

TERMS OF REFERENCE

SUPPLY, INSTALLATION, CONFIGURATION, TESTING AND COMMISSIONING OF PROJECT AURORA: QUEZON CITY GOVERNMENT UNIFIED CCTV COMMAND SYSTEM PHASE 2

I. BACKGROUND

The vision of Quezon City is to sustain itself as a Quality Community, a progressive and peaceful, clean and orderly place, conducive and hospitable to living, employment, and business; this is consistent with the City Government's pursuit of United Nations Sustainable Development Goal (SDG) No. 11, to make cities and human settlements inclusive, safe, resilient, and sustainable.

To achieve a safer and more resilient city, the Quezon City Government and Quezon City Police District (QCPD) invest on Peace and Order Modernization Programs, one of which is to augment additional CCTV Street Cameras in Strategic Areas within the City's jurisdiction. These cameras are on top of the existing 242 Cameras installed last 2021 in 158 locations in the city.

Through these technological advances, it will both prevent crimes from happening, can quickly solve criminal cases, and investigate accidents within material evidence. It will be easy for the Quezon City Government and Quezon City Police District to provide correct information relative to the investigation and non-classified information for other people.

II. PROJECT DESCRIPTION

Project Aurora: Quezon City Government Unified CCTV Command System Phase 2 is a premiere plan of the Local Government and QCPD that requires additional 543 CCTV Cameras in 320 locations and a complete set-up of an IP-Based Surveillance System over a private and secured network in Quezon City on top of the existing procured and installed under phase 1.

III. OBJECTIVES

To ensure Peace, Orderliness and Public safety through an IP-Surveillance System featuring additional 543 CCTV Cameras installed in 320 strategic locations within Quezon City.

IV. PROJECT SCOPE OF WORK

The equipment and devices will be deployed along the streets of Quezon City. The project requires the complete set-up of an IP-Based Surveillance System. The project shall include the complete set-up of a unified QC City Hall and QCPD Surveillance and Cloud Monitoring Platform. QCPD will monitor all additional street cameras.

QCG PROJECT AURORA PHASE-2 CAMERA LOCATION

POLICE STATION NO.	AREA/LOCATIONS	TYPE OF CAMERA		TOTAL NO. OF CAMERAS
		BULLET	PTZ	
P O L I C E S T A T I O N 1	1. Maximo Viola Corner Sto Domingo Street Brgy. Balingasa	1	0	1 - Bullet
	2. A. Bonifacio Corner Madrilejo St. Brgy. Balingasa	1	1	1 - Bullet & 1 - PTZ
	3. 11 th Avenue Mercury Corner A. Bonifacio Avenue Brgy. Pag-ibig sa Nayon	1	1	1 - Bullet & 1 - PTZ
	4. Intersection of Old Samson & Kaingin Rd Brgy. Apolonio Samson	1	0	1 - Bullet
	5. 76 Interior Kaingin Road Brgy. Apolonio Samson	1	0	1 - Bullet
	6. A. Bonifacio Avenue Corner J. Pineda Pag-ibig sa Nayon	1	0	1 - Bullet
	7. A. Bonifacio Avenue Corner 7 th Avenue Pag-ibig sa Nayon	1	0	1 - Bullet
	8. Malaya Corner Cordillera Brgy. Maharlika	2	0	2 - Bullet
	9. Agudo Corner A. Bonifacio Brgy. San Jose	2	0	2 - Bullet
	10. C-3 Corner Cahataan Brgy. San Jose	1	0	1 - Bullet
	11. Mauban Corner C-3 Brgy. San Jose	1	0	1 - Bullet
	12. G. Roxas Corner G. Araneta Brgy. Manresa	1	0	1 - Bullet
	13. Cordillera Corner Maynilad Brgy. Saint Peter	2	0	2 - Bullet
	14. A. Boni Corner Mariveles Brgy. Paang Bundok	2	0	2 - Bullet
	15. Hernan Street Corner N.S. Amoranto Sr. Brgy. Salvacion	1	0	1 - Bullet
	16. Talayan Road Corner Calamba Brgy. Talayan	1	0	1 - Bullet
	17. Banawe Corner Ma. Clara Street Brgy. Sto. Domingo	2	0	2 - Bullet
	18. Banawe Corner Quezon Avenue Brgy. Sto. Domingo	1	1	1 - Bullet & 1 - PTZ
	19. Biak na Bato Corner P. Florentino Brgy. Sto. Domingo	1	0	1 - Bullet
	20. Araneta Corner Ma. Clara Brgy. Talayan	1	0	1 - Bullet
P O L I C E S T A T I O N 2	1. FPJ Avenue Corner Gen. Lim Sy., Brgy. Sta. Cruz, QC	1	0	1 - Bullet
	2. Along Quezon Avenue in Front of Fishermall, Brgy. Sta. Cruz	1	1	1 - Bullet & 1 - PTZ
	3. Corumi Corner Del Monte Avenue, Brgy. Masambong	1	0	1 - Bullet
	4. FPJ Avenue Corner Pitimini St., Brgy. Del Monte	1	0	1 - Bullet
	5. West Riverside Corner Del Monte, Brgy. Damayan	2	0	2 - Bullet
	6. Alhambra St. Corner San Pedro, Brgy. Damayan	1	0	1 - Bullet
	7. Del Monte Avenue Corner Petros, Brgy. Nayong Kanluran	1	0	1 - Bullet
	8. Bernardo Corner De Vera, Brgy. Mariblo	1	0	1 - Bullet
	9. Dangay St. Corner Muñoz, Brgy. Veterans Village	1	0	1 - Bullet
	10. Talipapa, Brgy. San Antonio	1	0	1 - Bullet
	11. San Antonio St. Corner Sto. Niño St., Brgy. San Antonio	1	0	1 - Bullet
	12. West Ave Corner Del Monte, Brgy. Paltok	2	1	2 - Bullet & 1 - PTZ
	13. Anakbayan St. (Dulo), Brgy. Paltok	1	0	1 - Bullet
	14. EDSA Corner East Lawin, Brgy. Phlani	1	0	1 - Bullet
	15. EDSA Lemon Square, Brgy. Katipunan	1	0	1 - Bullet
	16. JJ Luna Corner MH Del Pilar, Brgy. Bungad	1	0	1 - Bullet
	17. West Ave Corner Examiner (Hapchan), Brgy. West Triangle	1	0	1 - Bullet
	18. QA Corner Examiner, Brgy. West Triangle	2	0	2 - Bullet
	19. FPJ Avenue-Bayamtel, Brgy. San Antonio	1	0	1 - Bullet
	20. Zamora St. (Frisco Market), Brgy. Damayan	1	0	1 - Bullet
P O L I C E S T A T I O N 3	1. Congressional Avenue Corner Sinagtala, Brgy. Bahay Toro	1	0	1 - Bullet
	2. Villa Socorro St. Sitio Militar, Brgy. Bahay Toro	2	0	2 - Bullet
	3. Congressional Avenue Corner Visayas Avenue, Brgy. Bahay Toro	1	1	1 - Bullet & 1 - PTZ
	4. Congressional Avenue Corner Jupiter St. Brgy. Bahay Toro	1	0	1 - Bullet
	5. F. Carlos GK Brgy. Baesa	1	0	1 - Bullet
	6. SB Road Sitio Pajo GK Brgy. Baesa	1	0	1 - Bullet
	7. Ilalim Ng Tulay, Brgy. Balon Bato	1	0	1 - Bullet
	8. Road 20 Corner Bayanihan Drive, Brgy. Bahay Toro	1	0	1 - Bullet
	9. Pook Masagana Corner Road 20 Extension, Brgy. Bahay Toro	1	0	1 - Bullet
	10. Mindanao Avenue Footbridge Tandang Sora Avenue Brgy. Tandang Sora	1	1	1 - Bullet & 1 - PTZ
	11. West Service Road Brgy. Unang Sigaw	1	0	1 - Bullet
	12. Congressional Corner Hereford St. Brgy. Bahay Toro	1	0	1 - Bullet
	13. Quirino Highway Gualguera Drive, Brgy. Talipapa,	2	0	2 - Bullet
	14. Pema Road Corner EDSA Bahay Toro	2	0	2 - Bullet
	15. General Avenue Corner Road 20 Brgy. Bahay Toro	1	0	1 - Bullet
	16. Howmart Road Corner EDSA Brgy. Apolonio Samson	1	1	1 - Bullet & 1 - PTZ
	17. Mindanao Avenue Corner Old Sauyo Road Brgy. Talipapa	2	0	2 - Bullet
	18. Quirino Highway Corner Mendez Road Brgy. Baesa	2	0	2 - Bullet
	19. Production St. Corner Premium St. Brgy. Sangandaan	1	0	1 - Bullet
	20. Mindanao Avenue Corner Road 20 Brgy. Bahay Toro	2	0	2 - Bullet

