

Republic of the Philippines
Department of Health
Baguio General Hospital and Medical Center

Project Title : PROPOSED CCTV SURVEILLANCE SYSTEM

DETAILED ESTIMATES

Item No.	DESCRIPTION	UNIT	QTY	UNIT COST	MATERIALS	LABOR & EQUIPMENT	ESTIMATED DIRECT COST	MARK-UPS IN %		TOTAL MARK-UP		VAT	TOTAL INDIRECT COST	TOTAL COST
								PROFIT	OCM	%	VALUE			
(1)	(2)	(3)	(4)				(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
EC.1	MAIN BUILDING - GROUND FLOOR													
	*Consumables such as Conduit Hangers and Supports (i.e. Unistrat channels, Full-threaded rods, expansion bolts, nuts and washers), RJ-45 Coax Connectors, Cable Ties shall be inclusive within the unit cost of each item													
EC.1.1	4-inch 4 MP 25X Network Speed Dome, FOV: Horizontal field of view: 59.5° to 2.6° (Wide-Tele), Vertical field of view: 35.7° to 1.5° (Wide-Tele), Diagonal field of view: 66.6 to 3.0° (Wide-Tele); Zoom Speed: Approx. 3.6 s (optical lens, wide-tele); Working Distance: 10 mm to 1500 mm (wide-tele); Aperture Range: F1.6 to F3.5; Focal Length: 4.8 mm to 120 mm, 25× optical zoom; IR Distance: 100 m; PTZ Movement Range (Pan): 360° endless; Pan Speed: Configurable, from 0.1°/s to 80°/s, ,Preset speed: 80°/s; Movement Range (Tilt): From -15° to 90° (auto-flip); Patrol Scan: 8 patrols, up to 32 presets for each patrol; Pattern Scan: 4 pattern scans, record time over 10 minutes for each scan;	set	1.00											
EC.1.2	Ethernet Surge Protector ESD/EMP Protection: Absorbing Transient Current with Response to Surge Voltage from 100V/s to 1kV/μs DC Spark-Over Voltage 90V @ 100V/s Maximum Impulse Spark-over Voltage 700V @ 1kV/μs Discharge Current 5kA (Maximum) 0.5kA (Normal) Maximum Insulation Resistance 1G ohm @ 50V Maximum Capacitance 1.0 pF @ 1 MHz Data Line Protection RJ45 10/100/1000 Ethernet IEEE 802.3af PoE Support Shock and Vibration Certification ETSI300-019-1.4 Standard	lot	2.00											
EC.1.3	2 MP Build-in Mic Fixed Turret Network Camera with Mounting Bracket, Fixed lens 4 mm, 1/2.8" Progressive Scan CMOS, IR Range, Up to 30 m	set	3.00											
EC.1.4	2 MP Build-in Mic Fixed Bullet Network Camera High quality imaging with 2 MP resolution Efficient H.265+ compression technology Clear imaging even with strong back lighting due to DWDR technology Water and dust resistant (IP67) Advanced infrared technology with long IR range Built-in microphone for real-time audio security	set	7.00											
EC.1.5	Network Video Recorder, 16-ch 1U 4K NVR Up to 16 channel IP cameras can be connected Supports decoding H.265+/H.265/H.264+/H.264 video formats Up to 4K high-definition live view, storage and playback Up to 8-ch @ 1080p decoding capacity Up to 160 Mbps high incoming bandwidth ensures IP cameras can be connected 1 HDMI and 1 VGA interfaces: both interfaces support independent video output 2 HDDs for continuous video recording	set	1.00											
EC.1.6	Hard Disk, 4 TB, for Surveillance/CCTV	set	1.00											
EC.1.7	Unshielded Twisted Pair (UTP) Cable, CAT-6, Pure Copper, Preferred Color: Orange/Red/Green/Yellow	m	650.00											
EC.1.8	Grounding System (THHN Copper Wire Stranded, 5.5sqmm, Green, with Grounding Rod)	lot	1.00											
EC.1.9	CAT 6 Outdoor Aerial Cable with Steel Messenger, Foil Shielded Twisted Pair (FTP), 23AWG Solid Bare Copper Conductors, inclusive of Clamps (S-Type), House Brackets, Midspan, etc.	m	140.00											

