



PROJECT PROPOSAL

I. PROJECT TITLE: CENSUS OF BUILDINGS/STRUCTURES IN THE CITY OF BAGUIO

II. PROPONENT: City Buildings and Architecture Office

III. RATIONALE:

Memorandum Circular No. 1, series of 2018, entitled "Strict Compliance on setback requirements under Rule VIII, Revised IRR of PD 1096" directing DPWH-NBCDO and CBAO to conduct an inventory of all building along National and various Local roads that does not conform to the minimum required setback in accordance with Rule VIII, Revised IRR of PD 1096.

Also with City Ordinance Numbered 75, Series of 2018, entitled "Disallowing the grant of exemption or out rightly denying applications for exception, variance, or non-conforming use of commercial and institutional buildings relative to the parking lot requirement within the central business district area in the City of Baguio, and setting the guidelines for the implementation of Article VIII of City Ordinance numbered 63, series of 2016" tasking this Office to determine buildings in the central business district that converted their parking lots into commercial spaces or any other purposes. With this, this Office now has the responsibility to monitor the buildings mentioned with regards to the use of parking spaces.

Resolution Numbered 062, Series of 2017 tasked the City Buildings and Architecture Office to prepare and provide a list of all the important cultural properties within the City of Baguio in accordance with the provisions of Republic Act No. 10066 (An Act providing for the protection and conservation of the National Cultural Heritage, Strengthening the National Commission for the Culture and the Arts (NCCA) and its Affiliated Cultural Agencies, and for other purposes, also known better as the "National Cultural Heritage Act of 2009").

It was stated further that, "while the city has yet to establish the cultural office to undertake the listing or inventory of important cultural properties in the city, compliance can be started with buildings and vertical structures which can be undertaken by the City Buildings and Architecture Office."

This Office is mandated to enforce the provisions of the National Building Code of the Philippines (P.D. 1096) and the National Structural Code of the Philippines. In relation to Anti-Squatting Laws and Orders such as Executive Order No. 51, Series of 2020 against illegal settlers. Hence, with the approved Resolution, National Building Code of the Philippines, Structural Code of the Philippines, NBCDO Memorandum Circular No. 1 Series of 2018, Ordinance numbered 75 Series of 2018, and Administrative Order No. 72 Series of 2013, this Office is bound to comply.

In addition, as the building census will be completed in the first quarter of 2023, the project transitions from census to digitization (2D and 3D Database). Hence, cloud services and high-end computers for intensive GIS workload is imperative. Thus, this project proposal of hiring job order personnel and acquiring necessary equipment is hereby endorsed.

IV. OBJECTIVES:

A. National Building Code and E.O. 51 Series of 2020:

1. To be able to conduct preliminary data gathering of all building/structures with building permit,
2. To be able to identify structures in the City of Baguio that have no Building Permits:
3. The data gathered, particularly within the protected areas (RROW, forest, watershed, creeks, parks) will be used in coming up with a Comprehensive Plan, also known as the general plan, master plan or land-use plan, designed to guide the future actions of the City.

B. NBCDO Memorandum Circular No. 1 (Inventory of Structures along Road Right-of-Way)

1. To be able to gather preliminary data on buildings/structures along road right-of-way.
2. To be able to identify buildings/structures along road right-of-way that are in violation of the minimum required setback.

C. City Ordinance numbered 75, Series of 2018:

1. To be able to conduct preliminary data gathering of all building/structures with building permit located in the central business district.
2. To be able to identify structures in the central business district of Baguio with converted parking lots for commercial and/or other purposes.

D. Resolution Numbered 062, Series of 2017

1. To be able to identify certain properties considered to be important cultural properties, including all structures which are at least fifty (50) years old;
2. To be able to determine the number of structures considered to be important cultural properties within the City; and
3. To furnish the National Commission for Culture and the Arts a copy of the requested data.