P O L I C E S T A T I O N 4	1. Nova Stop Light, 975 Quirino Highway, Brgy. Nova Proper	2	1	2 - Bullet & 1 - PTZ
	2. Katipunan Avenue SB Road, General Luis Brgy Nagkaisang Nayon	1	2	1 - Bullet & 2 - PTZ
	3. Along Damong Maliit Corner Queensland Subdivision, Bgy. Nagkaisang Nayon	2	0	2 - Bullet
	4. Katipunan Avenue Corner King Alexander Kingspoint, Brgy. Bagbag	1	0	1 - Bullet
	5. Along Gen Luis in front of Savemore Supermarket, Brgy. Nova Proper	1	1	1 - Bullet & 1 - PTZ
	6. Gen Luis Corner Buenamar, Brgy Nova Proper	2	0	2 - Bullet
	7. Along Don Julio Gregorio St. (Old Sauyo Road) Infront of Caltex Brgy. Sauyo	1	1	1 - Bullet & 1 - PTZ
	8. Along General Luis Corner Damong Maliit Road Brgy. Nagkaisang Nayon	1	1	1 - Bullet & 1 - PTZ
	9. Along Quirino Highway Corner Villareal St., Brgy Gulod	1	1	1 - Bullet & 1 - PTZ
	10. Along Quirino Highway Corner Nitang Avenue Brgy Gulod	1	2	1 - Bullet & 2 - PTZ
	11. Along Quirino Highway Corner P Dela Cruz, Brgy San Bartolome	3	0	3 - Bullet
	12. Sauyo Road Infront of Brgy. Hall Sauyo	1	0	1 - Bullet
	13. Along Quirino Highway RP Sea Oil, Brgy. Gulod	1	1	1 - Bullet & 1 - PTZ
	14. SM Novaliches Along Quirino Highway	1	1	1 - Bullet & 1 - PTZ
	15. In Front of Nova Mall Along Quirino Highway, Brgy. Nova Proper	2	0	2 - Bullet
	16. Belen St. Corner Sta. Trinidad Brgy. Gulod	1	0	1 - Bullet
	17. Along Quirino Highway Corner Kingspoint Subdivision, Brgy. Bagbag	1	1	1 - Bullet & 1 - PTZ
	18. Nitang Avenue Corner Kabuhayan St., Brgy. Gulod	1	0	1 - Bullet
	19. Along Quirino Corner Bernardino St., Brgy. Bagbag	1	1	1 - Bullet & 1 - PTZ
	20. Banahaw St., Brgy. Nagkaisang Nayon	1	2	1 - Bullet & 2 - PTZ
P O L I C E S T A T I O N 5	1. Commonwealth Avenue corner Regalado Avenue (Fairview Center Mall)	1	0	1 - Bullet
	2. Regalado Avenue Corner Republic Avenue (Intersection)	1	0	1 - Bullet
	3. Dahlia Avenue Corner Lilac Street (Petron Gasoline Station)	1	0	1 - Bullet
	4. Commonwealth Avenue Corner Fairlane Street (7-Eleven)	1	0	1 - Bullet
	5. Commonwealth Avenue Corner Camaro Street (Eastwest Bank)	2	0	2 - Bullet
	6. Commonwealth Avenue Corner Winston Street (BDO Unibank)	1	0	1 - Bullet
	7. Dahlia Avenue Corner Chestnut (Jetti Gasoline Station)	1	0	1 - Bullet
	8. Orchid Street Corner Lilac Street (CUL Transport)	1	0	1 - Bullet
	9. Commonwealth Avenue Corner Atherton Street (Stoplight)	2	0	2 - Bullet
	10. Commonwealth Avenue Corner Regalado Highway (Stoplight)	1	0	1 - Bullet
	11. Commonwealth Avenue Corner Mindanao Avenue Extension (Kapitan Gimmo Restaurant)	1	0	1 - Bullet
	12. Regalado Highway Corner Bristol Street (AMA Computer College)	1	0	1 - Bullet
	13. Dollar Street Corner Mark Street (AllDay Convenience Store)	1	0	1 - Bullet
	14. Drachma Street (Open Street)	1	0	1 - Bullet
	15. Commonwealth Avenue (UnoFuel - Subaru Motors)	1	0	1 - Bullet
	16. Rizal Street (Gulod Arko)	1	0	1 - Bullet
	17. Engineer Street corner Mabini Street (Sta Lucia Arko)	1	0	1 - Bullet
	18. Rizal Street Corner Abad Santos Street (Brother Sun, Sister Moon Academy)	1	0	1 - Bullet
	19. Rizal Street Corner Mabini Street (Southstar Drugstore)	1	0	1 - Bullet
	20. Rizal Street Corner Silang Street (Sta Lucia High School)	1	0	1 - Bullet
P O L I C E S T A T I O N 6	1. Alfa Village Corner Monotoc, (Family Mart)	2	1	2 - Bullet & 1 - PTZ
	2. Puregold Footbridge (Northbound) along Commonwealth Avenue	4	1	4 - Bullet & 1 - PTZ
	3. Road 2 Lakas Street (Left Side of Home Depot)	4	2	4 - Bullet & 2 - PTZ
	4. 165 Road 2 Lakas Street, (Market Sapang Kangkong)	4	2	4 - Bullet & 2 - PTZ
	5. Don Mariano Marcos Avenue (Northbound) Along Commonwealth Avenue	2	1	2 - Bullet & 1 - PTZ
	6. 44 Commonwealth Avenue near in Puregold Jr and Mary the Queen College (Northbound)	2	1	2 - Bullet & 1 - PTZ
	7. Commonwealth Avenue corner Alley 6 (Public Wet Market) near in BATODA (Northbound)	2	0	2 - Bullet
	8. BATODA Footbridge (Northbound) Facing Commonwealth Avenue and Going to Sandiganbayan Footbridge (Left Side)	0	2	2 - PTZ
	9. Kalayaan C Tribu Meralco Post (At the back of COA)	2	0	2 - Bullet
	10. Kalayaan B Corner Kaibigan Street (Yakap Day Care Center)	2	1	2 - Bullet & 1 - PTZ
	11. Taniman Street Corner Taniman Covered Court (Telephone Post)	2	0	2 - Bullet
	12. Kalayaan C Footbridge along Commonwealth Avenue Northbound (Left Side)	0	1	1 - PTZ
	13. Along IBP Road corner Kasayahan Street (Talipapa)	0	1	1 - PTZ
	14. Commonwealth Market Footbridge (Southbound) in front of Commonwealth Market	0	1	1 - PTZ
	15. Riverside under Footbridge (Southbound) along Commonwealth Avenue	1	1	1 - Bullet & 1 - PTZ
	16. Katibayan Street Corner Kasunduan Street (South Star Drug along Katuparan)	0	1	1 - PTZ
	17. Commonwealth Avenue (Northbound) Corner Katipunan Street (Left Side of Commonwealth Elementary School)	1	0	1 - Bullet
	18. Don Fabian Street Under Footbridge (Southbound)	2	0	2 - Bullet
	19. Commonwealth Avenue (Northbound) Soliven Under Footbridge	1	0	1 - Bullet
	20. Pinagkaisa Street Corner Alonvera Street (LC TODA)	2	1	2 - Bullet & 1 - PTZ