DETAILED ESTIMATES

Item No.	DESCRIPTION	UNIT	QTY	UNIT COST	MATERIALS	LABOR & EQUIPMENT	ESTIMATED DIRECT COST	MARK-UPS IN %		TOTAL MARK-UP		VAT	TOTAL INDIRECT COST	TOTAL COST
								PROFIT	OCM	%	VALUE			
(1)	(2)	(3)	(4)				(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
EC.1.10	24-Port Gigabit L2 Managed Switch with 4 SFP Slots Gigabit Ethernet connections on all ports provide full speed of data transferring L2+ feature—Static Routing, helps route internal traffic for more efficient use of network resources IP-MAC-Port Binding, ACL, Port Security, DoS Defend, Storm control, DHCP Snooping, 802.1X Authentication and Radius provide you robust security strategies L2/L3/L4 QoS and IGMP snooping optimize voice and video application IPv6 support with dual IPv4/IPv6 stack, MLD snooping, IPv6 neighbor discovery Web, CLI (Console Port, Telnet, SSH), SNMP, RMON and Dual Image bring abundant management policies.	set	1.00											
EC.1.11	16 Port Fast Ethernet Smart POE Switch • 16 × 100 Mbps PoE RJ45 ports, 2 × gigabit combos. • IEEE 802.3at/af standard for PoE ports. • Network topology management, alarm push, network health monitor. • 6 KV surge protection for PoE ports. • AF/AT camera can reach up to 300 m in extend mode.	set	1.00											
EC.1.12	Cable Manager, Horizontal, Metal Frame with Cover, 1U	pcs	1.00											
EC.1.13	Galvanized Wire Mesh Cable Tray, W: 100mm H: 54mm L: 3m, with Couplers, Clamp Plate, Nuts & Bolts, Brackets included	ln.m	50.00											
EC.1.14	32" 4K UHD Smart Monitor with HDMI cable and wall mount bracket	set	1.00											
	sub-total													
EC.2	MAIN BUILDING - SECOND FLOOR													
	*Consumables such as Conduit Hangers and Supports (i.e. Unistrat channels, Full-threaded rods, expansion bolts, nuts and washers), RJ-45 Connectors, Cable Ties shall be inclusive within the unit cost of each item													
EC.2.1	2 MP Build-in Mic Fixed Turret Network Camera with Mounting Bracket, Fixed lens 4 mm, 1/2.8" Progressive Scan CMOS, IR Range, Up to 30 m	set	4.00											
EC.2.2	2 MP Build-in Mic Fixed Bullet Network Camera High quality imaging with 2 MP resolution Efficient H.265+ compression technology Clear imaging even with strong back lighting due to DWDR technology Water and dust resistant (IP67) Advanced infrared technology with long IR range Built-in microphone for real-time audio security	set	11.00											
EC.2.3	Network Video Recorder, 16-ch 1U 4K NVR Up to 16 channel IP cameras can be connected Supports decoding H.265+/H.265/H.264+/H.264 video formats Up to 4K high-definition live view, storage and playback Up to 8-ch @ 1080p decoding capacity Up to 160 Mbps high incoming bandwidth ensures IP cameras can be connected 1 HDMI and 1 VGA interfaces: both interfaces support independent video output 2 HDDs for continuous video recording	set	2.00											
EC.2.4	Hard Disk, 4 TB, for Surveillance/CCTV	set	2.00											
EC.2.5	Unshielded Twisted Pair (UTP) Cable, CAT-6, Pure Copper, Preferred Color: Orange/Red/Green/Yellow	m	1,190.00											
EC.2.6	Data Cabinet, wall mount, 6U, 600mm x 600mm (WxD), front glass door with lock, removable side panels, 19" rack, with 2 fans, with 2 fans, PDU, cagenuts and bolts.	set	1.00											

