Exhibit A-1
SOLE SOURCE FACILITY JUSTIFICATION TRANSMITTAL

Public Contract Code section 3400 provides, in pertinent part, that:

"(a) The Legislature finds and declares that it is the intent of this section to encourage contractors and manufacturers to develop and implement new and ingenious materials, products, and services that function as well, in all essential respects, as materials, products, and services that are required by a contract, but at a lower cost to taxpayers.

(b) No agency of the state, nor any political subdivision, municipal corporation, or district, nor any public officer or person charged with the letting of contracts for the construction, alteration, or repair of public works, shall draft or cause to be drafted specifications for bids, in connection with the construction, alteration, or repair of public works, (1) in a manner that limits the bidding, directly or indirectly, to any one specific concern, or (2) calling for a designated material, product, thing, or service by specific brand or trade name unless the specification is followed by the words "or equal" so that bidders may furnish any equal material, product, thing, or service. In applying this section, the specifying agency shall, if aware of an equal product manufactured in this state, name that product in the specification. Specifications shall provide a period of time prior to or after, or prior to and after, the award of the contract for submission of data substantiating a request for a substitution of "an equal" item. If no time period is specified, data may be submitted any time within 35 days after the award of the contract.

(c) Subdivision (b) is not applicable if the awarding authority, or its designee, makes a finding that is described in the invitation for bids or request for proposals that a particular material, product, thing, or service is designated by specific brand or trade name for any of the following purposes:

(2) In order to match other products in use on a particular public improvement either completed or in the course of completion."

Integrated Automation Software (IAS) Graphical User Interface Software

This is a sole source procurement because:

- ☐ This is a sole provider of a licensed, copyrighted or patented good or service.
- ☑ This is a sole provider of items compatible with existing equipment or systems.
- ☐ This is a sole provider of factory-authorized warranty service.
- ☑ This is a sole provider of goods or services that perform a unique function in order to meet the specialized needs of the District. Please provide specific detail below.

In 2018, the District awarded a project to replace all HVAC building controllers and server level software with Tridium Niagara 4 server level software and Tridium Niagara JACE 8000 Controllers. Niagara JACE 8000 controller are available from most building automation system manufacturers and are installed by multiple local channels. This product was funded through Proposition 39 energy funds and include system wide software to save energy and continuously optimize system performance.

DGLux 5 graphical user interface software is a real time data-driven web based interface featuring a graphical data-driven tool box to rapidly build visually rich, interactive web applications and dashboards

for buildings. By seamlessly aggregating the various data sources in a building, it enables users to analyze, monitor and control data and analytics, within a single unified display.

☑ There are overriding circumstances upon which the Board can find that the exception found in Public Contract Code section 3400 (c) (2) applies to the identified product(s). Please provide specific detail below as to what those circumstances are, and why this sole source procurement would be in the best interest of the District.

The District has made concerted efforts to introduce open competition into the Integrated Automation Systems (IAS) throughout their current upgrade project to a Niagara 4 system. The platform will allow multiple vendors, manufactures, and installers to bid on each project while still standardizing on a compatible system. The software system is required to be expanded in future projects to maintain a unified IAS platform. If additional software systems are introduced to the IAS server platform for future projects, the District will lose the operation and energy savings benefits of controlling these disparate system through a single interface.

What steps were taken to verify that these goods or services are not available elsewhere?

The District hired a consultant to perform a study of available IAS platform upgrades prior to their 2018 migration project. The study identified the availability, benefits, and market share of available products. See Direct Digital Controls Network Assessment, dates October 2017, authored by SC Engineers.

See Supplier and Contractor Information Page Below For Contact Details.

This is a restricted brand or trade name, and no substitutions are allowed because:

☑ The requested product is an integral repair part or accessory compatible with existing equipment or systems.

Existing Equipment/System: IAS Graphical User Interface Software
Manufacturer/Model Number: DGLux5 by DGLogik (a subsidiary of Acuity Brands)

☑ The District has standardized on the requested product, and use of another brand/model would require considerable time and funding to evaluate or implement. Please provide additional detail below.

The District has invested in the proposed software after an exhaustive analysis. Use of another brand/model for new buildings would result in the loss of continuity in the campus IAS network, would require additional District manpower to operate and maintain multiple systems, and would result in wasted energy and HVAC system errors as systems cannot communicate with each other across different software platforms.

Supplier or Contractor Information:

DGLux5 aka DGLogiik
55 Harrison Street, Suite 200
Oakland, CA 94607

(415) 715 7433

RECOMMENDATION

Sufficient evidence has been provided upon which the Board can find that the exception found in Public Contract Code section 3400 (c) (2) applies to the identified product(s). Approve a finding to authorize use of the above stated exception for IAS Graphical User Interface Software in the MiraCosta Design Standards Manual for all the projects in the MM program. Require that said finding be included in all pertinent bid/proposal documents for those projects where such product(s) will be used.

SIGNATURE:

Tom Macias, Facilities Director	4/2/19 **Date**
Geoff Bachanas, PMO Director	4/2/19 **Date**

steinberg hart

Exhibit B-1
SOLE SOURCE ARCHITECT/ENGINEERING JUSTIFICATION SUMMARY EPORT TRANSMITTAL

April 5, 2019

Re: IAS Graphic User Interface Software

Within the Design & Construction Standards MiraCosta CCD has identified or designed various proprietary systems or products that meet specific District performance requirements, allow for seamless integration into existing systems, provide ease of maintenance, and afford a lower total cost of ownership. In these instances, the District is requesting that these systems and products shall be provided without substitution. The following Specification Section 23 09 00 is one that meets these special requirements.

