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1 Corporate Culture

1.1 Inside Monitac

Monitac is a passionate group of creative designers, engineers, fabricators, logisticians and project managers who solve everyday problems by building amazing spaces. Our Team Designs, Builds, Deploys and Operates intelligent modular structures anywhere on the planet.

We are a young, dynamic and innovative company which is enthusiastically working hard to prove itself to be the best smart modular building provider in the market. In an industry that is slow to evolve and often resistant to change, Monitac prides itself on doing things differently.

1.2 First Person Perspective

EVERY member of our team from the directors to the designers have spent significant time experiencing what it is like to build, live in and maintain our buildings. "We don't just design boxes. We design spaces. And the spaces between those spaces."



Monitac has a unique, first person perspective on the issues related to health, safety, comfort and quality, from the design desk to the factory, the site, and beyond.



1.3 Technology Development

Monitac operates two wholly owned technology arms; BinaryBean which is responsible for IIOT R&D, deployment and installation of our own building automation and environmental sustainability system, and Avario which manufactures and installs our branded line of intelligent automation systems.

Together, Monitac, BinaryBean and Avario have created the next generation of smart modular building.

Our IIOT (Industrial Internet of Things) and automation technology can extend the lifespan of equipment, decrease maintenance costs and streamline an operation to reduce unnecessary manpower.



HOME AUTOMATION



2 Corporate Capability

Monitac is strategically Headquartered in Dubai, UAE to service customers in the GCC and Africa, with a branch office in Lynden, Washington, USA to service North America. Working to international standards and best practice in all aspects of Safety, Quality Assurance and Management, Monitac has proven experience in delivering smart pre-fabricated / modular projects on time and on budget.

- Emergency Dispatch Centre, Britam Arabia, Saudi Arabia (USD 200k)
- Sadara Community Station, Britam Arabia, Saudi Arabia (USD 1.8m)
- Kurbside Kitchens: Private Client, Kingdom of Bahrain (confidential)
- Farm Labour Accommodation Munger Farms, USA (USD 1.1m)

2.1 Health & Safety

In Practice: With our executive director's experience rooted in rescue, emergency services and HSE education, we pride ourselves as leaders in safe work policy and systems of work. Monitac adheres to international best practice no matter what jurisdiction we are operating in. Our safety team is constantly training and upgrading to keep up with the latest techniques and technology.

By Design: The integration of safety features starts during the concept stage. A logically placed safe lifting point not

"The health and safety of our team and the people we work with is the underlying foundation of our company."



only reduces risk but saves countless hours of rigging, slinging and crane time. Additional smart integration of items such as working at height anchor points, foot pegs, hand rails, and non-slip surfaces greatly reduces not only build time, but also risk, and time/subsequently cost during ongoing maintenance and demobilization.

The Monitac 'Portable Factory'

4400 sqft of Portable Covered Manufacturing Space

Deployable anywhere in the World



2.2 The "Portable Factory" Concept

Monitac has a strong dedication to sustainable design in everything that we do. Whenever possible, we incorporate strategies that;

- Use local labour / develop local skillsets
- Offer education programs in HSE and leadership
- Reduce whole lifecycle carbon footprint of the project
- Eliminate or reduce transportation by manufacturing as close to the project site as possible
- Use local, sustainably sourced materials and recycled materials
- Use alternative energy

In order to accomplish our sustainability goals, we have created a "Portable Factory" concept, which, by using our own modular / portable building technology enables us to locate our manufacturing plant anywhere in the world.

Made up of up-cycled shipping containers, this facility contains all the necessary equipment, offices, support buildings, and storage to ramp up a full manufacturing operation. Depending on each project's local requirement, we incorporate a mix of our residential blocks, kitchen/dining areas, laundry, first aid room, firefighting equipment, recreation areas and observation decks. With most countries having a healthy feed stock of single trip shipping containers, this strategy has a significant positive impact on the environment, and the bottom line.

2.3 Social Consciousness

We pride ourselves on becoming involved in the communities which we operate. Where possible, we engage local communities for labour, support and supplier functions. We offer training and incentives for locals to get involved in our operation and encourage entrepreneurialism. Since the majority of our projects are temporary, we feel it is our duty to ensure that we leave behind skillsets, resources and education for the local people who enable our success.