Project Title : PROPOSED CCTV SURVEILLANCE SYSTEM

DETAILED ESTIMATES

Item No.	DESCRIPTION	UNIT	QTY	UNIT COST	MATERIALS	LABOR & EQUIPMENT	ESTIMATED DIRECT COST	MARK-UPS IN %		TOTAL MARK-UP		VAT	TOTAL INDIRECT COST	TOTAL COST
								PROFIT	OCM	%	VALUE			
(1)	(2)	(3)	(4)				(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
EC.2.7	Uninterruptible Power Supply (UPS), Capacity: 650VA/360W or higher; Battery Backup and Surge Protector; On-Line Input Voltage 160-290VAC, single phase; Online Frequency Range (50Hz/60Hz) 45 - 55Hz ±1Hz / 55 - 65Hz ±1Hz; Typical Recharge Time 4 hours to 90%; Outlet type and numbers IEC C13 x 4 / NEMA	set	1.00											
EC.2.8	16 Port Fast Ethernet Smart POE Switch • 16 × 100 Mbps PoE RJ45 ports, 2 × gigabit combos. • IEEE 802.3at/af standard for PoE ports. • Network topology management, alarm push, network health monitor. • 6 KV surge protection for PoE ports. • AF/AT camera can reach up to 300 m in extend mode.	set	2.00											
EC.2.9	Cable Manager, Horizontal, Metal Frame with Cover, 1U	pcs	1.00											
EC.2.10	20 mm dia x 3.00 m PVC Pipe	length	390.00											
EC.2.11	PVC Adapter Lock Nut, 20 mm dia	pcs	580.00											
EC.2.12	Square Box/Pull Box, PVC, 6"x6" with Cover	pcs	45.00											
EC.2.13	Pullbox, G.I., 600x200x200mm, Gauge #16	pcs	1.00											
	sub-total													
EC.3	CANCER INSTITUTE BUILDING - GROUND FLOOR													
	*Consumables such as Conduit Hangers and Supports (i.e. Unistrat channels, Full-threaded rods, expansion bolts, nuts and washers), RJ-45 Connectors, Cable Ties shall be inclusive within the unit cost of each item													
EC.3.1	2 MP Build-in Mic Fixed Turret Network Camera with Mounting Bracket, Fixed lens 4 mm, 1/2.8" Progressive Scan CMOS, IR Range, Up to 30 m	set	6.00											
EC.3.2	2 MP Build-in Mic Fixed Bullet Network Camera High quality imaging with 2 MP resolution Efficient H.265+ compression technology Clear imaging even with strong back lighting due to DWDR technology Water and dust resistant (IP67) Advanced infrared technology with long IR range Built-in microphone for real-time audio security	set	4.00											
EC.3.3	Network Video Recorder, 16-ch 1U 4K NVR Up to 16 channel IP cameras can be connected Supports decoding H.265+/H.265/H.264+/H.264 video formats Up to 4K high-definition live view, storage and playback Up to 8-ch @ 1080p decoding capacity Up to 160 Mbps high incoming bandwidth ensures IP cameras can be connected 1 HDMI and 1 VGA interfaces: both interfaces support independent video output 2 HDDs for continuous video recording	set	1.00											
EC.3.4	Hard Disk, 4 TB, for Surveillance/CCTV	set	1.00											
EC.3.5	Unshielded Twisted Pair (UTP) Cable, CAT-6, Pure Copper, Preferred Color: Orange/Red/Green/Yellow	m	550.00											
EC.3.6	Data Cabinet, wall mount, 12U, 600mm x 600mm (WxD), front glass door with lock, removable side panels, 19" rack, with 2 fans, with 2 fans, PDU, cagenuts and bolts.	set	1.00											
EC.3.7	Uninterruptible Power Supply (UPS), Capacity: 650VA/360W or higher; Battery Backup and Surge Protector; On-Line Input Voltage 160-290VAC, single phase; Online Frequency Range (50Hz/60Hz) 45 - 55Hz ±1Hz / 55 - 65Hz ±1Hz; Typical Recharge Time 4 hours to 90%; Outlet type and numbers IEC C13 x 4 / NEMA	set	1.00											

Republic of the Philippines
Department of Health
Baguio General Hospital and Medical Center

