

Proposal — Kingsford Hotel Bacolod

Building Management System: Supply, Delivery, Installation, Testing and Commissioning

Prepared for: Megaworld Corporation **Project:** Kingsford Hotel Bacolod, Manhattan Street corner Bates, Mandalagan, Bacolod City, Negros Occidental
Date: 2026-04-28 **Reference:** TUEC-issued BMS Points list (Construction Bulletin Oct 2025); MAAP-issued EE Plan (Construction Bulletin No. 8, 2025-11-05)

1. Executive summary

This proposal covers the complete supply, delivery, installation, testing, and commissioning of a Building Management System for Kingsford Hotel Bacolod. The scope serves the hotel’s mechanical plant (3 chillers, 3 cooling towers, 6 calorifiers, 2 steam boilers), Casino MVAC at 2nd Level (DOAS, 2 AHUs with CO sensors, 2 ionizers), 7 Roofdeck PAHUs, hot-water plant for both Lower Ground and Roof Deck zones, and ~68 ventilation fans across the building. The BMS aggregates roughly 753 monitoring and control points, integrates 11 Modbus power meters at the major load centers, and provides a redundant Siemens Desigo CC server platform at the Lower Ground IT room with operator workstations, a graphics display, and a 30-minute UPS.

Total estimated price: **PHP 21.7M** (per BOQ at 06-boq.yaml; final figure subject to RFQ stage and customer clarifications). Schedule: **16 weeks** from contract execution to handover, plus a 6-month refresher visit.

2. Project understanding

The customer brief is to provide complete BMS supply through commissioning for Kingsford Hotel Bacolod. The drawings provided are TUEC-issued BMS Points list (project-stamped Construction Bulletin, October 2025) and a partial MAAP electrical bundle (Construction Bulletin No. 8, November 2025) covering revised power layouts on Basement 1, Ground, 2nd, and 3rd floors plus Load Schedules and Power Riser. The auxiliary set ECE-01..15 covers FDAS and aux-system layouts on every floor.

Although the cover letter uses the word “Rehabilitation,” the supporting drawings are Construction Bulletins for new construction and no existing-system inventory

is in the package. We have classified the project as **greenfield new construction** and are confirming this with the customer (RFI Q-001).

The project is hospitality with a casino MVAC zone at 2nd Level, including a dedicated casino DOAS, two casino AHUs with return-air CO2 monitoring, and two casino-floor ionizers. Casino-floor return-air CO sensors are scoped as 1 per casino-serving AHU/DOAS pending regulator-driven count confirmation (Q-008).

3. Scope

The 14-leaf work breakdown is:

1. Project Management & Engineering (PM, design engineering, submittals, FAT)
2. Material Supply (head-end, network, panels, HVAC field devices, plumbing field devices, power meters, cabling)
3. Installation (mobilization, containment, cable pulling + termination, panel install, device install, network install, head-end install)
4. Programming & Configuration (controller programming, graphics, reports, integration)
5. Testing & Commissioning (pre-comm, P2P, functional, integrated, owner SAT, as-builts)
6. Training & Handover (5-day operator + 3-day engineer + 6-month refresher)

Detailed inclusions, exclusions, and clarifications are in 05-working-docs/C3-inclusions-exclusions.md. Highlights:

- **Excluded:** Per-room guestroom FCU controls (~280 rooms — pending Q-003); domestic-water / sump / sewage pump scope (pending Q-002); Hotel PMS integration (offered as priced option per Q-007); FDAS / CCTV / ACS / PA integration; demolition; after-hours/weekend work.

4. System architecture

The BMS is built around a Siemens Desigo platform: Desigo PXC field controllers in panel-mounted enclosures distributed across 8 BMS field panels (covering 14 logical zones), connected via a BACnet/IP backbone over single-mode fiber to a redundant pair of Desigo CC servers at the Lower Ground IT room. Per-floor unit controllers communicate to their floor's BMS field panel over BACnet MS/TP. Power meters and BTU meters integrate via Modbus RTU/TCP. The chillers

integrate via their native BACnet/IP gateway (HLI), as do the steam boilers (HLI from boiler control panel).