V. METHODOLOGY

1. To contract out Job Orders to undertake the mandate of the resolution, NBCDO Memorandum Circular No. 1 series of 2018, City Ordinance numbered 75 Series of 2018 and E.O. 51 Series of 2020;
2. To conduct orientation of Job Orders on the process of the census;
3. To gather preliminary data from other offices and agencies (CEO, CAO, DENR, BCDEO-DPWH, CEPMO, Barangays);
4. To conduct census on site;
5. To consolidate gathered data and submit to personnel in-charge of the consolidation;
6. To encode gathered data for submission;
7. To establish an electronic database.

VI. EXPECTED OUTPUT:

1. To have 100% of the city area undergo census on buildings/structures including structures with converted parking spaces, structures along RROW, important cultural properties, and other violations on NBC, Environmental Code of the Philippines, and other related Issuances given the following data gathered from previous years;

YEAR	NO. OF BARANGAY	NO. OF STRUCTURES	PERCENTAGE ACCOMPLISHED (BARANGAY)
2018	21	3,266	16.41%
		Heritage Sites = 85	
		Converted Parking = 45	
2019	42	18, 732	49.22%
		Heritage Sites = 4	
		RROW = 215	
		Creek Easement = 713	
2020	12	18,732	58.59%
2021	21	28, 916	75.00%
2022	27	42, 637	96.09%
		Creek Easement = 1, 607	
TOTAL	123	111, 840 as of December 31, 2022	
TO BE ACCOMPLISHED FOR THE YEAR 2023 (January to June 2023)			
2023	5	n/a	3.91%
TOTAL	128	n/a	100%

2. To have 100% of the city area undergo GIS Digitization on buildings/structures including structures with converted parking spaces, structures along RROW, important cultural properties, and other violations on NBC, Environmental Code of the Philippines, and other related Issuances given the following data gathered from previous years;

YEAR	NO. OF BARANGAY	NO. OF STRUCTURES	PERCENTAGE ACCOMPLISHED (BARANGAY)
2021	14	7,348	10.94%
		Censused and GIS Digitized Government Facilities/ Evacuation Center Per Barangays	
2022	66	35,435	62.50%
TOTAL	80	42,783	
TO BE ACCOMPLISHED FOR THE YEAR 2023			
2023	48	n/a	37.50%
TOTAL	128	n/a	100%

VII. DURATION AND STATION OF WORK:

The project shall be for a duration of Twelve (12) months upon signing of Contract of Employment or from January 1, 2023 to December 31, 2023. The Encoders, Technical Enumerators and Lead GIS Specialist shall and be assigned under the direct supervision of Investigation and Demolition Division. The 8:00 a.m. to 12:00 noon and 1:00 p.m. to 5:00 p.m. working hours from Mondays to Saturdays and Holidays, if necessary, shall be rendered with authority.

VIII. JOB DESCRIPTION

1. Encoder

- Encode and consolidate data from Technical Enumerators.
- Consolidate soft copies of encoded census forms, google earth tags and documented photos of per barangay on database.
- Prepare Overtime Accomplishment Report of all Enumerator and GIS Specialist.
- Prepare other pertinent enumerator reports that may be needed to payroll.
- Encode verified Building, Occupancy and Other Permits.

2. Technical Enumerator (January to June 2023)

- Conduct field census and use QField Application
- Prepare Notice of Violation with Summary List.
- Verify building, occupancy and other permits and incorporate in Qfield.
- Follow-up structures for completion and encode updated of census data.
- Identify buildings/ structures with possible violations on creek easement, RROW, protected areas and other violations observed on site.
- Perform other tasks that may be assigned from time to time.

Technical Enumerator (July to December 2023)

- Follow-up structures for completion and updating of census data using Qfield.
- Digitize structures using QGIS SQLite Template established by GIS Specialists and help in Data Cleansing/ Validation for correction of all digitized attributes.
- Prepare Notice of Violation with Summary List.
- Match verified permits from the Office Records Section to the Qfield digitized file.
- Identify buildings/ structures with possible violations on creek easement, RROW, protected areas and other violations observed on site.
- Perform other tasks that may be assigned from time to time.

