increase
N/A

Background/Recommendations:

Originally approved by the Awards Committee on 03/25/2021 in the amount of \$164,300.00 to Auld & White Constructors, LLC for Phase 1 up to 60% Design. A copy of the original award is attached as backup.

Negotiations with Auld & White Constructors were successfully completed for Phase 2 of this project. The Guaranteed Maximum Price (GMP) in the amount of \$5,290,700.00 has been deemed reasonable based on the scope of work and previous projects. This is a Progressive Design-Build contract which splits the effort into two (2) phases. Phase 1 included engineering design up to sixty percent (60%), support services and pre-construction services. Phase 2 includes the final design, services during construction and construction costs. The Phase 2 Proposal has been attached as backup.

Project Budget and Schedule Details:

- Original Project Budget: \$2,225,060.00 (as of April 2019)
 - Engineering Cost: \$233,000.00
 - Construction Cost: \$1,850,000.00
 - JEA Services Cost: \$142,060.00
- Revised Project Budget (at Phase 2 Award: January 2022): \$6,857,939.00
 - Engineering Cost: \$234,100.00
 - Phase 1 Cost: \$164,300.00
 - Phase 2 Cost: \$69,800.00 (included in GMP)
 - Construction Cost: \$5,220,900.00
 - JEA Services Estimate: \$1,402,939.00
- Original Project Schedule:
 - Engineering Completion: August 2021
 - Construction Completion: April 2022
- Revised Project Schedule:
 - Engineering Completion: April 2022
 - Construction Completion: February 2023

Major Changes/Issues

The initial project request was submitted in February of 2018 after the decommissioning of the St. Johns River Power Park and a temporary training center with leased modular units was installed at the Northside Generating Station (NGS). The original budget estimate was lower than the award amount due to scope increases, market escalation for services and materials, the relocation of the guard house, and this not being a typical classroom or office building. This is an industrial training center which includes the renovation of an existing metal warehouse and office building.

The JUTC and Northside Generating Station (NGS) back gate Guard House has progressed to 60% Design stage thru November 2021 with significant stakeholder input and participation on design. The Guard House was originally located closer to JUTC but it was determined that relocation of the Guard House 500 ft to the East was required. The relocation was necessary to accommodate peak operational delivery of tractor trailer traffic concerns at the guard station. This change delayed the 30% to 60% progress milestone. The relocation, including additional W/WW infrastructure extensions to service the

new location have impacted the cost of this project. The infrastructure extension included adding the following to the scope of work: multiple lanes of traffic, automatic gates, fiber, network, electrical service upgrades to industrial voltages and size, potable water supply, and sewer (mini waste water pumping system) as well as road shoulder and additional paving for new back gate. Security also requested that the guard shack meet hardened facility standards, which added to the additional cost.

In November 2021, Facilities received the schedule of values (SOV) proposal at the 60% design milestone which reflected significant scope and cost increases across all trades over our original estimates. The Facilities Capital Group engaged the stakeholders on multiple value add reduction possibilities in every aspect of the 60% design and took action on several items to either eliminate or adopt a different construction option at lower cost for the JUTC project. The scope decreased somewhat to accommodate value add reductions the stakeholders were comfortable with, however the 60% SOV costs reflected significant increases in construction cost projections due to market escalations for services, materials, and labor.

It should be noted that the overall total budget for this project is \$9,947,879.00 and part of that total budget included the purchase of the real estate. The totals above of \$6,857,939.00 include design, construction and JEA internal costs. The parcel of land with adjacent buildings was purchased for this site near NGS in FY20 in the amount of \$3,089,940.00.

Request approval to award Phase 2 Progressive Design Build Services to Auld & White Constructors, LLC for the JEA Utility Training Center (JUTC) Renovation Project in the amount of \$5,290,700.00, for a new not-to-exceed amount of \$5,455,000.00, subject to the availability of lawfully appropriated funds.

Manager: Crane, Christopher T. - Manager, Facilities Operations

Director: Brunell, Baley L. - Director, Facilities & Fleet Services

VP: McElroy, Alan D. - VP Supply Chain & Operations Support

APPROVALS:

| | |
|-----------------------------------|-------------|
| Chairman, Awards Committee | Date |
|-----------------------------------|-------------|

| | |
|------------------------------|-------------|
| Budget Representative | Date |
|------------------------------|-------------|



Formal Bid and Award System

Award #9 March 25, 2021

Type of Award Request: PROPOSAL (RFP)

Request #: 6823

Requestor Name: Griffin, Gregg R.

Requestor Phone: (904) 665-6334

Project Title: Progressive Design-Build Services for the JEA Utility Training Center (JUTC) Renovation Project

Project Number: 8005318

Project Location: JEA

Funds: Capital

Budget Estimate: \$2,225,060.00

Scope of Work:

JEA is requesting Responses from qualified Design-Build (DB) firms to provide design and construction services for the renovation of the JEA Utility Training Center (JUTC) facility (the "Work"). The scope of work includes, but is not necessarily limited to, those items listed below which are considered basic to the Solicitation response:

- Complete reformatting and upgrading of all occupied spaces, including offices, class room, open areas, break room and restrooms; includes finishes, furniture and fixtures. Restrooms need to be expanded and upgraded to meet current ADA requirements for access.
- Construction of new support and storage spaces, including server room, copy room, and closets/lockable storage.
- Upgrade of all operating systems (HVAC, plumbing, electrical) and related fixtures (toilets, sinks, light fixtures, etc.) HVAC work includes controls; plumbing includes supply and drain/waste/vent lines.
- Upgrade of warehouse doors and storefront systems to Miami-Dade standards.
- Upgrade of locksets, keying systems, and card access to building entrances, exits, and gates.
- Upgrade with new guard shack built to JEA generating station requirements which includes multiple access controlled gates, gate arms, lanes of entrance and exit, and network fiber optic.

JEA IFB/RFP/State/City/GSA#: 060-20

Purchasing Agent: Selders, Elaine L.

Is this a Ratification?: NO

RECOMMENDED AWARDEE(S):

| Name | Contact Name | Email | Address | Phone | Amount |
|--------------------------------|--------------|----------------------|--|----------------|--------------|
| AULD & WHITE CONSTRUCTORS, LLC | Cindy Reis | creis@auld-white.com | 4168 Southpoint Pkwy Ste 101, Jacksonville, FL | (904) 296-2555 | \$164,300.00 |

Amount for entire term of Contract/PO: \$164,300.00

Award Amount for remainder of this FY: \$164,300.00

Length of Contract/PO Term: Project Completion

Begin Date (mm/dd/yyyy):

04/01/2021

End Date (mm/dd/yyyy):

Project Completion (Expected: April 2022)

JSEB Requirement:

Five Percent (5%) Evaluation Criteria

Comments on JSEB Requirements:

Durden Surveying and Mapping Inc. – 12.8%

PROPOSERS:

| Name | Amount | Rank |
|--------------------------------|--------------|------|
| AULD & WHITE CONSTRUCTORS, LLC | \$164,300.00 | 1 |
| CHARLES PERRY PARTNERS, INC. | N/A | 2 |
| ABBA CONSTRUCTION INC. | N/A | 3 |
| ACON CONSTRUCTION CO., INC. | N/A | 4 |

Background/Recommendations:

Advertised on 11/02/2020. Nine (9) prime companies attended the mandatory pre-proposal meeting held on 11/12/2020. At proposal opening on 12/2/2020, JEA received four (4) Proposals. The public evaluation meeting was held on 01/20/2021 and JEA deemed Auld & White Constructors, LLC most qualified to perform the work. A copy of the evaluation matrix and negotiated Phase 1 fees are attached as backup.

Negotiations with Auld & White Constructors, LLC were successfully completed for Phase 1 of this project. This project will be delivered using the progressive design-build method, splitting the effort into two (2) phases. Phase 1 includes engineering design up to sixty percent (60%), support services and pre-construction services, which is approximately 7.9% of the estimated project cost. The Phase 1 negotiated fees proposed were compared with similar facilities design projects and have been deemed reasonable. After Phase 1, a Guaranteed Maximum Price (GMP) will be established, with an option of an “off ramp” if construction pricing is not acceptable. Upon acceptance of the GMP and subsequent approval of the Awards Committee, Phase 2 will commence. Phase 2 will include the final design, services during construction (SDC) and construction costs. The negotiated fees proposed were compared with similar facilities design projects and have been deemed reasonable.

Project Budget and Schedule Details:

- Total Project Budget: \$2,225,060.00
- Design-Build (DB) Estimate (at time of Proposal): \$2,083,000.00
- Phase 1 Fee: \$164,300.00 (7.9% of DB fee estimate)
- DB Firm: Auld & White Constructors, LLC
- Project Completion Key Dates (Estimated):
 - Phase 1 Start: April 2021
 - Phase 1 Completion: August 2021
 - Phase 2 Completion: April 2022


060-21 – Request approval to award a contract to Auld & White Constructors, LLC for the Progressive Design-Build Services for the JEA Utility Training Center (JUTC) Renovation Project in the amount of \$164,300.00, subject to the availability of lawfully appropriated funds.

Manager: Crane, Christopher T. - Manager, Facilities Operations

Director: Brunell, Baley L. - Director, Facilities & Fleet Services

VP: McElroy, Alan D. - VP Supply Chain & Operations Support

APPROVALS:

 03/25/2021

Chairman, Awards Committee

Date

 3/25/21

Budget Representative

Date



January 19, 2022

Re: JEA Utility Training Center Renovations

Gregg Griffin
JEA
10855 New Berlin Road
Jacksonville, Florida 32226

Dear Mr. Griffin:

We are pleased to submit our proposal for construction of the JEA Utility Training Center Renovations based on the drawings prepared by Scott A. Brady (see attached Drawing List) dated September 3, 2021 and Proposal Clarifications.

Our Guaranteed Maximum Amount is \$5,290,700.

This Proposal is for acceptance within five (5) days. Due to the current market volatility including impacts from the Coronavirus (COVID-19) on construction materials (i.e. metal, plastics, wood, etc.) and labor availability this proposal is subject to change.

If you wish for us to proceed with this work, please sign in the space below and return to our office. If you have any further questions, please do not hesitate to contact me at (904) 296-2555.

Sincerely,

A handwritten signature in blue ink, appearing to read 'JAV', with a long horizontal flourish extending to the right.

Jared A. Vincent
Director of Estimating

JAV/ck

Attachments

ACCEPTED:

JEA

BY: _____

PRINT: _____

DATE: _____



Formal Bid and Award System

Award #11 March 3, 2022

Type of Award Request: CONTRACT INCREASE (AMENDED)
Requestor Name: Ventura, Mildred - Contract Specialist
Requestor Phone: (904) 665-5201
Project Title: Leased Modular Buildings to House Technical Training at NGS
Project Number: 30801
Project Location: JEA
Funds: O&M
Budget Estimate: \$79,950.00
Scope of Work:

The purpose of this contract increase is to continue to lease the modular buildings currently being used to house JEA's technical training at NGS utilizing the Houston-Galveston Area Council Government Cooperative Agreement (HGAC).

JEA IFB/RFP/State/City/GSA#: HGAC Buy
Purchasing Agent: Selders, Elaine
Is this a Ratification?: NO

RECOMMENDED AWARDEE(S):

| Name | Contact Name | Email | Address | Amount |
|--|--------------|------------------|---|-------------|
| VESTA HOUSING SOLUTIONS LLC DBAVESTA MODULAR | Whatley Law | wlaw@vestahs.com | 4446-1A HENDRICKS AVE, STE 116 Jacksonville, FL 32207 | \$79,950.00 |

Amount of Original Award: \$298,420.66
Award Amount for remainder of this FY: \$36,900.00
Date of Original Award: 12/01/2017
Change Order Amount: \$79,950.00

List of Previous Change Order/Amendments:

| CPA # | Amount | Date |
|--------|-------------|------------|
| 194290 | \$92,250.00 | 12/03/2020 |

New Not-To-Exceed Amount: \$470,620.66
Length of Contract/PO Term: Five (5) Years
Begin Date (mm/dd/yyyy): 12/01/2017
End Date (mm/dd/yyyy): 04/30/2023
JSEB Requirement: N/A – No JSEBs available

Background/Recommendations:

In December of 2017, JEA entered into an informal agreement with Vesta Modular to lease Modular Office and Storage units. JEA's technical training team had originally been located at St. Johns River Power Park (SJRPP) but had to be relocated when the generating station was decommissioned. In an expedited effort to find a temporary home for the training team, the decision was made to piggy-back off of the Houston-Galveston Area Council Government Cooperative Agreement where these units had been competitively bid.

JEA originally anticipated needing these units for approximately thirty six (36) months at \$3,640.00 per month, and intended to purchase a site and build a permanent JEA Utility Training Center (JUTC) within that time period. After the original contract was signed it was discovered the team would also need two storage containers and ramps for the buildings which increased the monthly amount to \$6,150.00. Due to the construction of JUTC not being complete, a contract extension was awarded on 12/03/2020 in the amount of \$92,250.00 to cover the needs through completion. The JUTC construction project was delayed due to various design plan changes and discussions about value add alternatives, which is now at 60% design. JEA is requesting to extend this contract with Vesta Modular for an additional thirteen (13) months at the same rate of \$6,150.00 per month in the amount of \$79,950.00 to get us through completion of the project and allow for a transition period for move-in. The previous award and agreement are attached as backup.

It should be noted that this is an amended award that was originally brought before the committee on 01/13/2022 for approval. The amended award provides additional details regarding the JUTC project and the award amount was increased for an additional month. The contract amendment to the JUTC project is also on the agenda and pending approval for Phase 2. The current timeline at 60% design supports the completion of the project in February 2023, barring no major supply chain disruptions. JEA will be working with the vendor to see if material orders need to be placed prior to construction to avoid further delays.

| Leased Units | Number to be Awarded | Unit Price | Monthly Pricing |
|-------------------------|----------------------|------------|-----------------|
| Modular Classroom 36X40 | 3 | \$910.00 | \$2,730.00 |
| Modular Office 36X40 | 1 | \$910.00 | \$910.00 |
| Storage Containers 8X40 | 2 | \$125.00 | \$250.00 |
| Ramps, Steps & Decks | 1 | \$2,260.00 | \$2,260.00 |
| Totals | 7 | | \$6,150.00 |

Request approval to award an amended contract increase to Vesta modular for Leased Modular Buildings for Technical Training at NGS in the amount of \$79,950.00, for a new not-to-exceed amount of \$470,620.66, subject to the availability of lawfully appropriated funds.

Manager: Newton-Green, Melanie - Mgr Business Operations

Director: Brunell, Baley L. - Dir Facilities & Fleet Services

VP: McElroy, Alan D. - VP Supply Chain & Operations Support

APPROVALS:

Chairman, Awards Committee

Date

Budget Representative

Date



Formal Bid and Award System

Award #8 December 3, 2020

Type of Award Request: CONTRACT EXTENSION
Requestor Name: Ventura, Mildred - Contract Specialist
Requestor Phone: (904) 665-5201
Project Title: Leased Modular Buildings to House Technical Training at NGS
Project Number: 30801
Project Location: JEA
Funds: O&M
Budget Estimate: \$92,250.00

Scope of Work:

The purpose of this contract extension is to continue to lease the modular buildings currently being used to house JEA's technical training at NGS utilizing the Houston-Galveston Area Council Government Cooperative Agreement (HGAC).

JEA IFB/RFP/State/City/GSA#: HGAC Buy
Purchasing Agent: Selders, Elaine
Is this a Ratification?: NO

RECOMMENDED AWARDEE(S):

| Name | Contact Name | Email | Address | Amount |
|---|--------------|------------------|---|-------------|
| VESTA HOUSING SOLUTIONS LLC DBA VESTA MODULAR | Whatley Law | wlaw@vestahs.com | 4446-1A HENDRICKS AVE, STE 116 Jacksonville, Duval, FL 32207 | \$92,250.00 |

Amount of Original Award: \$298,420.66
Award Amount for remainder of this FY: \$67,650.00
Date of Original Award: 12/01/2017
Change Order Amount: \$92,250.00
Amount for entire term of Contract/PO: \$390,670.66
Length of Contract/PO Term: Three (3) Years
Begin Date (mm/dd/yyyy): 12/01/2017
End Date (mm/dd/yyyy): 01/31/2022 (estimated completion of JUTC)
JSEB Requirement: N/A – No JSEBs available

Background/Recommendations:

In December of 2017, JEA entered into an informal agreement with Vesta Modular to lease Modular Office and Storage units. JEA's technical training team had originally been located at St. Johns River Power Park (SJRPP) but had to be relocated when the generating station was decommissioned. In an expedited effort to

find a temporary home for the training team, the decision was made to piggy-back off of the Houston-Galveston Area Council Government Cooperative Agreement where these units had been competitively bid.

JEA originally anticipated needing these units for approximately 36 months at \$3,640.00 per month, and intended to purchase a site and build a permanent JEA Utility Training Center (JUTC) within that time period. After the original contract was signed it was discovered the team would also need two storage containers and ramps for the buildings which increased the monthly amount to \$6,150.00. Due to several delays the JUTC Design Build RFP is just now on the street and these modular units are still needed until JUTC is completed. A current quote and agreement for the leased units are attached as backup.

| Leased Units | Number to be Awarded | Unit Price | Monthly Pricing |
|-------------------------|----------------------|------------|-----------------|
| Modular Classroom 36X40 | 3 | \$910.00 | \$2,730.00 |
| Modular Office 36X40 | 1 | \$910.00 | \$910.00 |
| Storage Containers 8X40 | 2 | \$125.00 | \$250.00 |
| Ramps, Steps & Decks | 1 | \$2,260.00 | \$2,260.00 |
| Totals | 7 | | \$6,150.00 |


* JEA has no previous price information available for these leased items.

Request approval to award a contract extension to Vesta modular for Leased Modular Buildings to House Technical Training at NGS in the amount of \$92,250.00, for a new not-to-exceed amount of \$390,670.66, subject to the availability of lawfully appropriated funds.

Director: Crane, Christopher T. - Manager, Facilities Operations

Chief: McElroy, Alan D. - Interim Chief Supply Chain Officer

APPROVALS:

 12/04/2020

Chairman, Awards Committee **Date**

 12/4/2020

Budget Representative **Date**



SCHEDULE 07

The provisions of this Schedule dated February 1, 2021 are subject to the terms and conditions of the Master Lease Agreement # WL1117JEA dated November 15, 2017 by and between Vesta Housing Solutions, LLC, 1000 Town Center, Suite 975, Southfield, MI 48075 ("Lessor"), and JEA ("Lessee"), located at 21 West Church St., Jacksonville, FL 32202 collectively referred to as the "parties" in the Master Lease Agreement and/or Schedule(s). Pursuant to terms of and in accordance with the Master Lease Agreement, Lessor agrees to lease to Lessee and Lessee agrees to lease from Lessor the equipment described more particularly below for the consideration set forth below:

MODULAR BUILDING DETAILS:

| | |
|----------------|---|
| Quantity | Four (4) |
| Type | One (1) Modular Office Building, Three (3) Modular Classroom Buildings, Two (2) Storage Containers, & Raised deck platform/ramp/steps |
| Size | One (1) Office 36' x 60'; Three (3) Classrooms 36' x 40', Two (2) 8' x 40', Platform per proposal |
| Serial Numbers | DSI 15137 A-C (CR67); DSI 15138 A-C (CR68); DSI 15139 A-C (CR70); 0433232 A-C (MO17); 941367-9 (ST112); 635601-5(ST136) |

DESCRIPTION / LOCATION:

| | |
|--------------|--|
| Name | NGS (Northside Generation Station) |
| Full Address | 4377 Heckscher Drive Jacksonville, FL 32226 |

LEASE DETAILS:

| | |
|--|------------------|
| Commencement Date | February 1, 2021 |
| Term (consecutive months from commencement date) | 15 Months |
| Monthly Lease Payment* | \$6,150 |
| Number of Payments Per Year | 12 |
| Total Lease Payments (for entire term) | \$92,250 |
| Date of First Payment | Upon Acceptance |

* Does not include state, local or other tax, licensing, maintenance or other applicable charges. If applicable, such charges are Lessee's responsibility

OTHER DETAILS:


| | |
|------------------------------------|--|
| Dismantle & Return Costs | To be determined at the time of termination of the lease |
| Dismantle & Return Payment Details | Lessee responsible for teardown and return costs in accordance with MLA provisions |

IN WITNESS WHEREOF, the parties hereto have caused this Schedule to be duly executed on the date set forth below by their authorized representatives. Upon execution, this Schedule becomes incorporated by reference to the Master Lease Agreement and is subject to all of the terms, conditions, and/or provisions set forth therein.

☐ (Check if applicable)

Further, Lessee acknowledges the Proposal attached to this Schedule and initialed by Lessee applies to this individual Schedule only. These documents do not apply to any other existing or future Schedules.

Lessor: **Vesta Housing Solutions, LLC**

Signature: 

Name (Printed): Daniel McMurtrie

Title: Chief Executive Officer

Date: 03/05/2021

Lessee: **JEA**

Signature: 

Name (Printed): Jenny McCollum

Title: Director of Procurement & Chief Procurement Officer

Date: 03/03/2021



Formal Bid and Award System

Award #12 March 3, 2022

Type of Award Request: INVITATION FOR BID (IFB)

Requestor Name: Jessica Keeler

Requestor Phone: (904)665-6403

Project Title: ITEM CAIRH012

Project Number: Various

Project Location: JEA

Funds: Inventory Blanket Account

Budget Estimate: \$383,000.00

Scope of Work:

The purpose of this Invitation for Bid (IFB) is to solicit pricing for Item CAIRH012 (CABLE, 500KCM, 37 STRAND, 3-1/C PARALLELED). During the last 12 months, the commodity spend for this item was \$164,529.60. At the time of the bid release, the inventory balance for the item found in this solicitation was \$2,989.80 with the average current lead time of 56 days.

JEA IFB/RFP/State/City/GSA#: 1410562246-22

Purchasing Agent: Eddie Bayouth

Is this a Ratification?: NO

RECOMMENDED AWARDEE(S):

| Name | Vendor Contact | Email | Address | Phone | Amount |
|--------------------|-----------------|--|-----------------------------------|--------------|--------------|
| GRESKO SUPPLY INC. | Carrie Campbell | Carrie.campbell@gresco.com | 6421 CR 219 Wildwood, FL 34785 | 352-748-9550 | \$454,500.00 |

Amount for entire term of Contract/PO: \$454,500.00

Award Amount for remainder of this FY: \$454,500.00

Length of Contract/PO Term: One-time purchase

Begin Date (mm/dd/yyyy): 03/01/2022

End Date (mm/dd/yyyy): One-time purchase

Renewal Options: N/A

JSEB Requirement: N/A – Optional

BIDDERS

| Name | Number of Items Bid | Bid Value |
|--------------------|---------------------|--------------|
| GRESKO SUPPLY INC. | 1 | \$454,500.00 |
| ANIXTER INC. | 1 | \$512,300.00 |

Background/Recommendations:

It was advertised on 01/21/2022 as a formal solicitation. There was no pre-response meeting for this solicitation. At Response opening on 02/15/2022, JEA received two (2) Responses.

It should be noted that this solicitation was initially done in December as an informal solicitation. Due to supplier Minimum Order Quantity requirements along with newly emergent JEA capital project requirements the award would have been above the \$300,000.00 threshold. JEA determined this solicitation should be rescinded and reissued as a formal solicitation.

CAIRH012 is a product consisting of three separate cables ran together for three (3) phase applications primarily in downtown Jacksonville underground. CAIRH012 was developed and approved by JEA Standards in early 2020 as alternative and eventual replacement to the CAIRH008; the newly created CAIRH012 incorporates different colored jackets per phase (black, red and blue) as opposed to the all-black jackets in CAIRH008. The color-coded jackets offer a primary advantage to the all-black jackets of CAIRH008 in its ability to quickly identify the phases which has caused issues in the past for JEA. One instance of when this is particularly useful in situations where there is not enough visible cable to see the printed phasing; when utilizing the CAIRH008 it was required to identify the proper phasing via the printing on the jacket which is increasingly difficult with limited amounts of cable, this is eliminated when only needing to identify the color for proper phase identification. Secondly, the colored jackets help in general installations and maintenance as one can easily identify the phases via color to provide a quick way to check the safety of the connection by phase. This item only prior purchase was in June of 2020 as a spot buy and it, along with CAIRH012, have been relatively slow-moving items.

The past usage was largely based on repairs and maintenance of those cables as needed, because service growth in the network has been largely stagnant for some time. These days, with development and expansion on the rise downtown, JEA is seeing an increase in demand for these applications (CAIRH008 & CAIRH012 collectively) as we are doing more in the way of much needed upgrades/replacements to strengthen the network in preparation for some of that. JEA will continue to see decreasing usage of the CAIRH008 as they switch to the CAIRH012 multi-colored product. Lastly regarding consumption, at the request of the business, and after validation from last storm, both CAIRH008 and CAIRH012 are identified as items to have additional inventory as part of the underground cable storm stock item requirements in 2022.

The evaluation criteria for this bid was that the total lowest cost provider for the item would win, as long as the minimum qualifications were met, and they quoted the correct JEA approved manufacturer and manufacturer part number. Gresco Supply Inc. has been deemed the most responsive and responsible bidder based on their prices for this item. A copy of the Bid Analysis Workbook is attached as backup.

JEA will realize an estimated cost increase via unit price increase totaling \$228,000.00 for this contract, or 101% from last time item was bought in 2020. This increase in cost is primarily attributed to the cost increases of copper, labor, and transportation that have impacted all wire and cable over this time.

1410510446-21– Request approval to award contracts to Gresco Supply Inc. for Item CAIRH012 carried in JEA's inventory stock for a total amount of \$454,500.00 subject to the availability of lawfully appropriated funds.

| | |
|------------------|---|
| Manager: | Kenny Pearson – Procurement Category Manager |
| Director: | Jenny McCollum – Director, Procurement Services |
| VP: | Alan McElroy – VP Supply Chain & Operations Support |

APPROVALS:

| | |
|-----------------------------------|-------------|
| Chairman, Awards Committee | Date |
|-----------------------------------|-------------|

| | |
|------------------------------|-------------|
| Budget Representative | Date |
|------------------------------|-------------|

| 1410562246-22 Item CAIRH012 Bid Analysis | | | | | | | Anixter Inc. Bid | | |
|--|--|---|---------------------------|------|-------|-------------------|---------------------------------------|--|---|
| | Item Description | Mfg. Name & Mfg. Part Number | Quoted Mfg. & Part Number | UOM | Usage | Quoted Unit Price | Total Price | Lead Time: In Calendar Days After Receipt of Order | Contractual Minimum Order Quantities |
| CAIRH012 | CABLE, 500KCM, 37 STRAND, 3-1/C PARALLELED, COPPER, COLORED JACKET PER PHASE (BLACK, RED, BLUE), NO PULLING EYES, NON-RET WOODEN REELS,1000' REEL LENGTH MARKED W/FOOTAGE MARKINGS, REEL TYPE NR80.60 = 80" FLANGE DIA, 60" TRAVERSE (SPEC REQD) | CME Wire and Cable Inc. Prysimian Cable and Systems Southwire Co. | PRYSMIAN CABLE & SYSTEMS | Foot | 10000 | \$ 51.23 | \$512,300.00 | 98 | 10,000 |
| | | | | | | | Gresco Electric Supply Inc. Bid | | |
| JEA Item ID | Item Description | Mfg. Name & Mfg. Part Number | Quoted Mfg. & Part Number | UOM | Usage | Quoted Unit Price | Total Price | Lead Time: In Calendar Days After Receipt of Order | Contractual Minimum Order Quantities |
| CAIRH012 | CABLE, 500KCM, 37 STRAND, 3-1/C PARALLELED, COPPER, COLORED JACKET PER PHASE (BLACK, RED, BLUE), NO PULLING EYES, NON-RET WOODEN REELS,1000' REEL LENGTH MARKED W/FOOTAGE MARKINGS, REEL TYPE NR80.60 = 80" FLANGE DIA, 60" TRAVERSE (SPEC REQD) | CME Wire and Cable Inc. Prysimian Cable and Systems Southwire Co. | PRYSMIAN CABLE & SYSTEMS | Foot | 10000 | \$ 45.45 | \$454,500.00 | 56 | 10,000 |



Formal Bid and Award System

Award #13 March 3, 2022

Type of Award Request: REQUEST FOR PROPOSAL (RFP)
Requestor Name: Smith, Brandy
Requestor Phone: (904) 665-7987
Project Title: 300 MVA 230 kV to 69 kV Transformer for West Jax Substation T1
Project Location: JEA
Project Number: 8007279
Funds: Capital
Award Estimate: \$3,000,000.00

Scope of Work:

JEA is soliciting Bids for the equipment design, fabrication, and delivery of one (1) one 230kV to 69 kV transformer for the West Jax Substation (the "Work" or "Services").

Basic Transformer Specifications:

180/240/300 MVA, ONAN/ONAF/ONAF @ 65°C Rise. The autotransformer shall be capable of transforming the minimum MVA rating continuously, self-cooled at rated voltage and frequency without exceeding an average winding temperature rise of 65 degrees C.