P O L I C E S T A T I O N 7	1. Aurora Boulevard Corner General Romulo Avenue	2	0	2 - Bullet
	2. P. Tuazon Boulevard Corner 13 th Avenue	2	0	2 - Bullet
	3. 13 th Avenue Corner Main Avenue	1	0	1 - Bullet
	4. 15 th Avenue Corner Don Jose St.	1	0	1 - Bullet
	5. Aurora Boulevard Corner 20 th Avenue (Facing Stoplight & Intersection)	1	1	1 - Bullet & 1 - PTZ
	6. Princeton St. Corner 15 th Avenue	2	0	2 - Bullet
	7. Tuazon Boulevard Corner 20 th Avenue	1	0	1 - Bullet
	8. Aurora Boulevard Corner Annapolis	2	1	2 - Bullet & 1 - PTZ
	9. EDSA Corner Ermin Garcia	1	1	1 - Bullet & 1 - PTZ
	10. Miami Corner Columbia	2	0	2 - Bullet
	11. Along EDSA Footbridge Corner Aurora Boulevard	2	0	2 - Bullet
	12. Benitez Corner Aurora	2	0	2 - Bullet
	13. Arayat Corner Pinatubo	2	0	2 - Bullet
	14. Banahaw Corner Benitez	2	0	2 - Bullet
	15. Aurora Boulevard Corner Mangga	2	0	2 - Bullet
	16. P Tuazon Boulevard Corner C. Benitez	1	1	1 - Bullet & 1 - PTZ
	17. C. Benitez Corner Bonny Serrano, Brgy Horseshoe (Right)	1	1	1 - Bullet & 1 - PTZ
	18. Aurora Boulevard Corner Gilmore	1	1	1 - Bullet & 1 - PTZ
	19. Aurora Boulevard Corner Broadway	2	0	2 - Bullet
	20. C. Benitez Corner Bonny Serrano, Brgy Crame (Left)	1	0	1 - Bullet
P O L I C E S T A T I O N 8	1. Aurora Boulevard Corner 20 th Avenue, Brgy. Mangga (Facing Toward TIP)	1	1	1 - Bullet & 1 - PTZ
	2. Aurora Boulevard Corner Anonas St., Brgy. Bagumbuhay	1	1	1 - Bullet & 1 - PTZ
	3. Aurora Boulevard Corner F. Castillo St., Brgy. Bagumbuhay	1	1	1 - Bullet & 1 - PTZ
	4. Aurora Boulevard Corner Lauan St., Brgy. Marilag	1	1	1 - Bullet & 1 - PTZ
	5. Aurora Boulevard Corner JP Rizal St., Brgy. Marilag	1	1	1 - Bullet & 1 - PTZ
	6. JP Rizal St. Corner P. Tuazon Boulevard, Brgy. Marilag	0	2	2 - PTZ
	7. JP Rizal St. Corner Rajah Matanda St., Brgy. Milagrosa	1	1	1 - Bullet & 1 - PTZ
	8. JP Rizal St. Corner T. Castro St., Brgy. Milagrosa	1	1	1 - Bullet & 1 - PTZ
	9. P. Tuazon Boulevard Corner Burgos St., Brgy. Escopa 1	2	0	2 - Bullet
	10. P. Tuazon Boulevard Corner Legaspi St., Brgy. Marilag	1	1	1 - Bullet & 1 - PTZ
	11. P. Tuazon Boulevard Corner Kalantiaw St., Brgy. Bagumbuhay	2	0	2 - Bullet
	12. P. Tuazon Boulevard Corner 20 th Avenue, Brgy. Tagumpay	1	1	1 - Bullet & 1 - PTZ
	13. Kalantiaw St. Corner Rajah Matanda St., Brgy. Masagana	1	1	1 - Bullet & 1 - PTZ
	14. EDSA Corner Whiteplains Avenue, Brgy. Camp Aguinaldo (Facing People Power Monument)	1	1	1 - Bullet & 1 - PTZ
	15. Katipunan Avenue Corner Sunrises St., Brgy. Milagrosa	2	0	2 - Bullet
	16. Katipunan Avenue Corner Rajah Matanda St., Brgy. Milagrosa	2	1	2 - Bullet & 1 - PTZ
	17. Katipunan Avenue Corner Boni Serrano Avenue, Brgy. Bayanihan	1	1	1 - Bullet & 1 - PTZ
	18. Katipunan Avenue Extension (Shell), Brgy. St. Ignatius	1	1	1 - Bullet & 1 - PTZ
	19. Katipunan Avenue Southbound (Shell), Brgy. Blue Ridge A	1	0	1 - Bullet
	20. Katipunan Avenue Southbound (Arton Strip), Brgy. Blue Ridge A	1	1	1 - Bullet & 1 - PTZ
P O L I C E S T A T I O N 9	1. Microtel-Commonwealth Avenue, Brgy. UP Campus	2	1	2 - Bullet & 1 - PTZ
	2. Commonwealth Avenue Corner University Lane	2	1	2 - Bullet & 1 - PTZ
	3. Maharlika St. Corner Elliptical Road	2	0	2 - Bullet
	4. Maginhawa St. Corner Marilag St.	2	0	2 - Bullet
	5. Kalayaan Ave cor. Malingap St, Brgy. Teachers Village West	1	0	1 - Bullet
	6. Maginhawa St. Corner Malingap St., Teachers Village East	1	0	1 - Bullet
	7. V. Lana Road Corner Kalayaan Avenue, Brgy. Malaya (Jollibee)	1	1	1 - Bullet & 1 - PTZ
	8. V. Lana Road Corner Anonas Extension, Brgy. Sikatuna Village	1	0	1 - Bullet
	9. CP Garcia Avenue Corner Baluyot St., Brgy. Krus Na Ligas	2	0	2 - Bullet
	10. K-10 St. Corner EDSA Brgy. West Kamias	1	1	1 - Bullet & 1 - PTZ
	11. Kamias Road Corner Anonas Road, Brgy. East Kamias	1	1	1 - Bullet & 1 - PTZ
	12. Lanzones St. Corner Anonas Road, Brgy. Quirino 2A	1	0	1 - Bullet
	13. Langka St. Corner Chico St., Brgy. Quirino 2B	2	0	2 - Bullet
	14. Xavierville Avenue Corner Pajo St., Brgy. Quirino 2C	1	0	1 - Bullet
	15. Aurora Boulevard Corner Anonas Road, Brgy. Quirino 3A	1	1	1 - Bullet & 1 - PTZ
	16. Aguho St. Corner Almaciga St., Brgy. Quirino 3B/Claro	1	0	1 - Bullet
	17. Aurora Boulevard Corner Batino St., Brgy. Duyan Duyan	1	0	1 - Bullet
	18. Palosapis St Corner Narra St., Brgy. Amihan	1	0	1 - Bullet
	19. Aurora Boulevard Corner Katipunan (WB), Brgy. Loyola Heights	1	1	1 - Bullet & 1 - PTZ
	20. MWSS-Katipunan Avenue, Brgy. Pansol	1	0	1 - Bullet

