#### Request for Action by Board of Commissioners

## Approval of Engagement of HVAC Building Automation Services Contractor (inControl, Inc.)

#### A. SUMMARY

This Request for Action (RFA) is for approval to engage a building automation company to update RIHousing's current HVAC Building Management System ("BMS") software and respective hardware, for the Slade/Garr and Earle building heating and air conditioning systems. The selected vendor is inControl, Inc.

#### B. DISCUSSION

The Slade/Garr and Earle Buildings consist of approximately 72,200 square feet. The current Schneider/Andover Continuum BMS system has controlled the HVAC system since the opening of the building in 1995; and was subsequently expanded to include the Earle Building. Over the past 30 years, this system has been updated to address both physical and computer needs, and the main "controller panels" in each building have also received updates to accommodate changing programing enhancements. inControl, Inc., has been servicing the BMS system since the initial installation and upgrades to the Earle Building.

The existing Schneider/Andover Continuum program will be phased out on December 31, 2024, at which time RIHousing's current computer software and some of the control panels and valves throughout the complex will need to be replaced. inControl provided a full assessment of existing conditions and what would need to be replaced or updated, as well as a proposal to update the current system to the new Schneider "EcoStruxture" BMS, which would include a completely new computer program, update associated wiring, and where needed upgrade physical components throughout both buildings.

A recommendation was made to management to sole source this work to inControl, Inc. as opposed to completing an RFP for the services. inControl's computer operations system and much of the building hardware equipment is proprietary to inControl, and any change to an alternative system may require a complete overhaul, resulting in additional expense for new equipment, controllers, etc. As part of our research for this recommendation, we learned that other Rhode Island government institutions have had their BMS remain with the same vendors for many years for the reasons mentioned above.

Members of the Facilities and Design and Construction departments reviewed the proposal and pricing. Following the review, it was determined that inControl, Inc. has the expertise and experience to undertake the assignment. The proposed cost of their engagement is \$205,550.

#### C. RECOMMENDATION

Staff recommends the approval of the attached Resolution authorizing the engagement of Approval of Selection of HVAC Building Automation

August 17, 2023
Services Contractor (inControl, Inc.)

inControl, Inc. for a HVAC building automation upgrade and annual services.

#### D. **ATTACHMENTS**

- 1. Resolution
- Sole Source Procurement Approval Form in Control, Inc. Proposal 2.
- 3.

# Attachment 1 Resolution of the Board of Commissioners of

#### Rhode Island Housing and Mortgage Finance Corporation

**WHEREAS:** Rhode Island Housing and Mortgage Finance Corporation's ("RIHousing's") enabling act provides it with all the power and authority to make and execute contracts necessary to exercise the powers and functions provided to it under

the act (R.I. Gen. Laws §42-55-5(6)); and

WHEREAS: Staff of RIHousing has identified a need to engage a building automation

services company to update our current HVAC Building Management System ("BMS") software and respective hardware, for the Slade/Garr and Earle

building heating and air conditioning systems; and

**WHEREAS:** On May 4, 2023, inControl Inc. submitted a proposal to upgrade RIHousing's

BMS in the Slade/Garr and Earle buildings; and

WHEREAS: On June 12, 2023 RIHousing's Executive Director approved the Sole Source

Procurement request to upgrade RIHousing's BMS in the Slade/Garr and

Earle buildings; and

#### NOW, THEREFORE, IT IS HEREBY:

**RESOLVED:** That RIHousing be, and hereby is authorized, to sole source and engage inControl, Inc. to install updated computer software, wiring and required physical equipment for the amount of \$205,500;

**RESOLVED:** That RIHousing be, and hereby is authorized, to enter a five (5) year agreement, with two five (5) year extensions, at RIHousing's option, with inControl, Inc. for building automation services "as needed" at a cost of \$140 per hour (\$210 per hour for any overtime assistance).

**RESOLVED:** That the Executive Director and Deputy Executive Director, each acting singly, be, and hereby are, authorized and empowered to take any and all actions necessary or desirable to carry out the foregoing resolutions, including without limitation the authority to negotiate terms of the engagement as he or she may determine to be in the best interests of RIHousing, and to execute any and all agreements or documents as he or she deems necessary to carry out the foregoing.