Voltage : 230kV GRDY / 69kV GRDY, 13.8 KV Tertiary Buried Delta

The transformer description is oil immersed, three phase, outdoor type, step-down autotransformer with self-contained voltage regulating equipment on the low voltage side, automatic thermostatically controlled forced-air cooling equipment and other accessories, spare parts and appurtenances hereinafter specified. Delivery shall be F.O.B autotransformer pad. Manufacturer is responsible for offloading.

The scope of services the company will provide includes, however, is not limited to:

- Equipment Design
- Equipment Engineering
- Materials procurement
- Fabrication
- Drawings
- Delivery - Offload & Set on the pad.

JEA is requesting pricing for the Unit Price and Unit Price with load losses, the evaluated unit price, listed in the Bid Workbook.

JEA IFB/RFP/State/City/GSA#: 1410526846
Purchasing Agent: Lovgren, Rodney D.
Is this a Ratification?: NO

RECOMMENDED AWARDEE(S):

| Name | Contact Name | Address | Phone | Amount |
|---------------------------|----------------|--|--------------|----------------|
| PTI TRANSFORMERS LP | Mick Cleveland | 101 Rockman Street, Winnipeg, Manitoba, CA R3T OL7 | 204-452-7446 | \$3,310,828.00 |

Amount for entire term of Contract/PO: \$3,310,828.00
Award Amount for remainder of this FY: \$500,000.00
Length of Contract/PO Term: Project Completion
Begin Date (mm/dd/yyyy): 03/01/2022
End Date (mm/dd/yyyy): Project Completion (Estimate 04/28/2024)
JSEB Requirement: N/A - Specialty Services

BIDDER:

| Name | Unit Price | Evaluated Price | Comments |
|--------------------------------------|----------------|-----------------|--------------------|
| SPX TRANSFORMER SOLUTIONS INC. | \$3,203,501.00 | \$3,805,101.00 | Proposal Withdrawn |
| PTI TRANSFORMERS LP | \$3,310,828.00 | \$4,477,828.00 | |
| HYUNDIA ELECTRIC AMERICA CORPORATION | \$3,605,599.00 | \$4,616,599.00 | |

Background/Recommendations:

Advertised on 12/28/2021. Three (3) companies attended the optional pre-response meeting on 01/06/2022. At response opening on 02/01/2022, JEA received three (3) Proposals. The evaluation is 100% price and PTI Transformers LP was deemed the lowest priced responsible and responsive Proposer. A copy of the Bid Form and Bid Workbook is attached as backup.

It should be noted that SPX discovered a price error in their proposal post opening and JEA was not willing to accept an updated bid amount since the pricing was released to all Bidders through an intent to award. JEA believed this would create an unfair advantage, so we allowed SPX to withdrawal their proposal per the terms in the solicitation. Additionally, SPX's proposal had price adjustment through delivery as a base negotiation position, which JEA found less responsive. PTI has agreed to a fixed price through delivery which has a 60 week lead time vs. SPX's 104 week lead time.

The Bidders submit their unit price (actual equipment price) and are evaluated on an evaluated price, which takes into account load losses to determine the Awardee. The load losses are calculated by the equipment designer and input into a cost of ownership calculation to arrive at the evaluated price.

The award amount is 9.3% more than the budget estimate, which is deemed reasonable given the current market conditions. For reference, the 2021 PPI for Large Specialty transformers was up approximately 30% in 2021.

1410526846 - Request approval to award a contract to PTI Transformers LP for the supply of the West Jax. T-1 transformer in the amount of \$3,310,828.00, subject to the availability of lawfully approved funds.

Manager: Hamilton, Darrell D. - Mgr Transmission and Substation Projects
Director: Acs, Gabor – Sr. Dir. Engineering & Projects
VP: Erixton, Ricky D. - VP Electric Systems

APPROVALS:

Chairman, Awards Committee

Date

Budget Representative

Date

APPENDIX B PROPOSAL FORM

1410528846 – 300 MVA - 230KV to 69 KV Transformer for West Jax Substation T1

COMPANY INFORMATION:

COMPANY NAME: PTI Transformers LP
BUSINESS ADDRESS: 101 Rockman Street
CITY, STATE, ZIP CODE: Winnipeg, Manitoba, Canada R3T 0L7
TELEPHONE: (204) 452-7446
FAX: (204) 453-8644
EMAIL OF CONTACT: dboyd@ptitransformers.com

Quoted price in USD Funds

Unit Price per Option.

| Description | Unit Price |
|---|---|
| Option 1 – Evaluated Unit Price from the Bid Workbook | \$ 4,477,828.00 Evaluated Unit Price |

Upload 1 electronic signed copy of this Proposal your Proposal Submission

Company's Certification

By submitting this Proposal, the Proposer certifies that it has read and reviewed all of the documents pertaining to this RFP and agrees to abide by the terms and conditions set forth therein, that the person signing below is an authorized representative of the company, that the company is legally authorized to do business in the State of Florida, and that the company maintains in active status an appropriate license for the work. The company certifies that its recent, current, and projected workload will not interfere with the company's ability to Work in a professional, diligent and timely manner.

The Proposer certifies, under penalty of perjury, that it holds all licenses, permits, certifications, insurances, bonds, and other credentials required by law, contract or practice to perform the Work. The Proposer also certifies that, upon the prospect of any change in the status of applicable licenses, permits, certifications, insurances, bonds or other credentials, the Company shall immediately notify JEA of status change.

We have received addenda 1 through 3 4

Shah Mohamed - Ali
Signature of Authorize Officer of Company or Agent

Dan Boyd, Product Sales Manager
Printed Name & Title

February 1, 2022

Date

(204) 474-5704

Phone Number



JEA

RFP: 1410526846 - RFP 300 MVA West Jax T1 Transformer

Our Ref: Q100513

Submitted: February 1, 2022





To: JEA

Subject: RFP: 1410526846 – RFP 300 MVA West Jax T1 Transformer

With reference to the aforementioned inquiry, PTI Transformers is pleased to present our detailed commercial and technical offering for the below equipment:

| PTI Ref | Qty | Description |
|---------|-----|--|
| Q100513 | 1 | 3 Ph, 180/240/300 MVA, Autotransformer 230/69/13.8 kV c/w LV OLTC |

This proposal is based upon the requirements outlined as per the supplied RFQ documents.

We trust you find our offering in line with your requirements, but should you have any questions please do not hesitate to contact your local PTI Transformer representative (details below).

Mick Cleveland
Engineer Power Solution LLC
336-337-3900
engpwrsol@msn.com

Thank you for considering PTI Transformers, and we look forward to supply the above equipment.

Yours truly,

Shah Mohamed-Ali
Quotation Specialist
PTI Transformers

This document contains privileged and confidential information belonging to the Sender. This information is intended solely for the use of the individual or entity addressed above. If you have received this information in error, please immediately notify the Sender.



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SECTION 1: PRICING & BID INFORMATION

1.1. JEA Appendix B – Proposal Form & Bid Workbook

APPENDIX B PROPOSAL FORM

1410528846 – 300 MVA - 230KV to 69 KV Transformer for West Jax Substation T1

COMPANY INFORMATION:

COMPANY NAME: PTI Transformers LP

BUSINESS ADDRESS: 101 Rockman Street

CITY, STATE, ZIP CODE: Winnipeg, Manitoba, Canada R3T 0L7

TELEPHONE: (204) 452-7446

FAX: (204) 453-8644

EMAIL OF CONTACT: dboyd@ptitransformers.com

Quoted price in USD Funds

Unit Price per Option.

| Description | Unit Price |
|---|--|
| Option 1 – Evaluated Unit Price from the Bid Workbook | \$ <u>4,477,828.00</u> Evaluated Unit Price |

Upload 1 electronic signed copy of this Proposal your Proposal Submission

Company's Certification

By submitting this Proposal, the Proposer certifies that it has read and reviewed all of the documents pertaining to this RFP and agrees to abide by the terms and conditions set forth therein, that the person signing below is an authorized representative of the company, that the company is legally authorized to do business in the State of Florida, and that the company maintains in active status an appropriate license for the work. The company certifies that its recent, current, and projected workload will not interfere with the company's ability to Work in a professional, diligent and timely manner.

The Proposer certifies, under penalty of perjury, that it holds all licenses, permits, certifications, insurances, bonds, and other credentials required by law, contract or practice to perform the Work. The Proposer also certifies that, upon the prospect of any change in the status of applicable licenses, permits, certifications, insurances, bonds or other credentials, the Company shall immediately notify JEA of status change.

We have received addenda 1 through ~~3~~ 4

Signature of Authorize Officer of Company or Agent

For Dan Boyd, Product Sales Manager
Printed Name & Title

February 1, 2022

Date

(204) 474-5704

Phone Number

| 1410528846 Bid Workbook - West Jax Substation T1 Transformer (BIDDER SHALL FILL IN YELLOW CELLS) | | | | | | | | | | |
|--|------------------------------------|---|-------------------------|------------------------------|---------|------------------------|---------|--------------------------------|--------|----------------------|
| Only 1 Option may be selected | Transformer | Transformer Description | Unit Price (Base Price) | Guaranteed No-Load Losses | | Guaranteed Load Losses | | Guaranteed Auxiliary Losses | | Evaluated Unit Price |
| | | | | kW | Amount | kW | Amount | kW | Amount | |
| Option 1 | West Jax T1 300 MVA Transformer | 230 KV Delta (Δ) to 69 KV Grounded Wye (Y), Three-Phase Note 1 | \$ 3,310,828.00 | 58 | \$5,000 | 872 | \$1,000 | 10 | \$500 | \$4,477,828 |
| MATERIALS AND SERVICE OPTIONS PRICING (BIDDER SHALL FILL IN YELLOW CELLS) | | | | | | | | | | |
| # | Material / Service Option | Description of Work | Unit Price | Qty | | | | | | |
| 1 | Field Service Technician | 3 days of service during time period Monday - Friday, including travel and per diem. | Note 2 | 1 Lot | | | | | | |
| 2 | Additional Optional Training | 5 days of training, including travel, per diem | \$ 17,000.00 | 1 Lot | | | | | | |
| 3 | In and Out Costs | Move in and out of Storage | Note 3 | 1 Lot | | | | | | |
| 4 | Storage Costs | If Delivery delayed > 30 days from Ready to Ship. Delivery delays < 30 days shall be absorbed by the Company | Note 3 | Per Month | | | | | | |
| 5 | Critical Spare Parts | HV Bushing | \$ 11,500.00 | 1 | | | | | | |
| 6 | Critical Spare Parts | LV Bushing | \$ 4,700.00 | 1 | | | | | | |
| 7 | Critical Spare Parts | Neutral Bushing | \$ 2,800.00 | 1 | | | | | | |
| 8 | Critical Spare Parts | Gaskets | \$ 12,000.00 | 1 | | | | | | |

Note 1: Assembly, Vacuum Oil Fill, Testing & Commissioning of Transformer at site is not included in the price and shall be extra if required.

Note 2: Please refer to the Field Service rates as shown in Section 1.4 of the Bid Proposal.

Note 3: Please refer to Storage and associated costs as shown in Section 1.5 of the Bid Proposal.

| MATERIAL | CODE | PERCENTAGE | NOTES / RATIONALE |
|------------------|------------|---------------|---|
| Electrical Steel | | Note 2 | There is no US BLS Index for electrical grade steel. JEA may accept the supplier documentation on steel purchase prices, or use an alternate index such as transformer specialty manufacturer's index. |
| Carbon Steel | WPU101703 | Note 2 | This commodity category PPI Commodity data for Metals and metal products-Hot rolled steel sheet and strip, including tin mill products, not seasonally adjusted |
| Copper | Comex | Note 2 | The quarterly price adjustment for Copper shall be in accordance with PLATTS Metals Daily PDF weekly average for "COMEX HG 1st Position". The weekly average figures that will be used will be the last full week prior to the respective "Drawing Approval Date", as reported by PLATTS. |
| Oil | DCOILWTICO | Note 2 | The quarterly price adjustment for Oil shall be in accordance with the U.S. Energy Information Administration: Crude Oil Prices: West Texas Intermediate (WTI) - Cushing, Oklahoma (DCOILWTICO). The U.S. Energy Information Administration publishes this value daily. The pricing for the Oil will be determined by using the last daily reported figure that is the published and available on the Anniversary Date. This reported figure will then be compared to the initial Oil Base to measure the applicable percentage change. |
| All Other | N/A | Note 2 | Fixed Cost |

Note 2: We have offered fixed price for the unit.



1.2. Bid Summary

| | |
|---------------------|---|
| Bid Validity | : 60 days from date of original submittal excluding pricing : 30 days from date of original submittal for pricing. |
| Currency | : USD Funds |
| Taxes | : Not included and shall be extra if required. |
| Delivery | : 60 to 64 weeks after receipt of order and is subject to plant loading and confirmation at time of order. |
| INCO Terms | : DDP Site (offload to Pad). |
| Warranty | : 60/66 months, with in/out coverage for the 1 st year and in-out charges capped at 25% of the unit price. |

Shipping Conditions:

- Shipping **under dry air** by rail to nearest rail siding
- Getting rail clearance on regular train only.
- Having clear access to the substation with road trailer used to move from nearest rail siding to site.
- Getting road trailer within 30 feet from the pad for offloading;
- Not transloading the transformer to a shorter trailer due to lack of access to or within the substation and to the pad.
- Having clear access to the pad for offloading, not jacking up the transformer more than 2 feet to skid it off the trailer to the pad.
- Not rotating the transformer on site or pad.
- Having good ground conditions within the substation to withstand the trailer with transformer and skidding system.
- Does not include route survey, route engineering study, repair of roads, and utilities and police escorts. This, if required, are at costs plus 15% Adm fee.
- Does not included engineering stamped offloading drawings/lift plan. These, if required, will be at costs plus 15%.

PTI confirm that the Autotransformer and all loose items are to be shipped FOB Destination.



1.3. Recommended Spare Parts

| Item | Make | Qty | Price USD Funds |
|--|---------------|-------|--------------------|
| Winding Temperature Indicator | Messko | 1 | \$4,200.00 |
| Oil Temperature Indicator | Messko | 1 | \$3,400.00 |
| Sudden Pressure Relay 900 series | Qualitrol | 1 | \$2,400.00 |
| Pressure Relief Device | Messko | 1 | \$5,100.00 |
| Oil level Gauge | Messko | 1 | \$3,000.00 |
| LTC Vacuum Interrupter and bypass kit. | MR Reinhausen | 1 | \$18,900.00 |
| LTC Selector assembly set. | MR Reinhausen | 1 set | \$9,100.00 |
| | TOTAL | | \$46,100.00 |



1.4. Standard Field Service Rates

The following rates are applicable for personnel working within North America. Prices are subject to change.

- Per Diem:** \$2,050.00 per workday. This rate includes all time worked or traveled during a normal eight (8) hour work day or fraction thereof. A work day is considered any consecutive eight-hour period Monday to Friday (holidays excluded) with an allowance for lunch. Per Diem rate includes local traveling and living expenses only. It does not include the cost of airfare or transportation to/from the job site and personnel headquarters. All hours worked or traveled in excess of eight hours per weekday and all hours on Saturdays, Sundays, and holidays will be billed at the applicable hourly/overtime rates.
- Hourly:** \$190.00 per hour or any fraction thereof. The hourly rate is applicable to all regular workday time, including travel time 00 and time at the job site whether worked or not. A weekday is considered any consecutive eight-hour period Monday to Friday (holidays excluded) with an allowance for lunch.
- Overtime:** \$285. per hour or any part thereof. This rate is applicable to all hours worked in excess of eight (8) hours on weekdays (holidays excluded), and all time worked or traveled on Saturdays.
- Sunday & Holiday:** \$385.00 per hour or any part thereof. This rate is applicable to all hours worked or traveled on Sundays or holidays.
- Standby:** When personnel are prevented or unable to perform the services requested on the jobsite because of circumstances beyond their control, the purchaser will be billed at the applicable rate.
- Time Off:** The minimum time off for personnel during one 24-hour period shall be eight (8) hours.
- Travel:** Traveling time and expenses for each service person includes leaving and returning to headquarters. The maximum billing for traveling time at the applicable rate shall be eight (8) hours per individual for any one calendar day.

TRAVEL & LIVING EXPENSES

Hourly rates do not include any travel or living expenses.

Transportation costs to/from the jobsite and personnel headquarters shall be billed at cost.

Auto travel to/from the jobsite and headquarters, will be billed at a rate of \$0.75 per kilometer.

Copies of invoices shall be supplied.



1.5. PTI Storage Requirements and Costs

.

PTI Transformers LP

Registered Office & Plant:

101 Rockman Street, Winnipeg, Manitoba R3T 0L7, Canada

T: +1 204 452 7446 F: +1 204 453 8644 W: www.partnertechnologies.net



STORAGE REQUIREMENTS AND COST

I. Storage Requirement

a. Supplier to provide storage requirements associated with short-term and long-term storage plans. This should include any special inspections or maintenance requirements to be performed by Owner or Supplier.

b. 100% of the total unit ex-works price to be paid within 30 days of placement into storage. Remainder of contract price to be invoiced as services are rendered.

II. Storage Costs at Production Facility

Supplier to define the costs associated with potential storage at Suppliers production facility, at the port or other interim storage facility, and at the Project site.

| | Storage Cost | Insurance Cost | Maintenance Cost | Total |
|--------------------------------|---------------|----------------|------------------|---------------|
| Storage at Production Facility | \$500.00 / Mo | \$250.00 / Mo | \$1,000.00/Mo | \$1,750.00/Mo |

III. Offsite Storage

Supplier shall receive written consent from Purchaser prior to any offsite Storage

IV. Storage Costs at Onsite/Offsite Storage Facility (Beyond 3 months)

Purchaser is responsible for actual invoiced costs, plus 10% administrative fee. The costs include charges associated with storage, insurance, maintenance, loading, unloading, transport of unit (from factory to storage location) while being stored at an onsite/offsite storage facility, plus 10% administrative fee.

V. Additional Costs Associated with Long-Term Onsite/Offsite Storage (Beyond 6 Months)

If the unit needs to be stored longer than 6 months, then it needs to be filled with oil, which required assembly, oil processing, and filling at the long-term storage facility. Before the unit can be transported to the site, the oil needs to be drained and the unit needs to be disassembled for the transport. Purchaser is responsible for actual invoiced costs, plus 10% administrative fee, for long-term storage and transport preparations. They are in addition to the onsite/offsite storage costs described above.



SECTION 2: COMMERCIAL COMMENTS AND EXCEPTIONS

JEA Contract Terms and Conditions

Article 2.3.1: Payment Method - Task Authorization

We would like to offer milestone payment terms as shown below:

10% net 30 days after Design approval.

20% net 30 days at time of Manufacturing release.

40% net 30 days at time of successful completion of testing at our works.

20% net 30 days upon delivery to site.

Balance 10% payment after the final acceptance, but not to exceed 30 days after delivery.

Article 2.3.6: Taxes

Supplier is not registered to collect taxes within the USA, and Purchaser will need to self assess. Prices quoted do not include federal, state and local taxes.

Article 2.5.5: Limitation of Liability

The Purchaser agrees that the Seller not be liable for loss of expectation of profit, or any indirect special or consequential damages as a result of any failure to execute any of its obligations relating to the sale of the Equipment. The Seller's liability, on any other claim for loss arising out of the sale or repair of the Equipment or any failure of the Equipment or any element thereof shall not exceed the net unit price, exclusive of any taxes, duties or transportation cost of the Equipment or that part of the Equipment involved in such claim for loss, whichever is the lesser.

Article 2.4.1: Warranty

The Warranty Period for the Original Purchaser shall be sixty-six (66) months after the date of Delivery to its original destination or sixty (60) months from the date of the first use of Equipment by the Original Purchaser or End User, whichever is shorter. The Seller warrants that during the Warranty Period, the Equipment shall be free from defects in material and workmanship and shall reasonably meet the specifications of the Purchaser. If, within the Warranty Period, the Equipment does not meet the warranty specified above, and provided that the Purchaser promptly notifies the Seller of any such defects in writing, the Seller agrees to correct any defect, at its option, either by repairing or replacing any defective parts, or by making available, at the Facility, repaired or replacement parts subject to the limit of 100% of the original equipment. The transportation costs to and from the Facility or repair shop, shall be borne by the Seller exclusively over the first year of the warranty period, subject to the limit of twenty five percent (25%) of the original purchase price of the equipment. Seller shall be responsible for the Direct Cost of removing the apparatus from service, transportation to and from the place of repair and reinstallation of the apparatus at site (In/Out). Direct Cost excludes expenses for removing fire walls, installing temporary equipment and incremental costs of supply



service. At the end of the first year of the warranty, the cost of removal and reinstallation of the defective Equipment is the responsibility of the purchaser. The Purchaser acknowledges and agrees, that any repair or replacement of the Equipment shall not renew or extend the Warranty Period. The Purchaser further agrees that the Seller shall have no liability to the Purchaser beyond the expiration of the warranty period, and that the within warranty shall be void if the Equipment had been improperly installed or maintained, operated under abnormal conditions, or contrary to the specifications or instructions of the Seller. The purchaser expressly agrees that, aside from the foregoing, the Seller has not given, and is not bound by, any warranty regarding the equipment, or liability whatsoever including any and all incidental or consequential damages, expenses or loss of use or profits.



SECTION 3: TECHNICAL COMMENTS AND CLARIFICATIONS

JEA Technical Specifications – Autotransformers

Clause 3.6.5: LV On Load Tap Changer (OLTC)

LTC is provided for LV voltage variation and is at the neutral end of auto transformer in line with the name plate of existing unit. This is a variable flux design and please refer to voltage table for the LV voltage at different tap positions. We have considered RMV II 2000A vacuum type LTC and so LTC filters are not required

Clause 3.6.6: HV De-energized Tap Changer (DETC)

DTC not provided as per addendum clarification

Clause 15: Tank Construction

Please refer to write up on our tank construction in Section 5 of the Bid Proposal.

Clause 17: Paint:

We have included PTI Standard Paint System in the Quoted Price. Please refer to write up on our paint system in Section 6 of the Bid Proposal.

Clause 22: Autotransformer Online Monitoring Requirements

For this, our proposal is considering the Qualitrol QTMS system complete with bushing monitoring module, and the Qualitrol Serveron TM8 as an integrated solution. Please note however the TM8 does require a carrier gas. We would need to utilize an alternative DGA monitor such as the Kelman DGA 900 to avoid use of carrier gas if required. Please refer to brochures included in Section 6 of the Bid Proposal.

Other Comments

Oil quality for site oil:

In case tanker oil does not meet the listed criteria, it will be processed after filling in transformer and oil results checked to meet the requirements

Tests:

Induced test with PD measurements will be performed as per IEEE/CSA standards as applicable. The test levels will be as per the standards and the preferred measurement is only pico-coulombs as they are more reliable to assess healthiness of internal insulation.



Sound level:

Unless otherwise specified, the guaranteed sound level is Sound pressure at No load without fans and at no load with fans. Tests will be performed for these conditions. Sound power will be calculated when specified. Sound level under load will be performed only when specified. Octave band measurements will be performed only when specified. Additional price if any will be in the quote.

DGA limits:

DGA limits will be as per C 57.130

External clearances:

Unless otherwise specified, external air clearances for bushings will be based on IEEE/CSA standards. For Surge arresters, the air clearance will be based on supplier recommendations.

Gasket Material:

Unless otherwise specified, the gasket material supplied will be Nitrile with a temperature range -54° to $+104^{\circ}$ C (-65° to $+220^{\circ}$ ° F). O-Ring gaskets in machined grooves are used on circular openings, with flat gasket material inside metal gasket stops on rectangular openings.

For special requirements/or at additional cost we can supply Fluorosilicone gaskets with a temperature range of -57° to $+232^{\circ}$ C (-70° to $+450^{\circ}$ ° F). Price adder for this option is \$15,000 USD per-unit.

Gas Collection Configuration:

Unless otherwise specified, bushing turrets are fitted with internal gas deflectors to avoid the need for gas piping between the turrets and the GRD pipework. This also improves safety when working on the cover many pipe connections on cover are avoided.

Core/Clamp Ground:

Unless otherwise specified, the core assembly and the clamp assembly ground connection cables are each brought out through a 1.2kV/30kV BIL bushing and grounded externally with a removable cable to facilitate testing.



SECTION 4: TECHNICAL DATA SHEETS & OUTLINE DRAWINGS

PTI TRANSFORMERS LP

Power Transformer Specification

| | | | |
|--------------|---------|----------|------------------------|
| For: | JEA | Date: | 01/24/2022 |
| Proposal No. | Q100513 | Spec No. | West Jax Substation T1 |
| | | Item No. | Q100513 |

RATING

| | | | | |
|-------------------|-------|------------|------------|------------|
| Type: AUTO | Class | H Winding | X Winding | Y Winding |
| Phase: 3 | | 230 kV | 69 kV | 13.8 kV |
| Hertz: 60 | ONAN | 180.00 MVA | 180.00 MVA | Buried MVA |
| Temp. Rise: 65 | ONAF | 240.00 MVA | 240.00 MVA | |
| Insul Liquid: Oil | ONAF | 300.00 MVA | 300.00 MVA | |
| Service: Outdoor | | | | |

ADDITIONAL TAP VOLTAGES

H Winding

X Winding LTC +/- 10 % +/- 16 Steps

CONNECTIONS FOR OPERATION

| Transformers in Bank | To Transformer From | Phase | Connected | To Transformer To | Phase | Connected |
|----------------------|---------------------|-------|-----------|-------------------|-------|-----------|
| | HV | | WYE | | | |
| | LV | | WYE | | | |

PERFORMANCE BASED
ON A LOADING OF

| Winding | Voltage | MVA |
|-----------|---------|--------|
| H Winding | 230 | 180 |
| X Winding | 69 | 180 |
| Y Winding | 13.8 | Buried |

DIELECTRIC TESTS

| Test | Winding | Voltage |
|-----------------|-------------|----------|
| Applied Voltage | H Winding | per ANSI |
| | X Winding | per ANSI |
| | Y Winding | per ANSI |
| Induced Voltage | Line-Line | per ANSI |
| | Line-Ground | per ANSI |

INSULATION LEVELS

| Item | BIL |
|--------|-----|
| H Line | 900 |
| X Line | 350 |

PERFORMANCE DATA, Based on 85 °C Reference Temperature

| Losses and Exciting Current at 300.00 MVA | | | | | REGULATION (approximate) | |
|---|--------------|-----------------------|--------------------|--------------------------|--------------------------|--------------|
| Excitation | %lex | No Load KW Guaranteed | Load KW Guaranteed | Total Loss KW Guaranteed | Power Factor | % Regulation |
| 100% | 0.02 approx. | 58.00 | 872.00 | 930.00 | 1.0 | 0.68 |
| 110% | 0.02 approx. | | | | 0.8 | 4.20 |
| | | | | | 0.8 P.F Lead | -3.18 |

AUXILIARY LOSSES (cooling losses only)

| Transformer MVA | Class | KW Aux. Loss |
|-----------------|-------|--------------|
| 180 | ONAN | 0.00 |
| 240 | ONAF | 5.00 |
| 300 | ONAF | 10.00 |

MECHANICAL DATA

Not For Construction Purposes

For dimensions please refer to attached drawing

PERCENT IMPEDANCE VOLTS

| % IZ | Connection | at MVA | AVERAGE SOUND LEVEL |
|------|------------|--------|---|
| 6.20 | H-X | 180 | 82/83/84 dBA per ANSI standard test methods |
| | H-Y | | |
| | Y-X | | |

EFFICIENCIES (approximate)

| MVA Rating | 1 1/4 Load | Full Load | 3/4 Load | 1/2 Load | 1/4 Load |
|------------|------------|-----------|----------|----------|----------|
| 180 | 99.37 % | 99.48 % | 99.59 % | 99.69 % | 99.75 % |
| 300.00 | 98.98 % | 99.17 % | 99.37 % | 99.56 % | 99.72 % |

Net Weight in

| | |
|-------------------------|---------|
| Core and Coils: | 224,968 |
| Tank and Fittings: | 125,879 |
| Liquid: 20806 U.S. Gal. | 149,110 |
| Total Weight: | 499,957 |
| Shipping Weight: | 298,090 |