Our experience working with other Colleges and Universities shows that single sources for some materials, products, equipment, and systems is a common approach to achieving best value.

We have reviewed the facility justification transmittal for the above-referenced item and believe that the District's sole-sourcing of this specification section meets the requirements for District's benefit as described above.

Sincerely,
Steinberg Hart

Rob Barthelman
Principal

GUIDELINE A
GRAPHICAL USER INTERFACE REQUIREMENTS

INTRODUCTION

PURPOSE AND SCOPE

This Guideline provides requirements for the graphical user interface (GUI) requirements associated with MCCCD's IAS system. The intent of the requirements are to provide consistent and functional IAS graphics across all MCCCD systems regardless of the controls system manufacturer or installation contractor selected for each project.

BACKGROUND

MCCCD is standardized on a third party visualization software to serve as the primary user interface for the IAS network. The Graphical User Interface on the IAS network shall be provided in whole through DGLogik DGLux5 (aka Atrius Solution Builder) visualization software. All IAS Command and Control and functionality shall be provided within the DGLux environment. Embedded screen interfaces from other thin client applications are not acceptable.

REQUIRED SUBMITTALS

Guideline 8 - Specific Submittals:

- Sample Graphic Screens: the IAS Installation Contractor shall submit sample graphic screens at the Issued for Construction drawings submittal stage for Government review. The following graphic screens shall be provided:
    - proposed equipment pages for each unique HVAC system in the project
    - A proposed sample HVAC floor plan including a project specific three-dimensional floor plan rendering.
    - The proposed facility homepage including the building three-dimensional rendering
    - The proposed facility alarm management page
    - The proposed facility energy dashboard page
    - The proposed facility fault detection and diagnostics overview page

GRAPHIC INTERFACE REQUIREMENTS - GENERAL

GENERAL

The IAS Installation Contractor shall configure the project graphics to adhere to the specific requirements described in the following sections of this Guideline. Each graphic developed by the contractor shall include all control points, devices and user adjustable set points/parameters associated with the system. Vendor names, logos, hyperlinks to a vendor website, or other vendor identification or promotion, are not permitted on the graphics other than a reference to the graphics producer as described in the Graphics Page Header section below. Each graphic page shall be submitted for review and requires approval by the MCCCD and Design Team. Any exceptions or additions to the graphic requirements shall be reviewed and approved by the MCCCD Project Manager.

GRAPHICS PAGE HEADER

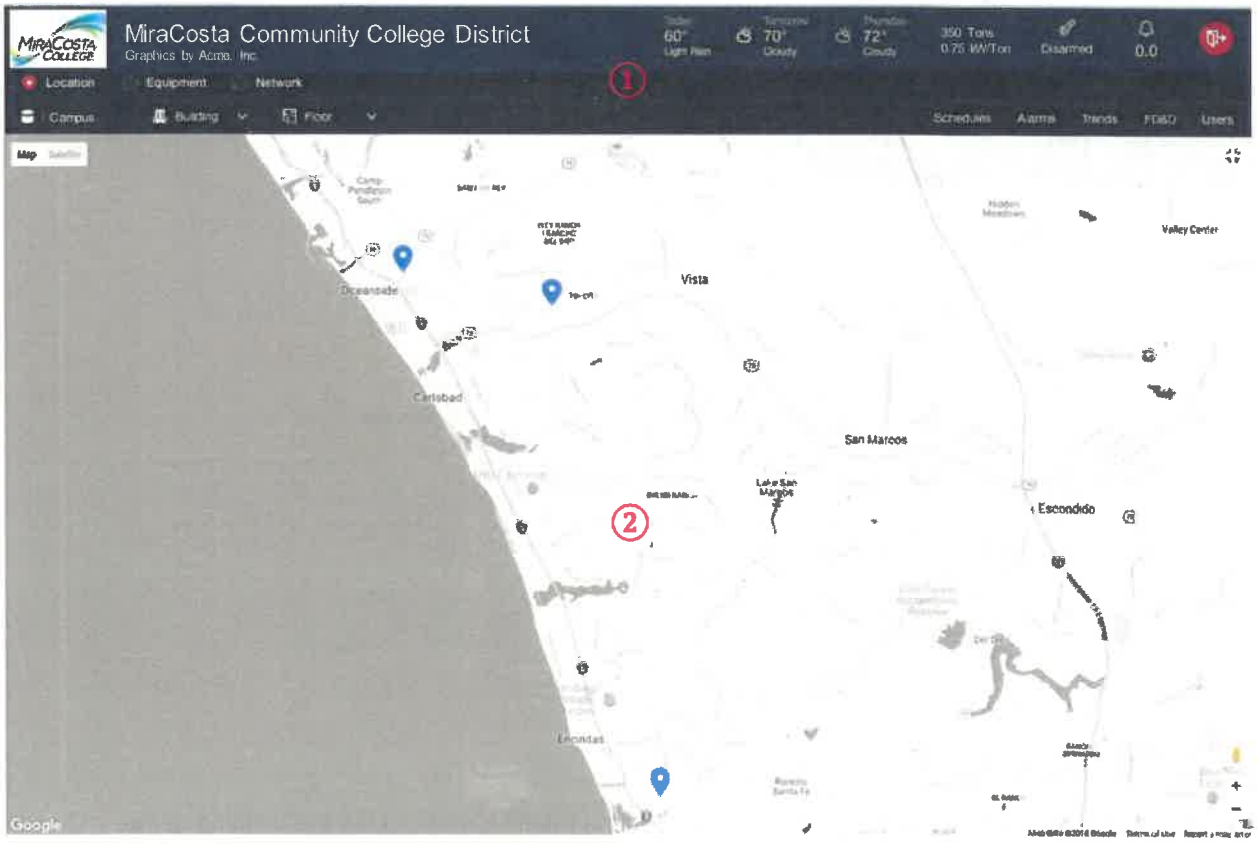
- The same project header shall appear on each graphic page in the GUI.
- The header and each of the link buttons shall appear the same on all MCCCD IAS systems.
- All links, labels and reference in the header graphics shall be tied into a single template file to allow for global edits.
- A sample header is shown below:

Specific Requirements:

1) Graphics Page Title shall be displayed at the center of the header.
2) MiraCosta Community College District (MCCCD) Logo and Name shall be displayed. The name of the IAS contractor who builds the graphic page shall be listed below MCCCD's name in the "Graphics by (Insert IAS Vendor Name)".
3) Current outdoor temperature and weather conditions shall be displayed. The weather forecast for the next two days shall be displayed.
4) Schedules, Alarms, Trends, FD&D, and Users links shall be provided where shown on every page, and shall direct the user to the overview page for each.
5) Indicate Oceanside Campus central plant live running capacity and efficiency.
6) Display the number of unacknowledged IAS alarms.
7) Provide a selection to sort navigation based on location, equipment, or network.
    a. In Location based navigation, the drop down links shall be Campus -> Building -> Floor as shown above.
    b. In Equipment based navigation, the drop down links shall be Plant -> AHU -> Zone
    c. In Network based navigation, the drop down links shall be Server -> JACE -> BACnet Device
8) Drop down navigation display links. The navigation tree shall change based on whether Location, Equipment, or Network is selected above.

IAS HOME PAGE

- The home page shall provide an operator with a region map of the MCCCD campuses tied to the IAS system with each building clearly labeled.
- Links to individual building home pages shall be provided based on selecting the campus location icon.
- The Google Map component shall be a customizable, interactive Google Map, with styling as shown, based on DGLux5's Google Maps API feature. Static image map backgrounds are not acceptable.
- A sample IAS Home Page is shown below:

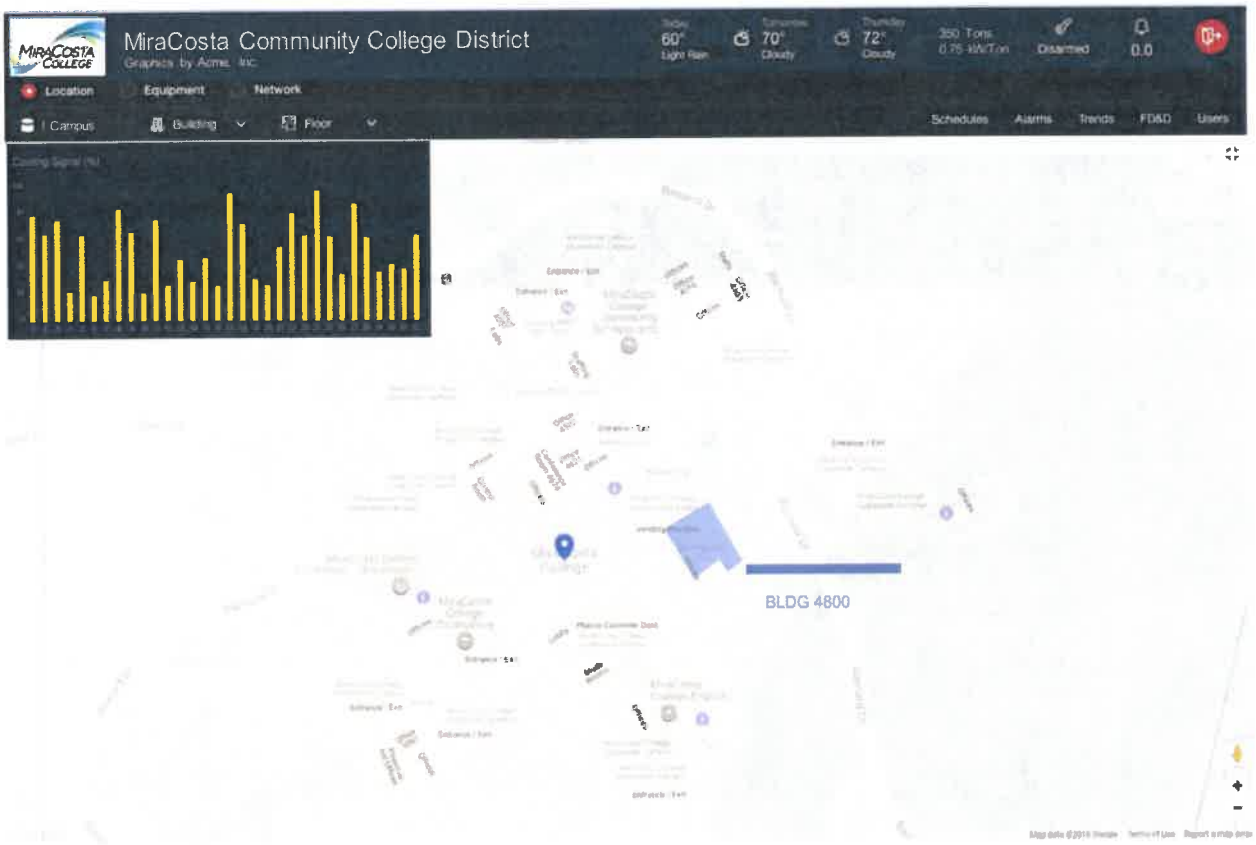


Specific Requirements:

1) Header Displayed
2) A hover-over of the campus location icon shall bring up the campus name and photo. Each display shall link to the individual Building Home Page or the Campus Home Page if more than one MCCCD building is located on the campus.