Project Title : PROPOSED CCTV SURVEILLANCE SYSTEM

DETAILED ESTIMATES

Item No.	DESCRIPTION	UNIT	QTY	UNIT COST	MATERIALS	LABOR & EQUIPMENT	ESTIMATED DIRECT COST	MARK-UPS IN %		TOTAL MARK-UP		VAT	TOTAL INDIRECT COST	TOTAL COST
								PROFIT	OCM	%	VALUE			
(1)	(2)	(3)	(4)				(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
EC.3.8	16 Port Fast Ethernet Smart POE Switch • 16 × 100 Mbps PoE RJ45 ports, 2 × gigabit combos. • IEEE 802.3at/af standard for PoE ports. • Network topology management, alarm push, network health monitor. • 6 KV surge protection for PoE ports. • AF/AT camera can reach up to 300 m in extend mode.	set	1.00											
EC.3.9	Cable Manager, Horizontal, Metal Frame with Cover, 1U	pcs	1.00											
EC.3.10	20 mm dia x 3.00 m PVC Pipe	length	155.00											
EC.3.11	PVC Adapter Lock Nut, 20 mm dia	pcs	240.00											
EC.3.12	PVC Long Elbow, 20 mm dia	pcs	70.00											
EC.3.13	Square Box/Pull Box, PVC, 6"x6" with Cover	pcs	26.00											
EC.3.14	Pullbox, G.L., 600x200x200mm, Gauge #16	pcs	1.00											
EC.3.15	32" 4K UHD Smart Monitor with HDMI cable and wall mount bracket	set	1.00											
EC.3.16	24-Port Gigabit L2 Managed Switch with 4 SFP Slots Gigabit Ethernet connections on all ports provide full speed of data transferring L2+ feature——Static Routing, helps route internal traffic for more efficient use of network resources IP-MAC-Port Binding, ACL, Port Security, DoS Defend, Storm control, DHCP Snooping, 802.1X Authentication and Radius provide you robust security strategies L2/L3/L4 QoS and IGMP snooping optimize voice and video application IPv6 support with dual IPv4/IPv6 stack, MLD snooping, IPv6 neighbor discovery Web, CLI (Console Port, Telnet, SSH), SNMP, RMON and Dual Image bring abundant management policies.	set	1.00											
	sub-total													
EC.4	CANCER INSTITUTE BUILDING - BASEMENT FLOOR													
	*Consumables such as Conduit Hangers and Supports (i.e. Unistrat channels, Full-threaded rods, expansion bolts, nuts and washers), RJ-45 Connectors, Cable Ties shall be inclusive within the unit cost of each item													
EC.4.1	2 MP Build-in Mic Fixed Turret Network Camera with Mounting Bracket, Fixed lens 4 mm, 1/2.8" Progressive Scan CMOS, IR Range, Up to 30 m	set	2.00											
EC.4.2	2 MP Build-in Mic Fixed Bullet Network Camera High quality imaging with 2 MP resolution Efficient H.265+ compression technology Clear imaging even with strong back lighting due to DWDR technology Water and dust resistant (IP67) Advanced infrared technology with long IR range Built-in microphone for real-time audio security	set	3.00											
EC.4.3	Unshielded Twisted Pair (UTP) Cable, CAT-6, Pure Copper, Preferred Color: Orange/Red/Green/Yellow	m	100.00											
EC.4.4	Data Cabinet, wall mount, 6U, 600mm x 600mm (WxD), front glass door with lock, removable side panels, 19" rack, with 2 fans, with 2 fans, PDU, cagenuts and bolts.	set	1.00											
EC.4.5	Uninterruptible Power Supply (UPS), Capacity: 650VA/360W or higher; Battery Backup and Surge Protector; On-Line Input Voltage 160-290VAC, single phase; Online Frequency Range (50Hz/60Hz) 45 - 55Hz ±1Hz / 55 - 65Hz ±1Hz; Typical Recharge Time 4 hours to 90%; Outlet type and numbers IEC C13 x 4 / NEMA	set	1.00											

Republic of the Philippines
Department of Health
Baguio General Hospital and Medical Center

