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| Form C (R1): Experience of Team |
| Proponent: |       |
| Notes:1. The City reserves the right to clarify, investigate, and request additional information to confirm the Proponent’s claim regarding any data provided.
2. This form is made available to Proponents in both PDF and Microsoft Word format. In the event of a discrepancy between the forms, the PDF version takes precedence.
3. Complete “Proponent Response” section in full. Failure to complete or submit required information may result in disqualification of the complete Qualification Application.
4. If insufficient space is provided, attach additional sheets with required information.
 |
| **Item** | **Description** | **Proponent Response** |
| 1.0 | Engineering Registration Details | Does your firm have a Certificate of Authorization for engineering? [ ]  Yes (Proponent) [ ]  Yes (Subcontractor)  [ ]  No (Proponent) Explanation:      [ ]  No (Subcontractor) Explanation:     Which province(s) is your firm registered with?        |
| 2.0 | CSA Certification Details | Is one of your Team Members CSA Certified to produce CSA Approved Industrial Control Panels?[ ]  Yes [ ]  No Details:      |
| 3.0 | Firm’s Knowledge Areas | Does one or more of your Team Members have automation experience in a wastewater and/or water treatment process?  [ ]  Yes (Proponent) Explanation:      [ ]  Yes (Subcontractor) Explanation:       [ ]  No (Proponent)  [ ]  No (Subcontractor)  |
| 4.0 | **Reference Project 1 –** All data below shall be for the portion of work implemented by the Systems Integrator on the project. |
| 4.1  | Project Description: | Project Name:       Client:      Systems Integrator contract value:      Brief Description:        |
| 4.2 | Number of PLCs installed or modified >50%: | # of Redundant PLC Pairs: [ ]  0 [ ]  1 [ ]  2-4 [ ]  5-8 [ ]  9-12 [ ]  >12# of Non-Redundant PLCs: [ ]  0 [ ]  1 [ ]  2-4 [ ]  5-8 [ ]  9-12 [ ]  >12# of Remote I/O Nodes: [ ]  1-3 [ ]  4-12 [ ]  5-8 [ ]  13-24 [ ]  25-36 [ ]  >36 |
| 4.3 | Total I/O | # of Discrete Inputs: [ ]  <250 [ ]  250-499 [ ]  500-999 [ ]  1000-1599 [ ] 1600-3000 [ ]  >3000# of Discrete Outputs: [ ]  <50 [ ]  50-99 [ ]  100-249 [ ]  250-499 [ ]  500-750 [ ]  >750# of Analog Inputs: [ ]  <50 [ ]  50-149 [ ]  150-299 [ ]  300-399 [ ]  400-600 [ ]  >600# of Analog Outputs: [ ]  <25 [ ]  25-49 [ ]  50-99 [ ]  100-149 [ ]  150-200 [ ]  >200 |
| 4.4 | Project Migration Components – Identify how many I/O were migrated from a DCS to a PLC, or from a PLC to a PLC, or from a PLC to a DCS, or from a DCS to a DCS for one project. | For one project that was migrated from a (select only one): [ ]  DCS to PLC  [ ]  PLC to PLC  [ ]  PLC to DCS [ ]  DCS to DCSFor this project, the number of points migrated were:# of Discrete Inputs: [ ]  <200 [ ]  200-399 [ ]  400-799 [ ]  800-1500 [ ]  >1500 # of Discrete Outputs: [ ]  <30 [ ]  30-74 [ ]  75-149 [ ]  150-300 [ ]  >300 # of Analog Inputs: [ ]  <30 [ ]  30-74 [ ]  75-149 [ ]  150-300 [ ]  >300 # of Analog Outputs: [ ]  <15 [ ]  15-29 [ ]  30-49 [ ]  50-99 [ ]  >100  |
| 4.5 | Networked Field Devices (instruments, valve actuators, and motor controllers) (i.e. Foundation Fieldbus, PROFIBUS, Modbus TCP, etc.)  | # of Networked Field Devices: [ ]  <50 [ ]  51-100 [ ]  101-200 [ ]  201-400 [ ]  401-600 [ ]  >600 |
| 4.6 | Specific PLC utilized(check all that apply) | [ ]  Schneider Electric [ ]  Quantum[ ]  M580[ ]  M340[ ]  Premium[ ]  984[ ]  Other      [ ]  Rockwell Automation[ ]  Siemens[ ]  Other       |
| 4.7 | Specific HMI utilized(check all that apply) | [ ]  Schneider Electric[ ]  Vijeo Citect[ ]  WonderWare[ ]  ClearSCADA[ ]  Vijeo Designer[ ]  Other      [ ]  Rockwell Automation[ ]  Siemens[ ]  Other       |
| 4.8 | Process Simulation | Percentage of inputs that were automatically simulated in software based upon the control system outputs for testing and training purposes: [ ]  0% [ ]  1-20% [ ]  21-40% [ ]  41-60% [ ]  61-80% [ ]  >80% |
| 4.9 | Dates | Award Date:      Scheduled Completion Date:       Project Completed? [ ]  Yes Actual Completion Date:      [ ]  No  Forecasted Completion Date:      Explanation:      |