"We have adopted a socially conscious business model, taking stewardship of the local environment and strategically investing in the communities in which we are invited to operate within."

Dave Sheppard – Director of Social Consciousness & Environment



2.4 21st Century Approach

Monitac offers the <u>value</u> of a typical assembly line with the advantages of bespoke design and current technology.

Portability, durability, environmental impact and cost efficiency are always priorities in the designs and construction techniques that Monitac develops and uses. Our team works closely with our clients to evolve a design which best meets their specific requirements and balances the various factors associated with these decisions.

Monitac has the capability to integrate a variety of valuable "smart" additions into the buildings, and has the experience to work with the client to evaluate the cost/benefit of each.

2.5 'Brilliant' lighting – Efficient and effective

Monitac typically uses "daylight" LED lighting to simulate natural light and lower energy and maintenance costs over conventional incandescent or florescent bulbs. Coupled with our Avario automated building management system and Modutech switches, energy usage and occupant comfort can be further increased by automatically blending artificial light levels with available natural light. Combining multiple lighting sources and intensities into pre-defined 'scenes' allows spaces to be



transformed for different uses (working/reading/relaxing/eating etc.) enabling more effective and varied use of spaces, particularly in smaller homes where a single room may have several functions.



Bahrain Container Cafe

Portable Office Complex



2.6 Key Personnel

Richard Scott-Smith – Managing Director & Lead Engineer

Born with a passion for design and innovation, after graduating with a master's degree in Engineering Science from Oxford University, Richard was recruited by one of the world's foremost Engineering and Architectural Practices, Atkins. Richard worked across a number of disciplines and countries with Atkins over nine years and was involved in some of the world's largest and most complex construction projects. Armed with a wealth of experience and ideas, Richard then moved on to setup Monitac in order to apply his innovative engineering mind to building portable and temporary accommodation which dramatically raises the quality and efficiency of remote living and working spaces.



Qualifications:	2004: Master of Engineering Science: Oxford University (UK)
Employment History:	2013 – To Date: Managing Director, Monitac (UAE)
	2005 – 2013: WS Atkins - London (UK), Bahrain, Dubai (UAE)

Key Experience:

2014: Sadara Petrochemical Plant Portable Fire Station (Design & Construction Management)

Richard was responsible for the design, the quality control and the construction management of this USD 1.8m shipping container project. Richard worked closely with the client and fabrication teams to ensure that the designs were optimised and followed to the high level of quality that the client required. The result was a world class facility which the occupants are thrilled to live and work from.

2015: Bahrain Container Café (Design & Project Management)

Richard is responsible for the innovative design of this shipping container up-cycling project which blends contemporary architectural design with traditional Bahraini themes such as the prominent wind tower which doubles as a spiral staircase. Cost is a key consideration on this project and materials and techniques have been carefully selected to minimise costs.

2006: Northumbria University's Law, Business & Design School (Architectural Design)

Richard designed and oversaw the construction of an innovative façade for the new USD 150m buildings which has now become a landmark for both the university and the city of Newcastle, UK. The design incorporated one of the world's largest evacuated solar tube arrays in order to collect energy from the sun whilst providing shade to the windows and cost effectively giving the building's their striking form.

2012: Building Automation & Entertainment (*IT and Electrical Engineering*)

Richard lead the development and install of several high end bespoke automation/entertainment systems capable of managing climate controls, lighting, drapery, security and distributed multi-room entertainment systems.

2013: Riyadh Metro (Project Controls)

Richard set up and managed the Project Controls and Billing for Atkins' design role on the USD 22.5bn Riyadh Metro project. He was responsible for leading the pricing team from four companies which formed the Joint Venture which ultimately won the design contract for three of the six metro lines.

2011: RAZMIC Industrial City (Complex Numerical Modelling & Management Consulting)

Richard developed a complex numerical model for Atkins Management Consultants to enable the material, utility and traffic flows for one of the world's largest industrial plants to be modelled over a twenty-year period



Shaun Shulba – Monitac Director / Project Director

Originally from Vancouver, Canada, Shaun is an entrepreneur, innovator and technologist. Having moved to Dubai to pursue his advocacy for green technology, he started Monitac's R&D technology arm with the goal of creating affordable environmental solutions for 3rd and 1st world markets. After joining with Richard to create Monitac in 2013, the two have created a world class company in a very short time.