3. Lead GIS Specialists

- Develop a secured website with login system for Authorized personnels and update system for website hosted in cloud with sustainable update feature.
- Georeference and overlay AutoCAD files from Assessors Office and plot Lot Plans with their corresponding bearing and coordinates.
- Consolidate all SQLite files of all barangays and Prepare Status Reports, Roadmap and plans of Census, GIS digitization and permit verification.
- Monitor and oversee preparation of Notice of Violation, photo and incorporating of permits and follow-up of missed/ missing data.
- Use geoprocessing tools to merge and cleansed all SQLite files, DCIM and geopackage of team members from Qfield.
- Prepare MBTiles, geopackage and field maps of barangays for QField.
- Train, monitor and supervise daily field census of team members, prepare and consolidate monthly accomplishment report of team members.
- Facilitate data flow, management, and distribution activities for GIS Database
- Manipulate, analyze and present geographical information by creating programs to convert GIS information from one format to another (KML for Google Earth-polygon and centroid of structures)
- Data Cleansing and Validation for correction of all digitized attributes.

IX. BUDGETARY REQUIREMENTS – Seven Million Fifty Thousand Eight Hundred Eighty Eight Pesos (PHP 7,050,888.00)

- Salaries and Wages – Job Order (January – June 2023)

No. of Request	Position	Daily Rate	20% Premium	TOTAL COST
3	Encoders	P 708.45 (SG 4)	P 141.69	P 336, 657.60
16	Technical Enumerators -For the field census	P 897.45 (SG 8)	P 179.49	P 2,274,508.80
3	Lead GIS Specialist	P 1, 803.27 (SG 16)	P 360.654	P 856, 915.20
TOTAL:				<u>P 3, 468, 081.60</u>

- Salaries and Wages – Job Order (July – December 2023)

No. of Request	Position	Daily Rate	20% Premium	Gratuity Pay	TOTAL COST
3	Encoders	P 708.45 (SG 4)	P 141.69	P 5,000.00	P 351, 657.60
12	Technical Enumerators -For GIS tagging	P 897.45 (SG 8)	P 179.49	P 5,000.00	P 1,785,881.60
3	Lead GIS Specialist	P 1, 803.27 (SG 16)	P 360.654	P 5,000.00	P 871, 915.20
TOTAL:					<u>P 3, 0009,454.40</u>
SUB TOTAL:					<u>P 6,477,536.00</u>

QUANTITY	DESCRIPTION	PURPOSE	UNIT PRICE	PRICE
4	Desktop Computer (Intel Core i7-10700K)	For intensive Cloud-based GIS Workload and Processes	100,000.00	400,000
2	Printer (Epson L1300) w/ ink and services	For printing of documents, maps (A3 and other sizes)	36,676.00	73,352.00
1	AWS Cloud Storage (Amazon S3)	For GIS Cloud-based infrastructure	50,000.00	50,000.00
1	AWS Cloud Computer (EC2 Instance)	For GIS Cloud-based infrastructure	50,000.00	50,000.00
<ul style="list-style-type: none"> • For the optimization of workflow: <ul style="list-style-type: none"> - Project Innovations - Georeferencing Lot CAD Files - Digitization of building/structures census - Hard copy documents and maps - Data Cleansing - 2D/3D Cloud-based GIS Database Website - Overall layout of SQLite of 128 barangays - Storage of geotagged files (KMZ and KML) in Google Earth - Storage of photos per barangay - Photogrammetry processing for the generation of 3D environment using drones 			SUB TOTAL:	<u>P 573,352.00</u>

GRAND TOTAL: PHP 7,050,888.00

X. SOURCE OF FUNDING:

Chargeable against the **Other General Services Account** (*Account No. 5-02-12-990*) of CY 2023 under the Buildings and Architecture Office.

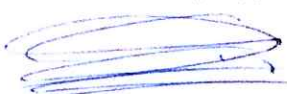
Prepared by:



ENGR. DONALD A. GAS-IB

Engineer IV, Investigation and Demolition Division

Recommending Approval:



JOHNNY A. DEGAY

City Government Department Head II

City Building Official ✓

Reviewed as to Appropriation Available and
By the Authority of the Mayor:



ATTY. LETICIA O. CLEMENTE

City Budget Officer *Ryp*