PERMISSIBLE SHORT TIME OVEREXCITATION OF AUTO TRANSFORMER

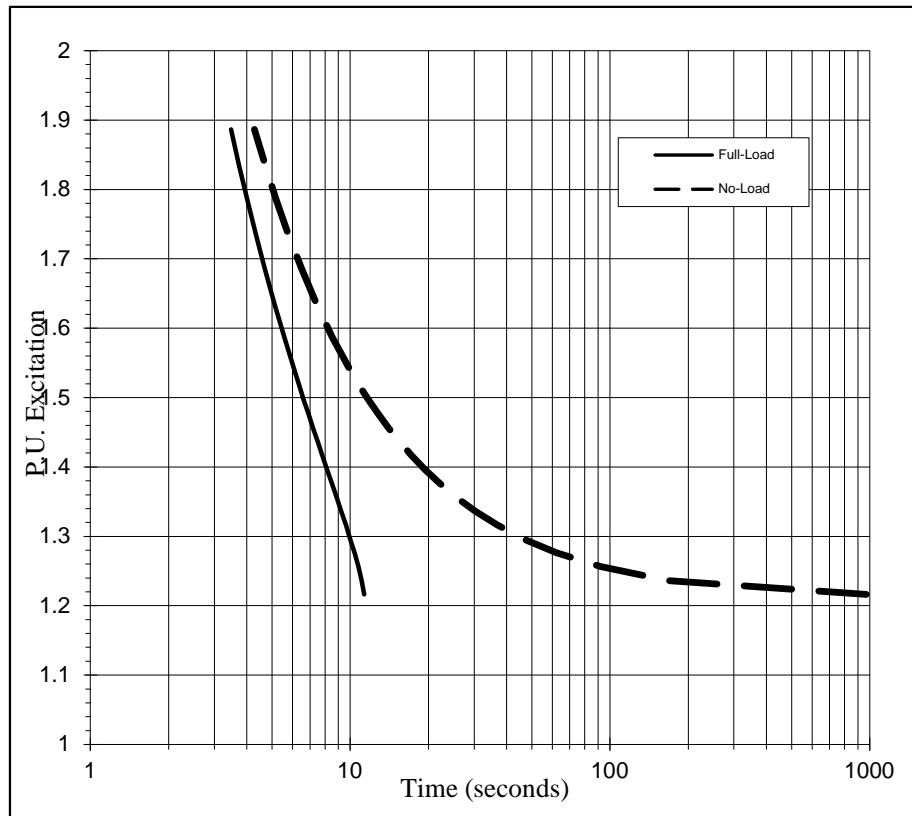
| | | |
|-----------------------|---|---------|
| | Rev 0 | |
| | 18-Jan-22 | |
| MVA 300 | P.U. Excitation = | 8:33:12 |
| | <u>P.U. voltage relative to rated voltage</u> | V2.00 |
| Voltage 230KVY -69KVY | P.U. frequency relative to rated frequen | |

Rated Freq: 60Hz

Excitation: HV

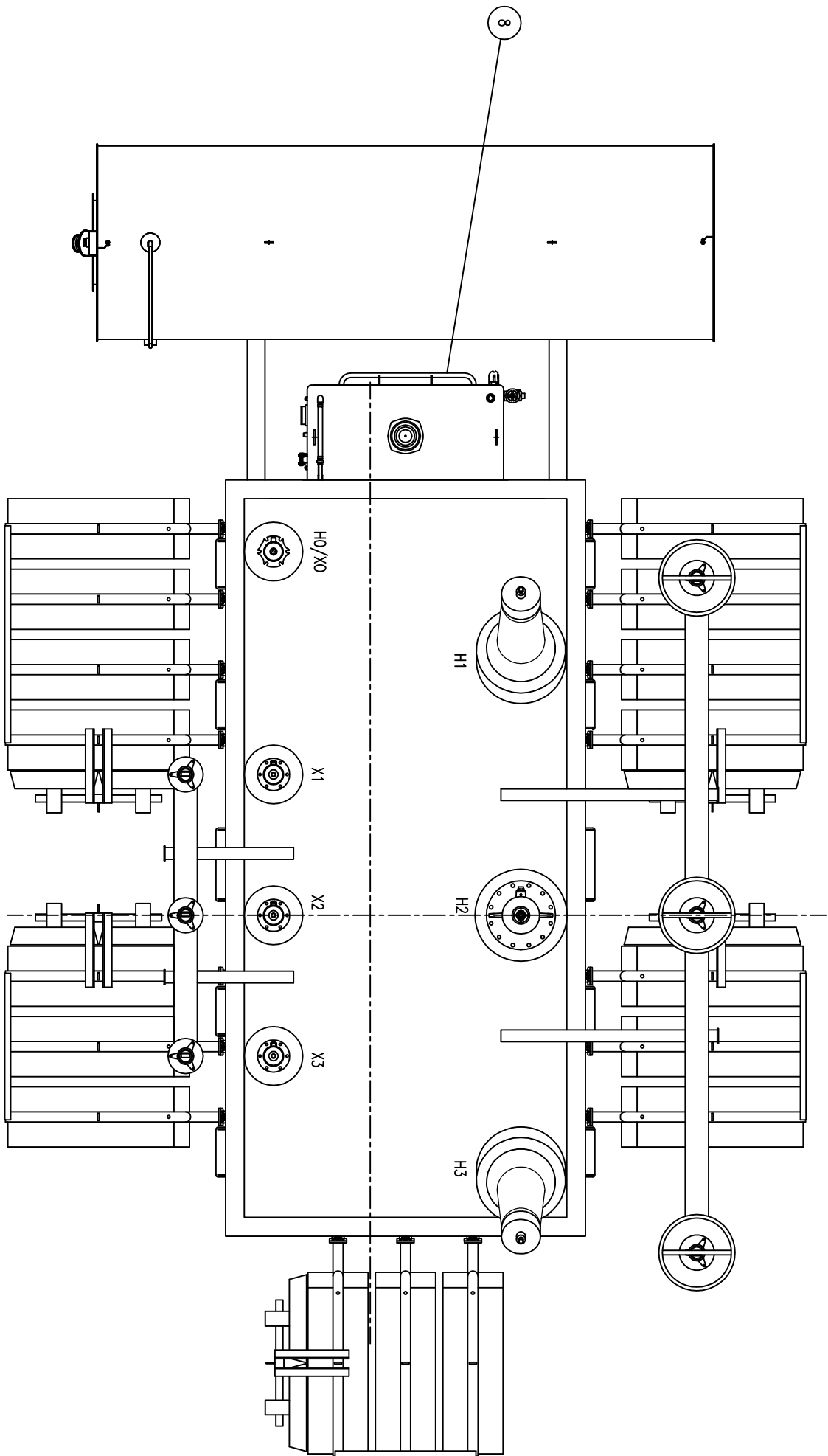
Customer JEA
Q100513

Maximum continuous overvoltage without dc current = 1.1 pu
This data assumes zero dc current. The curve must be derated for the dc current.

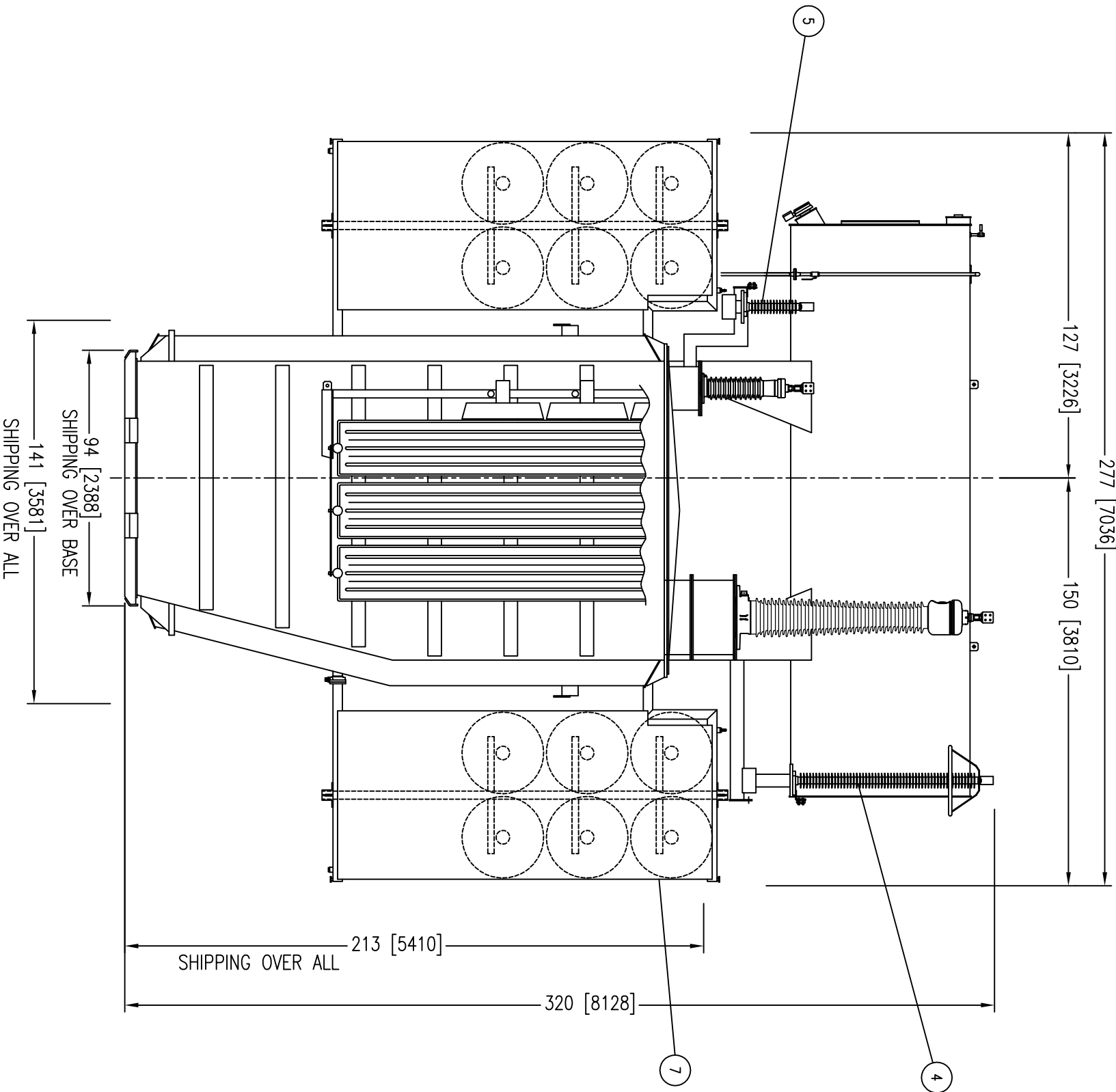
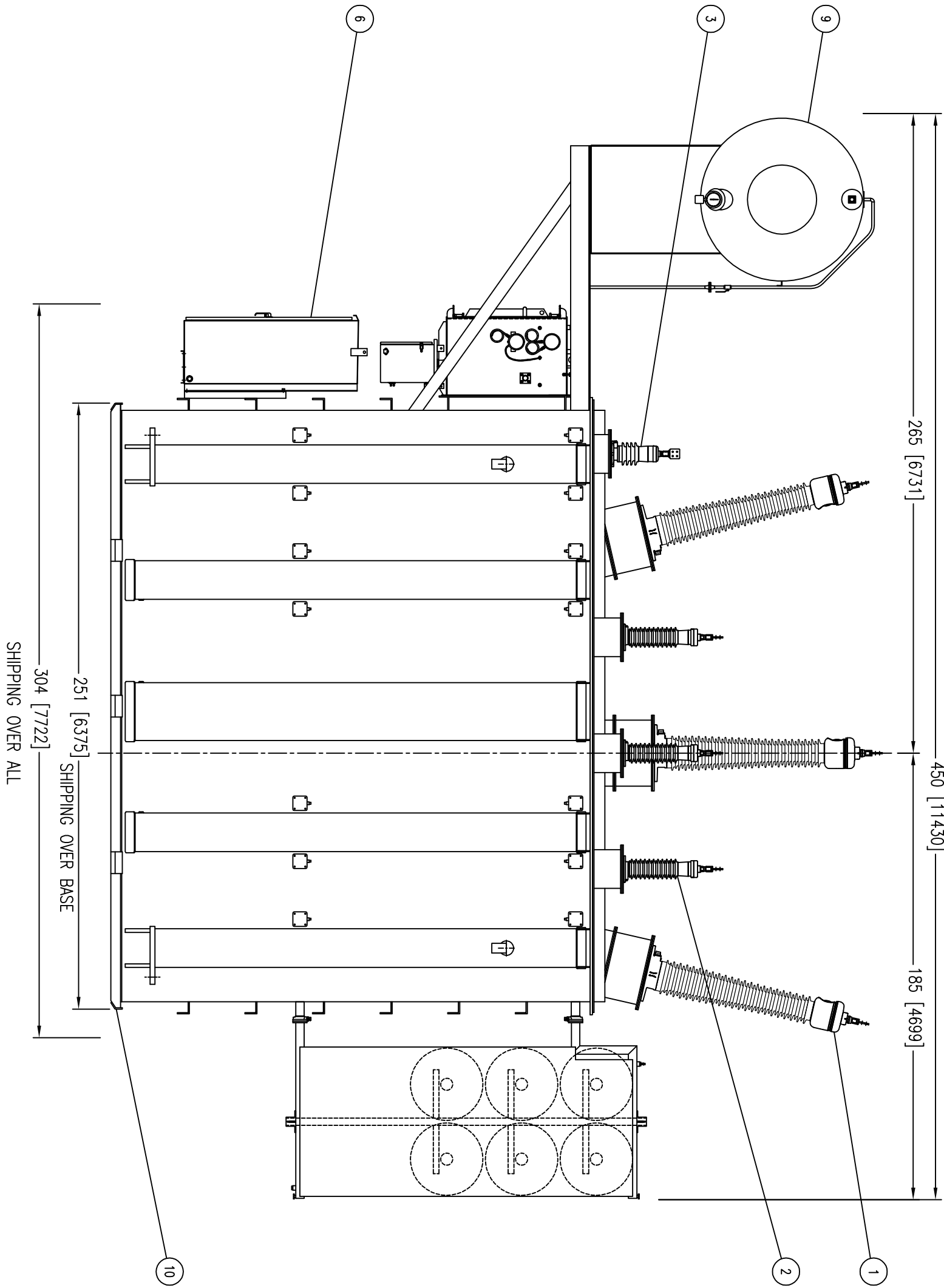


Q100513 - LV Voltage Table

| | |
|-----|-------|
| 16R | 75950 |
| 15R | 75525 |
| 14R | 75100 |
| 13R | 74700 |
| 12R | 74275 |
| 11R | 73850 |
| 10R | 73400 |
| 9R | 72975 |
| 8R | 72550 |
| 7R | 72125 |
| 6R | 71675 |
| 5R | 71225 |
| 4R | 70800 |
| 3R | 70350 |
| 2R | 69900 |
| 1R | 69450 |
| N | 69000 |
| 1L | 68550 |
| 2L | 68100 |
| 3L | 67625 |
| 4L | 67175 |
| 5L | 66700 |
| 6L | 66225 |
| 7L | 65750 |
| 8L | 65300 |
| 9L | 64800 |
| 10L | 64325 |
| 11L | 63850 |
| 12L | 63375 |
| 13L | 62875 |
| 14L | 62400 |
| 15L | 61900 |
| 16L | 61400 |



- 1 HV BUSHINGS c/w 4 HOLE NEMA CONNECTOR
- 2 LV BUSHINGS c/w 4 HOLE NEMA CONNECTOR
- 3 H0/X0 BUSHING c/w 4 HOLE NEMA CONNECTOR
- 4 HV L/A'S AND SUPPORT
- 5 LV L/A'S AND SUPPORT
- 6 CONTROL CABINET
- 7 FANS & RADIATORS
- 8 ON-LOAD TAPCHANGER
- 9 MAIN CONSERVATOR OIL PRESERVATION SYSTEM (AIR CELL TYPE)
- 10 SKID BASE



FANS & RADIATORS NOT SHOWN
ON THIS VIEW FOR CLARITY

| | | | |
|----------------|------------------|-----------------------|----------------------------------|
| ENGINEER | DATE | CUSTOMER NAME | MVA |
| DRAWN D.UDVAR | DATE JAN 19/2022 | JEA WEST JAX T1 | 180/240/300 |
| CHECKED | DATE | QUOTE NUMBER Q1005013 | VOLTAGE 230kV/69kV/13.8kV |
| APP'D. | DATE | DELIVERY LOCATION | TYPE ONAN/ONAF/ONAF |
| TITLE | | | FILENAME MECH\QUOTE\2021\Q100513 |
| QUOTE OUTLINE | | | PLOT SCALE |
| | | | 1=50 |
| | | | PROJECTION |
| | | | THIRD ANGLE |
| | | | PAGE 1 |
| | | | OF 1 |
| DRAWING NUMBER | | | REV. |
| 1601C3536 | | | |



SECTION 5: COMPANY PROFILE



COMPANY PROFILE ♦ PTI TRANSFORMERS LP



PTI is a **Canadian family-owned business that is financially sound**. PTI began, in 1989, as a small maintenance and repair shop and currently employs more than 330 people.

PTI has two (2) transformer facilities one (1) of which is located in Regina, Saskatchewan and one (1) in Winnipeg, Manitoba.

The Winnipeg, Manitoba, facility, **called PTI Transformers LP**,

PRODUCT RANGE:

- ♦ Substation transformers
- ♦ GSU transformers
- ♦ Auto-transformers
- ♦ Phase shifting transformers
- ♦ Mobile substation transformer

- ♦ Primary voltage up to 525 kV
- ♦ Primary voltage up to 230 kV for mobile substations

- ♦ Up to 750 MVA top rating
- ♦ LTC & DETC

was purchased under a fixed asset deal in November 2015 from CG Power Systems Canada Inc. which included design technologies up to 525 kV and HVDC technology. The facility manufactures medium and large power transformers up to 750 MVA top rating, with primary voltage up to 525 kV and mobile substation up to 100 MVA ODAF, and primary voltage up to 230 kV.

PTI Transformers operated previously under brand-names CG Power Systems Canada, Pauwels and Federal Pioneer. The facility is known in the industry for having a very reliable **core designs** with an in-field failure rate that is **less than 0.01%**.

The 200,000 sq. ft. facility is state-of-the-art with environmentally controlled critical areas, such as the winding area and insulation area.

PTI Transformers is ISO 9001:2008 and ISO 14001:2004 certified.

The Regina facility manufactures liquid filled distribution, small and medium power transformers up to 40 MVA top rating with primary voltage up to 138 kV.

PTI, Regina, is ISO 9001:2008 certified.

PTI, Regina facility, developed a "Portable Outdoor Distribution Station", called POD's, through 145 kV, which allows our customers to significantly reduce construction and installation costs compared to building a conventional substation.





COMPANY PROFILE ♦ CORE COMPETENCY

The PTI Transformers medium and large power transformers as well as the mobile substations are designed and manufactured to meet or exceed the customer expectations while complying with the applicable industry standards.

All option and special features are incorporated into the original design per customer's specification.

LTC & DETC design is available as well as ONAN, ONAF, ODAF and ODWF cooling.

All standard accessories as per customers' specification are included.



| Transformer Type | Rating* | Voltages | | Phase |
|--------------------------------|---------------|--------------|---------------|--------|
| | | HV | LV | |
| Substation transformers | Up to 750 MVA | Up to 525 kV | Up to 69 kV | 1 or 3 |
| Auto transformers | Up to 750 MVA | Up to 525 kV | Up to 345 kV | 1 or 3 |
| Generator Step-Up Transformers | Up to 750 MVA | Up to 525 kV | Up to 34.5 kV | 1 or 3 |
| Mobile substations | Up to 100 MVA | Up to 230 kV | Up to 115 kV | 3 |

* Rating is top rating

PRODUCT RANGE:

- ♦ Substation transformers
- ♦ GSU transformers
- ♦ Auto-transformers
- ♦ Phase shifting transformers
- ♦ Mobile substation transformer
- ♦ Primary voltage up to 525 kV
- ♦ Primary voltage up to 230 kV for mobile substations
- ♦ Up to 750 MVA top rating
- ♦ LTC & DETC



COMPANY PROFILE ◇ LONGEVITY OF TRANSFORMERS THROUGH PD CONTROL



Utilities value assets, network reliability and safety. It is for this reason that **PTI Transformer's design and manufacturing of utility grade transformers**, (substation power transformers, auto-transformers and GSU transformers), are focused on having an **unmatched low partial discharge (PD) of less than 25pC, when subjected to the induced voltage test per IEEE standard C57.12.00 and C57.12.90.**

These IEEE standards prescribe a PD level of lower than 500pC. An upcoming reduction of allowable PD level to 300pC, is already being reflected in most of the utilities' specifications. This future acceptance level, i.e. 300pC, has long been adopted by PTI Transformers as **its internal manufacturing PD limit** for all power transformers manufactured.

PD is a major contributing factor in the degradation of any power transformer insulation, which ultimately leads to reduction of life expectation and ultimately to transformers failure, furthermore leading to a reduced grid reliability.

PD is an electrical discharge or spark that bridges a portion of the insulation between two conducting electrodes. It can

occur at any point in the insulation system, where the electric field strength exceeds the breakdown strength of that portion of the insulating material. PD can occur in a gaseous, liquid or solid insulating medium. It often starts within gas voids; such as voids in insulation or bubbles in transformer oil. Protracted partial discharge can erode solid insulation and eventually lead to breakdown of insulation.

Testing PD as a standard practice, by all means, provides clear evidence that the transformer is fit for installing in a way that is not likely to lead to failure and will contribute to longevity.

Once PD activity is present, even if it is intermittent, damage will **always increase over time**, unless the cause of such source is corrected. The process of deterioration can propagate and develop, until the insulation is unable to withstand the electrical stress, leading to breakdown. PD activity is a clear indication that the transformer's insulation is deteriorating in a progressive manner, which will eventually result in it being unable to withstand the electrical stress, leading to insulation breakdown which may result in a catastrophic failure and finally lead to outages.

PD can usually be prevented through careful design and material selection. In critical high voltage equipment, the integrity of the insulation is confirmed using PD detection equipment during the manufacturing stage as well as periodically through the equipment's useful life. PD prevention and detection are essential to ensure reliable, long-term operation of high voltage equipment used by electric power utilities.

PTI Transformers, with decades of designing and manufacturing high voltage power transformers, has the necessary expertise in designing PD-free transformers, detecting and measuring PD activities.



PTI Transformers measures PD on **all power transformers it manufactures**; therefore, supplying specific untapped value to our customers and contributing to the **network reliability and safety**.

Measuring PD on a regular basis is important and is key, however, PD control starts with good design criteria for PD free condition, such as the limits for averaged and point stress (i.e. Weidmann criteria), avoiding sharp electrodes for each specific voltage class and capability to analyze complex geometries using 2D and 3D electric field solvers. Hence these are stringent design criteria that must be present at the manufacturer and more specifically in the manufacturing space itself. This must be considered when purchasing the transformer and should be questioned at time of evaluation.

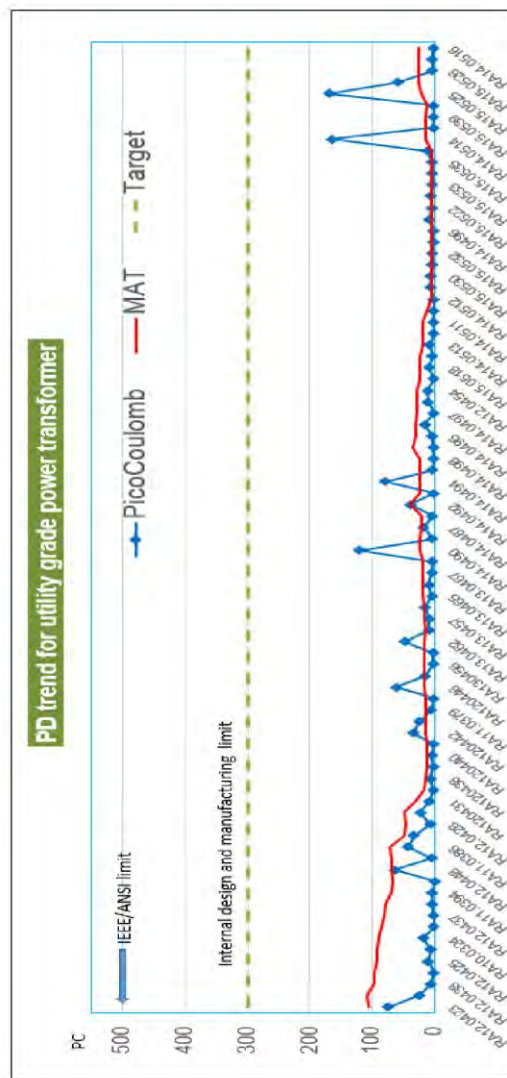
A PD-free design is not only driven by design, but also through stringent quality control of insulating materials, workmanship, cleanliness of work environment and moisture control in the manufacturing processes.

As indicated previously, power transformers are subjected to the induced voltage test per IEEE standard C57.12.00 and C57.12.90. with PD measurement prescribed.

Notwithstanding these standards **and self-imposed minimum PD levels**, the quality of our design guarantees longevity through even more stringent control of PD level on all power transformers manufactured.

Over the past recent period of one-hundred (100) transformers manufactured at PTI's Winnipeg facility, 90% tested at PD levels of less than 50pC, of which, the majority (94%) tested at 25pC or less.

The graph on the right demonstrates the results discussed in this profile sheet.





ENGINEERING INNOVATION ♦ 300 YEARS OF CUMULATIVE EXPERIENCE

PTI Transformers Engineering team has over 300 years of cumulative experience in design and development of transformers PTI Transformers is always very active in working together with lead customers on the development of new solutions in large power transformer engineering.

The progress in this area was achieved through:

- (i) **Pro-active interpretation of customer's specification**, looking for most economical solution for the customer. As example – the customer was looking for design of a spare GSU for a few locations with different LV voltages and same HV voltage; the original specification called for reconnectable LV winding which at 600MVA power rating would be extremely impractical; instead we proposed and developed with MR, Germany a new multi-position de-energized switch for HV side, which allowed to generate all required ranges of HV voltage with different supply voltage at LV terminals (with variable flux design) – see reference [5]
- (ii) **Common research** with a power utility, also through University of Manitoba, Winnipeg, MB and Poznan University of Technology, Poland – see e.g. [2, 3, 6, 7] Example - Study of transformers' operational problems with moisture ingress - see [4]
- (iii) **Publication of recent achievements** in conference papers or international journals – see [1-14]
- (iv) **Participation in international standardizing organizations** (IEEE, IEC) to promote implementation of solutions and new materials, e.g. in IEEE Standard C57.54 IEEE Standard for the Design, Testing, and Application of Liquid-Immersed Distribution, Power, and Regulating Transformers Using High-Temperature Insulation Systems and Operating at Elevated Temperatures (CG was represented by a few persons in the IEEE Working Group providing required input related to thermal

performance and implementation of high temperature materials, such as aramid paper and board)

- (v) **Knowledge sharing with customers** through seminars, e.g. Weidman seminars, IEEE tutorials, customized presentations to customers
- (vi) In-depth **design reviews** with customer's consultant(s) before and after award of the contract to search for cost savings opportunities
As example – PTI developed a large phase-shifting transformer with both exiting and series units housed in one tank – this reduced the footprint of the unit in the station, simplified transport and allowed for easier operation of the unit – see ref. [8-9].
- (vii) Contribution to development of **integrated design solution** to achieve optimized design with transient, thermal and short circuit strength verification
- (viii) Expertise to design and manufacture **design solutions to special requirements of customer** like Mobile substations up to 230kV class, HVDC converter transformers, units with dual LV in zig-zag connection, GSU unit with 500kV-230kV reconnection, Universal spare GSU units with different LV voltages, Phase shifting transformers
- (ix) **Collaborative design solutions** for site operation, e.g. Reverse power flow studies

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PRODUCT RANGE

Substation transformers
GSU transformers
Autotransformers
Phase shifting transformers
Mobile substation transformers

Primary voltage up to 525 kV
Primary voltage up to 220 kV for
mobile substations

Up to 750 MVA top rating
LTC & DFT



COMPANY PROFILE ♦ ENGINEERING



At PTI Transformers we realize that the design of power transformers, with primary voltage through 525 kV, requires a very high level of expertise which we have in-house

Our senior engineers are members of the IEEE and are active at various IEEE transformer working groups or committees and are experts on NEMA, IEEE/ANSI, CSA and IEC standards.

Our transformers are designed to the specifications and applications as per our customers' request.

Through special in-house developed software, we optimize every transformer in relation to labor and current material cost and loss evaluation together with eventual noise level restrictions imposed. We evaluate transformer behavior during short-circuit conditions, as well as the analysis of specific areas where high electrical stresses can occur during normal transformer operation. Part of our design verification is hinged on the calculation of distribution of voltage stresses during lightning impulse and switching surge conditions.

Should seismic calculation and withstand be required we can provide static or dynamic design evaluation to ensure the transformer will withstand the specified customer requirement.

The PTI Transformers LP engineering staff, entails a group of twenty-six (26) full-time engineers having a total of 336 years of experience.

Our engineer staff, members of the IEEE and CIGRE organization, are using robust and proven designs philosophies which in turn translates in an ultra-low in-filed failure rate of less than 0.01%. We are using 3D fabrication drawings to further reduce the first pass yield to industry standards.

| Department | # of people | Avg. seniority | Total seniority |
|------------------------|-------------|----------------|-----------------|
| Mechanical engineering | 14 | 13.33 | 186.62 |
| Electrical engineering | 10 | 6.29 | 62.90 |
| Engineering management | 2 | 43.60 | 87.00 |
| Total years | 26 | | 336.52 |

Our senior engineers are well respected in the North American transformer market, below their biography:

Dr. Waldemar Ziomek – Engineering R & D Manager

Waldemar started in 1997 with Pauwels Canada Inc. as a design engineer and became in 1999 their Engineering Manager through 2014. Today, due to his vast experience he is the **Engineering R&D Manager at PTI Transformers**. He as a PhD, in EE, from the Poznan University of Technology specialized in Electric Power and High Voltage Engineering, as well as a MSC degree in Electric Machines and Apparatus.