#### RIHousing Chief Purchasing Officer (CPO) Approval Form

	V	Sole Source Procurement
		Multi-Year Contract
		Other

Good or Service: Building Management HVAC

Requesting Department: Facilities

Proposed Vendor: InContol
Requesting Staff: Guy Pirolli

- 1. Provide a short statement of the request:
  - Our current HVAC Building Management System ("BMS") is approaching 30 years old. Although we have upgraded technology over past years, we've been informed that the current system operation server and some physical equipment will be retired as of 12/31/24.
- 2. If requesting Sole Source Procurement, please describe the unique features of proprietary nature of the product or service and explaining the efforts the staff members has undertaken to establish that no competition exists. If not relevant, indicate N/A. As with other BMS systems, equipment, controllers computer server components are proprietary to the manufacturer, in our case Schneider/Andover. The updated system will utilize many of the existing systems physical components (or new equipment where necessary) with its new server configuration. Memo on discussions with staff at RIC and URI attached.
- 3. For **Sole Source**, which of the following allowable categories applies:

V	Proprietary or patented items
	Published material (books, maps, periodicals, pamphlets, films, video, audio) obtained
	from publishers
V	Computer software
	Licenses
<b>V</b>	Specialized replacement or repair parts necessary to maintain the integrity of systems
	Works of art for public display
	Specialized services with only one documented accepted source (e.g., where a transaction
	involves unique professional services or institutions) and advertisements or public notices
	in magazines, newspapers or television, and maintenance contracts

the product or services will contract. Also explain why	<b>Contract,</b> please describe the extent to will be reasonably firm and continuing for the a multi-year contract will serve the best if not relevant, indicate N/A.	e proposed term of the
	is contract be a multi-year contract. It is no year renewal options at owners request.	recommended that the intial
5. For <b>Multi-Year</b> , which of the	ne following allowable categories applies:	
✓ Maintenance and repa □ Licensing agreements ✓ Specialized, skilled serv	real property or facilities ir contracts for specialized equipment vices based on a request for proposals cionship for which the CPO determines that	at a long-term agreement is
	olicitation cancellation, change order applease explain the request and provide just	
certify that the above statemer	nts are true and complete to the best of m	ny knowledge.
$\mathcal{D}_{m}$	,	,,
alle Gur Piroui	Manager Facilities Operations	6/5/2023
equestor Signature	Title	Date
UU	Dany ED	(db/23
ivision Director Signature	Title	Date

Chief Purchasing Officer



May 4, 2023

Mr. Guy Pirolli Manager Facilities Operations Rhode Island Housing 44 Washington St. Providence, RI 02903

Re: Rhode Island Housing - Upgrade of Schneider/Andover Continuum BMS to Schneider EcoStuxture BMS

Dear Guy,

As per our recent meeting, previous site visits and correspondences regarding beginning the process of upgrading the entire building from the existing Schneider/Andover Continuum BMS to the new Schneider EcoStruxture BMS for all of the existing mechanical equipment, the following is submitted for your review.

Under our scope of work, inControl, Inc. will furnish, install, control/communication wire, engineer, program, commission & checkout a new Schneider BMS throughout the facility. As we discussed last year, the Continuum BMS platform previously had an "End of Life" date of 12/31/27, this has since been modified by Schneider due to a lack of parts on the Continuum platform and has been changed to a 12/31/24 "End of Life" date. With this updated change, our customers are now making the appropriate adjustments as they see fit to begin the modernization process. Our current plan for RI Housing would be to do this in phases and get the initial new backbone up and running (along with swapping the noncompatible field controllers) then RI Housing can budget to upgrade each floor as capital is available over time. The following phases is how we're envisioning this to happen while keeping everything up and running at the same time (note – there will be some do downtime with associated mechanical equipment when migrating over from the Continuum to EcoStruxture BMS however, we would schedule everything with RI Housing before taking anything offline).

#### RI Housing - Schneider/Andover Continuum to Schneider EcoStruxture BMS

#### Part #I: Initial Phase – Upgrade Network Level/Run new comm backbone/Replace Non-compatible controllers/etc.

- Replace existing Schneider/Andover Continuum network controller on I<sup>st</sup> floor with new Schneider EcoStruxture network controller (referred to as an Automation Server, this is the main brain of the entire system).
- Swap out the existing 4th floor and 6th floor Continuum bCX with a BACnet router and install a network switch in each electrical closet. We'll also install a network switch in the electrical closet on floors I, 2, 3 & 5 to provide us with a means of hopping off and extending the new comm bus to any new controller.
- Run CAT6 communication bus wiring for the new network controller (AS) and MP controllers being installed. We'll use the existing electrical closet chase to get from floor to floor.
- Replace (25) controllers which unfortunately are not compatible/cannot be migrated over and used until a formal field controller swap out down the line (when you would complete a floor). The controllers that need to be swapped are for FC (fan coil) #I, 2, 3, 4, 5, 7, 8, 9; RTU#I, 2, 3, 4, 6 and TU (VAV boxes) #6, II, I2, I4, I7, 26, 27, 33, 34, 38, 41, 42. These will all be replaced with new EcoStruxture MPC/RPC controllers and will be fully compatible with the remaining upgrade process going forward.
- Install a new space thermostat for each of the new Schneider controllers and run new CAT6 thermostat wiring from the controller to the corresponding space thermostat.