Project Title : PROPOSED CCTV SURVEILLANCE SYSTEM

DETAILED ESTIMATES

Item No.	DESCRIPTION	UNIT	QTY	UNIT COST	MATERIALS	LABOR & EQUIPMENT	ESTIMATED DIRECT COST	MARK-UPS IN %		TOTAL MARK-UP		VAT	TOTAL INDIRECT COST	TOTAL COST
								PROFIT	OCM	%	VALUE			
(1)	(2)	(3)	(4)				(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
EC.4.6	16 Port Fast Ethernet Smart POE Switch • 16 × 100 Mbps PoE RJ45 ports, 2 × gigabit combos. • IEEE 802.3at/af standard for PoE ports. • Network topology management, alarm push, network health monitor. • 6 KV surge protection for PoE ports. • AF/AT camera can reach up to 300 m in extend mode.	set	1.00											
EC.4.7	Cable Manager, Horizontal, Metal Frame with Cover, 1U	pcs	1.00											
EC.4.8	20 mm dia x 3.00 m PVC Pipe	length	30.00											
EC.4.9	PVC Adapter Lock Nut, 20 mm dia	pcs	45.00											
EC.4.10	PVC Long Elbow, 20 mm dia	pcs	15.00											
EC.4.11	Square Box/Pull Box, PVC, 6"x6" with Cover	pcs	15.00											
EC.4.12	Pullbox, G.I., 600x200x200mm, Gauge #16	pcs	1.00											
	sub-total													
EC.5	CANCER INSTITUTE BUILDING - SECOND FLOOR													
	*Consumables such as Conduit Hangers and Supports (i.e. Unistrat channels, Full-threaded rods, expansion bolts, nuts and washers), RJ-45 Connectors, Cable Ties shall be inclusive within the unit cost of each item													
EC.5.1	2 MP Build-in Mic Fixed Turret Network Camera with Mounting Bracket, Fixed lens 4 mm, 1/2.8" Progressive Scan CMOS, IR Range, Up to 30 m	set	3.00											
EC.5.2	2 MP Build-in Mic Fixed Bullet Network Camera High quality imaging with 2 MP resolution Efficient H.265+ compression technology Clear imaging even with strong back lighting due to DWDR technology Water and dust resistant (IP67) Advanced infrared technology with long IR range Built-in microphone for real-time audio security	set	1.00											
EC.5.3	Network Video Recorder, 16-ch 1U 4K NVR Up to 16 channel IP cameras can be connected Supports decoding H.265+/H.265/H.264+/H.264 video formats Up to 4K high-definition live view, storage and playback Up to 8-ch @ 1080p decoding capacity Up to 160 Mbps high incoming bandwidth ensures IP cameras can be connected 1 HDMI and 1 VGA interfaces: both interfaces support independent video output 2 HDDs for continuous video recording	set	1.00											
EC.5.4	Hard Disk, 4 TB, for Surveillance/CCTV	set	1.00											
EC.5.5	Unshielded Twisted Pair (UTP) Cable, CAT-6, Pure Copper, Preferred Color: Orange/Red/Green/Yellow	m	80.00											
EC.5.6	Data Cabinet, wall mount, 6U, 600mm x 600mm (WxD), front glass door with lock, removable side panels, 19" rack, with 2 fans, with 2 fans, PDU, cagenuts and bolts.	set	1.00											
EC.5.7	Uninterruptible Power Supply (UPS), Capacity: 650VA/360W or higher; Battery Backup and Surge Protector; On-Line Input Voltage 160-290VAC, single phase; Online Frequency Range (50Hz/60Hz) 45 - 55Hz ±1Hz / 55 - 65Hz ±1Hz; Typical Recharge Time 4 hours to 90%; Outlet type and numbers IEC C13 x 4 / NEMA	set	1.00											
EC.5.8	16 Port Fast Ethernet Smart POE Switch • 16 × 100 Mbps PoE RJ45 ports, 2 × gigabit combos. • IEEE 802.3at/af standard for PoE ports. • Network topology management, alarm push, network health monitor. • 6 KV surge protection for PoE ports. • AF/AT camera can reach up to 300 m in extend mode.	set	1.00											
EC.5.9	Cable Manager, Horizontal, Metal Frame with Cover, 1U	pcs	1.00											
EC.5.10	20 mm dia x 3.00 m PVC Pipe	length	25.00											
EC.5.11	PVC Adapter Lock Nut, 20 mm dia	pcs	38.00											