BUILDING OR CAMPUS HOME PAGE

- The Campus Home page shall include an enlarged view of the campus through the interactive Google Map required in the IAS home page.
- A sample building / campus home page graphic is shown below:



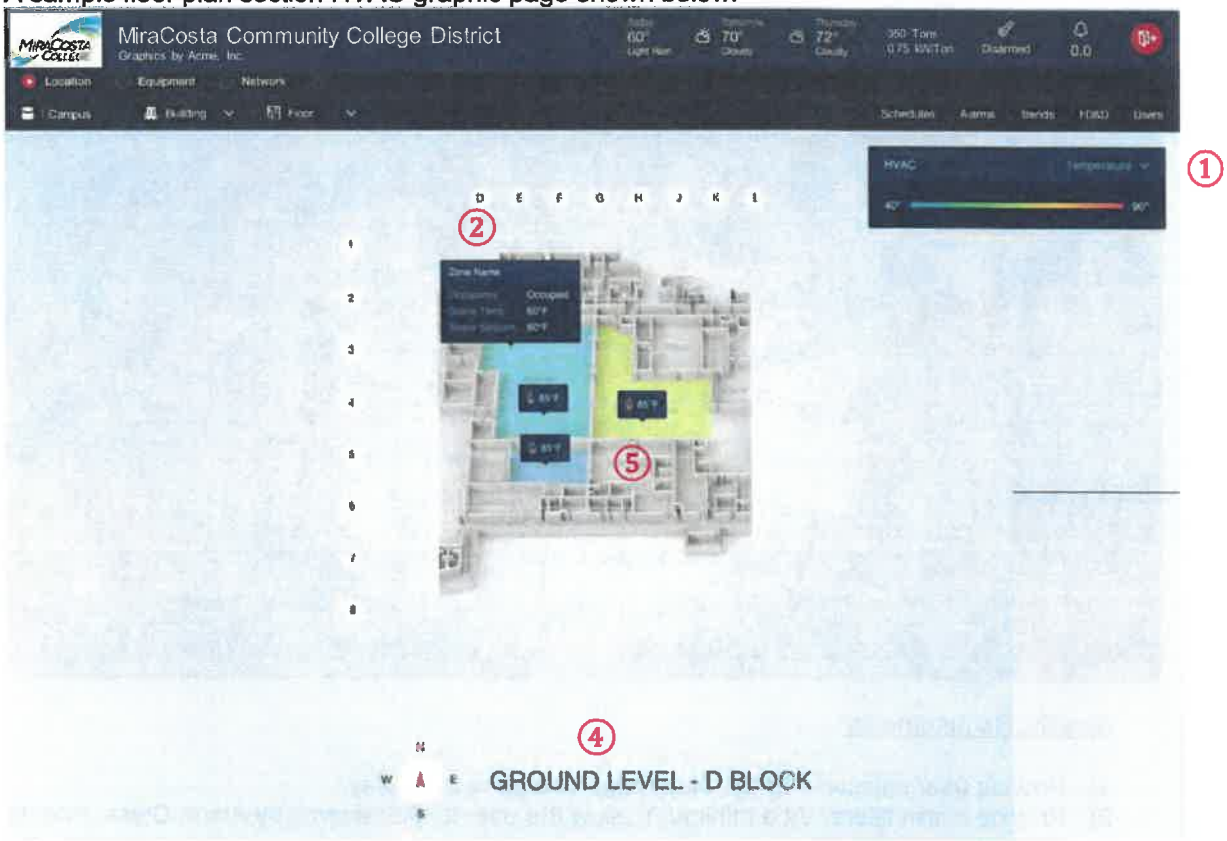
Specific Requirements:

1) A mouse-over on any building shall highlight the building and display the building name. Clicking on the selected floor shall navigate the user to the floor plan display.
2) Provide an overview of the facility cooling signal by displaying the CHW valve signals (%) of all air handling units for hydronic systems. For DX systems, display the cooling percentage in terms of Compressor Power/Max Compressor Power.

GRAPHICAL INTERFACE REQUIREMENTS- FLOOR PLANS

FLOOR PLAN HVAC GRAPHICS

- **Base Bid**: Individual floor plan pages shall include a custom two-dimensional graphic of the individual floor displaying room names. The floor plans shall be based off of the AutoCAD files provided as Exhibit 3.
- **Add Alternate Bid:** Individual floor plan pages shall include a custom three-dimensional graphic of the individual floor displaying doorways, shading, and room names. The floor plans shall be rendered by the IAS Installation Contractor to the detail shown below using Autodesk 3ds Max 3D rendering software, or equivalent.
- Each enlarged floor plan shall display color overlays to indicate individual HVAC zones.
- Display dynamic gradient coloring/shading of each zone based on a user selected variable. At a minimum, provide the following variable display choices:
    - "Temperature" – Display zone temperature (Deg F)
    - "Setpoints" – Display zone temperature deviation from setpoint (Deg F)
    - "Heat/Cool Demand" – Display the zone % heating/cooling command (%)
    - "Discharge" – Display the zone current discharge air temperature (Deg F)
- Provide a Playback button to display a video of historic conditions for the selected variable in display.
- A sample floor plan section HVAC graphic page shown below:



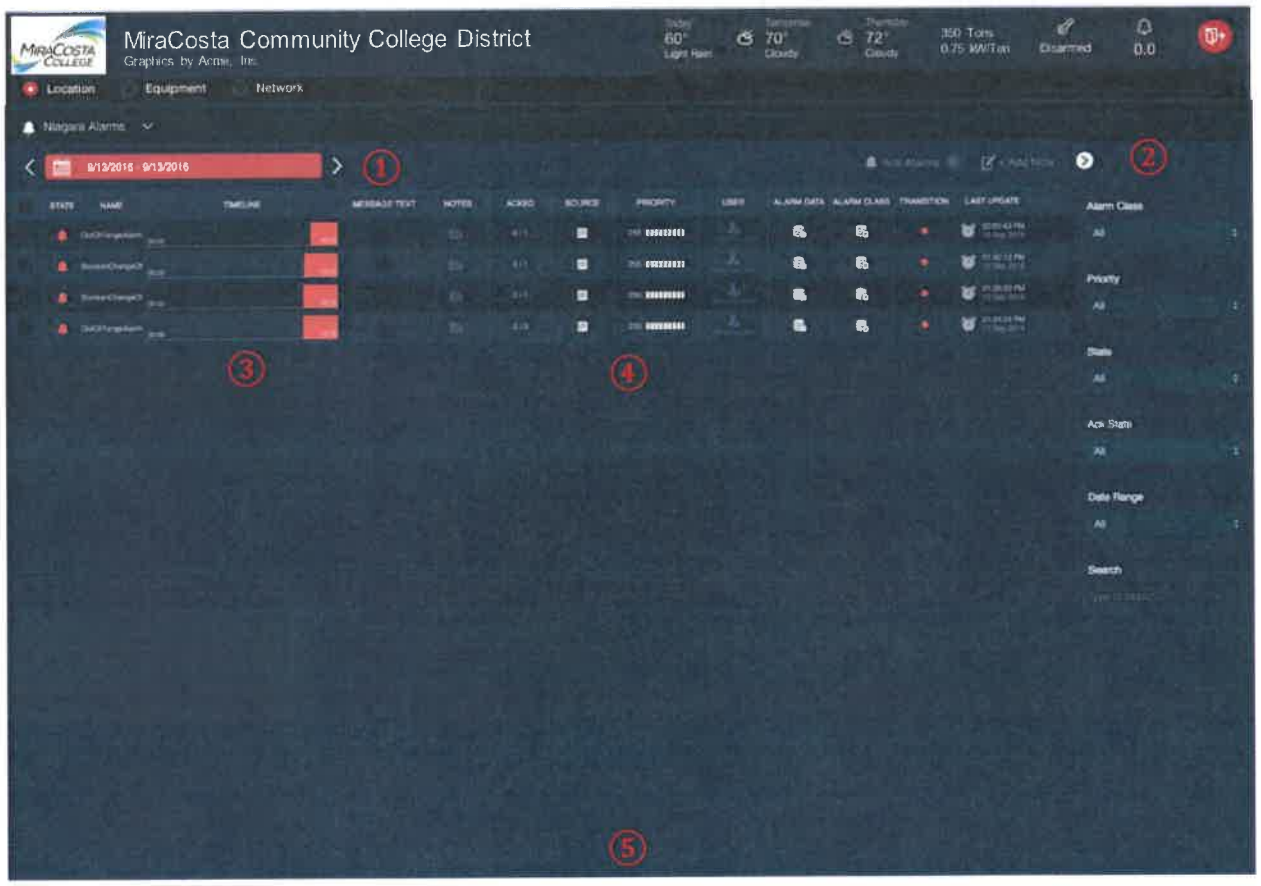
Specific Requirements:

1) User drop down selection for color gradient variable
2) On mouse-over, a pop up window shall display zone name, space temperature and setpoint,. Clicking on a zone shall navigate the user to the HVAC graphic of the system serving the zone.
3) Provide room names within the floor plans.

GRAPHICAL INTERFACE REQUIREMENTS – SUPPORT PAGES

ALARM MANAGEMNET GRAPHICS PAGE

- At minimum each individual building and campus (if there multiple MCCCD facilities onsite) shall contain an Alarm Page (all alarms)
- A sample alarm management graphic page shown below:

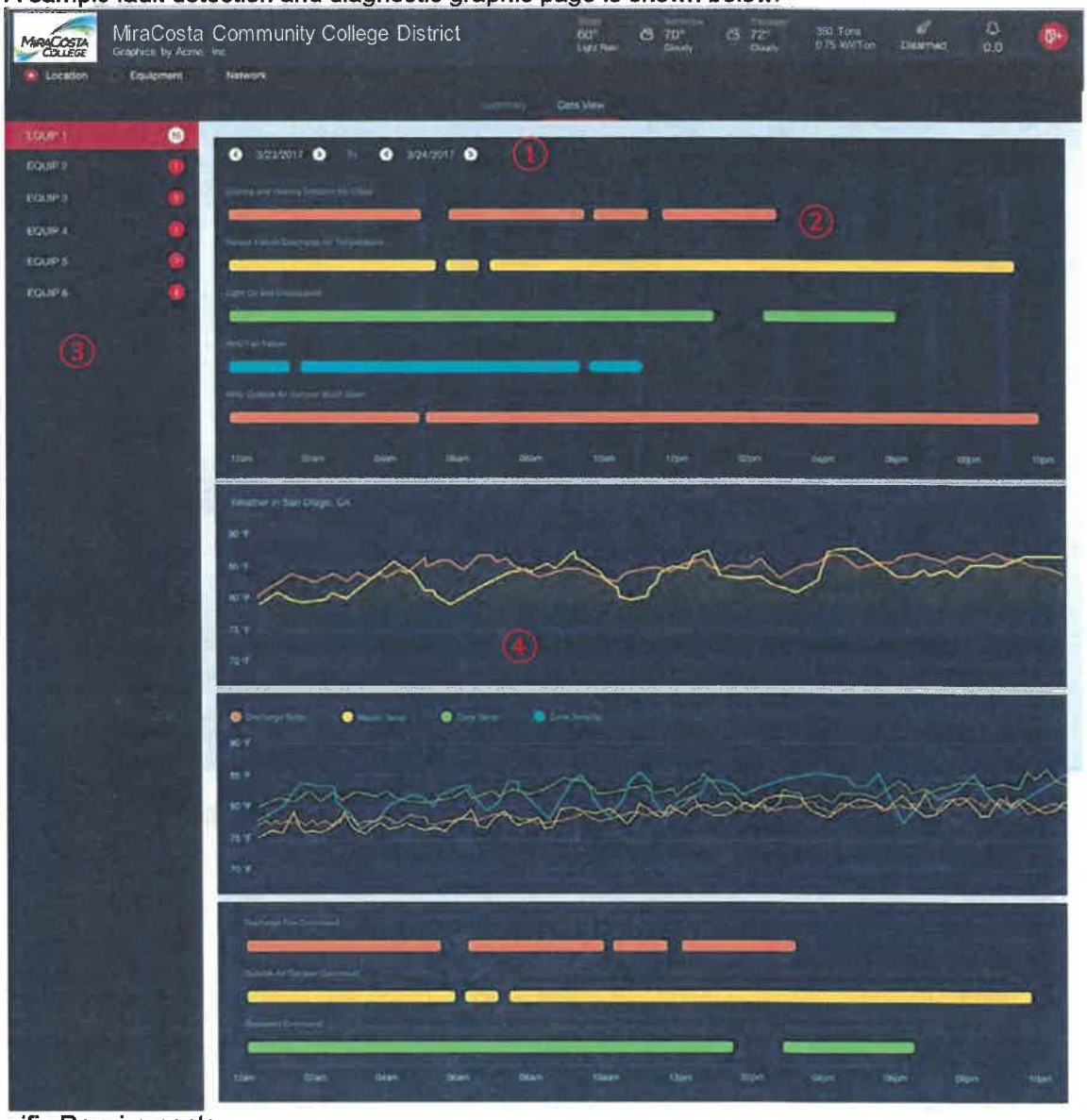


Specific Requirements:

1) Provide user selection for the date range of alarms to display.
2) Provide alarm filters. At a minimum, allow the user to filter alarms by Alarm Class, Priority, State, and Acknowledged State.
3) Provide a graph timeline of the alarm status within the selected timeframe.
4) Provide alarm details including alarm state, message, priority, user, user notes, and ack status.
5) Provide selections to allow the user to perform acknowledgement of multiple alarms by category or filtered view.

FAULT DETECTION AND DIAGNOSTIC GRAPHIC OVERVIEW

- At minimum each individual building shall contain a Fault Detection and Diagnostic Overview Page.
- A sample fault detection and diagnostic graphic page is shown below:



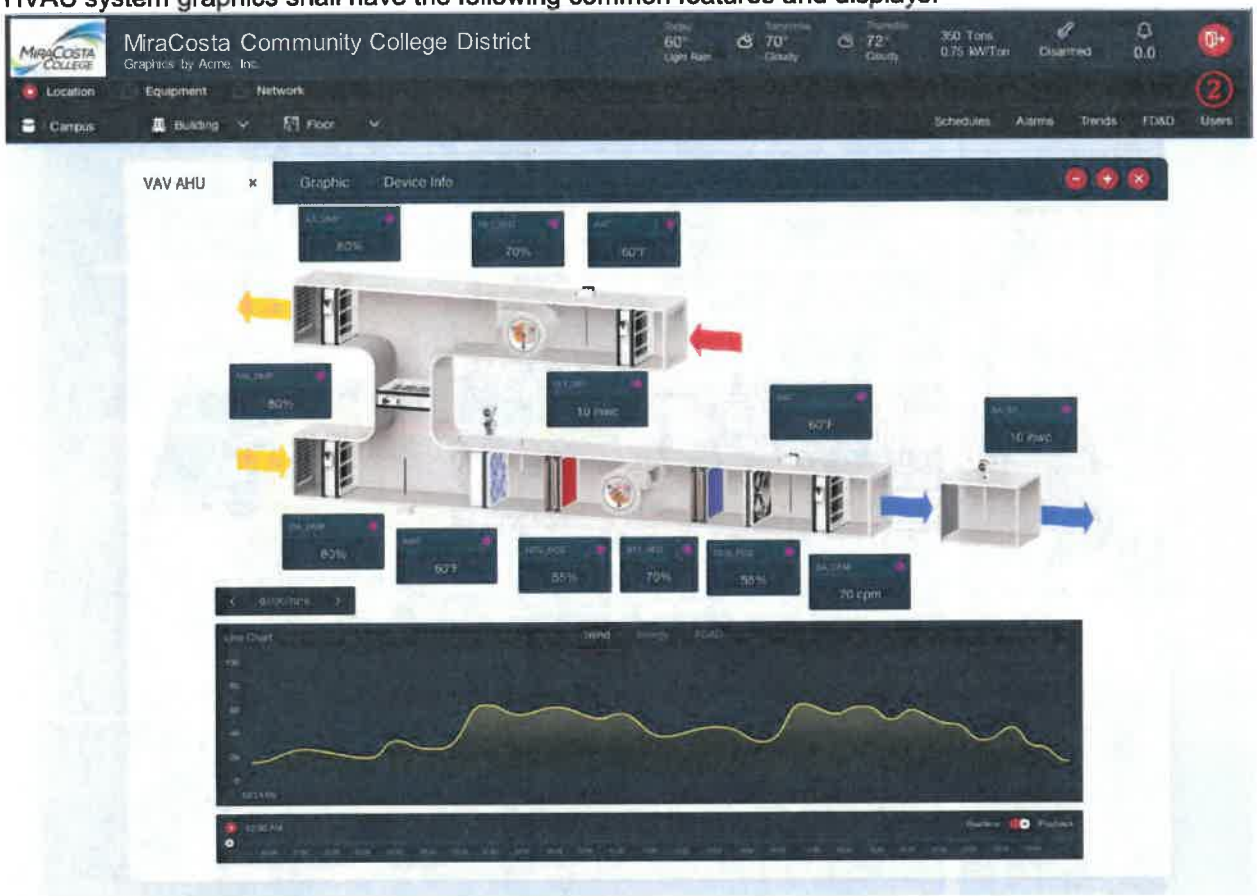
- Specific Requirements:

1) Data selection time range.
2) Provide active faults with associated energy costs, timeframes, and messages
3) Provide a menu of facility equipment to display.
4) Provide applicable trends of fault variables.

GRAPHICAL INTERFACE REQUIREMENTS - SYSTEMS

GENERAL REQUIREMENTS

HVAC system graphics shall have the following common features and displays.

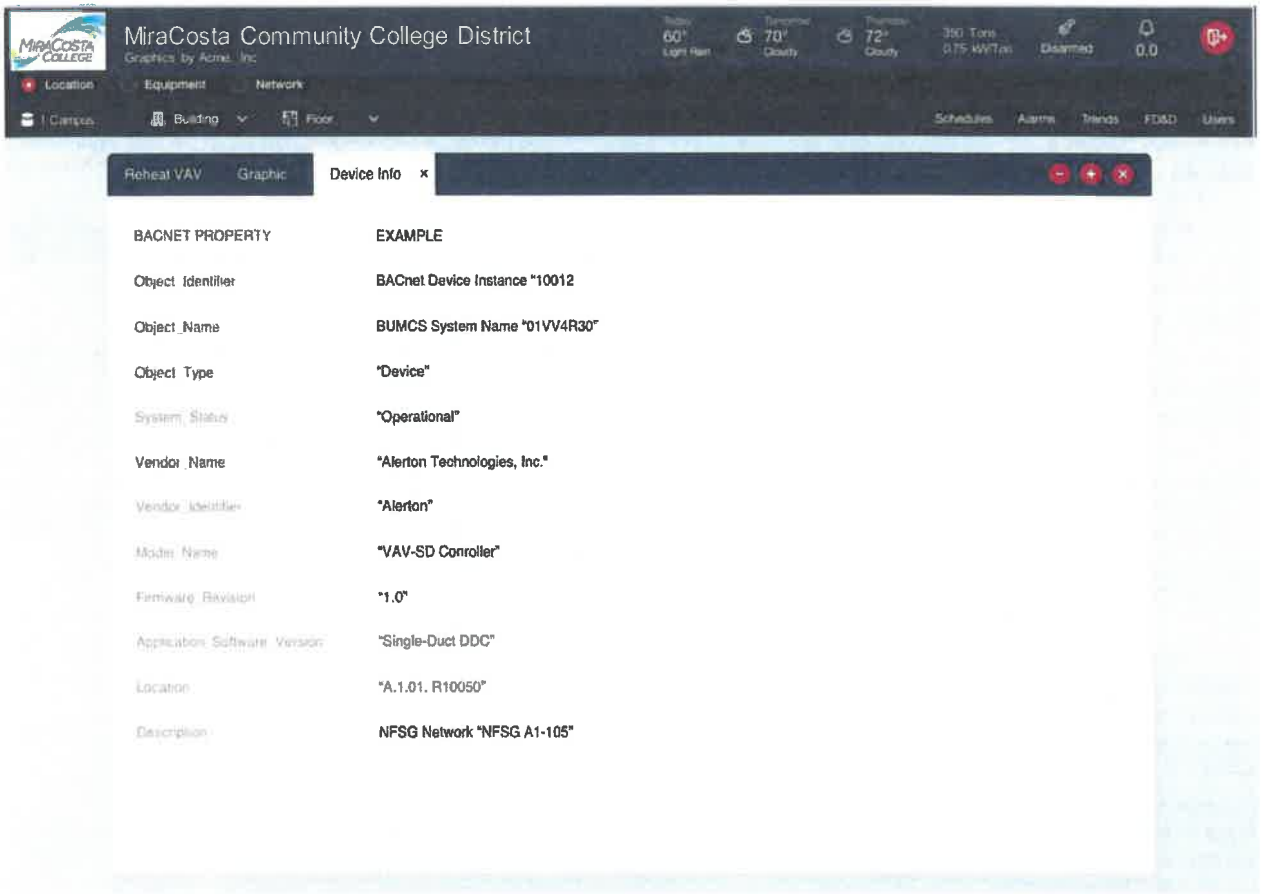


Specific Requirements:

1) Indicate the HVAC system name.
2) Label all points according to the IAS drawing object name abbreviation. On mouse-over, the point's written English object description shall pop-up.
3) Provide user selection for "Device Info" and "Graphic" views. The Device Info requirements are shown on the next page.
4) Provide user selection for views of each HVAC system's trend views.
5) Provide a playback feature which shows a video of historic data points over a user selected time period.