Shaun brings an eclectic mix of abilities to the management team. As a past Technical Rescue Technician, Paramedic, Health and Safety professional and educator, Shaun has had a hand in raising awareness and standards of rural accommodation and work environments across the globe.



As a Business Leader, Shaun has spent the past twenty years building businesses to solve difficult problems in some of the World's most challenging environments. With successful business development and subsequent projects in the Middle East, Africa, the USA and Canada, he has raised the standards and expectations within the Oil & Gas, Defence and Emergency Services industries. By mixing this experience with an aptitude for invention, drive, and leadership, his joining Monitac represents the culmination of a life's work to deliver unique solutions to discerning clientele.

Qualifications:	2009: NEBOSH (w/ Distinction)
	2007: CIEH Master Instructor
	1997: BSc EMS
Employment History:	2013 – To Date: Director, Monitac (UAE)
	2011 – To Date: Founder/Director, Binary Bean R&D Inc.
	2004 – 2011: General Manager – Britam Defence Arabia, Saudi Arabia, UAE, Bahrain

Key Experience:

2014: Sadara Petrochemical Plant Portable Fire Station (*Safety Systems, Logistics, Installation, Commissioning*) Shaun was responsible for the design, safety systems integration, ground logistics and the construction management of this USD 1.8m shipping container project. During the 90-day fast build, Shaun was the primary co-ordinator for all logistics on the ground in this difficult operational environment. The result was a world class facility which the occupants are thrilled to live and work from.

2010: Emergency Services Housing and Community (General Management)

Shaun was responsible for the design, operation and maintenance of 128 residences around the Middle East and Africa. With innovative management systems and high standards, our systems of work became the ipso facto standard operating baseline for many other facilities.

2007: Saudi Arabia – National Guard Camp Rebuild (Project Management & Construction)

Shaun was responsible for the vision, drive and project management to completely rebuild a de-commissioned 68-man camp in the deserts of Saudi Arabia. This project was a major challenge given the environment and availability of building materials. With ingenuity and entrepreneurship, Shaun was able to re-commission the camp and exceeded OSHA requirements upon inspection. Complete with community kitchen, 3 recreation centres and a works/repair shop, the project was completed on time and on budget.



3 Completed and Current Major Projects

3.1 Sadara Petrochem: Residential Community and Fire Station

Client: Britam Arabia Location: Jubail, Saudi Arabia Value: USD 1.8m

Monitac were approached to fabricate and deploy a fire station to service the world's largest petrochemical construction project. The brief was to provide living quarters for thirty-two people, support facilities such as kitchen, laundry and offices, a command & control centre and a covered area to park the emergency response vehicles. The whole campus had to be portable so that it could be repositioned within the construction site (it's a really big site!), and reused elsewhere in the world at the end of the project. The client chose Monitac because they wanted something which cost-effectively blended functionality, innovation and comfort.

A key requirement was to provide a campus that people would be thrilled to live in: The staff are involved in dangerous work in a harsh environment, and it is important that they are well rested and motivated. A further requirement was for the camp to be as green as possible. Monitac exceeded expectations on both these fronts through a combination of exquisite design, custom designed furniture, integration of a tailor-made campus-wide automation/entertainment system and use of environmental technologies including photovoltaic panels, solar water heaters and low-e glazing.

Monitac worked closely with the client to come up with several exciting masterplan concepts which were then refined into the final design. The fire station campus was split into three areas: The station area, the communal/recreation area and the residential area.



For the station area, Monitac utilized a modified version of their Modular Works Facility to create a space perfectly fulfilling the client's needs. This facility houses the command & control centre in an elevated location offering full view of the vehicle bay and panoramic views across the petrochemical plant. An on-call sleeper room with bunk beds for the crew of 6 is adjacent to the command centre allowing rapid communication and access to the vehicle bay. An industrial workshop is located at the rear of the facility for on-site maintenance of vehicles and equipment. Above the workshop is a forty-person training room which doubles as an area where the crew can relax. The offices, store rooms, washblock and laundry room make up the rest of the station creating a partially enclosed and covered area that provides an inspiring yet functional place to work.