As Manager of Engineering he designed the insulating structures as well as supervised designs and the manufacturing of 500+ power transformers between 1999 and 2014; entailing substation transformers, generator step-up transformers, auto-transformers, phase shifting transformers, and HVDC transformers. Although, PTI Transformers LP is not manufacturing transformers with a primary voltage up to 765 kV, he was part of the 765 kV development team.

He published over sixty (60) papers for various organization or institutions such as CIGRE and IEEE, this concerning



transformer insulation, vacuum insulation systems, gaseous dielectrics and discharge recognition methods.

He is a current member of the IEEE Power Engineering Society, Transformer Committee, IEEE standards association, CSA and CIGRE.

Currently he is also Adjunct Professor at the University of Manitoba.

Universal spare GSU transformers, Mobile substation, Smart transformers and Geomagnetic induced currents in transformers.

In short, Vijayan has over thirty-eight (38) years of large power, transformer, EHV shunt reactor, phase shifting and mobile transformer experience.

Krishnamurthy Vijayan – Engineering Manager

From 1981 through 1989, Vijayan was the Senior Electrical Design Engineer at Crompton Greaves Ltd., India. From 1998 through 2001, he was the Engineering Design Manager at Crompton Greaves Ltd., India. He immigrated to Canada in 2001 as Senior Electrical Design Engineer for Pauwels Canada Inc./CG Power Systems Canada Inc. Vijayan was promoted to Head of Electrical Engineering with CG Power Systems Canada Inc. and promoted as Engineering Manager in 2014.

He has a Master of Engineering with specialization of High Voltage Engineering from the reputed University, Indian Institute of Science in India.

Although, PTI Transformers LP is not manufacturing transformers with a primary voltage up to 765 kV, Vijayan was part of the CG Power Systems, Hungary, 765 kV development team. He was also part of the development team for 1200kV auto-transformer by the CG group.

He was directly involved in the electrical design of 420 kV shunt reactors, 750 MVA top rating 3 ϕ auto-transformers, 200 MVA 1 ϕ generator step-up transformer, 650 MVA 3 ϕ generator step-up transformer, 200 MVA 3 ϕ phase shifting transformer as well as a 600 MVA 3 ϕ universal generator step-up transformer and not to forget the development of a 3 ϕ 230 kV mobile substation transformer.

He published over twelve (12) technical papers for various organization or institutions such as CIGRE and IEEE, this concerning Shunt reactors, Phase shifting transformers,

PRODUCT RANGE:

- ▢ Substation transformers
- ▢ GSU transformers
- ▢ Auto-transformers
- ▢ Phase shifting transformers
- ▢ Mobile substation transformer

- ▢ Primary voltage up to 525 kV
- ▢ Primary voltage up to 230 kV for mobile substations

- ▢ Up to 750 MVA top rating
- ▢ LTC & DETC



COMPANY PROFILE ◇ QUALITY MANAGEMENT SYSTEM



PTI Transformers LP is ISO 9001:2008 certified for “power transformers up to 1,000 MVA, with a primary voltage class up to 765 kV and mobile transformers”.

Our quality philosophy is:

- To provide best in-class power systems of exceptional quality and productivity
- To be a customer-focused organization through the translating customer requirements into world class power systems
- To foster a creative work environment that promotes employee innovation, development, and engagement
- To continue improve our operations, systems and productivities
- To develop and sustain an exceptional supply chain network that delivers quality products and services every time, through a mutual beneficial customer supplier relationship

On a periodically basis, as prescribed by the quality manual, reviews at the level of management are made to evaluate key performance factors related to the quality policy and quality

objectives, which are shared through the organization in words and in action. This review process is described in detail in the controlled quality manual and this for all level of the organization; hence we are truly a made-to-order organization. Not only do we focus on in-house control PTI Transformers, through internal audits, customer satisfaction is of paramount importance and is the primary responsibility of each employee; hence on regular basis customer surveys are conducted to analyze the effectiveness of our quality management systems.

Each of all quality management processes are monitored and measured by the respective process owners through their selected Key Performance Indicators (KPI's). Process owners must select KPI's that allow them to monitor their process or department's performance, and to be able to react where corrections or improvement are required to adhere to the quality objectives set. Measurement of success and failure is contribution to PTI Transformers LP success as a first-class large power transformer supplier.

The success of PTI Transformer's quality process control is hinged on the following corner-stone procedure; and these are:

- **Control of documents procedure** – to establish and maintain a process for review, approval, distribution and control of all essential documents related to ISO 9001 Quality Management Systems (QMS) and ISO 14000 Environmental Management System (EMS).
- **Sales procedure** – to establish and maintain a process for all request for quotations within the organizations and provide guidance of execution through flow chart control.
- **Design procedure** – to establish and maintain a process for all quotation design with the design tools in place through flow chart control.
- **Manufacturing procedure** – establishes a well-documented manufacturing procedures and work instructions for all of our fabrication and manufacturing processes, including collection of relevant manufacturing data.
- **Contract administration procedure** – to establish and maintain the contract administration function within the organization and to provide guidance through flow-chart control.
- **Scheduling procedure** – to establish and maintain a process for scheduling through the organization and at all levels of the organization and to provide guidance through flow-chart control.



- **Design-to-order procedure** – to establish and maintain a design process for transformers orders within the engineering department and to provide guidance through flow-chart control.
- **Manufacturing procedure** –
- **Inspection and testing procedure** – to establish and maintain a process for inspection and testing process for all products manufactured at PTI Transformers LP
- **Getting ready for transportation** – to establish and maintain a process for testing the product and all associated parts and preparing it for shipment to defined location as specified in the customer's contract.
- **Shipping and invoicing** – to establish and maintain a process for shipping and invoicing for the product manufactured by PTI Transformers LP.

PTI Transformer's objective is well defined in our QMS and are solely related to ensure that the **manufactured products perform safely and reliably, meeting the requirements specified by its customers and providing excellent life cycle value; while considering that for the most part people are driving the quality of organization and products supplied.**

Therefore, we measure success and failure within the PTI Transformers organization as defined in the QMS manual, these are:

- **Continual improvement** – to establish and maintain continual improvement processes throughout the organization
- **Preventative action** – to establish and maintain a process to induce preventive action processes throughout the organization to identify and eliminate the causes of potential nonconformities to prevent their occurrences
- **Control of non-conformances** – to establish and maintain a process for identification, segregation and disposition of non-conformances of the product manufactured to further prevent its unintended use of delivery

The continual improvement processes include the monthly measurement of:

- First pass yield
- In-field failures
- Cost of poor quality (COPQ) as a percentage of net sales
- Efficiency in production as a measure of throughput time
- EHS
- Quality of supply
- Inventory control

The PTI Transformers QMS and EHS program is geared towards safe operation of the product manufactured as customers are depending on high quality products to contribute greatly to the

stability of their grid system in various shapes and forms. Indeed, the PTI Transformers power transformers are in fact an investment in our technology that needs to be secured for decades. Our customer's investment is secured through our processes implemented therefore inducing consistent quality of the product and its vital parts.

PTI Transformers LP does not compromise on quality; this through systems put in place and rigorous acceptance testing which ultimately has resulted in an "in-field failure rate of less than 0.01%".

PRODUCT RANGE:

- ◊ Substation transformers
- ◊ GBU transformers
- ◊ Auto-transformers
- ◊ Phase shifting transformers
- ◊ Mobile substation transformer
- ◊ Primary voltage up to 525 kV
- ◊ Primary voltage up to 230 kV for mobile substations
- ◊ Up to 750 MVA top rating
- ◊ LTC & DETC



COMPANY PROFILE ♦ CORE CONSTRUCTION



PTI Transformers medium and large, power transformers are always **core form** design, two (2) legged, three (3) legged or five (5) legged depending on customer requirement and application.

All cores are of circular cross section, step-lapped design with fully mitered corner joints to minimize core loss, coated with carlite to increase the interlamination resistance and to reduce eddy current and reduce sound level.

Computer controlled core shears accurately cut mitered laminations using the fully automated Georg 1000 core cutting machine. Once stacked, the exposed core edges are coated with low viscosity high tensile strength epoxy resin, which penetrates and bonds the laminations.

Our cores are carefully designed to limit core surface temperatures and leakage fluxes, and are constructed **without** through-bolts to eliminate a potential source of overheating. Core legs are additionally bonded with fiber-glass reinforced bands. Based on design, core top yoke is bonded with Nomex®/Kevlar® bands for mechanical integrity.

Where loss evaluations justify its use, core steel used is high grade, non-aging, grain-oriented, electrical silicon steel of low hysteresis loss and high permeability; hence we select M4-grade and laser-scribed steel.

We only use step-lap core principle to reduce losses, magnetizing current and sound level. The cores are fully-mitered on all joints in order to improve the flux distribution.

The laminations are stacked in steps, resulting in a circular core shape which gives the windings optimum radial support, especially during short-circuit conditions. The temperature rise of the core is designed to be low and is controlled. If required by design, and customer requirement, vertical oil ducts are placed within the core packets.

The core is clamped using structural steel clamps which provide high strength under both static (lifting and clamping) and dynamic (short-circuit) mechanical loads. The clamps are very lightweight for their strength and provide a smooth surface facing the winding ends, eliminating regions of high local electrical stress.

PRODUCT RANGE:

- ♦ Substation transformers
- ♦ GSI transformers
- ♦ Auto-transformers
- ♦ Phase shifting transformers
- ♦ Mobile substation transformer

- ♦ Primary voltage up to 525 kV
- ♦ Primary voltage up to 230 kV for mobile substations

- ♦ Up to 750 MVA top rating
- ♦ LTC & DETC



COMPANY PROFILE ♦ WINDINGS



Windings are of the circular concentric type, because this shape results in the highest short-circuit strength and provides excellent cooling performance with natural or forced oil flow. The copper conductors are paper covered magnet wire (single, twin, or triple), or continuously transposed cable and designed to optimize eddy loss and withstand anticipated short circuit forces. Low-voltage windings are made with netting tape/perforated Nomex® insulation for better thermal performance. The inner windings are designed to withstand inward radial forces based on ability of conductor to resist forces in a "free-buckling" mode. All the CTC conductors are epoxy bonded for high mechanical strength. High voltage windings are designed with special shielded windings without any joints for better impulse strength. Custom designed static rings are normally used to control the electric field at the ends of windings.

Insulation materials are made from pre-compressed boards of high mechanical and electrical strength. Insulating material is cut to size. End blocks and supporting structures are fabricated in the plant insulation shop or by PTI Transformers LP approved insulation manufacturers. All angle rings and caps are made of molded pressboard, with contoured profiles, in order to increase the dielectric withstand.

Directed oil flow is typically used to provide enhanced cooling and to limit hot spot temperatures. The oil flow washers/seals direct the oil flow in a zigzag pattern through the windings to

provide effective cooling. For the units with forced cooling the oil from pumps is directed into the windings (ODAF) where oil enters through the oil holes in the bottom insulation; it is distributed through the oil reservoir into all windings, continues throughout the winding in zigzag pattern and leaves the coil assembly at the top. This system is superior to the OFAF method in which the oil is pumped into the tank, cooling only the bulk volume of oil and not the oil in the windings. After the individual coils are wound, they are initially sized, dried in the auto clave vacuum oven, and then sized again with a clamping pressure of 600psi (4 N/mm²). Critical windings are sized under spring pressure. After drying, they are sized to the required axial height to ensure short circuit performance. The coils are combined together into the coil assembly and then completed with end insulation. The coil assembly is next compressed to ensure correct positions of all windings within the coil assembly. The Winding area has been completely refurbished to isolate the department and provide a dust free environment. Positive air pressure is maintained by filtered air make-up units to ensure that positive air flow is provided in the shop. This air flow minimizes the intake of non-filtered air through open doors etc. and ensures that air-borne contaminants are kept to a reduced level that will ensure a clean production environment.

PRODUCT RANGE:

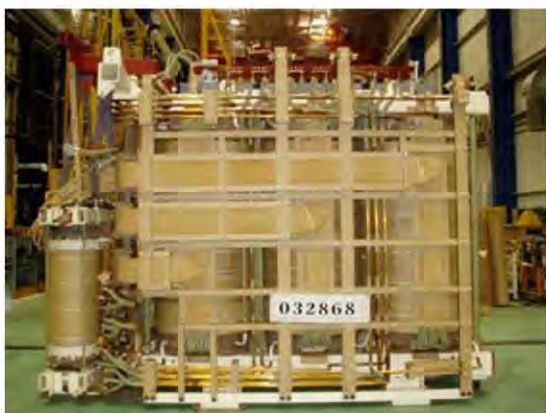
- ♦ Substation transformers
- ♦ GSI transformers
- ♦ Auto-transformers
- ♦ Phase shifting transformers
- ♦ Mobile substation transformer

- ♦ Primary voltage up to 525 kV
- ♦ Primary voltage up to 230 kV for mobile substations

- ♦ Up to 750 MVA top rating
- ♦ LTC & DETC



COMPANY PROFILE ♦ CORE & COILS ASSEMBLY



Prefabricated coil to clamp insulation is fitted on the bottom clamps prior to placing the coil assemblies concentrically on the core legs. The major insulation is usually of rigid form. It is prefabricated in a specially designated insulation area, isolated from other departments to provide carefully controlled clean and dry manufacturing and storage environment.

After the coils are lowered into place, the top pre-fabricated coil to clamp insulation is placed in position and the top yoke of core steel and box clamp are added. The coils are clamped axially by tie rods, or tie-plates, made of high tensile strength steel, as required by design. The core clamps and tie rods (or tie-plates) are designed so that the coils cannot shift during shipment and can withstand the maximum forces that may develop under short circuit conditions.

All leads and bus-bars are rigidly supported to withstand shipping and short circuit forces. Supports are made of high density pressboard with specially developed fiber-glass reinforced epoxy hardware.

All steel projections are located in areas of low electrical stress and, where necessary, high voltage leads are insulated using contoured insulation or shielded by metal tubes to minimize the local electrical stresses. The core & coils assembly is

thoroughly inspected before it goes into the vapor phase process.

During the manufacture of HVDC units, a clean room is utilized to minimize the opportunity for active part contamination. The structure is erected in the assembly area and positive air flow provided through portable air filters. Employees are required to dress in lint free coveralls and entrance to the area is controlled and limited only to employees involved in the project and fully compliant with clean room procedures.

PTI Transformers LP core and coils are of robust quality and design, which ultimately has resulted in an "in-field failure rate of less than 0.01%".

PRODUCT RANGE:

- ♦ Substation transformers
- ♦ GSU transformers
- ♦ Auto-transformers
- ♦ Phase shifting transformers
- ♦ Mobile substation transformer
- ♦ Primary voltage up to 525 kV
- ♦ Primary voltage up to 230 kV for mobile substations
- ♦ Up to 750 MVA top rating
- ♦ LTC & DETC



COMPANY PROFILE ◇ VAPOR-PHASE PROCESSING



Increasing quality requirements demand a more and more careful treatment under vacuum. After the initially applied technologies such as the hot-air circulation process, the vapor-phase drying process nowadays is the most efficient method to treat power transformers. At PTI Transformers LP we use a Hedrich system, 400 kW, cascade evaporator.

The completed core and coil assembly is thoroughly dried by the vapor-phase drying process to achieve the predetermined parameters, such dew point and water content in cellulose insulation (less than 0.3% moisture content in insulation).

The core and coil assembly is heated to 50C, by injecting kerosene vapor into the autoclave; afterwards the autoclave internal pressure is lowered to 35mbar for 2 hours. Then kerosene vapor is injected again and the core and coil assembly is now raised to a temperature 85C with a vacuum to 30mbar and this for 2 hours. A new kerosene vapor cycle is introduced now with the core and coil assembly reaching a temperature of 110C with vacuum to 30mbar for 2 hours. At the final heating cycle the core and coil assembly is raised to 120C and the autoclave internal pressure is then lowered to 25mbar for 1 hour. The chamber is then placed under fine vacuum; minimum end criteria for vacuum is 0.15mbar or less for a minimum of 3 hours with all other process parameters met.

The core and coil assembly must be at a minimum temperature of 115C at the end of the fine vacuum cycle and water extraction rate must be 14 g/hr/tonne. Only then these parameters together give an insulation moisture level of 0.3% or less as required.

The vapor phase is a fully automated machine with 24 hours fully automated monitoring and logging.

As the environment in the autoclave is essentially oxygen free, temperature reaching 120°C can be utilized without damage to the insulation or loss of life.

After the core and coil assembly is removed from the autoclave, the assembly is completely retightened, while hot, to take up all shrinkage, then cleaned, inspected, and promptly tanked within the times set by design.

PRODUCT RANGE:

- ◇ Substation transformers
- ◇ GSU transformers
- ◇ Auto-transformers
- ◇ Phase shifting transformers
- ◇ Mobile substation transformer

- ◇ Primary voltage up to 525 kV
- ◇ Primary voltage up to 220 kV for mobile substations

- ◇ Up to 750 MVA top rating
- ◇ LTC & DETC



COMPANY PROFILE ♦ TANK MANUFACTURE



Transformer tanks are constructed of mild-steel and designed to withstand normal operating conditions, application full vacuum, lifting, jacking, and skidding.

The completed tank and accessories are abrasive blasted to remove all mill scale and contaminants, and coated with a robust plural component coating system that exceeds IEEE recommended performance standards.

Adequate facilities are provided on the tank for lifting, jacking and pulling, as per CSA, IEEE/ANSI or even IEC. Openings in the cover are formed by raised flanges designed so that the fasteners do not extend through the cover. Hand-holes and/or manholes are provided for easy access to the active assembly within the tank, access to internal bushing connections etc. Tank bases are made from structural shapes or thickened base plates.

PTI Transformers is Canadian Welding Bureau certified for welding design, practices and procedures. Only CWB or AWS certified fabrication shops are employed for metal fabrication. Only AWS or CWB prequalified joints are utilized. The tank corner

joint design is a tee-joint with a double fillet weld (one fillet on each side of the plate). As only CWB or AWS certified fabrication shops are employed, all welds are performed to qualified procedures by qualified welders.

The tee-joint corner design of the tanks allows for a flexible joint and increases the rupture resistance of the tank due to possible internal fault. This tank corner welding procedure has been our standard since the early 1970's and no field issues where reported with respect to tanks leaking at the corner joints.

PRODUCT RANGE:

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- ♦ Mobile substation transformer

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- ♦ Primary voltage up to 230 kV for mobile substations

- ♦ Up to 750 MVA top rating
- ♦ LTC & DETC



COMPANY PROFILE ♦ TESTING



Prior to shipment, all transformers manufactured by PTI Transformers LP are tested in accordance with the latest applicable IEEE/ANSI and CSA standards and customer specifications.

All industry standard and optional tests with the exception of short-circuit tests, are performed in-house at PTI Transformers LP. We have well trained personnel and utilize accurate, certified and modern test equipment.

The results of all tests are provided in a certified test report.

PTI Transformers LP performs the tests as listed in IEEE/ANSI C57.12.90 and CAN/CSA-C88-M90.

The PTI Transformers LP are tested as follows:

Performance tests:

- Ratio test
- No load loss and % excitation current before and after dielectric tests
- Load loss and % impedance
- Zero sequence impedance

Dielectric tests:

- Lightning impulse test include full wave and chopped wave impulse.
- Switching Impulse
- Applied voltage test
- Induced overvoltage with partial discharge measurement (3 phase or 1 Phase)

Thermal test:

- Winding resistance
- Heat run test
- Over load heat run
- Dissolved gas analysis (DGA)
- Thermal scan on transformer tank.

Other tests:

- Insulation capacitance and power factor test on windings and bushings.
- 10 kV excitation current
- Sound level test
- Megger - Insulation resistance (IR) and polarization index (PI) of winding.
- Megger for core, clamp and ground.
- Recurrent surge test – only done on new, critical or if specified by customer.
- CT test – ratio, excitation, polarity, resistance and knee point voltage.
- On load tap changer test for rated voltage and current.
- Magnetic balance test
- Vector group and polarity.
- The control test on auxiliary equipment.

In process test:

These tests are done during the manufacturing process on core and coil assembly of transformer.

- Core insulation tests.
- Pre-lead assembly ratio test.
- Winding resistance (optional).

Prior to shipment, and upon customer's request, PTI Transformers LP can do a frequency response analysis (often referred to as FRA or SFRA) which is a powerful and sensitive method for



testing the mechanical integrity of transformer cores, windings, and press frames, in power transformers.

SFRA creates a so-called **"fingerprint"** of the power transformer. Comparing the measurements taken at various phases or on multiple identical transformers, as well as comparing measurements with the former fingerprint of the same transformer, provide indications of any mechanical or electrical changes after the transformer has been delivered to site.

PTI Transformers recommend testing the frequency response particularly after transporting transformers and after faults at high currents have occurred and compare these with one done prior shipment.



PTI Transformers is equipped with a state-of-the-art digital impulse recording system. The Haefely-Trench impulse system (HAIS) with 16 stages impulse voltage generator of capacity 3200kV and 320 kJ, provides the most accurate analysis of impulse results available today. The electronic recording of the impulse current and voltage waveforms allows quick mathematical comparisons to be made, including the difference between the two waveforms under scrutiny. Accurate printed and plotted final results are quickly available.

For chopped wave tests, a five-stage, 15 gaps, 3000 kV multiple chopping gap is used. The PTI Transformers test bay is capable of performing lightning impulse with chopping and switching impulse tests as per customer requirement and international standards.

For induced testing, a variable voltage alternator, rated 8.66kV, 100 Amps, 3/1-phase, 50 to 240 Hz, is used and solid state speed control of the 1000 HP, DC driving motor with DC voltage 527-700 volts. In the induced potential test, partial discharge (pC) and RIV (μ V) measurements are done with omicron MPD 600 High-end partial discharge measurement system with 6 channel output, it is the best partial discharge measurement and analysis equipment available across the industry.

PRODUCT RANGE:

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- ◊ GSU transformers
- ◊ Auto-transformers
- ◊ Phase shifting transformers
- ◊ Mobile substation transformer

- ◊ Primary voltage up to 525 kV
- ◊ Primary voltage up to 230 kV for mobile substations

- ◊ Up to 750 MVA top rating
- ◊ LTC & DETC



COMPANY PROFILE ◇ PACKING, SHIPPING & LOGISTICS



Medium and large power transformers by their size and weight are challenging to ship. The plant is ideally located to take advantage of both highway and rail links to major transportation arteries in North America. This allows PTI Transformers to ship transformers units to the four corners of the continent. PTI Transformers has significant experience in the transportation of large power transformers which reduces the risk of transportation damage for our customer.

We are able to coordinate all of our customer's logistics requirements from a single point of contact (SPOC). PTI Transformer's shipping department can make arrangements for customer's units to be shipped by rail, truck, ship or any combination. We will also coordinate the offloading of the unit at the site or storage area and moving the unit to its final location.

We use reputable specialty carriers for our trucking requirements and utilize local logistics agencies to establish permits for long haul truck shipments from the plant. Our facility has a railway spur which enters the main building on the east side and allows our staff to load a transformer directly onto the railcar inside the factory.

Our shipping department transports all of the parts and spare

parts for the unit to the site or a location of the customer's choosing. These parts are coordinated to meet the transformer at the site to ensure the economic off-loading of parts and the transformer at the same time.

We use the latest digital sensors and GPS technology to monitor the shipping process while the transformer is on the move. Each transformer can be equipped with digital impact monitor and/or GOS tracing system. This allows PTI Transformers LP to assess whether there were any anomalies during the shipping of the unit and whether there were any impacts that could affect the quality of the product. The GPS tracking system allows us to track the process of the unit in real time and if there are any anomalies in the impact recorder, they can be coordinated with the GPS information after the fact to determine where and when the anomaly took place.

All of the activities related to packing and shipping are controlled by written/illustrated procedures to ensure consistency and conformance to requirements. These procedures are available at the plant for audit at a time convenient to our customers.

PRODUCT RANGE:

- ◇ Substation transformer
- ◇ GSI transformers
- ◇ Auto-transformers
- ◇ Phase shifting transformers
- ◇ Mobile substation transformer

- ◇ Primary voltage up to 525 kV
- ◇ Primary voltage up to 230 kV for mobile substations

- ◇ Up to 750 MVA top rating
- ◇ LTC & DETC



COMPANY PROFILE ◇ AFTER SALES SERVICE



PTI Transformer LP's professional service group is ready and capable to fulfill all the after sales service requirements you may have.

Our transformer service group consist of five (5) experienced technicians; fully qualified and safety certified to dress-out large power transformers with primary voltages up to 525 kV.

PRODUCT RANGE:

- ◇ Substation transformers
- ◇ GSU transformers
- ◇ Auto-transformers
- ◇ Phase shifting transformers
- ◇ Mobile substation transformer

- ◇ Primary voltage up to 525 kV
- ◇ Primary voltage up to 230 kV for mobile substations

- ◇ Up to 750 MVA top rating
- ◇ LTC & DETC

PTI Transformer's service team carry-out on-site inspections, diagnostics and maintenance activities in addition to on-site refurbishments and repair work.

We have the expertise to perform all required activities on power transformers and load tap changers as follows:

- **Installations and relocations**
 - New transformer installs and testing
 - Existing transformer relocation
 - Commissioning and start-up
- **Repairs and refurbishment**
 - Radiator/Cooler replacements
 - Gasket replacement & leak repair
 - Cleaning and painting
 - LTC and DETC refurbishment
 - HV & LV bushing refurbishment
 - Control box refurbishment
- **Transformer enhancement and improvement**
 - Cooling upgrades
 - Breather upgrades
 - Controls upgrade
 - LTC & DETC upgrades
 - Gauges & probes upgrade
 - Pressure relief device conversions and ducting

In addition to providing the above mentioned services, PTI Transformers also provides OEM spare parts such as buchholz relay, radiators, WTI/OTI, fans, pumps, bushings, gauges or any other related LTC transformer accessory.

We provide on-site transformer consulting, including surveys, commissioning, internal & external transformer inspections, oil testing and training where required.