P O L I C E S T A T I O N 10	1. New York St. Corner F. Manalo Brgy. Sacred Heart	1	0	1 - Bullet
	2. Shanghai St. Corner K-3rd St. Brgy. Kamuning	2	0	2 - Bullet
	3. E. Rodriguez Sr. Avenue Corner Hilcrest St. Brgy. Immaculate Conception	2	0	2 - Bullet
	4. EDSA Corner Monte De Piedad St. Brgy. Immaculate Conception	1	1	1 - Bullet & 1 - PTZ
	5. Tomas Morato Corner Scout Caster St. Brgy. Sacred Heart	2	0	2 - Bullet
	6. East Avenue Corner BIR Road. Brgy. Pinyahan	0	1	1 - Bullet
	7. V. Luna Avenue Corner Kalayaan Avenue, Brgy. Pinyahan (Hapchan)	1	1	1 - Bullet & 1 - PTZ
	8. Kamias Road Corner Maliksi St. Brgy. Pinyahan	2	0	2 - Bullet
	9. Timog Avenue Corner Panay Avenue Brgy. South Triangle	2	0	2 - Bullet
	10. South AA St. Corner Rocas Avenue Brgy Paligsahan	1	0	1 - Bullet
	11. J. Jimenez Corner F. Manalo St. Brgy Pinagkaisahan	1	0	1 - Bullet
	12. Rocas Avenue Corner Scout Tuazon St. Brgy Laging Handa	2	0	2 - Bullet
	13. Scout Chuatoco Corner Champaca St. Brgy Roxas	2	0	2 - Bullet
	14. Scout Reyes Corner Scout Chuatoco Brgy. Obrero	2	0	2 - Bullet
	15. Matalino Corner Malakas St. Brgy. Central	1	0	1 - Bullet
	16. Rocas Avenue Corner Tomas Morato, Brgy. Laging Handa	2	1	2 - Bullet & 1 - PTZ
	17. EDSA Corner NIA Road Brgy. Pinyahan	1	1	1 - Bullet & 1 - PTZ
	18. Quezon Avenue cor BIR Rd, Brgy. Pinyahan	6	1	6 - Bullet & 1 - PTZ
	19. Malakas Lane Corner MAtapang St. Brgy. Pinyahan	1	0	1 - Bullet
	20. V. Luna Corner Matimpiin st, Brgy. Pinyahan	2	0	2 - Bullet
P O L I C E S T A T I O N 11	1. Quezon Avenue Corner Araneta Avenue	1	1	1 - Bullet & 1 - PTZ
	2. Quezon Avenue Corner Tuayan St.	2	0	2 - Bullet
	3. Araneta Avenue Corner Kaliraya St.	2	0	2 - Bullet
	4. E. Rodriguez Sr. Boulevard Corner Araneta Ave.	2	0	2 - Bullet
	5. Quezon Avenue Corner Kitanlad St.	2	0	2 - Bullet
	6. Welcome Rotonda	1	1	1 - Bullet & 1 - PTZ
	7. N. Ramirez St. Corner Matimyas St.	2	0	2 - Bullet
	8. Bayani St. Corner Cordillera St.	2	0	2 - Bullet
	9. Santol St. cor Bayani St.	1	0	1 - Bullet
	10. Santol St. Corner Palanza St.	1	0	1 - Bullet
	11. Aurora Boulevard Corner Araneta Ave.	1	1	1 - Bullet & 1 - PTZ
	12. Araneta Avenue Corner Baloy St.	2	0	2 - Bullet
	13. E. Rodriguez Sr. Boulevard Corner Victoria St.	2	0	2 - Bullet
	14. E. Rodriguez Sr. Boulevard Corner Broadway Ave.	2	0	2 - Bullet
	15. Roxas Bridge at 19 th St.	1	0	1 - Bullet
	16. Foot Bridge at 19 th St. at the Boundary of Bgy. Kalasugan and Bgy. Roxas District	1	0	1 - Bullet
	17. E. Rodriguez Sr. Boulevard in Front of Delos Santos Medical Center	1	0	1 - Bullet
	18. Aurora Boulevard Corner. Betty Go St.	2	0	2 - Bullet
	19. Aurora Boulevard Corner. Balete Drive.	1	1	1 - Bullet & 1 - PTZ
	20. Aurora Boulevard Corner Dña Hemady Avenue	1	1	1 - Bullet & 1 - PTZ
P O L I C E S T A T I O N 12	1. Calle Industria Corner Circulo Verde, Bagumbayan,	1	1	1 - Bullet & 1 - PTZ
	2. EDSA Corner Ortigas (Eastbound), Ugong Norte	1	1	1 - Bullet & 1 - PTZ
	3. Ortigas Avenue, Fronting Eton Cyberpod, Ugong Norte	2	0	2 - Bullet
	4. EDSA Corner White Plains Avenue, Ugong Norte (Facing EDSA Northbound)	0	1	1 - PTZ
	5. White Plains Ave. (Eastbound), Ugong Norte	1	0	1 - Bullet
	6. White Plains Ave. Corner Temple Drive St., Ugong Norte	1	1	1 - Bullet & 1 - PTZ
	7. Temple Drive St., Corner Giraffe St., Ugong Norte	1	0	1 - Bullet
	8. Temple Drive St., Corner Greenmeadows Avenue, Ugong Norte	2	0	2 - Bullet
	9. Giraffe St., Ugong Norte (Infront of The Clubhouse)	0	1	1 - PTZ
	10. Greenmeadows Avenue, Corner Dove St. (Gate 1), Ugong Norte	0	1	1 - PTZ
	11. ERJR (Southbound) Corner Greenmeadows Avenue, Ugong Norte	1	1	1 - Bullet & 1 - PTZ
	12. ERJR (Southbound) Corner Greenmeadows Avenue Gate 6, Ugong Norte	1	0	1 - Bullet
	13. ERJR (Northbound) Fronting Bridgetowne, Ugong Norte	1	0	1 - Bullet
	14. Katipunan Ave., Corner Pinesville, White Plains	1	0	1 - Bullet
	15. Bonny Serrano Corner P. Mejia St., Libis	1	1	1 - Bullet & 1 - PTZ
	16. ERJR (Southbound) Corner Bonny Serrano, Libis	1	1	1 - Bullet & 1 - PTZ
	17. ERJR (Northbound) Fronting Barangay Hall Libis, Libis	2	0	2 - Bullet
	18. ERJR (Northbound) Corner Mercury Avenue, Bagumbayan	2	0	2 - Bullet
	19. ERJR (Northbound) Corner Eastwood Avenue, Bagumbayan	2	1	2 - Bullet & 1 - PTZ
	20. Calle Industria Corner Economia St., Bagumbayan	1	0	1 - Bullet

