PURPLE PIXEL INC. – CONDO BMS- TECHNICAL REQUIREMENTS

<<Author Name>>

PURPLE PIXEL INC

Contents

PART II -- Technology Requirements (as a Word document or a pdf) (max. 4 pages)

1. Technological Requirements

A.   Technology Stack Option Evaluation and Key Considerations for Each track

Track	Evaluation Options Considered	Key Advantages
Experience layer	Full Stack (React components) Angular JS 9.0 (Presentation Layer) + API Adobe + Angular JS 9.0 Graphene (SaaS)	Advanced ability for modularisation High quality vendor support Adopted by leading peers Proven record of performance delivery
Microservices for Journey	Springboot-based microservices Other options/architecture choices to consider	Reusing 30+ API being developed for all subsequent implementations and/or modularisation
New Hardware API Management	Springboot-based microservice, Azure API Manager Other options/architecture choices to consider	Centralized API management Faster TAT for Vendor and New HVAC Systems onboarding
Data & Reporting capabilities	Azure Blob storage, Azure Synapse, Adobe Analytics/Power BI / Tableau New data mart on ongoing Data Lake Other options/architecture choices to consider	Reusing the existing Advanced analytics workbench (From the larger Purple Pixel Data Lake. centralized data consolidation capabilities Real-time data reporting

B.   Components for BMS

- Centralized Server - Hosted on the SAAS platform
- Operator Interface Station - the UI Integrated with All Sensors and Controllers in the building
- Controllers/Sensors - Moderated access to Building and Role-based access to software
- Data Storage Facility. Data Lake for the project with each client having its own "slice" for storing and consuming data
- Operating Software (can include AI-based control and decision making) - Device controllers and/or exposed API for connecting Hardware with Software
- Targeted Components include HVAC and Ventilation; Elevators and Emergency Exits; Motion Sensors; Security Systems (Cameras, Face recognition, etc.); Electrical Power Generators and Information Handling (Meeting Schedules, Visitor Information, Logging, etc.)