SECTION 6: ADDITIONAL INFORMATION

- Reference List
- Short Circuit Capability
- Approved List of Vendors for PTI Manitoba Inc.
- W-8BEN-E instead of W-9
- Certificate of Insurance
- ISO Certificates
- Paint Specification
- Transformer Oil Data Sheet
- Qualitrol QTMS
- Qualitrol Serveron TM8
- Kelman DGA 900

| | | | | | | |
|--|----------------------------------|-----------------|----------------|--------------|--------------|------------------|
| | | | | | | |
| PTI TRANSFORMERS - REFERENCE LIST - 3 PHASE AUTO-TRANSFORMERS | | | | | | |
| | | | | | | |
| Ship Year | Customer | Base MVA | Top MVA | HV KV | LV KV | HV BIL KV |
| 2022 | Fortis BC | 120 | 200 | 230 | 138 | 900 |
| 2022 | Manitoba Hydro | 84 | 140 | 230 | 66 | 900 |
| 2021 | Hydro One (Keith T12) | 150 | 250 | 239 | 121 | 900 |
| 2021 | Hydro One (Keith T11) | 150 | 250 | 239 | 121 | 900 |
| 2022 | Hydro One | 150 | 250 | 239 | 121 | 900 |
| 2022 | Hydro One | 150 | 250 | 239 | 121 | 900 |
| 2018 | Allete Inc. (Minnesota Power) | 200 | 373 | 230 | 115 | 900 |
| 2020 | Sask Power | 180 | 300 | 230 | 138 | 950 |
| 2019 | Sask Power | 180 | 300 | 230 | 138 | 950 |
| 2018 | Sask Power | 180 | 300 | 230 | 138 | 950 |
| 2015 | MINNESOTA POWER | 200 | 373 | 230 | 115 | 900 |
| 2015 | MINNESOTA POWER | 100 | 167 | 230 | 115 | 900 |
| 2015 | MINNESOTA POWER | 100 | 167 | 230 | 115 | 900 |
| 2013 | Luna Diversified | 120 | 200 | 230 | 115 | 900 |
| 2013 | Sask Power | 180 | 300 | 230 | 138 | 950 |
| 2013 | Sask Power | 180 | 300 | 230 | 138 | 950 |
| 2015 | Otter Tail Power Company | 84 | 140 | 230 | 115 | 900 |
| 2010 | National Electric Systems Inc. | 90 | 150 | 230 | 115 | 900 |
| 2009 | Hydro One | 150 | 250 | 239 | 121 | 900 |
| 2009 | Hydro One | 150 | 250 | 239 | 121 | 900 |
| 2007 | Hydro One | 150 | 250 | 239 | 121 | 900 |
| 2007 | East Kentucky Power Coop. | 270 | 450 | 345 | 138 | 900 |
| 2006 | East Kentucky Power Coop. | 270 | 450 | 345 | 138 | 900 |
| 2005 | Fortis BC | 120 | 200 | 230 | 132 | 850 |
| 2004 | Hydro One | 150 | 250 | 236.8 | 121 | 900 |
| 2004 | Hydro One | 150 | 250 | 236.8 | 121 | 900 |
| 2003 | Aquila Networks | 120 | 200 | 236 | 63 | 850 |
| 2003 | Aquila Networks | 120 | 200 | 236 | 63 | 850 |
| 2003 | Sask Power | 150 | 250 | 230 | 138 | 950 |
| 2003 | BC Hydro | 90 | 150 | 246 | 69 | 850 |
| 2002 | Alabama Electric Coop | 134.5 | 224 | 230 | 115 | 900 |
| 2002 | Alabama Electric Coop | 134.5 | 224 | 230 | 115 | 900 |
| 2002 | Sask Power | 120 | 200 | 230 | 138 | 950 |
| 2002 | Aquila Networks | 100.8 | 168 | 236 | 63 | 850 |
| 2002 | Aquila Networks | 100.8 | 168 | 236 | 63 | 850 |
| 2001 | Puerto Rico EPA | 270 | 450 | 230 | 115 | 900 |
| 2001 | Utilicorp United/ Peak Power Eng | 60 | 100 | 230 | 115 | 900 |

| Ship Year | Customer | Base MVA | Top MVA | HV KV | LV KV | HV BIL KV |
|-----------|---------------------------------|----------|---------|-------|-------|-----------|
| 2001 | Luz Y Fuerza | 75 | 100 | 230 | 85 | 900 |
| 2000 | Allegheny | 120 | 200 | 230 | 135.3 | 900 |
| 2000 | Delmarva Power & Light | 240 | 400 | 230 | 138 | 900 |
| 1999 | Rochester Gas & Elec. | 120 | 200 | 345 | 118 | 900 |
| 1999 | PacifiCorp | 270 | 450 | 345 | 138 | 900 |
| 1996 | BC Hydro | 90 | 150 | 246 | 69 | 850 |
| 1995 | Southern Maryland Electric Coop | 120 | 200 | 220 | 69.05 | 900 |
| 1994 | Delmarva Power & Light | 240 | 400 | 230 | 138 | 900 |
| 1993 | Ontario Hydro | 75 | 125 | 215.5 | 44 | 900 |
| 1993 | Ontario Hydro | 75 | 125 | 215.5 | 44 | 900 |
| 1993 | Ontario Hydro | 75 | 125 | 215.5 | 44 | 900 |
| 1993 | Alberta Power | 120 | 200 | 245 | 144 | 950 |
| 1993 | Ontario Hydro | 75 | 125 | 215.5 | 44 | 900 |
| 1993 | Manitoba Hydro | 120 | 200 | 230 | 115 | 900 |
| 1992 | Ontario Hydro | 75 | 125 | 216 | 44 | 900 |
| 1992 | Ontario Hydro | 75 | 125 | 216 | 44 | 900 |
| 1992 | Ontario Hydro | 150 | 250 | 236.8 | 121 | 850 |
| 1992 | Ontario Hydro | 75 | 125 | 226 | 125 | 900 |
| 1992 | Ontario Hydro | 75 | 125 | 226 | 125 | 900 |
| 1992 | Ontario Hydro | 75 | 125 | 215.5 | 44 | 900 |
| 1992 | Ontario Hydro | 75 | 125 | 215.5 | 44 | 900 |
| 1992 | Ontario Hydro | 75 | 125 | 215.5 | 44 | 900 |
| 1992 | Ontario Hydro | 75 | 125 | 215.5 | 44 | 900 |
| 1992 | Ontario Hydro | 75 | 125 | 215.5 | 44 | 900 |
| 1992 | Newfoundland & Labrador Hydro | 75 | 125 | 230 | 66 | 950 |
| 1992 | Sask Power | 150 | 250 | 230 | 138 | 950 |
| 1991 | Ontario Hydro | 75 | 125 | 216 | 44 | 900 |
| 1991 | Ontario Hydro | 75 | 125 | 216 | 44 | 900 |
| 1991 | Ontario Hydro | 75 | 125 | 216 | 44 | 900 |
| 1991 | Ontario Hydro | 75 | 125 | 216 | 44 | 900 |
| 1991 | TransAlta | 240 | 400 | 245 | 144 | 850 |
| 1991 | TransAlta | 240 | 400 | 245 | 144 | 850 |
| 1991 | Sask Power | 168 | 225 | 230 | 138 | 950 |
| 1991 | TransAlta | 120 | 200 | 245 | 144 | 850 |
| 1991 | Sask Power | 90 | 150 | 230 | 138 | 950 |
| 1991 | Sask Power | 90 | 150 | 230 | 138 | 950 |
| 1991 | Ontario Hydro | 150 | 250 | 236.8 | 121 | 900 |
| 1990 | Ontario Hydro | 75 | 125 | 216 | 44 | 900 |
| 1990 | Ontario Hydro | 75 | 125 | 216 | 44 | 900 |
| 1990 | Ontario Hydro | 75 | 125 | 216 | 44 | 900 |

| Ship Year | Customer | Base MVA | Top MVA | HV KV | LV KV | HV BIL KV |
|-----------|-------------------------------|----------|---------|-------|-------|-----------|
| 1990 | Ontario Hydro | 75 | 125 | 216 | 44 | 900 |
| 1990 | Ontario Hydro | 150 | 250 | 237 | 121 | 900 |
| 1990 | Ontario Hydro | 150 | 250 | 236.8 | 121 | 900 |
| 1990 | BC Hydro | 90 | 150 | 246 | 69 | 850 |
| 1989 | Ontario Hydro | 150 | 250 | 237 | 121 | 900 |
| 1989 | BC Hydro | 90 | 150 | 230 | 138 | 850 |
| 1989 | BC Hydro | 90 | 150 | 230 | 138 | 850 |
| 1989 | Ontario Hydro | 150 | 250 | 237 | 121 | 900 |
| 1989 | Newfoundland & Labrador Hydro | 75 | 125 | 230 | 138 | 950 |
| 1989 | Ontario Hydro | 75 | 125 | 215.5 | 44 | 900 |
| 1989 | Ontario Hydro | 75 | 125 | 215.5 | 44 | 900 |
| 1988 | Alberta Power | 120 | 200 | 245 | 144 | 950 |
| 1988 | TransAlta | 120 | 200 | 245 | 144 | 850 |
| 1988 | New Brunswick Power | 180 | 300 | 230 | 138 | 900 |
| 1988 | Newfoundland & Labrador Hydro | 75 | 125 | 230 | 138 | 950 |
| 1987 | Alberta Power | 120 | 200 | 245 | 144 | 950 |
| 1987 | Alberta Power | 120 | 200 | 245 | 144 | 950 |
| 1987 | Alberta Power | 120 | 200 | 245 | 144 | 950 |
| 1985 | West Kootenay Power | 100 | 168 | 230 | 138 | 900 |



SHORT CIRCUIT CAPABILITY

Short circuit test is a very special test which is performed to demonstrate the ability of the transformer to withstand stresses due to short circuit during operation. For high voltage transformers this test can be performed only at few special high-power laboratories in the world. At PTI short circuit design capability is verified using special field program. The calculations verify free/forced buckling, radial bending, axial bending, axial stress on key spacer & tilting for inner windings and hoop stress, tilting, axial bending, axial stress on key spacer for the outer winding. CTC conductors are epoxy bonded to enhance mechanical strength. Inner windings are designed for free buckling condition. PTI group has successfully verified the design capability by performing short circuit tests on units up to 315MVA 3 phase and 200MVA single phase units. The list below indicates details of the units successfully tested for short circuit.

Re: SHORT-CIRCUIT TESTING OF POWER TRANSFORMERS

PTI Transformers LP's has manufactured power transformers since 1947.

The Winnipeg transformer manufacturing plant (formerly CG Power Systems Canada Inc.), acquired by PTI Transformers LP in 2015, has been in operation for over 70 years. During this time period, several thousand power transformers were built and installed. Within the entire history of manufacturing power transformers in Winnipeg, there have not been any reported short-circuit failures of units in operation.

A few years after the 1994 Pauwels acquisition of the Winnipeg plant, all Pauwels facilities went through an Alignment Process, resulting in a commonality of design, manufacturing techniques and technology. In particular, the short-circuit calculations and methods for supporting the active part were thoroughly analyzed. All transformers are subjected to like conditions during short-circuit events, whether in testing or in operation. Most manufacturers of large power transformers with experience in the short-circuit testing of units have very similar design techniques to calculate short-circuit forces and stresses, as well as similar production methods and materials. Through the years and after numerous design reviews with customers and their consultants, certain elements of transformer technology become a standard for the industry.

From the early 1970's the Winnipeg manufacturing plant has used practically the same short-circuit calculations. The same set of critical parameters are also used to evaluate the "withstand" of conductors, pressboard spacers and clamping structures.

As stated before, all PTI transformers are designed using exactly the same rules. All PTI transformer units are built using the same technology, materials and processes. This standardization is important as any units built by PTI may be subjected to short-circuit testing. In any event certainly all of them will be subjected to real life short-circuit conditions while in service. PTI Transformers LP is more than willing to subject any of our transformers to short-circuit testing.



PTI Manitoba Inc uses trusted suppliers of active part materials, e.g. ASTA and Nexans for copper conductors, Weidmann for pressboard insulation. All materials were subjected to thorough withstand tests.

In North America it is commonly accepted that a design review is done in lieu of short-circuit testing. Subsequently, we have had only a few units short-circuit tested. This is a common practice amongst transformer manufacturers in North America, and has unfortunately recently lead to the termination of operation of a large power laboratory (IREQ in Quebec).

Globally, there has been a discussion going on for decades, whether to test or not to test the short-circuit performance. CIGRE (International Council on Large Electric Systems) during its general session in year 2000 expansively discussed this issue. There was no consensus on this problem, therefore CIGRE decided not to suggest any method for short-circuit performance evaluation, i.e. to (i) select trusted supplier, (ii) perform own design review, (iii) perform design review with consultant, (iv) short circuit testing. Moreover, based on numerous studies, the rate of short-circuit failures in operation has no relation to the way short-circuit performance is evaluated (see CIGRE report by Working Group 12.19 in Electr. No203, August 2003).

In conclusion one may state:

- The fact that only a few transformers built by Winnipeg plant have been short-circuit tested is typical for the North American industry, where design reviews are seen as sufficient method of approving the short-circuit performance of units;
- PTI Manitoba Inc is willing to subject any units to short-circuit tests. The cost for this service would be an extra to the contract.

Regards,

Dr. Waldemar Ziomek,
Director of Research & Development



PTI APPROVED LIST OF VENDORS

| Component | Vendor Name | Country of Origin |
|---------------------|--|--------------------------|
| Core | Cogent Power Inc. | Canada |
| Copper Conductor | Essex Group Canada Sam Dong Inc. | Canada USA |
| Insulation | Weidmann Electrical Technology Inc. USA Conduct Industries Inc. | USA Canada |
| Transformer Tank | W.S. Machining & Fabrication | Canada |
| LTC | Reinhausen | Germany |
| Bushings | ABB HSP Electro-Composite | USA Germany Canada |
| Arresters | Cooper Ohio Brass | USA USA |
| Oil | Nynas Petro Canada Calumet Lubricants Co. | Canada Canada USA |
| Current Transformer | Polycast International Meramec Instrument Transformers | Canada USA |
| Control Box | Celco Controls Ltd. Indus Automation | Canada Canada |
| Radiators | Menk Trantech | USA USA |
| Fans | Krenz & Company Inc. Ziehl Abbeg Inc. | USA Germany |
| Gaskets | Argus Industrial Supply Hi-Tech Seals | Canada Canada |
| Air Cell | Pronal SEI Industries | France Canada |

Form **W-8BEN-E**

(Rev. July 2017)

Department of the Treasury
Internal Revenue Service**Certificate of Status of Beneficial Owner for
United States Tax Withholding and Reporting (Entities)**

► For use by entities. Individuals must use Form W-8BEN. ► Section references are to the Internal Revenue Code.
► Go to www.irs.gov/FormW8BENE for instructions and the latest information.
► Give this form to the withholding agent or payer. Do not send to the IRS.

OMB No. 1545-1621

Do NOT use this form for:

- U.S. entity or U.S. citizen or resident W-9
- A foreign individual W-8BEN (Individual) or Form 8233
- A foreign individual or entity claiming that income is effectively connected with the conduct of trade or business within the U.S. (unless claiming treaty benefits) W-8ECI
- A foreign partnership, a foreign simple trust, or a foreign grantor trust (unless claiming treaty benefits) (see instructions for exceptions) . . . W-8IMY
- A foreign government, international organization, foreign central bank of issue, foreign tax-exempt organization, foreign private foundation, or government of a U.S. possession claiming that income is effectively connected U.S. income or that is claiming the applicability of section(s) 115(2), 501(c), 892, 895, or 1443(b) (unless claiming treaty benefits) (see instructions for other exceptions) W-8ECI or W-8EXP
- Any person acting as an intermediary (including a qualified intermediary acting as a qualified derivatives dealer) W-8IMY

Instead use Form:**Part I Identification of Beneficial Owner**

| | |
|---|--|
| 1 Name of organization that is the beneficial owner PTI Transformers LP | 2 Country of incorporation or organization CANADA |
| 3 Name of disregarded entity receiving the payment (if applicable, see instructions) | |

| |
|---|
| 4 Chapter 3 Status (entity type) (Must check one box only): <input type="checkbox"/> Simple trust <input type="checkbox"/> Central Bank of Issue <input type="checkbox"/> Grantor trust <input type="checkbox"/> Tax-exempt organization <input type="checkbox"/> Complex trust <input type="checkbox"/> Private foundation <input type="checkbox"/> Disregarded entity <input type="checkbox"/> Estate <input type="checkbox"/> International organization <input checked="" type="checkbox"/> Partnership <input type="checkbox"/> Government |
| If you entered disregarded entity, partnership, simple trust, or grantor trust above, is the entity a hybrid making a treaty claim? If "Yes" complete Part III. <input type="checkbox"/> Yes <input type="checkbox"/> No |

| | |
|---|--|
| 5 Chapter 4 Status (FATCA status) (See instructions for details and complete the certification below for the entity's applicable status.) | |
| <input type="checkbox"/> Nonparticipating FFI (including an FFI related to a Reporting IGA FFI other than a deemed-compliant FFI, participating FFI, or exempt beneficial owner). <input type="checkbox"/> Participating FFI. <input type="checkbox"/> Reporting Model 1 FFI. <input type="checkbox"/> Reporting Model 2 FFI. <input type="checkbox"/> Registered deemed-compliant FFI (other than a reporting Model 1 FFI, sponsored FFI, or nonreporting IGA FFI covered in Part XII). See instructions. <input type="checkbox"/> Sponsored FFI. Complete Part IV. <input type="checkbox"/> Certified deemed-compliant nonregistering local bank. Complete Part V. <input type="checkbox"/> Certified deemed-compliant FFI with only low-value accounts. Complete Part VI. <input type="checkbox"/> Certified deemed-compliant sponsored, closely held investment vehicle. Complete Part VII. <input type="checkbox"/> Certified deemed-compliant limited life debt investment entity. Complete Part VIII. <input type="checkbox"/> Certain investment entities that do not maintain financial accounts. Complete Part IX. <input type="checkbox"/> Owner-documented FFI. Complete Part X. <input type="checkbox"/> Restricted distributor. Complete Part XI. | <input type="checkbox"/> Nonreporting IGA FFI. Complete Part XII. <input type="checkbox"/> Foreign government, government of a U.S. possession, or foreign central bank of issue. Complete Part XIII. <input type="checkbox"/> International organization. Complete Part XIV. <input type="checkbox"/> Exempt retirement plans. Complete Part XV. <input type="checkbox"/> Entity wholly owned by exempt beneficial owners. Complete Part XVI. <input type="checkbox"/> Territory financial institution. Complete Part XVII. <input type="checkbox"/> Excepted nonfinancial group entity. Complete Part XVIII. <input type="checkbox"/> Excepted nonfinancial start-up company. Complete Part XIX. <input type="checkbox"/> Excepted nonfinancial entity in liquidation or bankruptcy. Complete Part XX. <input type="checkbox"/> 501(c) organization. Complete Part XXI. <input type="checkbox"/> Nonprofit organization. Complete Part XXII. <input type="checkbox"/> Publicly traded NFFE or NFFE affiliate of a publicly traded corporation. Complete Part XXIII. <input type="checkbox"/> Excepted territory NFFE. Complete Part XXIV. <input checked="" type="checkbox"/> Active NFFE. Complete Part XXV. <input type="checkbox"/> Passive NFFE. Complete Part XXVI. <input type="checkbox"/> Excepted inter-affiliate FFI. Complete Part XXVII. <input type="checkbox"/> Direct reporting NFFE. <input type="checkbox"/> Sponsored direct reporting NFFE. Complete Part XXVIII. <input type="checkbox"/> Account that is not a financial account. |

6 Permanent residence address (street, apt. or suite no., or rural route). Do not use a P.O. box or in-care-of address (other than a registered address).**101 Rockman Street**

City or town, state or province. Include postal code where appropriate.

Winnipeg, Manitoba R3T 0L7

Country

CANADA**7** Mailing address (if different from above)

City or town, state or province. Include postal code where appropriate.

Country

8 U.S. taxpayer identification number (TIN), if required**9a** GIIN**b** Foreign TIN**734422314 RT0001****10** Reference number(s) (see instructions)**Note:** Please complete remainder of the form including signing the form in Part XXX.**For Paperwork Reduction Act Notice, see separate instructions.**

Cat. No. 59689N

Form **W-8BEN-E** (Rev. 7-2017)

Part II Disregarded Entity or Branch Receiving Payment. (Complete only if a disregarded entity with a GIIN or a branch of an FFI in a country other than the FFI's country of residence. See instructions.)

- 11** Chapter 4 Status (FATCA status) of disregarded entity or branch receiving payment
- ☐ Branch treated as nonparticipating FFI. ☐ Reporting Model 1 FFI. ☐ U.S. Branch.
- ☐ Participating FFI. ☐ Reporting Model 2 FFI.
- 12** Address of disregarded entity or branch (street, apt. or suite no., or rural route). **Do not use a P.O. box or in-care-of address** (other than a registered address).

City or town, state or province. Include postal code where appropriate.

Country

- 13**
- GIIN (if any)

Part III Claim of Tax Treaty Benefits (if applicable). (For chapter 3 purposes only.)

- 14**
- I certify that (check all that apply):

- a** ☒ The beneficial owner is a resident of CANADA within the meaning of the income tax treaty between the United States and that country.
- b** ☒ The beneficial owner derives the item (or items) of income for which the treaty benefits are claimed, and, if applicable, meets the requirements of the treaty provision dealing with limitation on benefits. The following are types of limitation on benefits provisions that may be included in an applicable tax treaty (check only one; see instructions):
- | | |
|--|---|
| <input type="checkbox"/> Government | <input checked="" type="checkbox"/> Company that meets the ownership and base erosion test |
| <input type="checkbox"/> Tax exempt pension trust or pension fund | <input type="checkbox"/> Company that meets the derivative benefits test |
| <input type="checkbox"/> Other tax exempt organization | <input type="checkbox"/> Company with an item of income that meets active trade or business test |
| <input type="checkbox"/> Publicly traded corporation | <input type="checkbox"/> Favorable discretionary determination by the U.S. competent authority received |
| <input type="checkbox"/> Subsidiary of a publicly traded corporation | <input type="checkbox"/> Other (specify Article and paragraph): _____ |
- c** ☐ The beneficial owner is claiming treaty benefits for U.S. source dividends received from a foreign corporation or interest from a U.S. trade or business of a foreign corporation and meets qualified resident status (see instructions).

- 15**
- Special rates and conditions**
- (if applicable—see instructions):

The beneficial owner is claiming the provisions of Article and paragraph _____

of the treaty identified on line 14a above to claim a _____ % rate of withholding on (specify type of income): _____

Explain the additional conditions in the Article the beneficial owner meets to be eligible for the rate of withholding: _____

Part IV Sponsored FFI

- 16**
- Name of sponsoring entity: _____

- 17**
- Check whichever box applies.**

☐ I certify that the entity identified in Part I:

- Is an investment entity;
- Is not a QI, WP (except to the extent permitted in the withholding foreign partnership agreement), or WT; **and**
- Has agreed with the entity identified above (that is not a nonparticipating FFI) to act as the sponsoring entity for this entity.

☐ I certify that the entity identified in Part I:

- Is a controlled foreign corporation as defined in section 957(a);
- Is not a QI, WP, or WT;
- Is wholly owned, directly or indirectly, by the U.S. financial institution identified above that agrees to act as the sponsoring entity for this entity; **and**
- Shares a common electronic account system with the sponsoring entity (identified above) that enables the sponsoring entity to identify all account holders and payees of the entity and to access all account and customer information maintained by the entity including, but not limited to, customer identification information, customer documentation, account balance, and all payments made to account holders or payees.

Part V Certified Deemed-Compliant Nonregistering Local Bank**18** ☐ I certify that the FFI identified in Part I:

- Operates and is licensed solely as a bank or credit union (or similar cooperative credit organization operated without profit) in its country of incorporation or organization;
- Engages primarily in the business of receiving deposits from and making loans to, with respect to a bank, retail customers unrelated to such bank and, with respect to a credit union or similar cooperative credit organization, members, provided that no member has a greater than 5% interest in such credit union or cooperative credit organization;
- Does not solicit account holders outside its country of organization;
- Has no fixed place of business outside such country (for this purpose, a fixed place of business does not include a location that is not advertised to the public and from which the FFI performs solely administrative support functions);
- Has no more than \$175 million in assets on its balance sheet and, if it is a member of an expanded affiliated group, the group has no more than \$500 million in total assets on its consolidated or combined balance sheets; **and**
- Does not have any member of its expanded affiliated group that is a foreign financial institution, other than a foreign financial institution that is incorporated or organized in the same country as the FFI identified in Part I and that meets the requirements set forth in this part.

Part VI Certified Deemed-Compliant FFI with Only Low-Value Accounts**19** ☐ I certify that the FFI identified in Part I:

- Is not engaged primarily in the business of investing, reinvesting, or trading in securities, partnership interests, commodities, notional principal contracts, insurance or annuity contracts, or any interest (including a futures or forward contract or option) in such security, partnership interest, commodity, notional principal contract, insurance contract or annuity contract;
- No financial account maintained by the FFI or any member of its expanded affiliated group, if any, has a balance or value in excess of \$50,000 (as determined after applying applicable account aggregation rules); **and**
- Neither the FFI nor the entire expanded affiliated group, if any, of the FFI, have more than \$50 million in assets on its consolidated or combined balance sheet as of the end of its most recent accounting year.

Part VII Certified Deemed-Compliant Sponsored, Closely Held Investment Vehicle**20** Name of sponsoring entity: _____**21** ☐ I certify that the entity identified in Part I:

- Is an FFI solely because it is an investment entity described in Regulations section 1.1471-5(e)(4);
- Is not a QI, WP, or WT;
- Will have all of its due diligence, withholding, and reporting responsibilities (determined as if the FFI were a participating FFI) fulfilled by the sponsoring entity identified on line 20; **and**
- 20 or fewer individuals own all of the debt and equity interests in the entity (disregarding debt interests owned by U.S. financial institutions, participating FFIs, registered deemed-compliant FFIs, and certified deemed-compliant FFIs and equity interests owned by an entity if that entity owns 100% of the equity interests in the FFI and is itself a sponsored FFI).

Part VIII Certified Deemed-Compliant Limited Life Debt Investment Entity**22** ☐ I certify that the entity identified in Part I:

- Was in existence as of January 17, 2013;
- Issued all classes of its debt or equity interests to investors on or before January 17, 2013, pursuant to a trust indenture or similar agreement; **and**
- Is certified deemed-compliant because it satisfies the requirements to be treated as a limited life debt investment entity (such as the restrictions with respect to its assets and other requirements under Regulations section 1.1471-5(f)(2)(iv)).

Part IX Certain Investment Entities that Do Not Maintain Financial Accounts**23** ☐ I certify that the entity identified in Part I:

- Is a financial institution solely because it is an investment entity described in Regulations section 1.1471-5(e)(4)(i)(A), **and**
- Does not maintain financial accounts.

Part X Owner-Documented FFI

Note: This status only applies if the U.S. financial institution, participating FFI, or reporting Model 1 FFI to which this form is given has agreed that it will treat the FFI as an owner-documented FFI (see instructions for eligibility requirements). In addition, the FFI must make the certifications below.

24a ☐ (All owner-documented FFIs check here) I certify that the FFI identified in Part I:

- Does not act as an intermediary;
- Does not accept deposits in the ordinary course of a banking or similar business;
- Does not hold, as a substantial portion of its business, financial assets for the account of others;
- Is not an insurance company (or the holding company of an insurance company) that issues or is obligated to make payments with respect to a financial account;
- Is not owned by or in an expanded affiliated group with an entity that accepts deposits in the ordinary course of a banking or similar business, holds, as a substantial portion of its business, financial assets for the account of others, or is an insurance company (or the holding company of an insurance company) that issues or is obligated to make payments with respect to a financial account;
- Does not maintain a financial account for any nonparticipating FFI; **and**
- Does not have any specified U.S. persons that own an equity interest or debt interest (other than a debt interest that is not a financial account or that has a balance or value not exceeding \$50,000) in the FFI other than those identified on the FFI owner reporting statement.

Part X Owner-Documented FFI (continued)**Check box 24b or 24c, whichever applies.**

- b** ☐ I certify that the FFI identified in Part I:
- Has provided, or will provide, an FFI owner reporting statement that contains:
 - (i) The name, address, TIN (if any), chapter 4 status, and type of documentation provided (if required) of every individual and specified U.S. person that owns a direct or indirect equity interest in the owner-documented FFI (looking through all entities other than specified U.S. persons);
 - (ii) The name, address, TIN (if any), and chapter 4 status of every individual and specified U.S. person that owns a debt interest in the owner-documented FFI (including any indirect debt interest, which includes debt interests in any entity that directly or indirectly owns the payee or any direct or indirect equity interest in a debt holder of the payee) that constitutes a financial account in excess of \$50,000 (disregarding all such debt interests owned by participating FFIs, registered deemed-compliant FFIs, certified deemed-compliant FFIs, excepted NFFEs, exempt beneficial owners, or U.S. persons other than specified U.S. persons); **and**
 - (iii) Any additional information the withholding agent requests in order to fulfill its obligations with respect to the entity.
 - Has provided, or will provide, valid documentation meeting the requirements of Regulations section 1.1471-3(d)(6)(iii) for each person identified in the FFI owner reporting statement.
- c** ☐ I certify that the FFI identified in Part I has provided, or will provide, an auditor's letter, signed within 4 years of the date of payment, from an independent accounting firm or legal representative with a location in the United States stating that the firm or representative has reviewed the FFI's documentation with respect to all of its owners and debt holders identified in Regulations section 1.1471-3(d)(6)(iv)(A)(2), and that the FFI meets all the requirements to be an owner-documented FFI. The FFI identified in Part I has also provided, or will provide, an FFI owner reporting statement of its owners that are specified U.S. persons and Form(s) W-9, with applicable waivers.

Check box 24d if applicable (optional, see instructions).

- d** ☐ I certify that the entity identified on line 1 is a trust that does not have any contingent beneficiaries or designated classes with unidentified beneficiaries.

Part XI Restricted Distributor

- 25a** ☐ (All restricted distributors check here) I certify that the entity identified in Part I:
- Operates as a distributor with respect to debt or equity interests of the restricted fund with respect to which this form is furnished;
 - Provides investment services to at least 30 customers unrelated to each other and less than half of its customers are related to each other;
 - Is required to perform AML due diligence procedures under the anti-money laundering laws of its country of organization (which is an FATF-compliant jurisdiction);
 - Operates solely in its country of incorporation or organization, has no fixed place of business outside of that country, and has the same country of incorporation or organization as all members of its affiliated group, if any;
 - Does not solicit customers outside its country of incorporation or organization;
 - Has no more than \$175 million in total assets under management and no more than \$7 million in gross revenue on its income statement for the most recent accounting year;
 - Is not a member of an expanded affiliated group that has more than \$500 million in total assets under management or more than \$20 million in gross revenue for its most recent accounting year on a combined or consolidated income statement; **and**
 - Does not distribute any debt or securities of the restricted fund to specified U.S. persons, passive NFFEs with one or more substantial U.S. owners, or nonparticipating FFIs.

Check box 25b or 25c, whichever applies.