P O L I C E S T A T I O N 13	1. Bansalagin Street Corner Golden Shower Brgy Payatas	1	0	1 - Bullet
	2. Payatas Road Corner Narra st Brgy Payatas	2	0	2 - Bullet
	3. Payatas Road Corner Lansones St. Brgy. Payatas	2	0	2 - Bullet
	4. Payatas Road Corner Roberto Street Brgy. Payatas	2	0	2 - Bullet
	5. Santo Nino Street Corner San Lucas Street Brgy. Payatas	2	0	2 - Bullet
	6. Ilang-Ilang Street Corner San Juan Baustista, Camp Site Talipapa Barangay Payatas	2	0	2 - Bullet
	7. Bonifacio Corner Kamunoy	1	0	1 - Bullet
	8. Bonifacio Corner Road 9	1	0	1 - Bullet
	9. JP, Rizal Fillenvest Gate 3 and 4	2	0	2 - Bullet
	10. JP Rizal Intersection cor Geronimo	2	0	2 - Bullet
	11. Bonifacio and Geronimo Crossing	2	0	2 - Bullet
	12. Payatas Road Corner Amlac Ville	2	0	2 - Bullet
	13. Payatas Road Corner Visayas Street	2	0	2 - Bullet
	14. Payatas Road Corner Leyte Street	1	0	1 - Bullet
	15. Empire Street Phase III	2	0	2 - Bullet
	16. Clemente Street Corner Phase II St.	1	0	1 - Bullet
	17. Area 6 Scan Sandakot St. Brgy. Bagong Silangan	1	0	1 - Bullet
	18. Dove St. Corner Don Vicente St. Brgy. Bagong Silangan	1	0	1 - Bullet
	19. Quail St. Corner Eagle St. Brgy Bagong Silangan	1	0	1 - Bullet
	20. Dove St, Talipapa Brgy. Bagong Silangan	2	0	2 - Bullet
P O L I C E S T A T I O N 14	1. Central Avenue Corner Abenojar St (Facing Abenojar St.)	1	0	1 - Bullet
	2. #27Abenojar St. Fronting Sitio Mahilog	1	0	1 - Bullet
	3. Central Avenue Corner Abenojar St (Facing Petron)	1	0	1 - Bullet
	4. Abenojar St. Corner San Agustin	1	0	1 - Bullet
	5. Opal St. Corner Congressional	0	1	1 - PTZ
	6. Jade St. Corner Congressional	1	0	1 - Bullet
	7. Vargas Lane Corner Visayas Avenue	1	0	1 - Bullet
	8. Everlasting St. Corner Sampaguita St.	1	0	1 - Bullet
	9. Everlasting St. Cor Gladiolus St.	1	0	1 - Bullet
	10. Kalamansi St. Cor Anonas St.	2	0	2 - Bullet
	11. Kalamansi - Luzon Avenue	1	0	1 - Bullet
	12. Kalamansi - Kamatsile St.	1	0	1 - Bullet
	13. Holy Spirit Drive Corner Commonwealth Avenue	1	1	1 - Bullet & 1 - PTZ
	14. Luzon Avenue Corner Samat Road	1	0	1 - Bullet
	15. Holy Spirit Drive - Fronting Plaza Andrea	1	0	1 - Bullet
	16. AFP Road Corner Samat Road	1	0	1 - Bullet
	17. Saint Peter St. Corner San Simon St.	1	0	1 - Bullet
	18. Sto. Domingo Corner San Isidro	1	0	1 - Bullet
	19. San Isidro Corner Sto. Rosario	1	0	1 - Bullet
	20. Samonte St. Corner Laura St.	1	0	1 - Bullet
P O L I C E S T A T I O N 15	1. Visayas Avenue Corner Road 1	1	1	1 - Bullet & 1 - PTZ
	2. Visayas Avenue Corner Central Avenue	1	0	1 - Bullet
	3. Visayas Avenue Corner Lands St.	1	1	1 - Bullet & 1 - PTZ
	4. Visayas Avenue Corner Road 8	1	1	1 - Bullet & 1 - PTZ
	5. EDSA Corner North Avenue	1	1	1 - Bullet & 1 - PTZ
	6. EDSA Corner Mindanao Avenue Exit	2	0	2 - Bullet
	7. Quezon Avenue Corner Elliptical Road	2	1	2 - Bullet & 1 - PTZ
	8. North Avenue Corner Agham Road	2	2	2 - Bullet & 2 - PTZ
	9. EDSA Corner Misamis St.	1	1	1 - Bullet & 1 - PTZ
	10. EDSA cor Nueva Ecija St	1	1	1 - Bullet & 1 - PTZ
	11. EDSA Corner Corregidor St.	1	1	1 - Bullet & 1 - PTZ
	12. Congressional Avenue Corner Abra St.	1	1	1 - Bullet & 1 - PTZ
	13. Congressional Avenue Corner Cagayan St.	1	1	1 - Bullet & 1 - PTZ
	14. Bukidnon St. Corner Ilocos Sur St.	1	0	1 - Bullet
	15. Ilocos Sur St. Corner Road 8	2	0	2 - Bullet
	16. Mindanao Ave Corner Road 3	1	1	1 - Bullet & 1 - PTZ
	17. Mindanao Avenue cor Road 1	1	1	1 - Bullet & 1 - PTZ
	18. Road 3 Corner Road 9	1	1	1 - Bullet & 1 - PTZ
	19. EDSA Corner Congressional	4	0	4 - Bullet

P O L I C E S T A T I O N 16	1. Benevento Road cor Regalado Highway (Near Commonwealth Hospital and Medical Center)	1	0	1 - Bullet
	2. Mindanao Avenue Corner Cardigan St. Pasong Putik Proper	1	1	1 - Bullet & 1 - PTZ
	3. 125 Regalado Avenue Greater Lagro (Benevento Road Corner Regalado Highway)	0	1	1 - PTZ
	4. Quirino Highway Corner Regalado Ave. Greater Lagro	1	1	1 - Bullet & 1 - PTZ
	5. Quirino Highway Corner Maligaya Drive Pasong Putik Proper	2	0	2 - Bullet
	6. Bulalakaw St. Corner Belfast Avenue Pasong Putik Proper	0	1	1 - PTZ
	7. #18 Geronimo St. Sta. Monica	1	0	1 - Bullet
	8. #23 Zabarte Road Brgy. Kaligayahan	2	0	2 - Bullet
	9. Quirino Highway Corner Esperanza, Brgy. Greater Lagro	1	1	1 - Bullet & 1 - PTZ
	10. Commonwealth Avenue Cor Mindanao Ave. Sta. Monica	1	1	1 - Bullet & 1 - PTZ
	11. Susano Road Corner Sapphire San Agustin	2	0	2 - Bullet
	12. Susano Road Corner Heavenly Drive San Agustin	2	0	2 - Bullet
	13. Sampaguita St. Corner Malipaka St Pasong Putik Proper	2	0	2 - Bullet
	14. Sampaguita St. Corner Ilang-Ilang St. Pasong Putik Proper	2	0	2 - Bullet
	15. Belfast Avenue Corner Mindanao Avenue Pasong Putik Proper	1	1	1 - Bullet & 1 - PTZ
	16. Quirino Highway Corner Dumalay St. Sta. Monica	2	0	2 - Bullet
	17. Quirino Highway Corner Ascension Avenue Greater Lagro	2	0	2 - Bullet
	18. Regalado Ave. Corner Mindanao Avenue Greater Lagro	1	1	1 - Bullet & 1 - PTZ
	19. Quirino Highway Corner Commonwealth Avenue Brgy. Kalaigayahan	1	1	1 - Bullet & 1 - PTZ
	20. Zabarte Road Corner Camarin Avenue Brgy. Kaligayahan	1	1	1 - Bullet & 1 - PTZ
TOTAL :		425	118	543