The communal area is located in the heart of the campus providing a divide between the work and residential areas. It incorporates a NBA size basketball court, a gym, a recreation room, and kitchen/dining facilities for forty people. The residential zone is designed to allow expansion whilst retaining the masterplan's philosophies. It is compact and comfortable, arranged in four blocks of four modules each containing two ensuite bedrooms.



















4 Camp Solutions



4.1 BASECAMP³ Modular System

For your requirements, we are proposing the use of "BASECAMP³", our line of upcycled ISO shipping container buildings. These buildings are rugged, portable and stand up very well in the harshest conditions. Unlike wood frame construction, they are designed to be transported by standard sized truck trailers and offer a much longer lifecycle.

Our "BASECAMP³" modular designs provide flexibility and significant benefits over competing products;

Flexible – BASECAMP³ buildings do not have to be set in a straight line, allowing for more layout options to fit your exact needs.



Stacked BASECAMP with optional Solar Panels

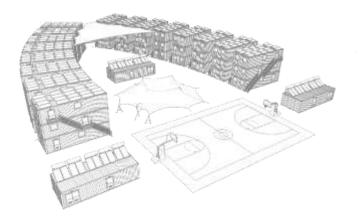
Stackable – Each building has the ability to be ground floor only or stacked to reduce overall footprint. Decks, stairs, rails and walkways are designed to be quickly, safely and easily reconfigured so that every building can be deployed in any configuration alone or in groups.

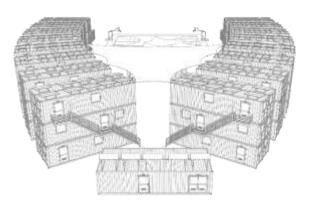
Transportable – ISO shipping containers were designed to cross the ocean many times while stacked 13 units high protecting tons of cargo, for several trips. They make a perfect base for portable buildings and offer longevity and easy transportability with standard truck / trailers with no need for special permits or a pilot car.

Sustainable – It takes almost 8000 kwh of energy to melt down and remanufacture the steel in a shipping container. By contrast, it takes about 400 kwh of energy to modify and install a container for building use. Steel buildings also last considerably longer than their wooden counterparts, able to be moved several times over their lifetime without main structure degradation.

Scalable – BASECAMP³'s modular compatibility specifications remain the same for every building we manufacture which means you can scale your camp as required and not worry about compatibility down the line. Since each unit can function on its own or in a group, your investment is protected, ensuring you can use your buildings in any group configuration that you require.









4.2 Green Options

Bolt On / Plug in options include several services and assets which can reduce your camp's carbon footprint, energy use, and waste, all while increasing the quality of life for occupants both aesthetically and functionally.

Options include:

Solar Hot Water – Solar hot water heaters allow a site to provide an abundance of hot water to an entire camp without one drop of diesel or load on the local grid.



Solar Photovoltaics – BASECAMP is 'solar ready'. Solar photovoltaics can supplement grid or generator power, reducing the requirement for additional fossil fuel energy during peak requirements that summer heat can bring. When coupled with battery storage and our Avario Power Management System, a site can become Net Zero or even Net +.

Grey Water Reclamation – Reduce or eliminate the use of trucked in or city provided sweetwater for irrigation of local green spaces. Our grey water reclamation system separates and filters water from camp taps and showers and turns it into useable irrigation water that is perfect for the maintenance of green spaces that battle dust and increase the quality of life for everyone in the camp.

On Site Sewage Treatment – Together with our partners at BiPure Inc. (Canada), we are able to offer portable, containerized MBR (Membrane BioReactor) technology capable of on-site treatment of sewage to class A or B effluent standards.



"Solaris Camp" Washington State, USA (Concept)



4.3 Smart Technology that SAVES MONEY



AC / Auxiliary Equipment Monitoring

Together with our in-house technology company Binarybean IOT, we have designed our Remote Monitoring System to provide you with the information you need for both comfort and cost effectiveness. Using our efficient mesh network technology, data from multiple HVAC units is collected by the designated master unit over a local WiFi network and transmitted through the Internet to the Cloud where the HVAC health information is processed and made securely available to authorized staff.

From the dashboard, designated users can view and compare all collected data, check alerts and analyse information for an entire fleet in moments.