I further certify that with respect to all sales of debt or equity interests in the restricted fund with respect to which this form is furnished that are made after December 31, 2011, the entity identified in Part I:

- b** ☐ Has been bound by a distribution agreement that contained a general prohibition on the sale of debt or securities to U.S. entities and U.S. resident individuals and is currently bound by a distribution agreement that contains a prohibition of the sale of debt or securities to any specified U.S. person, passive NFFE with one or more substantial U.S. owners, or nonparticipating FFI.
- c** ☐ Is currently bound by a distribution agreement that contains a prohibition on the sale of debt or securities to any specified U.S. person, passive NFFE with one or more substantial U.S. owners, or nonparticipating FFI and, for all sales made prior to the time that such a restriction was included in its distribution agreement, has reviewed all accounts related to such sales in accordance with the procedures identified in Regulations section 1.1471-4(c) applicable to preexisting accounts and has redeemed or retired any, or caused the restricted fund to transfer the securities to a distributor that is a participating FFI or reporting Model 1 FFI securities which were sold to specified U.S. persons, passive NFFEs with one or more substantial U.S. owners, or nonparticipating FFIs.

Part XII Nonreporting IGA FFI

26 ☐ I certify that the entity identified in Part I:

- Meets the requirements to be considered a nonreporting financial institution pursuant to an applicable IGA between the United States and _____ . The applicable IGA is a ☐ Model 1 IGA or a ☐ Model 2 IGA; and is treated as a _____ under the provisions of the applicable IGA or Treasury regulations (if applicable, see instructions);
- If you are a trustee documented trust or a sponsored entity, provide the name of the trustee or sponsor _____ .
The trustee is: ☐ U.S. ☐ Foreign

Part XIII Foreign Government, Government of a U.S. Possession, or Foreign Central Bank of Issue

27 ☐ I certify that the entity identified in Part I is the beneficial owner of the payment, and is not engaged in commercial financial activities of a type engaged in by an insurance company, custodial institution, or depository institution with respect to the payments, accounts, or obligations for which this form is submitted (except as permitted in Regulations section 1.1471-6(h)(2)).

Part XIV International Organization

Check box 28a or 28b, whichever applies.

28a ☐ I certify that the entity identified in Part I is an international organization described in section 7701(a)(18).

b ☐ I certify that the entity identified in Part I:

- Is comprised primarily of foreign governments;
- Is recognized as an intergovernmental or supranational organization under a foreign law similar to the International Organizations Immunities Act or that has in effect a headquarters agreement with a foreign government;
- The benefit of the entity's income does not inure to any private person; **and**
- Is the beneficial owner of the payment and is not engaged in commercial financial activities of a type engaged in by an insurance company, custodial institution, or depository institution with respect to the payments, accounts, or obligations for which this form is submitted (except as permitted in Regulations section 1.1471-6(h)(2)).

Part XV Exempt Retirement Plans

Check box 29a, b, c, d, e, or f, whichever applies.

29a ☐ I certify that the entity identified in Part I:

- Is established in a country with which the United States has an income tax treaty in force (see Part III if claiming treaty benefits);
- Is operated principally to administer or provide pension or retirement benefits; **and**
- Is entitled to treaty benefits on income that the fund derives from U.S. sources (or would be entitled to benefits if it derived any such income) as a resident of the other country which satisfies any applicable limitation on benefits requirement.

b ☐ I certify that the entity identified in Part I:

- Is organized for the provision of retirement, disability, or death benefits (or any combination thereof) to beneficiaries that are former employees of one or more employers in consideration for services rendered;
- No single beneficiary has a right to more than 5% of the FFI's assets;
- Is subject to government regulation and provides annual information reporting about its beneficiaries to the relevant tax authorities in the country in which the fund is established or operated; **and**
 - (i) Is generally exempt from tax on investment income under the laws of the country in which it is established or operates due to its status as a retirement or pension plan;
 - (ii) Receives at least 50% of its total contributions from sponsoring employers (disregarding transfers of assets from other plans described in this part, retirement and pension accounts described in an applicable Model 1 or Model 2 IGA, other retirement funds described in an applicable Model 1 or Model 2 IGA, or accounts described in Regulations section 1.1471-5(b)(2)(i)(A));
 - (iii) Either does not permit or penalizes distributions or withdrawals made before the occurrence of specified events related to retirement, disability, or death (except rollover distributions to accounts described in Regulations section 1.1471-5(b)(2)(i)(A) (referring to retirement and pension accounts), to retirement and pension accounts described in an applicable Model 1 or Model 2 IGA, or to other retirement funds described in this part or in an applicable Model 1 or Model 2 IGA); **or**
 - (iv) Limits contributions by employees to the fund by reference to earned income of the employee or may not exceed \$50,000 annually.

c ☐ I certify that the entity identified in Part I:

- Is organized for the provision of retirement, disability, or death benefits (or any combination thereof) to beneficiaries that are former employees of one or more employers in consideration for services rendered;
- Has fewer than 50 participants;
- Is sponsored by one or more employers each of which is not an investment entity or passive NFFE;
- Employee and employer contributions to the fund (disregarding transfers of assets from other plans described in this part, retirement and pension accounts described in an applicable Model 1 or Model 2 IGA, or accounts described in Regulations section 1.1471-5(b)(2)(i)(A)) are limited by reference to earned income and compensation of the employee, respectively;
- Participants that are not residents of the country in which the fund is established or operated are not entitled to more than 20% of the fund's assets; **and**
- Is subject to government regulation and provides annual information reporting about its beneficiaries to the relevant tax authorities in the country in which the fund is established or operates.

Part XV Exempt Retirement Plans (continued)

- d** ☐ I certify that the entity identified in Part I is formed pursuant to a pension plan that would meet the requirements of section 401(a), other than the requirement that the plan be funded by a trust created or organized in the United States.
- e** ☐ I certify that the entity identified in Part I is established exclusively to earn income for the benefit of one or more retirement funds described in this part or in an applicable Model 1 or Model 2 IGA, or accounts described in Regulations section 1.1471-5(b)(2)(i)(A) (referring to retirement and pension accounts), or retirement and pension accounts described in an applicable Model 1 or Model 2 IGA.
- f** ☐ I certify that the entity identified in Part I:
- Is established and sponsored by a foreign government, international organization, central bank of issue, or government of a U.S. possession (each as defined in Regulations section 1.1471-6) or an exempt beneficial owner described in an applicable Model 1 or Model 2 IGA to provide retirement, disability, or death benefits to beneficiaries or participants that are current or former employees of the sponsor (or persons designated by such employees); **or**
 - Is established and sponsored by a foreign government, international organization, central bank of issue, or government of a U.S. possession (each as defined in Regulations section 1.1471-6) or an exempt beneficial owner described in an applicable Model 1 or Model 2 IGA to provide retirement, disability, or death benefits to beneficiaries or participants that are not current or former employees of such sponsor, but are in consideration of personal services performed for the sponsor.

Part XVI Entity Wholly Owned by Exempt Beneficial Owners

- 30** ☐ I certify that the entity identified in Part I:
- Is an FFI solely because it is an investment entity;
 - Each direct holder of an equity interest in the investment entity is an exempt beneficial owner described in Regulations section 1.1471-6 or in an applicable Model 1 or Model 2 IGA;
 - Each direct holder of a debt interest in the investment entity is either a depository institution (with respect to a loan made to such entity) or an exempt beneficial owner described in Regulations section 1.1471-6 or an applicable Model 1 or Model 2 IGA.
 - Has provided an owner reporting statement that contains the name, address, TIN (if any), chapter 4 status, and a description of the type of documentation provided to the withholding agent for every person that owns a debt interest constituting a financial account or direct equity interest in the entity; **and**
 - Has provided documentation establishing that every owner of the entity is an entity described in Regulations section 1.1471-6(b), (c), (d), (e), (f) and/or (g) without regard to whether such owners are beneficial owners.

Part XVII Territory Financial Institution

- 31** ☐ I certify that the entity identified in Part I is a financial institution (other than an investment entity) that is incorporated or organized under the laws of a possession of the United States.

Part XVIII Excepted Nonfinancial Group Entity

- 32** ☐ I certify that the entity identified in Part I:
- Is a holding company, treasury center, or captive finance company and substantially all of the entity's activities are functions described in Regulations section 1.1471-5(e)(5)(i)(C) through (E);
 - Is a member of a nonfinancial group described in Regulations section 1.1471-5(e)(5)(i)(B);
 - Is not a depository or custodial institution (other than for members of the entity's expanded affiliated group); **and**
 - Does not function (or hold itself out) as an investment fund, such as a private equity fund, venture capital fund, leveraged buyout fund, or any investment vehicle with an investment strategy to acquire or fund companies and then hold interests in those companies as capital assets for investment purposes.

Part XIX Excepted Nonfinancial Start-Up Company

- 33** ☐ I certify that the entity identified in Part I:
- Was formed on (or, in the case of a new line of business, the date of board resolution approving the new line of business) _____ (date must be less than 24 months prior to date of payment);
 - Is not yet operating a business and has no prior operating history or is investing capital in assets with the intent to operate a new line of business other than that of a financial institution or passive NFFE;
 - Is investing capital into assets with the intent to operate a business other than that of a financial institution; **and**
 - Does not function (or hold itself out) as an investment fund, such as a private equity fund, venture capital fund, leveraged buyout fund, or any investment vehicle whose purpose is to acquire or fund companies and then hold interests in those companies as capital assets for investment purposes.

Part XX Excepted Nonfinancial Entity in Liquidation or Bankruptcy

- 34** ☐ I certify that the entity identified in Part I:
- Filed a plan of liquidation, filed a plan of reorganization, or filed for bankruptcy on _____;
 - During the past 5 years has not been engaged in business as a financial institution or acted as a passive NFFE;
 - Is either liquidating or emerging from a reorganization or bankruptcy with the intent to continue or recommence operations as a nonfinancial entity; **and**
 - Has, or will provide, documentary evidence such as a bankruptcy filing or other public documentation that supports its claim if it remains in bankruptcy or liquidation for more than 3 years.

Part XXI 501(c) Organization

- 35** ☐ I certify that the entity identified in Part I is a 501(c) organization that:
- Has been issued a determination letter from the IRS that is currently in effect concluding that the payee is a section 501(c) organization that is dated _____; **or**
 - Has provided a copy of an opinion from U.S. counsel certifying that the payee is a section 501(c) organization (without regard to whether the payee is a foreign private foundation).

Part XXII Nonprofit Organization

- 36** ☐ I certify that the entity identified in Part I is a nonprofit organization that meets the following requirements.
- The entity is established and maintained in its country of residence exclusively for religious, charitable, scientific, artistic, cultural or educational purposes;
 - The entity is exempt from income tax in its country of residence;
 - The entity has no shareholders or members who have a proprietary or beneficial interest in its income or assets;
 - Neither the applicable laws of the entity's country of residence nor the entity's formation documents permit any income or assets of the entity to be distributed to, or applied for the benefit of, a private person or noncharitable entity other than pursuant to the conduct of the entity's charitable activities or as payment of reasonable compensation for services rendered or payment representing the fair market value of property which the entity has purchased; **and**
 - The applicable laws of the entity's country of residence or the entity's formation documents require that, upon the entity's liquidation or dissolution, all of its assets be distributed to an entity that is a foreign government, an integral part of a foreign government, a controlled entity of a foreign government, or another organization that is described in this part or escheats to the government of the entity's country of residence or any political subdivision thereof.

Part XXIII Publicly Traded NFFE or NFFE Affiliate of a Publicly Traded Corporation

Check box 37a or 37b, whichever applies.

- 37a** ☐ I certify that:
- The entity identified in Part I is a foreign corporation that is not a financial institution; **and**
 - The stock of such corporation is regularly traded on one or more established securities markets, including _____ (name one securities exchange upon which the stock is regularly traded).
- b** ☐ I certify that:
- The entity identified in Part I is a foreign corporation that is not a financial institution;
 - The entity identified in Part I is a member of the same expanded affiliated group as an entity the stock of which is regularly traded on an established securities market;
 - The name of the entity, the stock of which is regularly traded on an established securities market, is _____; **and**
 - The name of the securities market on which the stock is regularly traded is _____.

Part XXIV Excepted Territory NFFE

- 38** ☐ I certify that:
- The entity identified in Part I is an entity that is organized in a possession of the United States;
 - The entity identified in Part I:
 - (i) Does not accept deposits in the ordinary course of a banking or similar business;
 - (ii) Does not hold, as a substantial portion of its business, financial assets for the account of others; **or**
 - (iii) Is not an insurance company (or the holding company of an insurance company) that issues or is obligated to make payments with respect to a financial account; **and**
 - All of the owners of the entity identified in Part I are bona fide residents of the possession in which the NFFE is organized or incorporated.

Part XXV Active NFFE

- 39** ☒ I certify that:
- The entity identified in Part I is a foreign entity that is not a financial institution;
 - Less than 50% of such entity's gross income for the preceding calendar year is passive income; **and**
 - Less than 50% of the assets held by such entity are assets that produce or are held for the production of passive income (calculated as a weighted average of the percentage of passive assets measured quarterly) (see instructions for the definition of passive income).

Part XXVI Passive NFFE

- 40a** ☐ I certify that the entity identified in Part I is a foreign entity that is not a financial institution (other than an investment entity organized in a possession of the United States) and is not certifying its status as a publicly traded NFFE (or affiliate), excepted territory NFFE, active NFFE, direct reporting NFFE, or sponsored direct reporting NFFE.

Check box 40b or 40c, whichever applies.

- b** ☐ I further certify that the entity identified in Part I has no substantial U.S. owners (or, if applicable, no controlling U.S. persons); **or**
- c** ☐ I further certify that the entity identified in Part I has provided the name, address, and TIN of each substantial U.S. owner (or, if applicable, controlling U.S. person) of the NFFE in Part XXIX.

Part XXVII **Excepted Inter-Affiliate FFI**

41 ☐ I certify that the entity identified in Part I:

- Is a member of an expanded affiliated group;
- Does not maintain financial accounts (other than accounts maintained for members of its expanded affiliated group);
- Does not make withholdable payments to any person other than to members of its expanded affiliated group;
- Does not hold an account (other than depository accounts in the country in which the entity is operating to pay for expenses) with or receive payments from any withholding agent other than a member of its expanded affiliated group; **and**
- Has not agreed to report under Regulations section 1.1471-4(d)(2)(ii)(C) or otherwise act as an agent for chapter 4 purposes on behalf of any financial institution, including a member of its expanded affiliated group.

Part XXVIII **Sponsored Direct Reporting NFFE** (see instructions for when this is permitted)

42 Name of sponsoring entity:

43 ☐ I certify that the entity identified in Part I is a direct reporting NFFE that is sponsored by the entity identified on line 42.

Part XXIX Substantial U.S. Owners of Passive NFFE

As required by Part XXVI, provide the name, address, and TIN of each substantial U.S. owner of the NFFE. Please see the instructions for a definition of substantial U.S. owner. If providing the form to an FFI treated as a reporting Model 1 FFI or reporting Model 2 FFI, an NFFE may also use this part for reporting its controlling U.S. persons under an applicable IGA.

[illegible]

Part XXX Certification

Under penalties of perjury, I declare that I have examined the information on this form and to the best of my knowledge and belief it is true, correct, and complete. I further certify under penalties of perjury that:

- The entity identified on line 1 of this form is the beneficial owner of all the income to which this form relates, is using this form to certify its status for chapter 4 purposes, or is a merchant submitting this form for purposes of section 6050W;
- The entity identified on line 1 of this form is not a U.S. person;
- The income to which this form relates is: (a) not effectively connected with the conduct of a trade or business in the United States, (b) effectively connected but is not subject to tax under an income tax treaty, or (c) the partner's share of a partnership's effectively connected income; **and**
- For broker transactions or barter exchanges, the beneficial owner is an exempt foreign person as defined in the instructions.

Furthermore, I authorize this form to be provided to any withholding agent that has control, receipt, or custody of the income of which the entity on line 1 is the beneficial owner or any withholding agent that can disburse or make payments of the income of which the entity on line 1 is the beneficial owner.

I agree that I will submit a new form within 30 days if any certification on this form becomes incorrect.

Sign Here

Signature of individual authorized

Signature of individual authorized to sign for beneficial owner

Stuart Gibson

Print Name _____

10-11-2018

Date (MM-DD-YYYY)

☒ I certify that I have the capacity to sign for the entity identified on line 1 of this form.



Aon Reed Stenhouse Inc.
2103 - 11th Avenue, 8th Floor
Regina, Saskatchewan
S4P 3Z8

Certificate of Insurance

To: TO WHOM IT MAY CONCERN

Re: Evidence of Insurance

Insurance as described herein has been arranged on behalf of the insured named herein under the following policy(ies) and as more fully described by the terms, conditions, exclusions and provisions contained in the said policy(ies) and any endorsements attached thereto.

Insured: PTI Transformers LP
101 Rockman Street
Winnipeg, MB R3T 0L7

| Coverage: | Insurer(s) | Policy No. | Policy Eff. Date | Policy Exp. Date | Limit(s) of Liability |
|------------------------------|---|--------------|------------------|------------------|--|
| Commercial General Liability | Northbridge General Insurance Corporation | CBC 1939268 | June 15, 2020 | May 15, 2021 | \$2,000,000 each Occurrence - Bodily Injury and Property Damage, subject to aggregate where applicable Non-Owned Automobile Liability |
| Umbrella Liability | Northbridge General Insurance Corporation | CBC 1939268 | June 15, 2020 | May 15, 2021 | \$3,000,000 each Occurrence in excess of underlying policies above on a follow form basis. |
| Cargo | Underwriters at Lloyd's through Aon Group Limited | MACAR1700374 | May 15, 2020 | May 15, 2021 | \$5,000,000 by any one inland conveyance \$50,000 Deductible any one loss |
| Manufacturer's E&O | Northbridge General Insurance Corporation | CBC 1939268 | June 15, 2020 | May 15, 2021 | \$2,000,000 each Claim \$2,000,000 Aggregate \$10,000 Retention |

THIS IS A SUMMARY OF COVERAGES ONLY; ACTUAL POLICY WORDING, CONDITIONS AND LIMITATIONS APPLY

This Certificate constitutes a statement of the facts as of the date of issuance and are so represented and warranted only to the Certificate Holder; other persons relying on this Certificate do so at their own risk.

Aon Reed Stenhouse Inc.

Dated June 15, 2020, at Regina, Saskatchewan

Terrilee Lamer, CAIB
(306) 569-6726

**THE POLICY CONTAINS A CLAUSE THAT MAY LIMIT THE AMOUNT PAYABLE
OR, IN THE CASE OF AUTOMOBILE INSURANCE,
THE POLICY CONTAINS A PARTIAL PAYMENT OF LOSS CLAUSE**



Certificate of Registration

This certifies that the Quality Management System of

PTI Transformers LP

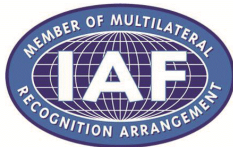
101 Rockman Street
Winnipeg, Manitoba, R3T 0L7, Canada

has been assessed by NSF-ISR and found to be in conformance to the following standard(s):

ISO 9001:2015

Scope of Registration:

Design, manufacture, delivery and servicing of medium and large power transformers.



| | |
|-------------------------|-------------|
| Certificate Number: | 6G721-IS10 |
| Certificate Issue Date: | 22-APR-2021 |
| Registration Date: | 09-MAY-2021 |
| Expiration Date *: | 08-MAY-2024 |

Jennifer Morecraft,
Senior Managing Director

NSF International Strategic Registrations

789 North Dixboro Road, Ann Arbor, Michigan 48105 | (888) NSF-9000 | www.nsf-isr.org

Authorized Registration and /or Accreditation Marks. This certificate is property of NSF-ISR and must be returned upon request.
*Company is audited for conformance at regular intervals. To verify registrations call (888) NSF-9000 or visit our web site at www.nsf-isr.org



Certificate of Registration

This certifies that the Environmental Management System of

PTI Transformers LP

101 Rockman Street
Winnipeg, Manitoba, R3T 0L7, Canada

has been assessed by NSF-ISR and found to be in conformance to the following standard(s):

ISO 14001:2015

Scope of Registration:

Design, manufacture, delivery and servicing of medium and large power transformers.




| | |
|-------------------------|-------------|
| Certificate Number: | 6G721-EM7 |
| Certificate Issue Date: | 22-APR-2021 |
| Registration Date: | 09-MAY-2021 |
| Expiration Date *: | 08-MAY-2024 |

Jennifer Morecraft,
Senior Managing Director

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*Company is audited for conformance at regular intervals. To verify registrations call (888) NSF-9000 or visit our web site at www.nsf-isr.org

| | | |
|--|-------------------------------------|---|
| PTI TRANSFORMERS LP | PAINT SPECIFICATION FOR METAL PARTS |  |
| Quality Management System ENGINEERING SPECIFICATION | Document Number: ES-70-002 | |

1. Scope:

This specification outlines the paint requirement for metal parts, it shall be suitable for spray application.

2. General:

All paints shall be ready-mixed at the factory to comply with the specification formula for the type of paint ordered shall be free from dirt, water and other foreign matter; and shall dry within the specified period to a good film without running, streaking or sagging.

Two specific requirements for painting metal parts:

Internal metal parts – consist of metal parts and surfaces in contact with transformer oil such as clamp structure, base bar, end bracket assembly, top cross brace, locating beam, and inside surface of the tank, cover, conservator, turret, LTC box, cooler pipe, header, hand-hole cover.

External metal parts – consist of metal parts and surfaces not in contact with transformer oil such as lightning arrestor (L/A) support assembly, A-Frame assembly, conservator support assembly, control box and outside surface of the tank, cover, conservator, turret, LTC box, cooler pipe, header, hand hole cover.

3. Specific Instruction:

3.1. Surface Preparation

- 3.1.1. Surfaces shall be free of all visible oil, grease, dirt, mill scale, rust, coating, oxides, corrosion, and other foreign matter.
- 3.1.2. All sharp edges must be broken with appropriate grinding tool, 3 passes with 100 grit.
- 3.1.3. Commercial blast to SSPC-SP 6
- 3.1.4. Blast profile of 2 mil +/- 0.5 mil
- 3.1.5. A maximum of 24 hours exposure time is allowed before painting application.
- 3.1.6. Use Loctite two part epoxy to seal welded clamping plates from egress of trapped Shot-blast material.


3.2. Masking surfaces before painting

- 3.2.1. For internal metal parts such as clamp, base bar, top cross brace, end brackets, and locating beam, the surfaces to be masked with tape will be specified by standard drawings.
- 3.2.2. For the tank and cover, the surfaces to be masked with tape will be specified by standard drawings.
- 3.2.3. For the conservator, the surfaces to be masked with tape will be specified by standard drawings.

3.3. Spot/Stripe Priming

- 3.3.1. Apply a stripe primer coat first on welds, edges, and hard to reach surface areas before full prime coat application. Spray or brush application are acceptable.

| | | |
|-----------------|---------------------------------|-------------|
| Revision No.: 5 | Revision Date: February 1, 2019 | Page 1 of 2 |
|-----------------|---------------------------------|-------------|

| | | |
|--|-------------------------------------|---|
| PTI TRANSFORMERS LP | PAINT SPECIFICATION FOR METAL PARTS |  |
| Quality Management System ENGINEERING SPECIFICATION | Document Number: ES-70-002 | |

3.4. Internal Metal Parts Paint Requirements

- 3.4.1. White epoxy primer/Top coat - Superior-Sequoia 263-166 A&B
- 3.4.2. Dry film thickness (DFT) is 3.0mils-5.0 mils for 1,500 hrs

3.5. External Metal Parts Paint Requirements

- 3.5.1. First full prime coat – High solids red oxide epoxy primer; Superior Sequoia 263-147 A&B, DFT at least 4.0 mils for 1,500 hrs.
- 3.5.2. Top coat – Urethane Topcoat 4:1; Superior Sequoia 273-719, DFT at least 2.0 mils above profile.
- 3.5.3. Color for top coat - as required by specific order.

4. Approval List:

| | | | | |
|---|--|--|--|---------------------------------|
| Responsibility Center: Engineering | Prepared by: R. Jorundson <i>Original signed</i> | Date: | Issued by ISO Coord: John Manansala <i>Original signed</i> | Date: |
| Accepted for Quality: Arlyne Jutiz <i>Original signed</i> | Date: | Accepted for Engineering: Jim Nielsen <i>Original signed</i> | Date: | <i>Intentionally left blank</i> |

5. Revision History:

| Revision no | Revised by | Date | Description of Revision |
|-------------|---------------|------------------|--|
| 0 | A. Minh Vuong | August 26, 2013 | New work instruction |
| 1 | Armand Siapno | July 29, 2013 | Added item 3.1.6 under surface preparation |
| 2 | ST | January 2016 | New company name, logo |
| 3 | B.Seerapathy | March 21, 2018 | Minor Format Updation. Logo changed from Pauwels to PTI |
| 4 | R. Jorundson | June 18, 2018 | Update 2.2.4 & 2.2.5 to current product in use. |
| 5 | Arlyne Jutiz | February 1, 2019 | Modify "Approval List" section Change company name and logo |

| | | |
|-----------------|---------------------------------|-------------|
| Revision No.: 5 | Revision Date: February 1, 2019 | Page 2 of 2 |
|-----------------|---------------------------------|-------------|

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New Customer Inquiries 1.800.437.3188



home about products manufacturing technical information transportation investor relations contact

Products

- Base Oils
- Hydrocarbon Gels
- Petrolatum
- Petroleum Sulfonates
- Specialty Aliphatic Solvents
- Specialty Oils
 - Cable Fillers
 - Horticultural Spray Oils
 - Low Temperature Base Oils
 - Process Oils
 - Raven Oils
 - Refrigeration Oils
 - Shock Absorber Oils
 - Tackifiers
 - Transformer Oils
 - Caltran 60-08 (Type I)
 - Caltran 60-15 (Type II)**
 - Caltran 60-30 (Type II)
 - Caltran N60-08
 - Caltran N60-30
 - VI Improvers
- Wax
- White Oils
- Applications



Transformer Oils

Caltran 60-15 (Type II)

Calumet produces both Type I and Type II transformer oils from our Princeton refinery. These oils meet the requirements of ASTM D3487.

[Compare >>](#)

| Tests | Test Method | Typicals |
|-----------------------------------|------------------|-------------|
| Viscosity, CST @ 0C | D445 | 56.85 |
| Viscosity, CST @ 40C | D445 | 8.63 |
| Viscosity, CST @ 100C | D445 | 2.23 |
| Gravity, API, 60F | D4052 | 27.4 |
| Density @ 15C, KG/DM3 | D1298 | 0.8900 |
| Flash, COC, C(F) | D92 | 148(298) |
| Pour Point, C(F) | D97 | -57(-71) |
| Color, ASTM | D1500 | L0.5 |
| Aniline Point, C(F) | D611 | 70.3(158.5) |
| Neut. No., MG KOH/G | D974 | 0.013 |
| Water Content, ppm | D1533 | 15 |
| Dielectric Breakdown @ 60 HZ | | |
| Disk Electrodes, KV | D877 | 43 |
| KV 1.02 MM Gap | D1816 | 30 |
| KV 2.03 MM Gap | D1816 | 60 |
| Dielec. Breakdown, Impulse Conds. | D3300 | |
| 25C, Needle Neg. to Sphere | | |
| Grounded, 25.4 MM Gap, KV | | 300 |
| Corrosive Sulfur | D1275 (Method B) | n/corros. |
| Interfacial Tension, Dynes/CM | D971 | 47.6 |
| Oxidation Stability | D2440 | |
| 72 hr Sludge, Mass % | | 0.01 |
| 72 hr Acid No., MG KOH/G | | 0.01 |
| 164 hr Sludge, Mass % | | 0.01 |
| 164 hr Acid No., MG KOH/G | | 0.01 |
| Oxidation Stability, RBOT, MIN | D2112 | 271 |
| Oxid. Inhibitor Content, Mass % | D2668 | 0.19 |
| Gassing Tendency | D2300 | |

| | | |
|---------------------------|-------|-----------|
| Micro L/MIN (Procedure B) | | + 12 |
| Power Factor, 25C, % | D924 | 0.006 |
| Power Factor, 100C, % | D924 | 0.06 |
| Visual Examination | D1524 | B & C |
| PCB Content, PPM | D4059 | n/detect. |

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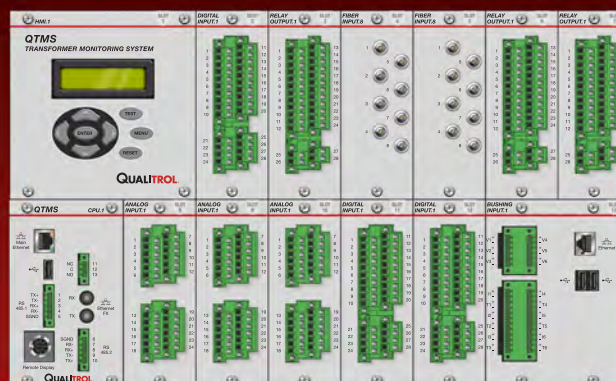
Providing the missing piece in your Condition Based Monitoring platform

- Modular design; full customization of monitoring parameters to meet specification
- Reduce installation and reconfiguration time; web based software and plug and play modules
- Field upgradeable; hot swappable modules with wiring on the front panel of the unit
- Multiple chassis sizes and mounting options to suit any application

Product Summary

Description As industry trends continue to require higher transformer utilization with reduced operations and maintenance budgets, it is becoming vital to reliably monitor asset health in real time. Real time monitoring of important parameters such as traditional transformer main tank / LTC / cooling systems, partial discharge, dissolved gas analysis and bushing health may indicate early warning signs of potential risks to the electrical network and associated assets. Early detection of transformer abnormality may allow for a shorter issue resolution cycle and avoidance of unnecessary maintenance or even potential unplanned outages.