Device Info View

Program and display the following properties for each BACnet network device.



BACNET PROPERTY	DESCRIPTION
Object_Identifier	**Identify BACnet Device Instance**
Object_Name	**Identify IAS HVAC System Name**
Object_Type	**Identify BACnet Object Type**
System_Status	**Multistate Device Point**
Vendor_Name	**Identify Controller Manufacturer**
Vendor_Identifier	**Identify BACnet Vendor ID**
Model_Name	**Identify Vendor's Model Name**
Firmware_Revision	**Use Vendor's Firmware Revision**
Application_Software_Version	**Use Vendor's Version #**
Location	**Identify Room Location.**
Description	**Identify the JACE Network that the Device is Placed On.**

DGLux5 IOT Application Platform

Features

- True Visual Programming
- Drag & Drop Workflow
- Intelligent Component Creation
- Smart Objects & Snapping Points
- Unique Property Inspector
- Extensive Widget Bar
- HVAC & Data Center Library
- Charts & Gauge Library
- Custom Interactions

Benefits

- Cutting-edge, data technology that enables and visualizes the Internet of Things.
- Build Visually Stunning Interfaces & Applications Without Writing A Single Line Of Code
- Significantly Reduce Time & Money In Project Design, Creation And Deployment
- Analyze, Monitor And Control Business Intelligence And Analytics Systems In Real Time With The Most Cutting Edge Visualization Available On The Market
- Runs Dashboards And Applications On Any Touch Screen Display, Educational Kiosk, Digital Signage, Computer Or Mobile Device With Automatic Scaling To Fit Any Resolution
- Enhance Your Data Analysis, Monitoring, Troubleshooting, Information Management, And Cost Comparison To Improve Business Process And Save Money

DGLux5 is the most mature and sophisticated application development technology available on the market today. Through the years of experience on real projects where DGLux has been deployed, we have implemented the richest set of functionality and workflows to assist the developers in saving time where it matters. We focus on the functionality which will make designers and users more efficient ten-fold rather than saving a couple of minutes here and there. We have also removed the constraints of designers having several options for graphics for assembling their interfaces. DGLux is so dynamic and customizable at the core, that imagination is the only constraint you will ever face.

DGLux5 provides a rich feature set that allows you to cater to any industry, as opposed to a niche market, unlike many other visualization products. DGLux5 enables the unification of all of your systems and multiple data providers into a singular interface with the most advanced visualization tools available.

NiagaraAX Edition

Niagara's open integration platform allows you to connect to your building intelligence through multiple protocols, creating one singular communication stream. The unification of DGLux cutting edge IoT Application Platform and NiagaraAX communication creates a powerful, singular graphic interface which allows you to effectively monitor and control your building automation systems and analytics in real-time. DGLux NiagaraAX Edition is deployed as a .dist package onto a NiagaraAX Station. Utilizing the proven reliability, flexibility and versatility of Tridium's NiagaraAX framework for building systems automation and integration; DGLux offers an unprecedented level of creative expression in designing the next generation of building control and monitoring solutions. DGLux5 offers users native "in browser" loading on iOS, Android, and Windows Mobile - NO APPS are required. Users are able to turn off power, adjust temperatures, and monitor your building intelligence from anywhere, at any time with visually stunning, true-to-life graphics.

NiagaraAX Compatibility

DGLux5 Service is compatible with Niagara AX 3.7 and up.
The following modules are required:

- alarm
- baja
- bajaui
- bql
- control
- driver
- file
- gx
- history
- platform
- web
- workbench

Browser Compatibility

DGLux5 is a 100% HTML5 application that does not require any special browser plugins. DGLogik recommends to use the latest version of Google Chrome web-browser for the best user-experience.
Currently the supported Web-Browsers are:

- IE 11+
- Chrome 21+
- Firefox 22+
- Opera 15+
- Safari 6.1+

Cross Platform

DGLux5 allows users to access their application with Native "in-browser" loading on iOS, Android, and Windows Mobile - not a single app is required! Intelligent scaling with responsive layout ensuring that every user interface is automatically optimized for any screen size to ensure optimal viewer experience on any mobile device.

Access your performance data in an easily comprehensible manner in real-time, wherever you may be in the world. Hold the power of information in the palm of your hand. Reap the benefits of being mobile and flexible without sacrificing style and functionality in your IOT visualization system.

Smart Design

True WYSWYG HTML5 editor with advanced, simplified design tools.

- Symbols - ensure easy widgetizing and rapid customization.
- Project Architecture - for simple content management.
- SVG - import to leverage existing designs.
- Actions - enable interactivity and animations
- New Property Inspector - Simplified and unified, consistent across all widgets with advanced section available to advanced users.

Intelligence

Create Logic without writing a single line of code.

- Dataflow - Visual block programming allows for efficient workflow creation. All binding logic is now captured by Dataflow for easy tracking and troubleshooting.
- Bind Everything - Bindings are expanded to include every available property
- Tables - data formatting, calculations and transformation.
- Repeater - optimized to render hundreds of thousands of rows instantly. Ideal for large data sets or streaming data

Installation Details

For installation details, visit http://wiki.dglogik.com/dglux5_wiki:installation:home

Contact Us

For more information about DGLogik's DGLux5 Software, visit dglogik.com or call (415) 422-9920.

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