VIDEO PTZ CONSTRUCTION CAMERA SPECIFICATIONS

PART 1 – GENERAL

1.01 SUMMARY

    A. Section includes a professional grade Hi-Res Megapixel camera system providing on demand live streaming at 1080p over a cellular network with storage and remote access to stored video. All hardware, software, and time-lapse movie production services to be provided by a proven construction camera System Vendor.

1.02 VENDOR

    A. OxBlue Corporation
        1777 Ellsworth Industrial Boulevard NW
        Atlanta, GA 30318

1.03 CLOSEOUT SUBMITTALS

    A. Submit all digital still images without alteration, manipulation, editing, or modifications using image-editing software.
    B. Submit a professionally produced high-definition time-lapse movie of the project. Editing shall include image stabilization, color correction, removal of inclement weather footage, and removal of images outside the desired daily time range to be determined by the Owner.

1.04 WARRANTY

    A. Manufacturer Warranty: Manufacturer agrees to repair or replace components of system that do not comply with requirements or that fail in materials or workmanship within specified warranty period.
    B. Warranty Period: Video PTZ Camera shall have a three year hardware warranty.

1.05 SHIPPING

    A. All domestic shipping fees shall be included in the equipment price.

1.06 OWNERSHIP DOCUMENTS

    A. All images and time-lapse footage shall be the property of the Owner.

PART 2 – PRODUCTS

2.01 CAMERA

    A. Resolution: 1080p video - 2.13 Megapixel images (1920 x 1080 pixels)
    B. 360° horizontal field of view and 180° vertical field of view
    C. Adjustable 32x optical zoom with 6x digital zoom (72x zoom capability)
    D. User controllable Pan/Tilt/Zoom designed to provide consistent imaging in all environments
    E. Thermostatically controlled IP66 waterproof all-weather enclosure
    F. Capable of maintaining multiple preset compositions

G. High-Definition continuous video recording with 30 days of retention (up to 120 days available)
H. The system shall have M2M – Machine to Machine 24/7 Support with active self-healing technology and automatic software upgrades to maintain the quality, consistency and reliability of all images
I. Built-in motion detection
J. Auto Features: Focus and Day/Night IR

2.02 DATA CONNECTIVITY AND STORAGE

A. Cellular data services provided by the System Vendor
B. Onboard Memory: Up to 4 Week Video Storage. Resolution can be adjusted but will impact storage time.
C. Remote Storage: Archive a still image approximately every 10 minutes.

2.03 POWER CONNECTION

A. 120 / 240 VAC (optional 12 VDC version for compatible OxBlue solar power station available)

2.04 DIMENSIONS AND WEIGHT

A. Camera Dimensions: 8.56" L (21.7 cm) X 7.38" W (18.75 cm) X 7.38" H (18.75 cm)
B. Mount Dimensions: 10.81" L (27.46 cm) X 7.38" W (18.75 cm) X 7.38" H (18.75 cm)
C. Weight: 5.5 lb. (2.5 kg) installed

2.05 MOUNT

A. Pole or wall mount provided by the System Vendor
B. Optional mounts (non-penetrating roof mount, etc.) available

2.06 OPERATING ENVIRONMENT AND CONTROLS

A. -40 to 140°F (-40 to 60°C)
B. 120 / 240 VAC units come standard with blower, and defroster; 12 VDC units come standard with blower.

2.07 SOFTWARE

A. Responsive software interface for use on computer, tablet and mobile screens
B. Display Owner or Project logo on desktop software interface
C. Dashboard display of all cameras
D. Camera search capability
E. Visual calendar showing actual photos from each day of the project
F. Access to each individual photo archived
G. Ability to schedule the automated delivery of images & time-lapses to users via email
H. Display weather data with each image
I. Automatically generated daily/weekly project progress update email with camera image and weather
J. Ability to compare images from two cameras or two specific times simultaneously
K. Ability to overlay and compare images from different times
L. Interactive map showing project location

M. Provide iPhone/iPad app and Android app

N. Graphical Markup Tools for detailing and creating notes with graphical overlays on images, including project title, logo and time date stamp

O. Up to 300 megapixels customized 360° panoramas

P. Instant live snapshot capability in addition to preset scheduled archives

Q. Visual timeline with quick thumbnail view allows image navigation by year, month, day and hour

R. Full Screen Mode for displaying video and complete image without any graphical frame

S. The system shall capture and upload images every 5 minutes, 24 hours per day

T. Artificial Intelligence - Activity Analysis to verify work hours and deliveries, See the short and long term impact of weather conditions, Proactively mitigate scope creep to keep projects on schedule, Identify areas where you can boost performance, Make decisions based on clear construction data

U. Artificial Intelligence - Safety Tracking to Identify safety compliance levels across projects, Track hard hat and safety vest usage, See opportunities for additional training, Determine subcontractor safety levels, Reduce liability issues and potential policy violations

2.08 HOSTING AND WEBSITE INTEGRATION

A. Provide links to thumbnails of most recent image

B. Provide API access for use in software and website integration

C. Project Management Software integration (i.e. PlanGrid, Procore, SharePoint)

2.09 DATA SECURITY AND INFRASTRUCTURE

A. Multiple access options shall be available, including publicly available links, username authentication, IP restrictions, and HTTPS communication protocols

B. Actual access method used shall be specified by the Owner

C. Data shall be stored on redundant servers owned and managed by the System Vendor

D. Optional time delay feature for time-lapse videos and images on websites

2.10 SOLAR POWER STATION FOR CAMERA (OPTIONAL)

A. Turnkey system designed specifically for use with the camera

B. 5-day minimum solar autonomy based on lowest monthly average solar hours for the region

C. Charge control with digital display meter showing system status

D. 1-yr minimum system warranty with up to 25-yr solar module warranty

E. Domestic freight included in solar power station cost

PART 3 – TIME-LAPSE MOVIE TECHNOLOGY & SERVICES

3.01 AUTOMATICALLY GENERATED TIME-LAPSE MOVIES

A. System shall automatically generate up-to-date high-definition time-lapse movies throughout the duration of the project. Automatically generated time-lapse movies shall be available for download at any time. The online system shall intelligently select frames in order to produce time-lapse movies of an appropriate duration for viewing on the Web, typically 30-60 seconds.

3.02 USER CREATED CUSTOM TIME-LAPSE MOVIES

A. System shall allow users with appropriate permissions to create custom time-lapse movies at any time during the project. Users shall be able to control start and end dates, filter daily images by time, and specify time-lapse movie duration.

3.03 PROFESSIONALLY PRODUCED TIME-LAPSE MOVIE

A. At the completion of the project the System Vendor shall create a professionally produced time-lapse movie of the project. As part of the service, the time-lapse movie shall be prepared based on the Owner's instructions for resolution, duration, date range, time range, and audio.

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