The full topology and switch inventory is in 05-working-docs/A5-network-architecture.md.

5. Cabling and containment

5,033 m total cable length across 194 field cables, 7 trunks (380 m fiber + 700 m MS/TP + per-floor), and 8 panel power feeds. Conduit volume is sized at 35% of total cable length per the project's site-factor table — greenfield BMS-installed last-leg conduit in a tray-fed environment (basis disclosed in B4-site-factors.yaml).

Cable lengths are derived from a per-context typical-range table (A3-route-lengths.yaml) calibrated against the EE/ECE column-grid bays:

- Plant-room cables (panel in same room as device): 12 m typical
- Roofdeck plant-area cables: 15 m typical
- BOH cables on the same floor as the BMS panel: 22 m typical
- Inter-floor risers: 35 m per floor
- Guestroom-corridor cables: 35 m typical (limited use in current scope)
- Panel power feeds: 18 m typical

These ranges are per the agent's Operating Principle #11 reasoned-fallbacks methodology. Once architectural and mechanical layout drawings are supplied (Q-005), per-cable measurement will refine the BOQ $\pm 15\%$.

6. Bill of Quantities

Total estimated price: **PHP 21,747,826** at base subtotal PHP 15,236,740 plus 18% overhead/margin, 8% contingency (drawing-risk uplift), and 12% VAT.

86 line items across 7 WBS top-level groups. 63 of those line items (73.3%) require RFQ-stage pricing — packaged into 12 supplier categories at 09-rfq-package/.

WBS	Group	Estimated subtotal
1.0	Project Management & Engineering	(per BOQ)
2.0	Material Supply	(per BOQ)
3.0	Installation	(per BOQ)
4.0	Programming &	(per BOQ)

WBS	Group	Estimated subtotal
	Configuration	
5.0	Testing & Commissioning	(per BOQ)
6.0	Training & Handover	(per BOQ)

Detailed BOQ at [_deliverables/06-boq.xlsx](#).

7. Schedule

16 weeks from contract execution to handover plus a 6-month deferred refresher. Critical path: Engineering → Procurement → Installation → T&C. Peak labor is 9 site personnel during weeks 8-14. Detailed Gantt at [_deliverables/D1-gantt.png](#).

8. Open items requiring customer clarification

17 RFI items — full list in [08-customer-clarifications.md](#). The four hardest are:

1. **Q-001** — Confirm greenfield classification (cover letter says rehabilitation, drawings indicate new construction)
2. **Q-002** — Confirm plumbing scope (centralized hot water only is provided; domestic water / sump / sewage pumps not in package)
3. **Q-003** — Confirm guestroom FCU controls scope (currently excluded; PHP 8-14M impact if in scope)
4. **Q-004** — Confirm required completion date (16-week assumed schedule)

Other clarifications cover commercial terms (Q-014), brand approvals (Q-012), casino CO sensor count (Q-008), missing electrical sheets (Q-009 / Q-015), and the unresolved PPCAS-14 panel relocation markup on EE-09 (Q-011).

9. Stated assumptions

Per Operating Principle #11, every assumption-driven default is reasoned per project context with basis and source. Full ledger at [07-assumptions.md](#) (35 entries, A-001 through A-035). Notable categories:

- Cable length typical-ranges by context (A-012)
- Conduit fraction 35% (A-028)
- Commercial: Overhead 18%, Contingency 8% (drawing-risk uplift), VAT 12% (A-031)

- Trend strategy: 100% AI/AO/DO + 50% DI + 80% HLI (A-030)
- Brand defaults: Siemens BMS, Dell PCs (A-002)

10. Why us

Megaworld portfolio engagement; Siemens Desigo platform familiarity; standardized methodology for hospitality+casino BMS; transparent assumption-and-clarification framework so the customer sees what's confirmed vs. what's pending.

11. Next steps

1. Customer review of this proposal and the 17-item clarification list.
2. RFI responses inform a revised BOQ.
3. Brand-approval confirmation (Q-012) finalizes RFQ targets.
4. Contract execution → 16-week engagement begins.