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#### Page #2

Create all new graphics & programming for all new controllers along with all the existing Continuum i2 controllers
that will remain in place until a future upgrade to new EcoStruxture MP controllers. The entire building would be on
the Schneider EcoStruxture platform at this time with only older controller hardware (and the associated
labor/wiring) that would need to be done in conjunction.

The cost for the Schneider Continuum to Schneider EBO transition initial phase is \$81,350

#### Part #2: RI Housing - Per Floor Budgets for remaining field controllers/communication bus wiring

Note: in an effort to limit the upfront cost, we have proposed a "Per Floor Phasing" approach that can be accomplished once the initial transition phase is completed.

• The remaining work to be done will be to replace the existing Schneider Continuum field controllers with new Schneider MPC/RPC field controllers along with a new CAT6 communication bus and thermostat for the associated mechanical equipment. This will be done as RI Housing can do so and does not need to be done all at once (we can branch off each floor and do a floor at a time, floor(s) at a time, hit a section of a floor, etc.). Once these controllers have been swapped out and re-terminated & commissioned, they'll be integrated into the new Schneider EcoStruxture BMS system with new graphics & programming. The following is the per floor cost for completing this work:

#### Ist Floor – Schneider EcoStruxture upgrade cost: \$27,000

Mech Equipment Remaining: (6) VAV boxes, (1) AHU, (1) HVAC, (1) FCU, (1) Chiller, (1) Heating Plant, (1) ERV

#### 2<sup>nd</sup> Floor – Schneider EcoStruxture upgrade cost: \$25,500

Mech Equipment Remaining: (12) VAV boxes, (2) AHU

### 3rd Floor - Schneider EcoStruxture upgrade cost: \$30,500

Mech Equipment Remaining: (16) VAV boxes, (2) AHU

#### 4th Floor - Schneider EcoStruxture upgrade cost: \$34,000

Mech Equipment Remaining: (15) VAV boxes, (2) AHU, (3) FCU

#### 5th Floor - Schneider EcoStruxture upgrade cost: \$7,200

Mech Equipment Remaining: (4) VRF

#### **PROJECT NOTES**

- (I) All inControl labor will be done during normal working hours (M-F, 7AM-3:30PM) and at a prevailing labor rate.
- (2) All control wiring is to be re-used within the control panels, field controllers and control end devices. Should any control wiring not be long enough to reach the new Schneider Electric controller, it will be spliced and secured with terminal blocks. New CAT6 communication bus wiring will be run for all new Schneider EcoStruxture field controllers & thermostats. During the course of work, should we find that any control wiring is damaged and needs to be replaced, we'll make RI Housing personnel aware and any cost associated with repairing would be in addition to the original total cost(s).
- (3) This project is tax exempt. We will need RI Housing to provide inControl with a "Contractors Tax Exempt Certificate" for this project or we will be required to collect RI sales tax on the material portion of this contract.

#### Page #3

#### PROJECT NOTES (cont.)

- (4) inControl will honor our existing project costs from last year (labor rates/material costs/sub-electrical/etc.) as part of this proposal. Please note that should this project not occur until 2024 and material not be ordered prior to 12/31/23, we would need to revise our material costs at that time.
- (5) Specifically excluded from our pricing is any cutting, patching, painting, core-boring, roof penetrations, roof repair or power wiring for any mechanical equipment.
- (6) <u>Please note, that only the items specifically listed in this scope letter will be DDC controlled/monitored/</u>
  <u>BACnet interfaced to by inControl. Any items that are not mentioned in this scope letter are not covered under our scope of work and would be an extra to the original quoted price.</u>
- (7) We have included 16 hours of onsite customer training at RI Housing on the new Schneider Electric EcoStruxture system as part of this quotation. We'll setup anyone, that you deem necessary, the proper access to the system and show you and your facilities personnel a multitude of ways to take advantage of the system: remote viewing of the BMS from desktop/tablets/mobile device, creating specific reporting/trends, alarm management, creating any front-viewing dashboards (i.e.—if the brass wants to show a specific energy usage in the lobby to guests to attain a specific sustainability goal) or any dashboards that you would like to see internal within the BMS, etc.
- (8) If RI Housing IT has any questions on the cybersecurity protocols for the upgraded Schneider EcoStruxture BMS, please let me know and I can provide you with their new parameters.
- (9) Prior to any work beginning on each floor, we'll schedule with RI Housing personnel to develop a plan of attack and keep overall work disruption to a minimum.
- (10) At the completion of the project, we will furnish new "as-built" drawings and owner's manuals for record purposes.

If there are any questions regarding this proposal and scope of work, please feel free to contact me.

Sincerely,

Robert M. Spinella Sales Engineer