P O L I C E S T A T I O N 16	1. Benevento Road cor Regalado Highway (Near Commonwealth Hospital and Medical Center)	1	0	1 - Bullet
	2. Mindanao Avenue Corner Cardigan St. Pasong Putik Proper	1	1	1 - Bullet & 1 - PTZ
	3. 125 Regalado Avenue Greater Lugo (Benevento Road Corner Regalado Highway)	0	1	1 - PTZ
	4. Quirino Highway Corner Regalado Ave. Greater Lugo	1	1	1 - Bullet & 1 - PTZ
	5. Quirino Highway Corner Maligaya Drive Pasong Putik Proper	2	0	2 - Bullet
	6. Bulalakaw St. Corner Belfast Avenue Pasong Putik Proper	0	1	1 - PTZ
	7. #18 Geronimo St. Sta. Monica	1	0	1 - Bullet
	8. #23 Zaharte Road Brgy. Kaligayahan	2	0	2 - Bullet
	9. Quirino Highway Corner Esperanza, Brgy. Greater Lugo	1	1	1 - Bullet & 1 - PTZ
	10. Commonwealth Avenue Cor Mindanao Ave. Sta. Monica	1	1	1 - Bullet & 1 - PTZ
	11. Susano Road Corner Sapphire San Agustin	2	0	2 - Bullet
	12. Susano Road Corner Heavenly Drive San Agustin	2	0	2 - Bullet
	13. Sampaguita St. Corner Malipaka St Pasong Putik Proper	2	0	2 - Bullet
	14. Sampaguita St. Corner Ilang-Ilang St. Pasong Putik Proper	2	0	2 - Bullet
	15. Belfast Avenue Corner Mindanao Avenue Pasong Putik Proper	1	1	1 - Bullet & 1 - PTZ
	16. Quirino Highway Corner Dumalay St. Sta. Monica	2	0	2 - Bullet
	17. Quirino Highway Corner Ascension Avenue Greater Lugo	2	0	2 - Bullet
	18. Regalado Ave. Corner Mindanao Avenue Greater Lugo	1	1	1 - Bullet & 1 - PTZ
	19. Quirino Highway Corner Commonwealth Avenue Brgy. Kaligayahan	1	1	1 - Bullet & 1 - PTZ
	20. Zaharte Road Corner Camarin Avenue Brgy. Kaligayahan	1	1	1 - Bullet & 1 - PTZ
TOTAL :		425	118	543

Breakdown of scope as follows:

Supply and installation of cables and conduits including but not limited to the following:

- Supply and installation of 543 sets of Street Cameras. These include 425 sets of 5MP Bullet Cameras and 118 sets of 2MP PTZ Cameras.
- Supply and Installation of Remote Communication Box connecting street cameras to the QCPD Command Center and City Hall Command Center, via WAN, and 4G/5G wireless connection.
- Supply and Installation of cables/conduits for street cameras.
- Supply of additional recording servers for additional street cameras with a retention of 60 calendar days.
- Supply and installation of the core switch and closed data cabinet including UPS, copper and fiber patch panels, patch cords, and other peripherals.
- Supply and Installation of 2 PC Operator Workstations with Monitors and CCTV Consoles.
- Installation, Configuration, Testing, and Commissioning of additional equipment and devices for QCPD command center.

PROJECT STANDARDS AND REQUIREMENTS

The following proposed CCTV system shall have the standard components that are regularly manufactured and used in the manufacturer's systems list. The system to be offered shall have been tested and proven in real installations. An established after-sales or technical support group for the system shall be available.

FIELD EQUIPMENT

The Outdoor Field Equipment shall be composed of the following items depending on the location and instructions from the plotting in the location plans:

- 5MP Fixed Bullet Camera, 2592 x 1944 resolution, video compression of H.265, day/night auto and infrared cut filter, IR Range at least 30m, audio compression G.711a, supports connection modes LAN (wired) and Wifi (wireless), support micro-SD Card recording and mobile phone remote monitoring, ONVIF compliant, ingress protection of IP67. Includes surge protection front and end. Shall be mounted using wall mount and/or pole mount brackets depending on the location.

- 2MP IP PTZ Camera, 1080P resolution, at least 18X optical zoom, video compression of H.264/H.265, day/night auto with IR cut filter, 8 LED Lamp at 120m range, DWDR, 3D DNR, mobile phone remote monitoring, Multi-Browser Access (IE, Chrome, Firefox, Safari), Auto Electronic Shutter Time, ONVIF compliant, with preset points, Lightningproof and anti-surge (TVS4000V) and ingress. protection of at least IP66. Surge protection front and end. Shall be mounted using wall mount and/or pole mount brackets depending on the location.

- Managed Industrial PoE Switch, at least 4* 10/100/1000M POE, 2*100/1000M SFP ports, IEEE802.3, IEEE802.3i, IEEE 802.3u, 802.3ab, IEEE802.3z, IEEE802.3x, Switching capacity 20 Gbps, MAC 4K, total power 120W, Input Voltage 48VDC, DIN Rail.

- DIN Rail Power Supply for PoE Switch.

- 4G Outdoor Wireless Router, 300Mbps transmission speed, 2*10/100M RJ45 Interface, Built-in 4G and Wi-Fi Antenna.

- Outdoor Enclosure with Camlock and complete electrical accessories (circuit breaker, AC outlets, etc.) inside and AC220VAC surge protection and data surge protection devices.

NETWORK COMMUNICATION EQUIPMENT

All equipment shall be suitable for the working environments in which it should be deployed. Additional Network Communication Equipment to be deployed in QCPD Command Center shall comprise the following:

- 32 Ports, 10G Managed Switch, 24 Ports Gigabit SFP, plus 4*RJ45 Gigabit ports plus 4*SFP ports 10Gig uplink ports, built-in power supply; to be interconnected with existing CCTV network.

- 42U 600*800 Closed Data Cabinet including 24-port Cat6 Patch Panel, shelves, power strip, and other accessories

- 24-port Fiber Patch Panel loaded.

HEAD-END EQUIPMENT

The Head-End Equipment will function as the Central System for Management, Recording, Storage as well as Live and Playback Monitoring to a Videowall Matrix System. The management servers shall include a cloud service operation management platform that integrates project management, equipment management, user management, storage management, and financial management.

This system helps administrators provide users with vertical industry cloud platform solutions. To supply a platform where users can access devices at any time, enabling a quick assignment of roles to different users with different management rights, set up multiple project sites, or sub-command centers without the need to set up and deploy the server hardware and software saving time and effort. It should be able to support multi-level groups and centralized equipment management with a unified configuration. Which will effectively solve the problem of multiple monitoring points. It should support equipment batch configuration and maintenance, with one-click deployment. It should provide remote monitoring in real-time, using the web or mobile phone app, users can preview and playback the video, and push alarm notifications in real-time, with system status monitoring.

Additional devices will include the following:

- 200 Ch. Network Video Server, 24*HDD; 2*10/100/1000Mbps RJ45 Port, 2*HDMI, 1*VGA, 2*USB 2.0 ports, 4*USB 3.0 ports, 24SATA (support 10TB) RAID. Recording Parameters are 2MP/5MP, H.265, and 15FPS, for 60 Calendar Days configured at RAID6 configuration.
- Additional 32*10TB HDD to be installed in existing Network Video Servers.
- Core i7 (latest generation or equivalent benchmark) Workstations, at least 16GB memory and 8GB Graphics Card, at least 1TB HDD. Includes 22" LED Monitors and Workstation Consoles.
- 3KVA Online UPS, Input Voltage/Load:208V, 220V, 230V, 240V, 50/60 Hz Auto Sensing, Surge Protection: 120V (IEEE62.41) / 230V (IEEE1000-4-5 Level 3), Short Circuit Protection: Output Cut-off immediately, Alarm when battery discharge and UPS fault, RS-232 Serial Port and USB.

V. PROJECT IMPLEMENTOR

The Office of the City Administrator shall be the Project Implementer on behalf of the Quezon City Government and shall be in-charge of ensuring the successful execution of the Project. Further, the Office is responsible on project monitoring and strict implementation of the requirements and guidelines in this Terms of Reference.