Application Transformer monitor for condition based, continuous online monitoring of asset health (CBM). Interfaces with a variety of Qualitrol and third party smart sensors, as well as traditional gauges to accurately measure transformer parameters vital to asset management. The QTMS utilizes a modular approach allowing for full system customization to specification. Modules are hot swappable and field upgradeable. Web based software is specifically designed for ease of unit commissioning and setup.



Bring ALL sensor data into one monitor

Asset Health

Reliably monitor asset health in real time

- Individual modules allow for complete QTMS customization
- Certain parameters such as dissolved gas analysis (DGA), partial discharge (PD), and 3rd party sensors can be brought in via communication ports



LOAD TAP CHANGER

- Contact wear status
- Current position and range
- Tap run time and count
- Motor current power
- Motor actuation counter
- Alarm set points
- LTC temperature and differentials



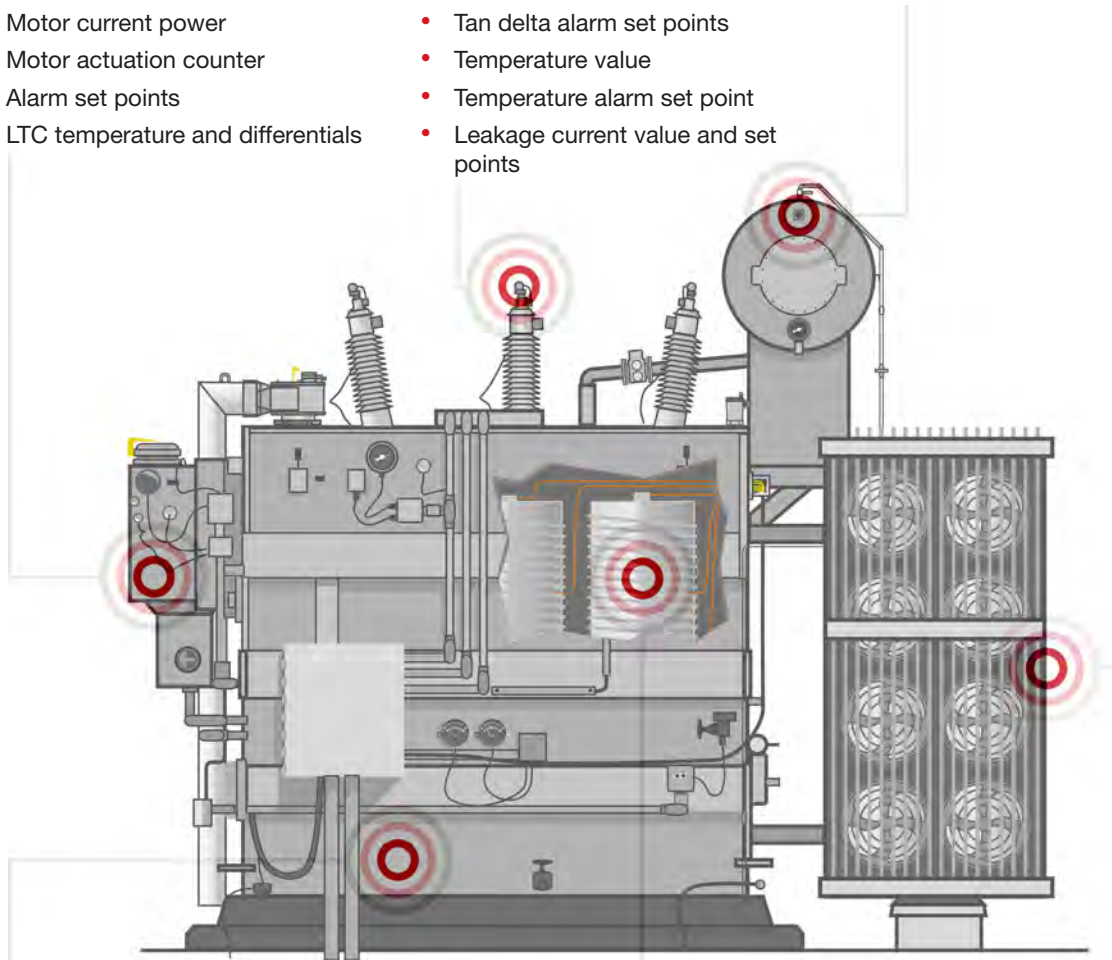
BUSHINGS

- Capacitance current value
- Capacitance alarm set points
- Tan delta value
- Tan delta alarm set points
- Temperature value
- Temperature alarm set point
- Leakage current value and set points



CONSERVATOR TANK

- Liquid level
- Buchholz relay
- Bladder rupture alarm



MAIN TANK

- Temperature
- Pressure relief
- Rapid pressure rise relay
- Liquid level
- Smart breather
- 3rd party smart sensors



WINDINGS

- Fiber optic winding temperature
- Simulated winding temperature
- Partial Discharge (PD)
- Dissolved Gas Analysis (DGA)
- Geomagnetically Induced Current (GIC)



COOLING MONITORING

- Motor current power and motor run time
- Alarm set points
- Cooling bank temperature and differentials
- Flow indicator status
- Efficiency status

Modular Platform

Field upgradeable, hot swappable modules

- All modules are isolated from one another. Each is engineered to be hot swappable and fully field upgradeable to aid in configuration changes
- The web based interface software will automatically recognize hardware changes to reduce installation and commissioning time



DISPLAY

- Optional push button display screen
- Large backlit LCD screen
- Integrated overlay buttons



DIGITAL INPUTS

- Completely configurable per specification
- 14 digital inputs per module
- Up to 196 digital inputs per system



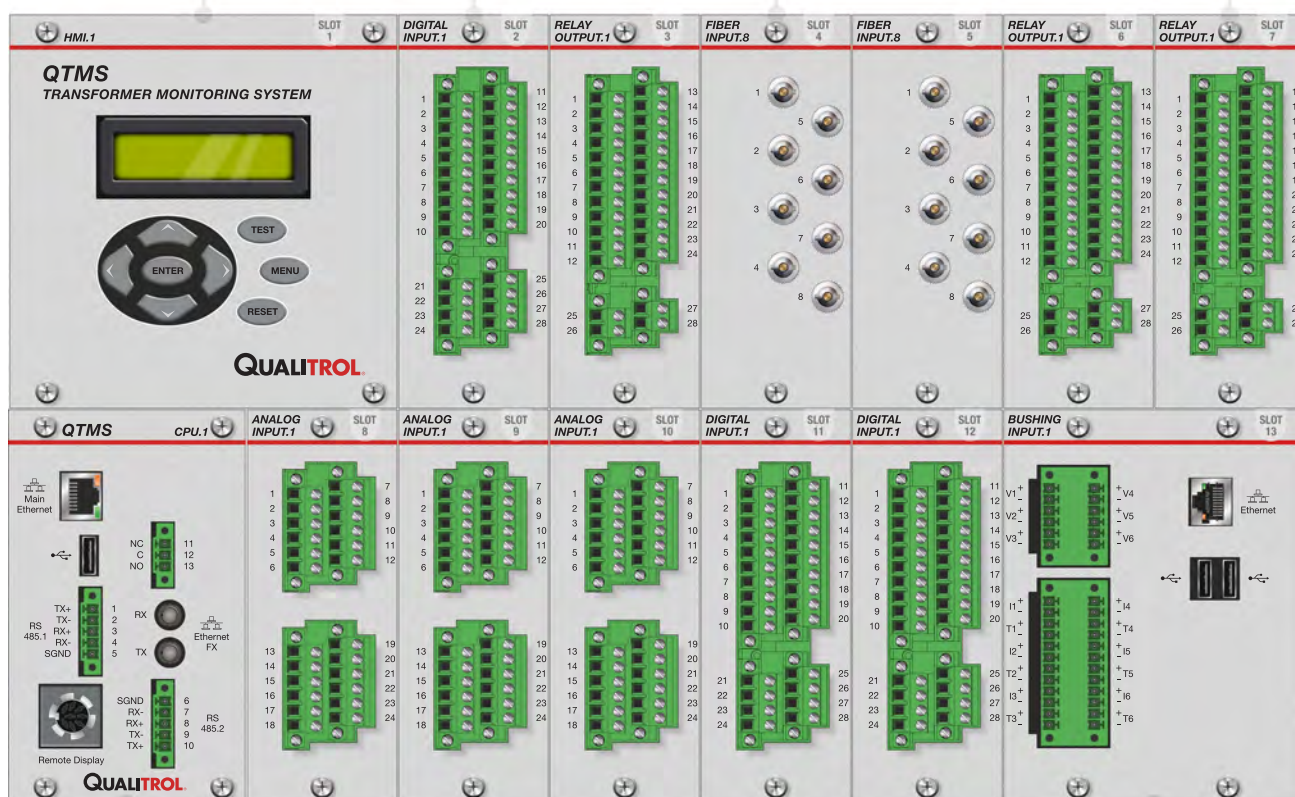
FIBER OPTICS

- Accurate direct winding temperature
- Accurately characterize asset aging
- Available in 4, 6, or 8 inputs



RELAYS

- Cooling system activation, alarms and customized signals
- 8 relays per module
- Up to 112 relays available per system



CPU

- USB and serial ports; IEC 61850, DNP 3.0, Modbus, IEC 60870 protocols
- Web based interface
- Universal power supply



ANALOG INPUTS

- Flexible configuration of multiple analog types
- 8 analog inputs per module
- Up to 112 analog inputs per system



BUSHING MONITOR

- Real time monitoring of up to 6 bushing taps per module
- Detect changes in Tan Delta
- Detect changes in capacitance

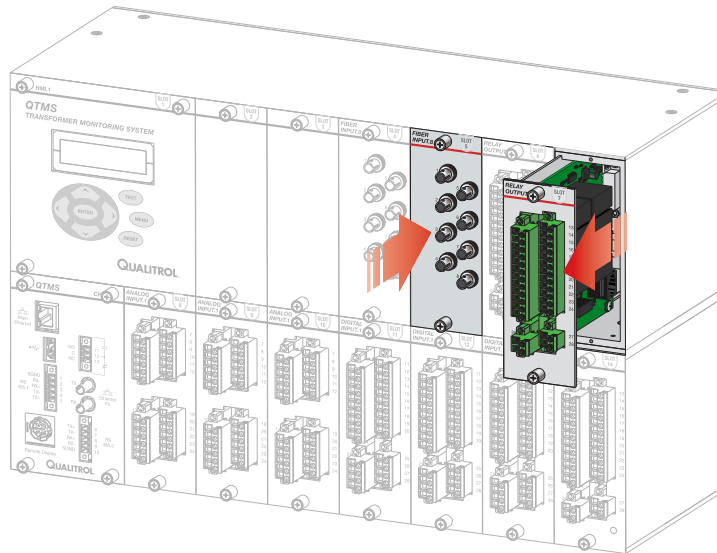
QUALITROL QTMS - Transformer Monitoring System

Module Customization

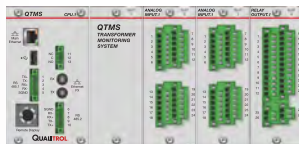
Simple Installation of Additional Monitoring Technologies

- Qualitrol offers a wide variety of modules to populate the various sizes of QTMS chassis
- Any module configuration may be chosen, and module changes are auto-recognized by the QTMS software

Modules easily slide in and out of the chassis to create custom configurations

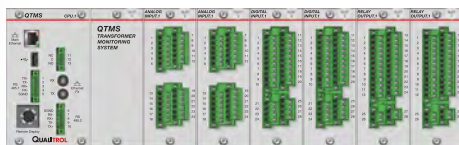


Chassis Customization



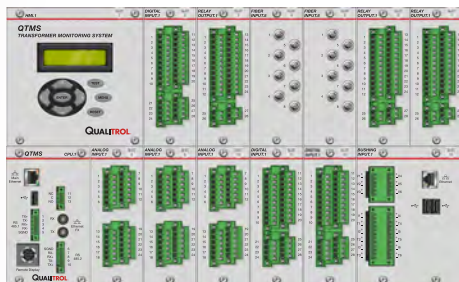
STX Chassis

- Optional remote display
- Houses up to 4 modules
- Generally used for traditional transformer monitoring or specialty applications



MTX Chassis

- Optional remote or internal display
- Houses up to 7 modules
- Generally used for traditional monitoring plus some advanced functionality such as Fiber Optics, DGA or Bushing Monitoring



LTX Chassis

- Optional remote or internal display
- Houses up to 14 modules
- Generally used for advanced CBM transformer monitoring:
 - Traditional monitoring / LTC / Cooling
 - Bushing Monitoring
 - Dissolved Gas Analysis (DGA)
 - Partial Discharge (PD)
 - Fiber Optic Temperature

Mounting options

- A variety of mounting options are available with the QTMS. Including panel mount, rack mount, and various enclosures

Product Advantages

Customization and Configuration

- Modular approach customizable to any CBM platform; traditional monitoring plus DGA, PD, Bushing Monitoring
- Choose a unique combination of monitoring parameters and health algorithms for various sized transformers
- All modules are backward compatible and can be added or subtracted at any time with simple configuration
- Fully field configurable by the end user with web based software that can be accessed on or offline
- No need for constant manufacturer technician support on installation or configuration changes!

Installation and Reliability

- Universal power supply with wiring on the front of the unit for easy assess

- Multiple mounting options and chassis sizes allow for a tailored application for any CBM platform
- Hot swappable modules and simple configuration of 3rd party sensors through multiple communication options
- Made in USA, with robust materials that are fully tested according to current electrical and security protocols

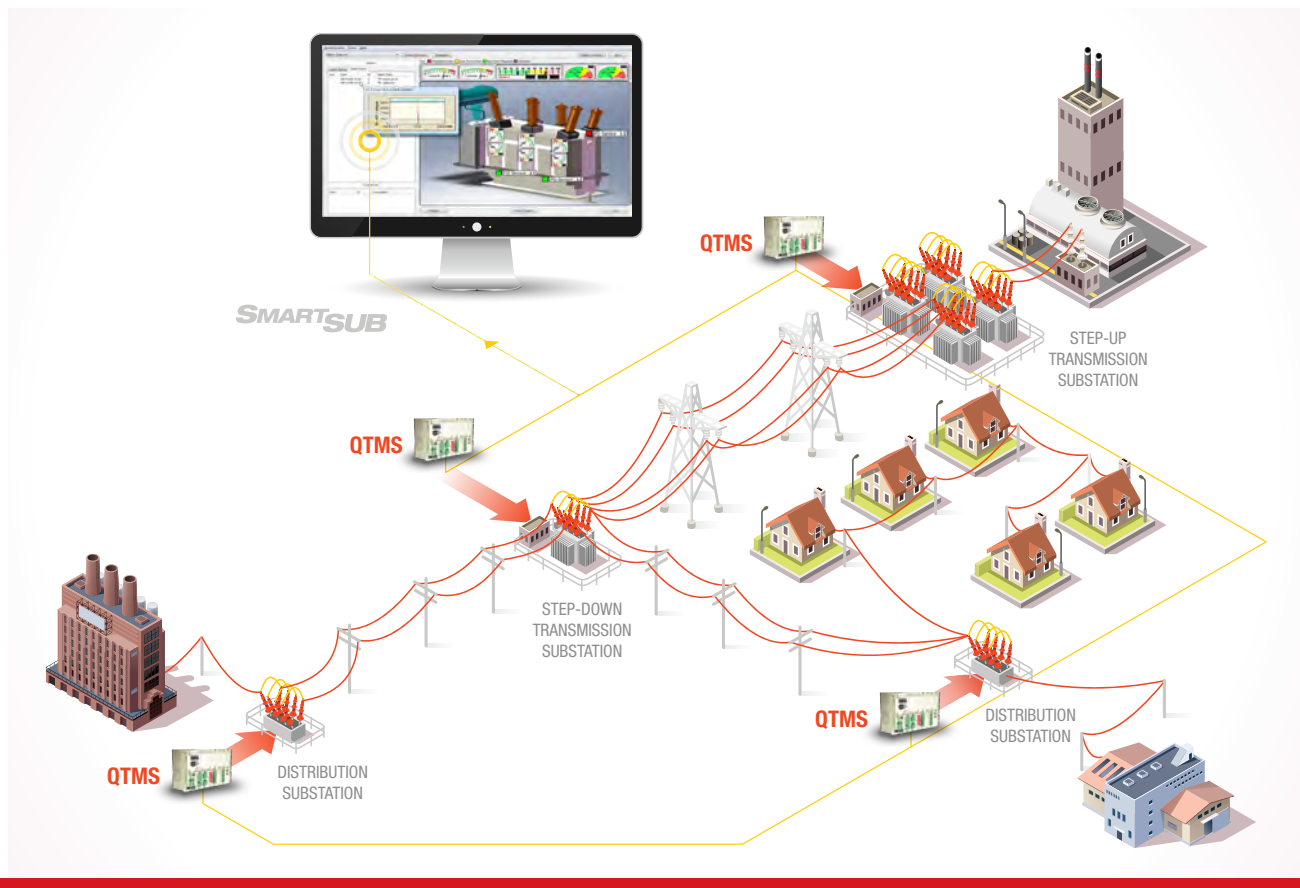
Software and Algorithms

- Web based software can be accessed locally or remotely depending on the application
- Configuration of sensors, alarms, and modules are simple and intuitive with just a few mouse clicks
- Incorporation of state of the art health assessment algorithms
- Algorithms are based on IEC and IEEE standards that are well accepted in the industry

Transformer Fleet Monitoring

SmartSUB Enterprise Software

- Bring data from multiple QTMS units into a centralized location with Qualitrol's SmartSUB enterprise software
- Show data on an individual asset level, regional view, or consolidated fleet wide look



QUALITROL QTMS - Transformer Monitoring System

TECHNICAL SPECIFICATIONS

| | | |
|---|---|--|
| Power supply | Universal | 120 - 240 V AC, $\pm 20\%$; 50/60 Hz; 125 - 250 V DC, $\pm 15\%$; <50 W Fuse: 5.0 A / 250 V |
| Processor module | CPU | TX6-DL dual-core processor 10/100 Ethernet TX, RJ45 port USB-A port RS-485, 4-wire communications port, Display port for optional remote display |
| Comms module (integral to the CPU) | Option 1 | Ethernet FX, ST connector RS-485, 4-wire communications port System status relay |
| User interface | Platform | Web based |
| Data comms | Protocols - serial | DNP 3.0 (Level3), Modbus IEC 60870-104-5 |
| | Protocols - Ethernet | IEC 61850, IEC 60870-104-5 DNP 3.0 (Level 3), Modbus |
| Memory | Data logging | 100 variables; store rates 1 minute to 24 hours 32 parameters at 15 second capture rate for 90 days without overwriting, with 4 GB memory space |
| Display | Local (optional) Remote for swing panel (optional) | Backlit LCD, 2 x 16 characters |
| | Controls (switches) | 8 pushbutton (Navigation, Test and Reset) |
| Analog input module | Inputs | Measures up to 8 parameters |
| | Accuracy | $\pm 0.5\%$ full scale input range |
| | Temperature | 100 ohm platinum (Pt100) RTD; simulated winding Liquid / ambient temperature range: -40 - 120°C Winding temperature range: -40 - 200°C |
| | Current | Clamp-on CT, 0 - 5A, - 10A, - 20A, - 100A and others available |
| | DC current loops | 0 - 1 and 4 - 20 mA DC |
| | DC voltage | 0 - 100 mV DC and 0 - 10 VDC |
| | AC voltage | 0 - 140 VAC and 0 - 320 VAC; 50/60 Hz |
| | Potentiometer | 1500 - 15,000 ohms |
| | Switch contact (dry) | Open / closed |
| | Switch contact (powered) | >80 V or >130 V open, jumper selectable; optically isolated |
| | Taps | 0 - 1 mA DC or 4 - 20 mA DC |
| | Tap position | 0 - 1, 0 - 5, 0 - 10, -5 - +5, -10 - +10, 0 - 125 VDC or non-powered; resistor bridges of 40 - 2500 ohm (1% acc, 100 ppm); or 0 - 1 mA DC or 4 - 20 mA DC |
| Digital input module | Inputs | Measures up to 14 optically isolated inputs |
| | Maximum voltage | 250 V DC |
| | Threshold voltage | >75 V DC |



TECHNICAL SPECIFICATIONS

| | | |
|-----------------------------------|--|---|
| Direct winding temperature | Inputs | Up to 8 fiber optic input probes |
| | Accuracy | $\pm 1^{\circ}\text{C}$ |
| Fiber optic | Output relays | 8 Form C relays; 10 A @ 120 / 240 V AC; 10 A @ 30 V DC |
| | Accuracy | 2 Loops; 0 - 1 mA (max resistive load 10,000 ohms) / 4 - 20mA (max resistance 500 ohms); other options available |
| Bushing input module | Input signals from bushing sensors | Up to 6 bushings (minimum 3 signals required) 6 x bushing current (equivalent voltage) signal 6 x temperature signal 6 x reference voltage signal Ethernet port to connect 1 OCU for partial discharge monitoring |
| | Measuring principal | Calculates the phase difference between leakage current and reference voltage |
| | General | Tan Delta / Power Factor: Accuracy better than ± 0.0001 (0.1mrad in phase shift) Capacitance: Accuracy better than 0.2% Leakage current: Accuracy better than $\pm 0.1\%$ Reference Voltage: Accuracy better than $\pm 0.1\%$ Temperature compensated Tan Delta / Power Factor Integration into SmartSUB: Accuracy better than $\pm 0.1\%$ |
| | | |
| Immunity | Dielectric strength | IEC 60255-5:2000; IEEE C37.90-2005 |
| | Impulse | IEC 60255-5:2000 |
| | Electrostatic discharge | C37.90.3 (IEEE); IEC 61000-4-2:2009 |
| | Radiated RF | 61000-6-5; IEC 61000-4-3:2010 |
| | Fast transient, burst | IEC 60255-22-4:2008; IEC 61000-4-4:2011 |
| | Surge | 61000-6-5; IEC 61000-4-5:2005 |
| | Capability damped oscillatory | 61000-4-12 |
| | Conducted RF | IEC 61000-4-6:2006; IEC 61000-4-6:2006 |
| | Conducted emissions | EN 55011 Class A |
| | Radiated emissions | EN 55011 Class A |
| | Tolerance to power frequency | 61000-4-8; IEC 60529:2001 |
| Environmental | Enclosure IP rating | IP20. (Higher IP enclosure ratings available on request) |
| | Sinusoidal vibration | IEC 60255-21-1:1988, Class 1 |
| | Shock and bump | IEC 60255-21-2:1988, Class 1 |
| | Cold | IEC 60068-2-1:2007 |
| | Damp heat, cyclic | IEC 60068-2-56 |
| | Dry heat | IEC 60068-2-2:2007 |
| | Operating temperature | -40°C to +72°C |
| | Operating temperature (Bushing module) | -20°C to +72°C |
| | Storage temperature | -60°C to +85°C |
| | Operating humidity | 5 - 95% non-condensing |



QTMS

Transformer Monitoring System



QUALITROL® Field Services

QUALITROL® provides on-site commissioning/start-up and comprehensive maintenance contracts to all customers worldwide. To further improve reliability, an extended warranty is available on selected products commissioned by QUALITROL®.

About QUALITROL®

Established in 1945, with continual improvement at the core of our business, QUALITROL® provides smart utility asset condition monitoring across the globe. We are the largest and most trusted global leader for partial discharge monitoring, asset protection equipment and information products across generation, transmission and distribution. At QUALITROL® we are redefining condition monitoring technology for Electric utilities assets.

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Protect Transformer Assets

- Avoid transformer failures
- Enable condition based maintenance
- Extend transformer life
- Defer capital expenditures
- The most comprehensive DGA assessment available

Product Summary

Description: Our industry leading on-line DGA monitors and TM VIEW™ software are monitoring generation, transmission and distribution power transformers worldwide. DGA (dissolved gas analysis) of transformer oil is the single best indicator of a transformer's overall condition. The Model TM8 offers the most comprehensive DGA assessment available. This assessment is provided through accurate and repeatable on-line measurements of the 8 critical fault gases plus nitrogen, moisture and other key parameters.

Application: Throughout your system are transformers that are vital to the reliability of your grid – GSU's, large transmission transformers, and critical substation transformers. Serveron DGA transformer monitors provide the important and timely information needed to maintain the reliability and safety of transformer fleets.



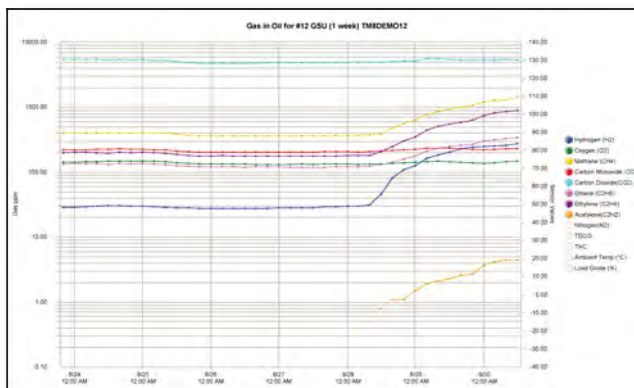
SERVERON® TM8™ on-line DGA monitor

Comprehensive Data Requires Powerful Tools

- Serveron TM View™ software and services offer simple yet powerful analytical tools for transformer monitor management, data visualization and analysis including our exclusive TOAN diagnostic tool.
- Seamlessly move from single user software to enterprise capability for large deployments of monitors in your fleet with our SmartSUB solution.
- SmartSUB includes the DGA analysis features of TM View and adds the ability of combining data from additional transformer condition based monitoring devices (tank pressure, cooling bank current, winding current & temperature, bushing monitor, partial discharge and others).

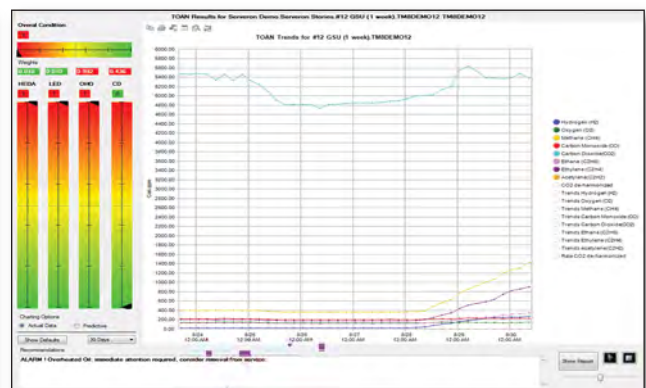
Gas-in-Oil Trend Chart

- On-line correlation of 8 fault gases for the most comprehensive DGA condition assessment available.



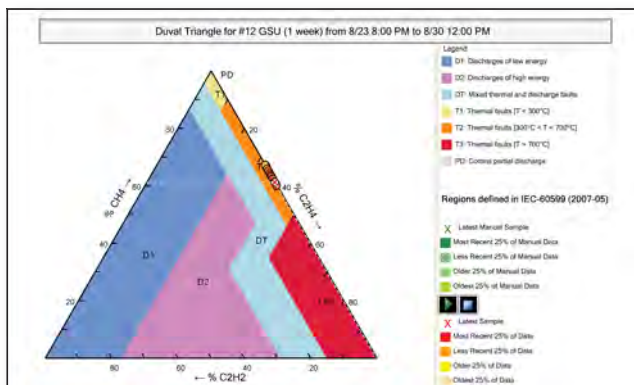
Transformer Oil Analysis and Notification (TOAN)

- Neural network based DGA diagnostic technology that provides the most accurate DGA diagnostic results over all other diagnostic tools.



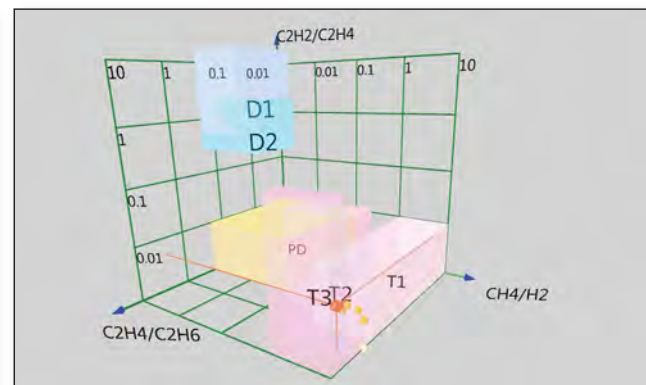
Duval Triangles

- Multiple Duval Triangles provide diagnostic outcomes for various combinations of the fault gases (IEC 60599-2007-05).



Rogers and Basic Gas Ratios

- Offer three dimensional views of diagnostic outcomes for various combinations of the fault gases (IEEE C57.104-2008 & IEC 60599-2007-05).