Project Title : PROPOSED CCTV SURVEILLANCE SYSTEM

DETAILED ESTIMATES

Item No.	DESCRIPTION	UNIT	QTY	UNIT COST	MATERIALS	LABOR & EQUIPMENT	ESTIMATED DIRECT COST	MARK-UPS IN %		TOTAL MARK-UP		VAT	TOTAL INDIRECT COST	TOTAL COST
								PROFIT	OCM	%	VALUE			
(1)	(2)	(3)	(4)				(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
EC.5.12	PVC Long Elbow, 20 mm dia	pcs	10.00											
EC.5.13	Square Box/Pull Box, PVC, 6"x6" with Cover	pcs	4.00											
EC.5.14	Pullbox, G.I., 600x200x200mm, Gauge #16	pcs	1.00											
EC.5.15	32" 4K UHD Smart Monitor with HDMI cable and wall mount bracket	set	1.00											
	sub-total													
EC.6	INFECTIOUS DISEASES BUILDING (IDB) - GROUND FLOOR													
	*Consumables such as Conduit Hangers and Supports (i.e. Unistrat channels, Full-threaded rods, expansion bolts, nuts and washers), RJ-45 Connectors, Cable Ties shall be inclusive within the unit cost of each item													
EC.6.1	2 MP Build-in Mic Fixed Turret Network Camera with Mounting Bracket, Fixed lens 4 mm, 1/2.8" Progressive Scan CMOS, IR Range, Up to 30 m	set	4.00											
EC.6.2	2 MP Build-in Mic Fixed Bullet Network Camera High quality imaging with 2 MP resolution Efficient H.265+ compression technology Clear imaging even with strong back lighting due to DWDR technology Water and dust resistant (IP67) Advanced infrared technology with long IR range Built-in microphone for real-time audio security	set	3.00											
EC.6.3	Network Video Recorder, 16-ch 1U 4K NVR Up to 16 channel IP cameras can be connected Supports decoding H.265+/H.265/H.264+/H.264 video formats Up to 4K high-definition live view, storage and playback Up to 8-ch @ 1080p decoding capacity Up to 160 Mbps high incoming bandwidth ensures IP cameras can be connected 1 HDMI and 1 VGA interfaces: both interfaces support independent video output 2 HDDs for continuous video recording	set	1.00											
EC.6.4	Hard Disk, 4 TB, for Surveillance/CCTV	set	1.00											
EC.6.5	Unshielded Twisted Pair (UTP) Cable, CAT-6, Pure Copper, Preferred Color: Orange/Red/Green/Yellow	m	305.00											
EC.6.6	Data Cabinet, wall mount, 6U, 600mm x 600mm (WxD), front glass door with lock, removable side panels, 19" rack, with 2 fans, with 2 fans, PDU, cagenuts and bolts.	set	1.00											
EC.6.7	Uninterruptible Power Supply (UPS), Capacity: 650VA/360W or higher; Battery Backup and Surge Protector; On-Line Input Voltage 160-290VAC, single phase; Online Frequency Range (50Hz/60Hz) 45 - 55Hz ±1Hz / 55 - 65Hz ±1Hz; Typical Recharge Time 4 hours to 90%; Outlet type and numbers IEC C13 x 4 / NEMA	set	1.00											
EC.6.8	16 Port Fast Ethernet Smart PoE Switch • 16 × 100 Mbps PoE RJ45 ports, 2 × gigabit combos. • IEEE 802.3at/af standard for PoE ports. • Network topology management, alarm push, network health monitor. • 6 KV surge protection for PoE ports. • AF/AT camera can reach up to 300 m in extend mode.	set	1.00											
EC.6.9	Cable Manager, Horizontal, Metal Frame with Cover, 1U	pcs	1.00											
EC.6.10	PVC Slotted Cable Duct, 2" x 2" x 2 meters	pcs	25.00											
EC.6.11	Pull Box/Square Box, PVC, 6"x6" with Cover	pcs	7.00											

Republic of the Philippines
Department of Health
Baguio General Hospital and Medical Center

Project Title : PROPOSED CCTV SURVEILLANCE SYSTEM

DETAILED ESTIMATES

Item No.	DESCRIPTION	UNIT	QTY	UNIT COST	MATERIALS	LABOR & EQUIPMENT	ESTIMATED DIRECT COST	MARK-UPS IN %		TOTAL MARK-UP		VAT	TOTAL INDIRECT COST	TOTAL COST
								PROFIT	OCM	%	VALUE			
(1)	(2)	(3)	(4)				(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
EC.6.12	24-Port Gigabit L2 Managed Switch with 4 SFP Slots Gigabit Ethernet connections on all ports provide full speed of data transferring L2+ feature——Static Routing, helps route internal traffic for more efficient use of network resources IP-MAC-Port Binding, ACL, Port Security, DoS Defend, Storm control, DHCP Snooping, 802.1X Authentication and Radius provide you robust security strategies L2/L3/L4 QoS and IGMP snooping optimize voice and video application IPv6 support with dual IPv4/IPv6 stack, MLD snooping, IPv6 neighbor discovery Web, CLI (Console Port, Telnet, SSH), SNMP, RMON and Dual Image bring abundant management policies.	set	1.00											
	sub-total													
EC.7	FLAVIER BUILDING - BASEMENT & GROUND FLOOR													
	*Consumables such as Conduit Hangers and Supports (i.e. Unistrat channels, Full-threaded rods, expansion bolts, nuts and washers), RJ-45 Connectors, Cable Ties shall be inclusive within the unit cost of each item													
EC.7.1	2 MP Build-in Mic Fixed Turret Network Camera with Mounting Bracket, Fixed lens 4 mm, 1/2.8" Progressive Scan CMOS, IR Range, Up to 30 m	set	7.00											
EC.7.2	2 MP Build-in Mic Fixed Bullet Network Camera High quality imaging with 2 MP resolution Efficient H.265+ compression technology Clear imaging even with strong back lighting due to DWDR technology Water and dust resistant (IP67) Advanced infrared technology with long IR range Built-in microphone for real-time audio security	set	4.00											
EC.7.3	Network Video Recorder, 16-ch 1U 4K NVR Up to 16 channel IP cameras can be connected Supports decoding H.265+/H.265/H.264+/H.264 video formats Up to 4K high-definition live view, storage and playback Up to 8-ch @ 1080p decoding capacity Up to 160 Mbps high incoming bandwidth ensures IP cameras can be connected 1 HDMI and 1 VGA interfaces: both interfaces support independent video output 2 HDDs for continuous video recording	set	1.00											
EC.7.4	Hard Disk, 4 TB, for Surveillance/CCTV	set	1.00											
EC.7.5	Unshielded Twisted Pair (UTP) Cable, CAT-6, Pure Copper, Preferred Color: Orange/Red/Green/Yellow	m	1,430.00											
EC.7.6	20 mm dia x 3.00 m PVC Pipe	length	10.00											
EC.7.7	PVC Adapter Lock Nut, 20 mm dia	pcs	16.00											
EC.7.8	PVC Long Elbow, 20 mm dia	pcs	1.00											
EC.7.9	Pull Box/Square Box, PVC, 6"x6" with Cover	pcs	15.00											
EC.7.10	Data Cabinet, wall mount, 6U, 600mm x 600mm (WxD), front glass door with lock, removable side panels, 19" rack, with 2 fans, with 2 fans, PDU, cagenuts and bolts.	set	1.00											
EC.7.11	Uninterruptible Power Supply (UPS), Capacity: 650VA/360W or higher; Battery Backup and Surge Protector; On-Line Input Voltage 160-290VAC, single phase; Online Frequency Range (50Hz/60Hz) 45 - 55Hz ±1Hz / 55 - 65Hz ±1Hz; Typical Recharge Time 4 hours to 90%; Outlet type and numbers IEC C13 x 4 / NEMA	set	2.00											