VI. TERMS AND CONDITIONS

a. Winning Bidder and the Quezon City Government shall work hand in hand with the following Scope of Work:

- i. Installation, testing, and commissioning of additional CCTV Equipment
- ii. Additional cameras should be integrated seamlessly into the existing Unified CCTV Command Center of the Quezon City Government.
- iii. Existing Network Infrastructure may be utilized. The network contractor shall be responsible for repairing connectivity to the nearest IDF provided by QCG.
- iv. Fiber Backbone from Cameras to the Command Center at Camp Karingal shall be provided by the QCG.
- v. Connectivity of all offered cameras shall be via wireless transmission and WAN using fiber cable.

- vi. • Internet connectivity shall be provided by QCG
- vii. WAN connectivity will be provided by QCG
- viii. During the installation of the outdoor field equipment in all locations within the city boundaries, Traffic Management shall be in full coordination and assistance by the City Administrator's Office.
- ix. Existing network passive and active equipment can be utilized.
- x. The QCG will provide the 220VAC Mains whenever and wherever needed, with the proper lightning arresters and grounding.
- xi. Any existing Passive and Active Network Equipment within the WAN found to be defective shall be provided by the QCG.
- xii. Storage of items delivered will be provided by the client
- xiii. Any QCG permits needed will be provided by the client
- xiv. Poles, traffic lights posts, lighting posts, footbridge, etc... which are currently used for the camera mounting will be utilized.

b. Other requirements and qualifications:

Other requirements must be considered as an integral part of the bid proposal.

- i. The offered brand for CCTV cameras and equipment must at least have been in the market for at least 20 years in existence in the Philippine market.
- ii. The bidder must have at least 15 years of experience in the electronic security, and surveillance industry.
- iii. Upgrades for Version during warranty at no additional cost.
- iv. Bidders must submit a certificate that they are the exclusive distributor of the brand being offered
- v. Bidders must submit a single-line diagram detailing how it intends to integrate into the existing system.
- vi. Within a period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, the Bidder must be able to do a demo and proof of concept.
- vii. The bidder must have an existing service center and technical support.
- viii. Bidders must secure a certificate of site inspection from the end user.
- ix. Bidders are to submit single-line diagrams and camera locations reflected on a floor plan or site development plan.
- x. Consider two days of end-user training (minimum of 5 personnel from QC Government and 5 personnel from QCPD).
- xi. The bidder must include system maintenance during the warranty period.

VII. PROJECT DURATION

The Project Duration will be 150 calendar days upon issuance of Notice to Proceed.

VIII. APPROVED BUDGET FOR THE CONTRACT

The approved budget for the contract will be charged the Office of the City Mayor (Peace and Order and Public Safety Program amounting to One Hundred Fifteen Million Pesos and 00/100 only (P 115,000,000.00) inclusive of all relevant taxes and fees. The following is the full technical specification:

ITEM NO.	TECHNICAL SPECIFICATION	QTY
1.	5MP BULLET CAMERA WITH SURGE PROTECTOR AND MICRO SD CARD Sensor: 1/2.8" Black Light CMOS Min. Illumination : Color : 0.0001 Lux (F1.2,AGC on), 0 Lux with IR B/W :0.0001 Lux (F1.2,AGC on), 0 Lux with IR Camera should be able to capture and transmit an image size of 5MP (2592x1944) at 25fps Camera is intended to be a bullet style IR Range: 8 LED lamps Dual Light Fixed Lens with focal length of 3.6mm @ F1.6 True Day & Night with an Infrared Cut Filter and with auto switch Shutter Time/Speed of 1/50(1/60)s to 1/10,000s Supports DWDR, 3D DNR Mobile Phone Remote Monitoring (iOS & Andriod) H.265A1/H.265+ (compatible H.265/H.264) high profile Supports LAN (Wired) and Wifi (Wireless) Alarm: Video Loss, Video Block, Human Detect, Motion Detection, Face Detection Bitrate of 0.1Mbps to 8Mbps Audio I/O: 1/1 Audio Compression G.711a Supports HVR/NVR, ONVIF Protocol Power Supply: 12V DC +/- 10%; PoE Ingress Protection: IP67 Operating Temperature/Humidity: -10°C to +60°C/10% to 90% RH Maximum of 5W power consumption Network Storage Supports micro SD Card recording Must include PoE Network Surge Protector with RJ45 Interface	425 sets
2.	2MP PTZ DOME CAMERA, 18X WITH SURGE PROTECTOR AND MICRO SD CARD Auto Electronic Shutter Time Supports DWDR, 3D DNR H.265+/H.265/H.264 encoding algorithm Mobile Phone Remote Monitoring (iOS, Android) Multi Browser Access (IE, Chrome, Firefox, Safari) Supports WEB, CMS, VMS, Cloud services Supports HVR/NVR, ONVIF Protocol Sensor: 1/2.8" Starlight CMOS Minimum Illumination: Color: 0.001 Lux @ (F1.2 AGC On) B/W: 0.001 Lux @ (F1.2 AGC On); 0 Lux with IR Shutter Time: Automatic Maximum Image: 1920X1080 Frame Rate: NTSC: 1080P @ 30 fps Day & Night: IR Cut Filter with Auto Switch Lens Aperture: F1.6 - F2.7 Lens Focal Length: 4.7 mm - 84.6mm Optical Zoom: 18X IR Range: 8 IR LED Lamp Rotation Range: Horizontal: 0 - 360 deg continuous rotation Vertical: -15 - 90 deg continuous monitoring Auto Mode: Preset Point/Preset Point Cruise/Horizontal Scan/ Auto Scan/ Path PTZ Function: Support the turn-on movement, support power memory function Protocol: TCP/IP, HTTP, DHCP, DNS, DDNS, PPPoE, SMTP, NTP,(HTTPS, SIP, 802.1x, IPv6 Optional) Storage: Network Storage, SD Card (at least 64GB, internal) Ethernet: 1*10/100 Mbps Ethernet port, RJ45 port Material: Metal + ABS Plastic Ingress Protection: IP66 Lightning Proof and Anti-Surge: TVS4000V With Wifi connection Must include Network Surge Protector with RJ45 Interface	118 sets