| 4.10 | Relation to Form D | Did any of your Key Personnel (proposed in Form D) work on this project? [ ]  Yes [ ]  No Who Role on This Project      Project Manager      Principal Programmer Lead      Software Configuration Architect      Principal HMI Developer      Site Commissioning Lead      Principal Networking Developer and Security Architect      Professional Engineer      Other:       |
| 4.11 | Reference Information - References should have worked directly on the projects described, such as the Project Manager or Contract Administrator. | Contact Name:      Organization Name:       Position / Title:      E-mail address:      Telephone Number:       |
| **4.12** | Number of Servers installed: | # of HMI Servers: [ ]  0 [ ]  1 [ ]  2 [ ]  ≥3 # of Terminal Servers: [ ]  0 [ ]  1 [ ]  2 [ ]  ≥3  |
| 5.0 | **Reference Project 2 –** All data below shall be for the portion of work implemented by the Systems Integrator on the project. |
| 5.1  | Project Description: | Project Name:       Client:      Systems Integrator contract value:      Brief Description:        |
| 5.2 | Number of PLCs installed or modified >50%: | # of Redundant PLC Pairs: [ ]  0 [ ]  1 [ ]  2-4 [ ]  5-8 [ ]  9-12 [ ]  >12# of Non-Redundant PLCs: [ ]  0 [ ]  1 [ ]  2-4 [ ]  5-8 [ ]  9-12 [ ]  >12# of Remote I/O Nodes: [ ]  1-3 [ ]  4-12 [ ]  5-8 [ ]  13-24 [ ]  25-36 [ ]  >36 |
| 5.3 | Total I/O | # of Discrete Inputs: [ ]  <250 [ ]  250-499 [ ]  500-999 [ ]  1000-1599 [ ] 1600-3000 [ ]  >3000# of Discrete Outputs: [ ]  <50 [ ]  50-99 [ ]  100-249 [ ]  250-499 [ ]  500-750 [ ]  >750# of Analog Inputs: [ ]  <50 [ ]  50-149 [ ]  150-299 [ ]  300-399 [ ]  400-600 [ ]  >600# of Analog Outputs: [ ]  <25 [ ]  25-49 [ ]  50-99 [ ]  100-149 [ ]  150-200 [ ]  >200 |
| 5.4 | Project Migration Components – Identify how many I/O were migrated from a DCS to a PLC, or from a PLC to a PLC, or from a PLC to a DCS, or from a DCS to a DCS for one project. | For one project that was migrated from a (select only one): [ ]  DCS to PLC  [ ]  PLC to PLC  [ ]  PLC to DCS [ ]  DCS to DCSFor this project, the number of points migrated were:# of Discrete Inputs: [ ]  <200 [ ]  200-399 [ ]  400-799 [ ]  800-1500 [ ]  >1500 # of Discrete Outputs: [ ]  <30 [ ]  30-74 [ ]  75-149 [ ]  150-300 [ ]  >300 # of Analog Inputs: [ ]  <30 [ ]  30-74 [ ]  75-149 [ ]  150-300 [ ]  >300 # of Analog Outputs: [ ]  <15 [ ]  15-29 [ ]  30-49 [ ]  50-99 [ ]  >100  |
| 5.5 | Networked Field Devices (instruments, valve actuators, and motor controllers) (i.e. Foundation Fieldbus, PROFIBUS, Modbus TCP, etc.)  | # of Networked Field Devices: [ ]  <50 [ ]  51-100 [ ]  101-200 [ ]  201-400 [ ]  401-600 [ ]  >600 |
| 5.6 | Specific PLC utilized(check all that apply) | [ ]  Schneider Electric [ ]  Quantum[ ]  M580[ ]  M340[ ]  Premium[ ]  984[ ]  Other      [ ]  Rockwell Automation[ ]  Siemens[ ]  Other       |
| 5.7 | Specific HMI utilized(check all that apply) | [ ]  Schneider Electric[ ]  Vijeo Citect[ ]  WonderWare[ ]  ClearSCADA[ ]  Vijeo Designer[ ]  Other      [ ]  Rockwell Automation[ ]  Siemens[ ]  Other       |
| 5.8 | Process Simulation | Percentage of inputs that were automatically simulated in software based upon the control system outputs for testing and training purposes: [ ]  0% [ ]  1-20% [ ]  21-40% [ ]  41-60% [ ]  61-80% [ ]  >80% |
| 5.9 | Dates | Award Date:      Scheduled Completion Date:       Project Completed? [ ]  Yes Actual Completion Date:      [ ]  No  Forecasted Completion Date:      Explanation:      |
| 5.10 | Relation to Form D | Did any of your Key Personnel (proposed in Form D) work on this project? [ ]  Yes [ ]  No Who Role on This Project      Project Manager      Principal Programmer Lead      Software Configuration Architect      Principal HMI Developer      Site Commissioning Lead      Principal Networking Developer and Security Architect      Professional Engineer      Other:       |
| 5.11 | Reference Information - References should have worked directly on the projects described, such as the Project Manager or Contract Administrator. | Contact Name:      Organization Name:       Position / Title:      E-mail address:      Telephone Number:       |
| **5.12** | Number of Servers installed: | # of HMI Servers: [ ]  0 [ ]  1 [ ]  2 [ ]  ≥3 # of Terminal Servers: [ ]  0 [ ]  1 [ ]  2 [ ]  ≥3  |