Republic of the Philippines
Department of Health
Baguio General Hospital and Medical Center

Project Title : PROPOSED CCTV SURVEILLANCE SYSTEM

DETAILED ESTIMATES

Item No.	DESCRIPTION	UNIT	QTY	UNIT COST	MATERIALS	LABOR & EQUIPMENT	ESTIMATED DIRECT COST	MARK-UPS IN %		TOTAL MARK-UP		VAT	TOTAL INDIRECT COST	TOTAL COST
								PROFIT	OCM	%	VALUE			
(1)	(2)	(3)	(4)				(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
EC.7.12	16 Port Fast Ethernet Smart POE Switch • 16 × 100 Mbps PoE RJ45 ports, 2 × gigabit combos. • IEEE 802.3at/af standard for PoE ports. • Network topology management, alarm push, network health monitor. • 6 KV surge protection for PoE ports. • AF/AT camera can reach up to 300 m in extend mode.	set	1.00											
EC.7.13	Cable Manager, Horizontal, Metal Frame with Cover, 1U	pcs	1.00											
EC.7.14	Galvanized Wire Mesh Cable Tray, W: 100mm H: 54mm L: 3m, with Couplers, Clamp Plate, Nuts & Bolts, Brackets included	ln.m	15.00											
EC.7.15	PVC Slotted Cable Duct, 2" x 2" x 2 meters	ln.m	25.00											
EC.7.16	Pullbox, G.I., 600x200x200mm, Gauge #16	pcs	2.00											
EC.7.17	24-Port Gigabit L2 Managed Switch with 4 SFP Slots Gigabit Ethernet connections on all ports provide full speed of data transferring L2+ feature——Static Routing, helps route internal traffic for more efficient use of network resources IP-MAC-Port Binding, ACL, Port Security, DoS Defend, Storm control, DHCP Snooping, 802.1X Authentication and Radius provide you robust security strategies L2/L3/L4 QoS and IGMP snooping optimize voice and video application IPv6 support with dual IPv4/IPv6 stack, MLD snooping, IPv6 neighbor discovery Web, CLI (Console Port, Telnet, SSH), SNMP, RMON and Dual Image bring abundant management policies.	set	1.00											
EC.7.18	32" 4K UHD Smart Monitor with HDMI cable and wall mount bracket	set	1.00											
	sub-total													
EC.8	OPD BUILDING - ALL FLOORS													
	*Consumables such as Conduit Hangers and Supports (i.e. Unistrat channels, Full-threaded rods, expansion bolts, nuts and washers), RJ-45/RJ-11/BNC/RG-6 Coax Connectors, Cable Ties shall be inclusive within the unit cost of each item													
EC.8.1	2 MP Build-in Mic Fixed Turret Network Camera with Mounting Bracket, Fixed lens 4 mm, 1/2.8" Progressive Scan CMOS, IR Range, Up to 30 m	set	20.00											
EC.8.2	2 MP Build-in Mic Fixed Bullet Network Camera High quality imaging with 2 MP resolution Efficient H.265+ compression technology Clear imaging even with strong back lighting due to DWDR technology Water and dust resistant (IP67) Advanced infrared technology with long IR range Built-in microphone for real-time audio security	set	8.00											
EC.8.3	Network Video Recorder, 16-ch 1U 4K NVR Up to 16 channel IP cameras can be connected Supports decoding H.265+/H.265/H.264+/H.264 video formats Up to 4K high-definition live view, storage and playback Up to 8-ch @ 1080p decoding capacity Up to 160 Mbps high incoming bandwidth ensures IP cameras can be connected 1 HDMI and 1 VGA interfaces: both interfaces support independent video output 2 HDDs for continuous video recording	set	2.00											
EC.8.4	Hard Disk, 4 TB, for Surveillance/CCTV	set	2.00											
EC.8.5	Unshielded Twisted Pair (UTP) Cable, CAT-6, Pure Copper, Preferred Color: Orange/Red/Green/Yellow	m	1,120.00											
EC.8.6	32" 4K UHD Smart Monitor with HDMI cable and wall mount bracket	set	2.00											
EC.8.7	20 mm dia x 3.00 m PVC Pipe	length	370.00											
EC.8.8	PVC Adapter Lock Nut, 20 mm dia	pcs	550.00											