3.	NETWORK VIDEO SERVER 200CH MANAGEMENT, 64CH FORWARDING [UP TO 24 BAYS SATA HDD (MAX. 10 TB PER BAY)] WITH RAID 5/6 FUNCTION INCLUDING HDD 200 Channels Management + 200 Channels Video + 64 Channels Forwarding Processor: Intel Xeon E3-1230 V5 Internal Memory (RAM Capacity): 8G DDR4 ECC check Memory * 2 Operating System: Embedded Linux Video Compression: H.265/H.264 Professional management platform software; Open architecture Supports multi-level server cluster, cascade Remote server configuration Record Mode: Manual>Alarm>Motion Detection>Timing Inquire Mode: Inquiry by Time/Calendar/Event/Channel Video Output Interface: 1*VGA Ethernet Port: 2*Intel gigabit network port, 1* IPMI 2.0 remote management network port USB Port: 2*USB 2.0, 4*USB 3.0 up to 24 bays SATA HDD (Max. 10 TB per bay) RAID: 0, 1, 5, 6, 10, 50, 60 Includes 24 sets 10TB Hard Disk Drive	3 sets
4	10TB HARD DISK DRIVE Capacity: 10TB Form Factor: 3.5 inch Rotational Speed: 7200 rpm Interface: 6Gb/s SATA MTBF: 2,000,000 Hours or better	32 sets
5	COMMBOX - REMOTE COMMUNICATION BOX WITH SFP MODULES, PATCH CORD - 4G ROUTER AND 8PORT INDUSTRIAL POE SWITCH - AUTOMATIC VOLTAGE CURRENT PROTECTOR - AC SURGE PROTECTOR Power Distribution Board, Isolation and Protection for Equipment and AC Surge Protection. The size of the PDB shall be constructed such that it will fit in the power supplies if needed, surge protectors, and other components For outdoor use, the PDB shall be designed for outdoor installation and can withstand all types of weather conditions. The PDB must include a circuit breaker for tapping of main power source and It should provide protection against residual current Each line output shall have at least one-pole circuit breakers to provide protection against over-current and short circuit AC Surge Protection applicable for protecting AC220-240V Min surge current of 6000A, Min surge voltage of 6000V Must Include Automatic Voltage Current Protector with the following features: 10 sec Power On Delay 230V-300V Over Voltage Protection voltage 1-63A Over-Current Protection PoE Switch with the following features: At least 4-10/100Base-TX PoE ports + 2-100/1000Base-X uplink SFP ports Gigabit SFP optical fiber interface Network Protocol: IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX, IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, IEEE802.3x Forward Mode: Store and Forward (Full Wire-speed) Switching Capacity: 12 Gbps or better Forwarding Rate @ 64byte: 4.17 Mpps MAC 2K or better Buffer Memory: 2M Jumbo Frame: 9.2K Remote Power Reset Total Power/Input Voltage: at least 60W/48VDC 4G Outdoor Wireless Router DDR2 128M Byte RAM; 16MB Flash Storage Supports 10/100M (WAN) port * 1, can connect xDSL modems/cable modems/Internet Supports 10/100M (LAN) port * 1, supports Auto MDI/MDIX Antenna Frequency: 2412 ~ 2472 MHz Antenna Polarization: Vertical/Horizontal Antenna Gain: 5 Dbi Support all-network 4G; Built-In 4G Antenna Supports 2.4G, Output power up to 500mW Supports 64/128 bit WEP encryption	543 sets

	Supports customized SSD and encryption Supports 300Mbps bandwidth Industrial DIN Rail Power Adapter with the following features 48 VDC Output Voltage 2.5 A Output Rated Current 120 W Output Rated Power Voltage Input: AC 100-240V -40 deg C to 70 deg C Operating Temperature Range Supports protection from short circuit, over current, over voltage	
6	COREDATA CAB - CORE SWITCH - CLOSED DATA CABINET - UNINTERRUPTIBLE POWER SUPPLY - PATCH PANELS AND ACCESSORIES L3 Managed 28-port 10G Switch 32 Ports, 10G Managed Optical Fiber Switch, 24 Ports Gigabit SFP, plus 4*RJ45 Gigabit ports plus 4*SFP ports 10Gig uplink ports, Built-in power supply Standard 1U Rack 10G SFP Module Dual Fiber LC Supports 9.95 to 10.3 Gb/s bit rates LC Connector Applicable for 10km SMF connection Operating Case Temperature: 0 to 70 deg C 42U Closed Data Cabinet 42U*600mm*800mm Closed Data Cabinet Vented Front and Rear doors with excellent ventilation rate Removable Side Panels with round locks Cable entry plates at the top and bottom covers S-Shaped mounting profile; free to move forward and backward Comply with ANSI/EIA RS-310-D, IEC297-2, DIN41491, Part 1, DIN41491 Part 7, ETSI Standard Includes 24-ports Cat6 Patch Panel 24-Port SC Fiber Terminal Box, SC Coupler loaded 3KVA On-line UPS Capacity: 3000A INPUT Voltage/Load: 208V, 220V, 230V, 240V Frequency: 50/60 Hz Auto Sensing Surge Protection: 120V (IEEE C62.41) / 230V (IEEE C61000-4-5 Level 3) Overload Protection: 125% for 1 minute and 150 % for 10 seconds Short Circuit Protection: Output Cut-off immediately Cold Start (DC Start) Visual Display: Input/Output voltage, input/output frequency, on-line mode, back up mode, battery capacity, load level Continuous beeping sound and LCD display when UPS Fault Audible Alarm (Battery Back-up): Beep every 5 sec Communication: RS-232 Serial Port and USB Tower mount Conformance (Safety): IFL 1778, CE Conformance (EMC (EMS/EMI)): IEC 61000-4, FCC Part 15, CISPR 22	1 lot
7	PC WORKSTATION INCLUDING 22" MONITOR AND WORKSTATION CONSOLE PC Workstation CPU Intel Octa Core i7, 16 MB Cache 2.9 GHz to 4.8 GHz 65W or better Intel W580 Chipset or better 16GB DDR4 Memory, 8GB Video Graphics Card or better Includes 3.5" 1TB 7200 RPM HDD Windows 10 Professional 64-bit Operating System or better Includes USB Keyboard, Mouse & AntiVirus PC workstation must be branded. Operator Workstation Monitor 21.5" Screen Size (22" Screen Size with Bezel) Suitable for 24/7 continuous operation Supports up to 1920 x 1080 resolution 16:9 Display Mode 16.7 M Display Color 1000:1 Contrast Ratio Viewing Angle 178 (H) / 178 (V) Fast response time 5ms, no image ghosting HDMI/VGA input connection	2 lots

IX. PROJECT COST ADJUSTMENT

As stated in Section 61 of R.A. 9184 and its RIRR, in cases where the cost of the awarded contract is affected by any applicable new laws, ordinances, regulations, or other such as acts of the Government of the Philippines, promulgated after the date of bid opening, a contract price adjustment shall be made, or appropriate relief shall be applied on a no loss basis.

X. WARRANTY

- a. One (1) year onsite warranty on parts and service.
- b. The bidder must include a system maintenance during the warranty period.

XI. TERMS OF PAYMENT

- 15% upon submission of project implementation plan which includes:
 1. Scope of work to be done.
 2. Plotting of Camera Locations, and
 3. Timeline/ Gantt chart for work schedule
- 50% upon delivery of all major equipment
- 35% Upon completion of the project which includes the supply, delivery, and installation of patch cables, cameras & accessories, Communication box & accessories, and head-end equipment. Project Management (Supervision, Coordination, Mob/Demob), including end-users training and submission of the required documents.

XII. PENALTIES FOR BREACH OF CONTRACT

Failure to deliver the services according to the standards and requirements set by the Quezon City Government shall constitute an offense and shall subject the Service Provider to penalties and or liquidated damages pursuant to R.A. 9184 and its RIRR.

XIII. CANCELLATION OR TERMINATION OF CONTRACT

The Contract may be cancelled or terminated:

- a. Should there be any supervening event resulting from National Government Agency projects and/or Local Government projects that may hinder or restrict the operation of the route according to this Terms of Reference such as but not limited to the Schedule of Trips, or
- b. Should there be any dispute, controversy or difference between the parties arising out of this Terms of Reference, the parties shall exert efforts to amicably settle such dispute or difference. However, if any dispute, controversy or difference cannot be resolved by them amicably to the mutual satisfaction of the parties, then the matter may be submitted for arbitration in accordance with existing laws, without prejudice for the

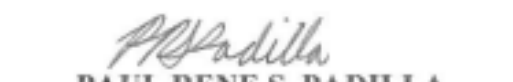
aggrieved party to seek redress exclusively before a court of competent jurisdiction within Quezon City.

The guidelines contained in R.A. 9184 and its RIRR shall be followed in the cancellation or termination of this Contract.

Prepared by:


AMIEL JACOBO PINPIN
Administrative Officer IV (MAA II)
POPS Plan Secretariat Member

Recommending Approval:


PAUL RENE S. PADILLA
City Government Department Head III
ITDD Head

Approved by:


MICHAEL VICTOR N. ALIMURUNG
City Administrator