SERVERON® TM8™ on-line DGA monitor

Accuracy and Reliability

- The Model TM8 measures all fault gases using a single Gas Chromatography (GC) measurement system. Gas Chromatography is the accepted measurement science for DGA and is the only DGA measurement technology specified in IEEE, ASTM, CIGRE and IEC standards.
 - Serveron has delivered more GC based DGA monitors with industry leading accuracy than any other vendor.
 - On-board automated calibration verification ensures performance to specification throughout the entire operating life of the monitor.
 - Performs accurate DGA analysis on mineral and ester-based insulating fluids.
-

Low Total Cost of Ownership (TCO)

- Field-proven reliability combined with low lifetime maintenance requirements offers superior value.
 - Economical maintenance costs compared to other multi-gas monitors.
 - All scheduled maintenance can be performed on-site for minimal disruption to monitor up-time.
-

Avoid transformer failures

- Continuous trending of key fault gases gives early and immediate notification of incipient faults that can lead to transformer failure.
 - Many transformer failures can be prevented through the correlation of DGA data to real events.
 - All 8 fault gases plus nitrogen, oil temperature, ambient temperature, transformer load and moisture-in-oil are correlated by the Model TM8.
-

Enable condition based maintenance

- Only comprehensive on-line monitoring can provide the information that enables continuous transformer condition assessment.
 - Data from the Model TM8 supports all IEEE and IEC diagnostic tools for rapid warning and diagnosis of developing faults.
-

Extend transformer life and defer capital expenditures

- Comprehensive analysis of key fault gases, moisture and other key parameters enables intelligent management of transformers, extending their useful life and deferring capital expenditures.

TECHNICAL SPECIFICATIONS

DGA Method: Laboratory Grade Gas Chromatography

| | Accuracy ¹ | Repeatability ² | Range ³ |
|--|-----------------------|----------------------------|--------------------|
| Hydrogen (H ₂) | ±5% or ±3 ppm | <2% | 3-3,000 ppm |
| Oxygen (O ₂) | ±5% or +30/-0 ppm | <1% | 30-25,000 ppm |
| Methane (CH ₄) | ±5% or ±5 ppm | <1% | 5-7,000 ppm |
| Carbon Monoxide (CO) | ±5% or ±5 ppm | <2% | 5-10,000 ppm |
| Carbon Dioxide (CO ₂) | ±5% or ±5 ppm | <1% | 5-30,000 ppm |
| Ethylene (C ₂ H ₄) | ±5% or ±3 ppm | <1% | 3-5,000 ppm |
| Ethane (C ₂ H ₆) | ±5% or ±5 ppm | <1% | 5-5,000 ppm |
| Acetylene (C ₂ H ₂) | ±5% or ±1 ppm | <2% | 1-3,000 ppm |
| Nitrogen (N ₂) | ±10% or ±5,000 ppm | <20% | 5,000-100,000 ppm |

All specifications are independent of oil temperature and gas pressure levels.

1) Percent or PPM - whichever is greater

2) At the calibration level

3) Gas-in-Oil

Additional Monitoring Options

| | Accuracy ⁴ | Range |
|-----------------|---|--------------------------|
| Moisture-in-Oil | ±2% | 0-100% RS |
| | < 10% of reading for oil temperature > 30°C | 0 to 80 ⁵ ppm |
| | < 18% of reading for oil temperature < 30°C | 0 to 80 ⁵ ppm |
| Oil Temperature | 0.1°C (typically) | -40°C to +180°C |

4) Includes non-linearity and repeatability

5) Upper range limited to saturation

Total Dissolved Gases

| | |
|----------------------------|--|
| True Total Combustible Gas | True Total Dissolved Combustible Gas (TDCG) output is available reporting 100% of detected level in PPM for H ₂ , C ₂ H ₂ , C ₂ H ₄ , CO, CH ₄ , C ₂ H ₆ |
| Total Hydrocarbons | Total Hydrocarbons (THC) output is available reporting 100% of detected level in PPM for CH ₄ , C ₂ H ₂ , C ₂ H ₄ , C ₂ H ₆ |

Gas Analysis Parameters

| | |
|------------------------------------|--|
| Oil Sampling Rate | Oil sampling is continuous and gas analysis intervals are user-selectable from 2 hours to 12 hours (Default: 4 hours). Automatic schedule acceleration when rate of change alarm limit is exceeded (Default: 1 hr) |
| Data Management | All data is date and time stamped and up to two years of data is stored in memory |
| Automated Calibration Verification | System performs periodic automated calibration verification to National Institute of Standards and Technology (NIST) traceable gas standard |

Alarms

| | |
|--------------------------------------|---|
| Two individually programmable relays | 50 VDC or 240 VAC @ 3 A max. (125 VDC @ 1 A max.); relay contacts operate as normally open or normally closed |
| Supported Alarms | Gas Caution & Alarm for Level (ppm), Rate-of-Change (ppm/day), Power and/or Service Event |

External Sensor Inputs

| | |
|---------------|---|
| Analog Inputs | Three (3) analog 4 to 20 mA inputs, ambient temperature sensor included. Optional sensors include transformer load guide and moisture-in-oil with temperature probe (uses 2 inputs) |
|---------------|---|



TECHNICAL SPECIFICATIONS

| | | |
|-----------------------|---------------------|---|
| Communications | Standard Interfaces | RS-232, RS-485, Ethernet Fiber (100Base-FX) |
| | Optional Interfaces | Cellular modem, Ethernet Copper (10/100Base-TX), Wireless Radio, V.92 Internal POTS modem |
| | Supported Protocols | TCP/IP, DNP3, Modbus RTU, ASCII, OPC and IEC 61850 |

| | | |
|-------------------------------------|------------------------|------------------------------|
| Environmental Specifications | Operating Temperature | -50°C to +55°C |
| | Cold Start Temperature | -20°C |
| | Operating Humidity | 5% to 95% RH, non-condensing |
| | Oil Inlet Pressure | 0 to 45 psi (0 to 3 bar) |
| | Storage Temperature | -40°C to +75°C |
| | Storage Humidity | 5% to 95% RH, non-condensing |

| | | |
|--------------------------------|----------------------|--|
| Physical Specifications | Product Dimensions | HxWxD: 22.0 in x 20 in x 11.2 in (55.9 cm x 50.8 cm x 28.4 cm) |
| | Packaging Dimensions | 26.4 in x 26.4 in x 15.9 in (67 cm x 67 cm x 40.3 cm) |
| | Product Weight | 65 lb (29.5 kg) |
| | Shipping Weight | 70 lb (31.8 kg) (monitor package only) |
| | Enclosure Rating | NEMA 4X, IP66 |

| | | |
|---------------------------------|-----------|--|
| Input Power Requirements | Voltage | 115 VAC or 230 VAC \pm 15% |
| | Frequency | 50/60 Hz |
| | Current | 6 A maximum @ 115 V; 3 A maximum @ 230 V |

| | | | |
|---|----------------------|-------------------|-----------------------------------|
| Radiated and Conducted Emissions | | Specification | Test Method |
| | Radiated Emissions | EN 61326-1: 2006 | CISPR 11:2009 A1:2010 Class A |
| | Conducted Emissions | EN 61326-1: 2006 | CISPR 11:2009 A1:2010 Class A |
| | Current Harmonics | EN 61000-3-2:2006 | EN 61000-3-2:2006 A1:2009 Class A |
| | Voltage Fluctuations | EN 61000-3-3:2008 | EN 61000-3-3:2008 Class A |

| | | | |
|--|---------------------------|-----------------|---------------------------|
| Radiated and Conducted Immunity | | Specification | Test Method |
| | ESD | EN 61326-1:2006 | IEC61000-4-2:2009 |
| | Radiated Immunity | EN 61326-1:2006 | IEC61000-4-3:2006 A2:2010 |
| | EFT | EN 61326-1:2006 | IEC61000-4-4:2004 A1:2010 |
| | Surge | EN 61326-1:2006 | IEC61000-4-5:2006 |
| | Conducted RF Immunity | EN 61326-1:2006 | IEC61000-4-6:2009 |
| | Magnetic Field Immunity | EN 61326-1:2006 | IEC61000-4-8:2010 |
| | Voltage Dips & Interrupts | EN 61326-1:2006 | IEC61000-4-11:2004 |

| | | | |
|---------------|--|--------------------------|--------------------------|
| Safety | | Specification | |
| | | IEC 61010-1 | IEC 61010-2-81 |
| | | UL 61010-1 (2nd Edition) | CSA-C22.2 No. 61010-1-04 |



On-line DGA Analysis Across Your Power Transformer Fleet

Leading utilities around the globe deploy the Serveron line of transformer monitors to provide superior asset protection for their transformer fleets across generation, transmission and distribution. With a low total cost of ownership, reliable field-proven performance and global customer service, Serveron transformer monitors set the standard for on-line DGA monitoring. Our transformer monitors can be deployed stand-alone or as part of the Qualitrol SmartSUB condition based monitoring system for transformers and other critical substation assets.



About Serveron®

Serveron transformer condition assessment and management tools are critical to utilities in improving grid reliability while optimizing the management and economics of their asset base. We are a leader in on-line DGA monitoring of power transformers with solutions across the entire power transformer fleet. Serveron is a QUALITROL Company.

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Kelman DGA 900

Next generation on-line multi-gas DGA

Dissolved Gas Analysis (DGA) and moisture measurement of insulating fluids are recognized as the most important tests for condition assessment of transformers. In previous years, multi-gas DGA was traditionally confined to a laboratory environment, with infrequent off-line manual sampling forming part of time-based maintenance strategies. However, as the global average age of transformers continued to rise, the possibility of rapid ageing, unplanned outages and even catastrophic failure between off-line tests also increased, leading many asset owners to adopt on-line DGA monitoring strategies to increase network reliability.

In the early 2000's, GE's Kelman™ range of analysers brought consumable-free on-line multi-gas DGA to the market and GE is now proud to introduce the Kelman DGA 900, our next generation multi-gas on-line DGA and moisture analyser. At its heart lies an evolved implementation of GE's proven Photo-Acoustic Spectroscopy (PAS) measurement technology, providing laboratory challenging levels of precision and repeatability with no consumables and no need for frequent re-calibration. Benefiting from over 40 years of global DGA vendor experience, the Kelman DGA 900 encapsulates learnings and improvements derived from its predecessors to bring improved performance, innovative new features, enhanced user experience and increased robustness.

Key Benefits

- Provides remote alert and multi-gas diagnostic of deteriorating transformer condition
- Expedites operational decisions without needing to go to site for manual oil sampling
- Issues can be detected in their infancy, avoiding unexpected failures and facilitating planned outages
- Anchors condition based maintenance and asset replacement strategies on hard data
- No need for consumables or frequent recalibration to operate at optimum performance
- New "Rapid Mode" provides near real-time insight on fast developing faults
- Enhanced computing power and scalable I/Os for a flexible transformer monitoring solution
- Compatible with mineral insulating oils and newer ester based fluids (natural and synthetic)

Applications

The Kelman DGA 900 is an invaluable foundational tool for implementing Asset Performance Management (APM) across electrical generation, transmission and industry, enabling a condition based asset replacement strategy and delivering improvements in system reliability and availability.

A DS-Agile™ and Grid APM ready device, the DGA 900's wide range of communication methods and protocols enables connection to those platforms and integration with GE's Perception™ transformer fleet management software as well as other software, historian and SCADA systems.



Proven Technology

- 4th generation of GE's PAS technology delivering improved accuracy with lower detection limits
- From the only vendor with 15 years PAS experience and installed base of >13,000 units
- No carrier or calibration gas consumables
- Laboratory challenging field measurement of nine gases plus moisture
- Complete DGA analysis up to once per hour and new "Rapid Mode" for critical gases in ~30 min

Reliable and Available

- First Kelman device designed by GE leveraging our quality and continuous improvement ethos
- Enhanced reliability and easier field servicing
- 5-year warranty as standard †
- Factory calibration benchmarked against industry standard laboratory assessment

Intuitive and Flexible

- Integrated 7" colour LCD screen for simplified local user interaction and visualisation of data
- Lightweight innovative two-enclosure design enables adjacent or separated installation
- Can connect to AC or sub-station DC power

Scalable and Connected

- Expandable analogue/digital I/Os
- Future proof computing platform ready for feature enhancements
- Designed for cyber security, with a range of comms options and protocols



Technical Specifications

MEASUREMENTS

Technology

Automated head-space gas extraction.
Photo-acoustic spectroscopy (PAS) gas measurement.
Thin film capacitive moisture sensor.
Immersed fiber optic oxygen sensor.

Frequency

Configurable from once per hour to once every 4 weeks.
Faster sampling automatically triggered upon alert level reached.
"Rapid Mode" provides a rapid indication of the evolution of the gases indicated below in ~30 minutes.

Range

| | LDL | UDL | Accuracy* | Repeatability | Available in Rapid Mode |
|--|--------|------------------|---------------|---------------|-------------------------|
| Hydrogen (H ₂) | 5 | 5,000 ppm | ± LDL or ±5% | < 3% | • |
| Carb. Monox. (CO) | 1 | 50,000 ppm | ± LDL or ±3% | < 2% | • |
| Methane (CH ₄) | 2 | 50,000 ppm | ± LDL or ±3% | < 2% | • |
| Acetylene (C ₂ H ₂) | 0.5 | 50,000 ppm | ± LDL or ±3% | < 2% | • |
| Ethylene (C ₂ H ₄) | 1 | 50,000 ppm | ± LDL or ±3% | < 2% | • |
| Carb. Diox. (CO ₂) | 20 | 50,000 ppm | ± LDL or ±3% | < 3% | • |
| Ethane (C ₂ H ₆) | 1 | 50,000 ppm | ± LDL or ±3% | < 2% | • |
| Oxygen (O ₂) | 100 | 50,000 ppm | ± LDL or ±5% | < 2% | • |
| Nitrogen (N ₂) ** | 10,000 | 100,000 ppm | ± LDL or ±15% | < 3% | • |
| Moisture (H ₂ O) | 0 | 100% RS (in ppm) | ± 3% ppm | < 3% | • |

*whichever is greater. Accuracy quoted is the accuracy of the detectors during calibration. Gas-in-oil measurement may be affected by oil type and condition. Repeatability as measured from final production test data.

** N₂ value is calculated and available on free-breathing transformers only.

Time Response (typical): 1 measurement cycle; >95%: C₂H₂, CO, C₂H₆, C₂H₄, CH₄, CO₂; >90%: H₂

FEATURES

Display

4 x sunlight visible LED arrays
Integrated backlight 7" inch color resistive touch screen (800 x 480)
Embedded secure webserver (https)

Analogue Inputs

1 x CT input standard
5 x optional analogue inputs slots (Add up to 5 additional load CT's or PT100 inputs or 4-20mA sensor cards)

Digital Output

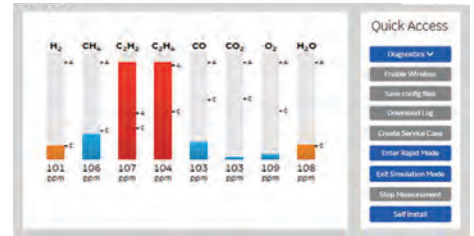
6 x standard customer programmable dry contact relays (type C, SPDT), NO/NC, 10A@ 250Vac resistive load, 10A@ 30Vdc resistive load
1 x standard service alarm relay
1 x standard watchdog relay

Digital Communications / Protocols

1 x Modbus® over RS485 / TCP/IP as standard
1 x Standard 1Gb Ethernet (RJ45)
Option: DNP3.0 over RS485 or TCP/IP
Option: IEC 61850 Edition 2
Option: ST/SC Multi-mode fiber converters
Option: GSM/GPRS/UMTS/HSPA+ modem
Option: Wi-Fi (802.11b/g/n)

Alarms

Multiple Alarm setting/scenarios, all assignable to relays or SMS
Gas: absolute gas level, Rate of Change (ROC), moisture level, Total Dissolved Combustible Gas (TDCG) and 7 x user defined gas ratios alarms
Analog inputs: absolute Level, and Rate of Change (ROC)
Digital inputs: status transition



DGA 900 gas levels displayed on the local LCD screen

ENVIRONMENT

Conditions

Operating ambient temperature -40°C to +55°C (-40°F to +131°F)

Operating ambient humidity 0-95% RH, non-condensing

Oil temperature at valve*** -20°C to +120°C (-4°F to +248°F)

***Based on testing carried out using VOLTESSO™ 35 mineral oil, over a ¼" pipe run of 10 metres or less from oil supply or return valve to monitor connection point and on transformer oil supply valve volumes of 200ml or less. For oil temperatures colder than -20°C GE recommends the use of heat trace cabling on piping

Enclosure

IP56 certified
Standard: Powder coated marine grade aluminium (RAL9002)
Option: Unpainted 316 Stainless Steel

Power Requirements

AC Nominal 100-240 Vac, Range 85-264 Vac, 4A
DC Nominal 100-250 Vdc, Range 90-300 Vdc

Mechanical

| | Analysis Unit | Hub Unit |
|------------|---|---|
| Dimensions | 600 x 484 x 330 mm 23.6 x 19.1 x 13.0 in | 600 x 380 x 330 mm 23.6 x 15.0 x 13.0 in |
| Weight | 33.4Kg 73.6 lb | 18.5Kg 40.8 lb |

OPTIONS

Mounting stand
Sun canopy
Longer umbilical cable between units
Analogue output of gas values

† Terms and conditions apply

| Configuration Code | E0 | P0 | M0 | U0 | S0 | C0 | C0 | C0 | X0 | X0 | X0 | X0 | X0 | Part No. | Description |
|---------------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----------------|---|
| Enclosure Options | | | | | | | | | | | | | | Kelman DGA 900 | DGA 900 - Base Unit |
| Protocol Options | | | | | | | | | | | | | | | The 316SS enclosure is still an option, however it should be noted that the DGA900 standard painted aluminum enclosure provides our highest possible rated ingress and corrosion protection levels at IP56 and C5M. |
| Mounting Stand | | | | | | | | | | | | | | | |
| Umbilical Cable | | | | | | | | | | | | | | | |
| Sun Canopy | | | | | | | | | | | | | | | |
| Communication Options | | | | | | | | | | | | | | | |
| Analogue I/O Card (5 slots available) | | | | | | | | | | | | | | | |

Grid Solutions
Lissie Industrial Estate East
Unit 1, 7 Lissie Walk
Lisburn BT28 2LU
United Kingdom
Tel: +44 (0) 2892 622915

GEGridSolutions.com

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Grid-GA-L3-DGA_900-1599-2019_09-EN_R002



imagination at work



Formal Bid and Award System

Award #14 March 3, 2022

Type of Award Request: CONTRACT AMENDMENT
Request #: 6877
Requestor Name: Hightower, Justin
Requestor Phone: (904) 665-8357
Project Title: JEA Heavy Duty Vehicle Procurement Acquisition
FY22 Project Numbers: NA
FY23 Project Numbers: TBD
Project Location: JEA
Funds: Capital
Budget Estimate: \$2,054,000.00

Scope of Work:

The purpose of this contract amendment is to modify the original Award amounts from the February 3, 2022 Award Committee. The purpose of the original Invitation to Negotiate (the "ITN") was to solicit pricing for the purchase of eleven (11) heavy duty vehicles for JEA's FY22 and FY23 requirements. This purchase is for planned and budgeted replacement of JEA's Fleet Water (Water Replacement – 1 units) and Electric (Electric Replacement – 8 units) assets along with expansion units for JEA's Fleet Water (Water Expansion - 2 Units) associated with the Fleet Capital Procurement Plan.

JEA IFB/RFP/State/City/GSA#: 1410462846-22

Purchasing Agent: Pearson, Kenny

Is this a Ratification?: NO

RECOMMENDED AWARDEE(S):

| Name | Contact Name | Email | Address | Original Award Amount | Change Amount | Total Contract Amount |
|---|-------------------|--|---|-----------------------|---------------|-----------------------|
| CUMBERLAND INTERNATIONAL TRUCKS OF FLORIDA, LLC | Mic hael O'Br ien | mobrien@cltte.com | 2110 S Division Avenue, Orlando, FL 32805 | \$810,096.17 | \$0.00 | \$810,096.17 |
| KENWORTH OF JACKSONVILLE | Ed Cost ello | edcostello@kwjax.com | 1121 Suemac Road, Jacksonville , FL 32254 | \$460,888.00 | \$0.00 | \$460,888.00 |
| ORLANDO FREIGHTLINER | Eam on Keal y | EKealy@orlandofreightliner.com | 2455 S Orange Blossom Trail, Apopka, FL 32703 | \$1,001,043.00 | \$320,548.00 | \$1,321,591.00 |

Amount of Original Award: \$2,272,027.17

Date of Original Award: 02/03/2022
Change Order Amount: \$320,548.00
Award Amount for remainder of this FY: \$0.00
Length of Contract/PO Term: Project Completion
Begin Date (mm/dd/yyyy): 02/04/2022
End Date (mm/dd/yyyy): Project Completion
JSEB Requirement: N/A – No JSEBs available

Background/Recommendations:

Originally bid and approved by the Awards Committee on 02/03/2022 for \$2,272,027.17. Previous award are attached as backup.

JEA is requesting this contract amendment based on an emergent need to fulfill JEA Water Department FY23 Expansion needs. JEA Water Department is adding additional crews at the Pearl Street Service Center and these, along with other items not included in this award, are essential equipment used to complete daily tasks. This would double the amount of Group Four (4) assets, 5 Ton - 19 Cubic Yard Dump Trucks, with the new amount being purchased at a total quantity of four (4) units.

The basis of award for the original solicitation is to the contract to the highest ranked Respondent for each heavy duty vehicle groupings included in this solicitation, and companies were encouraged to bid multiple groupings for efficiency purposes. After the Best and Final Offers (BAFO) were submitted, Orlando Freightliner, was deemed the lowest cost responsible and responsive Respondents for the heavy duty vehicle groupings that is being requested to increase as part of this award.

| Vehicle Grouping | Vehicles | Previous Pricing | Proposed Awardee | Original Award Price | New Award |
|------------------|--------------------------------------|------------------|----------------------|----------------------|--------------|
| Group 4 | Truck 5 Ton Dump 19 Cubic Yard | \$317,522.00 | Orlando Freightliner | \$320,548.00 | \$641,096.00 |

Request approval to award an amendment for increase to the contract with Orlando Freightliner in the amount of \$320,548.00 for the purchase vehicles for JEA's FY22 and FY23 heavy duty fleet capital requirements, for a total not-to-exceed amount of \$2,592,575.17, subject to the availability of lawfully appropriated funds.

Manager: Hightower, Justin – Manager, Fleet Services
Director: Brunell, Baley – Director Facilities and Fleet Services
VP: McElroy, Alan – VP of Supply Chain and Operations Support

APPROVALS:

Chairman, Awards Committee **Date**

Budget Representative **Date**



Formal Bid and Award System

Award #3 February 3, 2022

Type of Award Request: INVITATION TO NEGOTIATE (ITN)
Request #: 6877
Requestor Name: Hightower, Justin
Requestor Phone: (904) 665-8357
Project Title: JEA Heavy Duty Vehicle Procurement Acquisition
FY22 Project Numbers: 8007352
FY23 Project Numbers: TBD
Project Location: JEA
Funds: Capital
Budget Estimate: \$2,054,000.00

Scope of Work:

The purpose of this Invitation to Negotiate (the "ITN") was to solicit pricing for the purchase of eleven (11) heavy duty vehicles for JEA's FY22 and FY23 requirements. This purchase is for planned and budgeted replacement of JEA's Fleet Water (Water Replacement – 1 units) and Electric (Electric Replacement – 8 units) assets along with expansion units for JEA's Fleet Water (Water Expansion - 2 Units) associated with the Fleet Capital Procurement Plan.

JEA IFB/RFP/State/City/GSA#:

Purchasing Agent: Pearson, Kenny

Is this a Ratification?: NO

RECOMMENDED AWARDEE(S):

| Name | Contact Name | Email | Address | Amount |
|---|-----------------|--|---|----------------|
| CUMBERLAND INTERNATIONAL TRUCKS OF FLORIDA, LLC | Michael O'Brien | mobrien@cltte.com | 2110 S Division Avenue, Orlando, FL 32805 | \$810,096.17 |
| KENWORTH OF JACKSONVILLE | Ed Costello | edcostello@kwjax.com | 1121 Suemac Road, Jacksonville, FL 32254 | \$460,888.00 |
| ORLANDO FREIGHTLINER | Eamon Kealy | EKealy@orlandofreightliner.com | 2455 S Orange Blossom Trail, Apopka, FL 32703 | \$1,001,043.00 |

Amount for entire term of Contract/PO: \$2,272,027.17

Award Amount for remainder of this FY: \$918,016.86

Length of Contract/PO Term: Project Completion

Begin Date (mm/dd/yyyy): 02/04/2022

End Date (mm/dd/yyyy): Project Completion

JSEB Requirement: N/A – No JSEBs available

BIDDERS:

| Name | Original Amount | BAFO Amount | Proposed Award Amount |
|---|-----------------|----------------|-----------------------|
| CUMBERLAND INTERNATIONAL TRUCKS OF FLORIDA, LLC | \$1,487,152.32 | \$1,487,152.32 | \$810,096.17 |
| KENWORTH OF JACKSONVILLE, INC. | \$1,644,636.00 | \$1,805,653.00 | \$460,888.00 |
| ORLANDO FREIGHTLINER | \$1,126,547.00 | \$1,126,547.00 | \$1,001,043.00 |
| NEXTRAN TRUCK CENTERS JACKSONVILLE | \$343,932.00 | \$348,932.00* | \$0.00 |
| ALTEC INDUSTRIES, INC. | \$134,920.00 | \$134,920.00 | \$0.00 |
| RING POWER CORPORATION | \$1,384,697.00 | \$1,384,697.00 | \$0.00 |

*Nexan Truck Centers Jacksonville's BAFO was \$5,000 higher than their initial bid as they received Cab and Chassis manufacturer price increases after the first round and before the second round. In lieu of a later change order request, they submitted a price increase of the bid price. This did not impact the bid.

Background/Recommendations:

Advertised 10/20/2021. Eight (8) companies attended the mandatory pre-response meeting on 10/25/2021. At the Response opening on 11/23/2021, JEA received six (6) Responses.

The solicitation was processed as an ITN given the complexity of the work found within the solicitation, as this was a fleet capital solicitation that involved complex technical requirements. The basis of award is to the contract to the highest ranked Respondent for each heavy duty vehicle groupings included in this solicitation, and companies were encouraged to bid multiple groupings for efficiency purposes. On 12/10/2021, negotiations were held with the six (6) shortlisted companies, Cumberland International Trucks, Kenworth of Jacksonville, Inc., Nextran Truck Centers Jacksonville, Orlando Freightliner, Altec Industries Inc., and Ring Power Corporation. After the Best and Final Offers (BAFO) were submitted, Orlando Freightliner, Cumberland International Trucks, and Orlando Freightliner were deemed the lowest cost responsible and responsive Respondents for the heavy duty vehicle groupings included in this solicitation.

| Vehicle Grouping | Vehicles | Previous Pricing | Proposed Awardee | Proposed Award |
|------------------|-------------------------------------|------------------|---------------------------------|----------------|
| Group 1 | Truck 3 Ton Utility 11' | N/A* | Cumberland International Trucks | \$120,818.34 |
| Group 2 | Truck 3 Ton Cargo Reel | \$602,345.00 | Orlando Freightliner | \$680,495.00 |
| Group 3 | Truck 5 Ton Cargo Reel | \$518,328.00 | Kenworth of Jacksonville, Inc., | \$460,888.00 |
| Group 4 | Truck 5 Ton Dump 19 Cubic Yard | \$317,522.00 | Orlando Freightliner | \$320,548.00 |
| Group 5 | Truck 8 Ton / Crane 50 Ton 120 Foot | N/A** | Cumberland International Trucks | \$689,277.83 |

*The last time purchased was 2009 **We have never purchased over a 38 Ton Crane

When comparing JEA's past pricing to the proposed winning supplier, JEA's new pricing will on average be 1.4%, or \$20,297.15 higher on Groupings 2, 3, and 4 based on current market conditions. This percentage

was determined by taking the last price paid and comparing those prices to the quoted unit prices found within this solicitation. We have excluded groupings 1 due to the item has not been purchased since 2009 along with excluding grouping 5 as it has never been purchased before and the closest item was a considerably different 38 Ton Crane in 2008.

Request approval to award a contract to Orlando Freightliner (\$1,001,043.00), Cumberland International Trucks of Florida, LLC (\$810,096.17), and Kenworth of Jacksonville Inc. (\$460,888.00), for the purchase of eleven (11) vehicles within the vehicles for JEA's FY22 and FY23 heavy duty fleet capital requirements, for a total not-to-exceed amount of \$2,272,027.17, subject to the availability of lawfully appropriated funds.

Manager: Hightower, Justin – Manager, Fleet Services

VP: McElroy, Alan – VP of Supply Chain and Operations Support

APPROVALS:

| | |
|-----------------------------------|-------------|
| Chairman, Awards Committee | Date |
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| Budget Representative | Date |
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