Republic of the Philippines
Department of Health
Baguio General Hospital and Medical Center

Project Title : PROPOSED CCTV SURVEILLANCE SYSTEM

DETAILED ESTIMATES

Item No.	DESCRIPTION	UNIT	QTY	UNIT COST	MATERIALS	LABOR & EQUIPMENT	ESTIMATED DIRECT COST	MARK-UPS IN %		TOTAL MARK-UP		VAT	TOTAL INDIRECT COST	TOTAL COST
								PROFIT	OCM	%	VALUE			
(1)	(2)	(3)	(4)				(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
EC.8.9	PVC Long Elbow, 20 mm dia	pcs	150.00											
EC.8.10	Data Cabinet, wall mount, 6U, 600mm x 600mm (WxD), front glass door with lock, removable side panels, 19" rack, with 2 fans, with 2 fans, PDU, cagenuts and bolts.	set	6.00											
EC.8.11	Uninterruptible Power Supply (UPS), Capacity: 650VA/360W or higher; Battery Backup and Surge Protector; On-Line Input Voltage 160-290VAC, single phase; Online Frequency Range (50Hz/60Hz) 45 - 55Hz ±1Hz / 55 - 65Hz ±1Hz; Typical Recharge Time 4 hours to 90%; Outlet type and numbers IEC C13 x 4 / NEMA	set	7.00											
EC.8.12	8-Port Fast Ethernet Unmanaged PoE Switch, 1x100Mbps Hi-PoE port, 7x100Mbps PoE ports and 2x1GB uplinks, 6KV protection	set	5.00											
EC.8.13	16 Port Fast Ethernet Smart POE Switch • 16 × 100 Mbps PoE RJ45 ports, 2 × gigabit combos. • IEEE 802.3at/af standard for PoE ports. • Network topology management, alarm push, network health monitor. • 6 KV surge protection for PoE ports. • AF/AT camera can reach up to 300 m in extend mode.	set	1.00											
EC.8.14	24-Port Gigabit L2 Managed Switch with 4 SFP Slots Gigabit Ethernet connections on all ports provide full speed of data transferring L2+ feature—Static Routing, helps route internal traffic for more efficient use of network resources IP-MAC-Port Binding, ACL, Port Security, DoS Defend, Storm control, DHCP Snooping, 802.1X Authentication and Radius provide you robust security strategies L2/L3/L4 QoS and IGMP snooping optimize voice and video application IPv6 support with dual IPv4/IPv6 stack, MLD snooping, IPv6 neighbor discovery Web, CLI (Console Port, Telnet, SSH), SNMP, RMON and Dual Image bring abundant management policies.	set	1.00											
EC.8.15	Cable Manager, Horizontal, Metal Frame with Cover, 1U	pcs	6.00											
EC.8.16	Square Box/Pull Box, PVC, 6"x6" with Cover	pcs	80.00											
EC.8.17	Pullbox, G.I., 600x200x200mm, Gauge #16	pcs	6.00											
	sub-total						-	-	-		-	-	-	-
	GRAND TOTAL						-	-	-		-	-	-	-