Save on replacement costs by comparing current data against other units or against historical data to identify early signs of failure.

Maintain equipment more effectively by reviewing alerts and warnings while receiving suggestions on preventative maintenance.

Smart Wireless Switches

Monitac's own Modutech "wireless, batteryless switch" technology enables owners to change internal office/wall configurations without changing or modifying internal wiring or switches or lights. Light switches can be glued/screwed to any wall with no wiring, and configured to control any of the light(s) in the building.

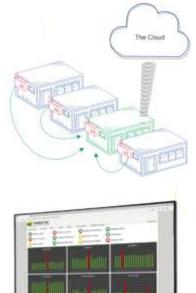
This feature:

- Eliminates the risk of electrical hazards to employees during the configuration and re-configuration stages
- Eliminates the cost of rewiring associated with this activity
- Reduces time / cost for configuration or re-configuration



Smart Automation – Our cost effective, "Avario Office Automation System" manages lights, monitors energy consumption and ensures that your modular buildings are running at peak efficiency.

- Occupancy detectors ensure energy is not being used in parts of the building that are not occupied by turning off lights, TVs, ACs etc.
- The system can monitor energy use, watch for spikes and advise of issues in real time





5 Labour Camp Project

5.1 Project Requirements

- The solution calls for a portable, modular camp capable of housing a varied array of personnel in different room configurations.
- The camp will require up to 1000 beds but may be built and deployed in stages.
- Floorplans must take into account requirements by local jurisdictions on allotted per man floor space.
- All specifications as per standard Monitac BASECAMP spec.

5.2 Accommodation Solution

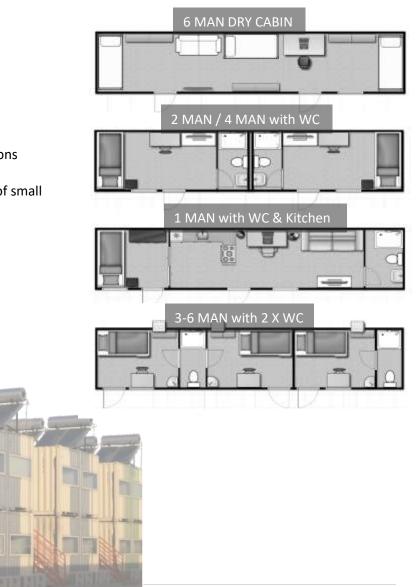
"BASECAMP³" – Upcycled Shipping Container modular buildings with various room configurations for differing level of employees.

BASECAMP³ Configurations:

- Single or multiple story
- Furnished or Unfurnished
- Standard Plugin Electrical Connections
- Minimal foundation requirements of small concrete block at each corner



Sample Floorplans: to be finalized during master planning session





5.3 Support Buildings

Monitac has a varied array of buildings available, which are not included in this proposal, including:

- Kitchens / Dining Halls
- Recreation Rooms
- Storage Units
- Workshops
- Classrooms
- Offices
- Laundry Facilities
- Executive Bedrooms



5.4 Construction Supervision

Monitac can offer full turn key services or provide modules and construction supervision only.

5.5 Pricing

TBD

5.6 Delivery Time / Details

TBD based upon requirements Note: Monitac cannot be held responsible for delays at border crossings

5.7 Exclusions

Permits

Visas for Monitac supervisory staff Customs / Tax / Excise / Paperwork Processing Fees Furnishings Preparation of site / Laydown area Civil works External Electrical Distribution Boxes Construction / Assembly of buildings at site Construction plant/equipment including, but not limited to, cranes, forklifts, generators, welding equipment

5.8 Considerations

This proposal is currently based upon manufacturing taking place in the UAE.

Alternatively, for a project of this size, we would be happy to conduct a cost/benefit analysis of the following;

- 1) Base manufacturing to take place in the UAE, finishing to take place at site with local labour;
 - a. Provided by Bokhowa or
 - b. Provided by Monitac

OR



2) Utilisation of our "Portable Factory" concept, conducting a major portion of all of the manufacturing process in Bahrain. Depending on the phasing, deployment schedule, and availability of raw goods (such as containers) and skilled labour, it may be plausible and cost effective to deploy to Bahrain and operate from or near the site.