Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
CEBU 3RD DISTRICT ENGINEERING OFFICE
Ibo, Toledo City, Cebu, Region VII

BAGONG PILIPINAS

TERMS OF REFERENCE

CONSULTANCY SERVICES IN THE CONDUCT OF PARCELLARY SURVEY - TOLEDO-PINAMUNGAJAN-ALOGUINSAN-MANTALONGON RD, K0050+767 – K0051+995

Brgy. Ibo – Brgy. Cabitoonan, Toledo City, Cebu

I. INTRODUCTION

A. BACKGROUND

The Government of the Republic of the Philippines, thru the Department of Public Works and Highways (DPWH) Cebu 3rd District Engineering Office, Ibo, Toledo City, intends to engage the services of Local Consultancy Firms for the conduct of Parcellary Survey of affected lots within the road right of way in order to ensure expeditious implementation of the *Road Widening of Toledo-Pinamungajan-Aloguinsan-Mantalongon Rd., K0050+767 – K0051+995,* located at Brgy. Ibo – Brgy. Cabitoonan, Toledo City, Cebu.

B. OBJECTIVE

The objective of the services is to identify affected lots within the Road Right-of-Way (RROW) limits, as indicated in the detailed road design plans approved by the District Engineer or her authorized representative and segregate the affected lots for the purpose of registering them in favor of the Government.

C. PROJECT SCOPE OF WORK

The proposed project which is the parcellary survey of Toledo-Pinamungajan-Aloguinsan-Mantalongon Rd., K0050+767 – K0051+995 has an estimated length of 1.227 k.m.

II. SCOPE OF SERVICES

A. GENERAL

2.1 The Consultant shall coordinate with the Land Management Services (LMS), Department of Environment and Natural Resources (DENR), DPWH-Implementing Office and Regional/District Offices concerned on the RROW acquisition. The services shall be provided in accordance with the improved Infrastructure Right-of- Way (ROW) Procedural Manual and DPWH Department Order (DO) No. 65, series of. 2017 – "Re-issuance of Department Order No. 19, s. 2017, delegating to Regional Directors the approval/signing of documents pertaining to Infrastructure Right-Of-Way (ROW) for national projects including the approval of payments of claims and signing of checks"; and other related Department issuances.

2.2 The Consultant/Geodetic Engineer/Survey Contractor (Geodetic Engineering Partnership or Sole Proprietorship Firm) shall provide all labor, instruments/ equipment like Global

Positioning System and Electronic Total Stations, calibrated by the DENR LMS, materials, supplies, vehicles, and other facilities necessary to perform satisfactorily the survey works herein required, viz:

2.2.1 Detailed Survey and Mapping Requirements

The detailed survey works shall be undertaken in accordance with the common surveying and mapping requirements and specifications stipulated in the Manual for Land Survey in the Philippines (Land Administrative Order No. 4 of the Bureau of Lands); Executive Order No. 4, adopting the Philippine Reference System of 1992 as the Standard Reference System for Survey in the Philippines; and the DPWH Design Guidelines, Criteria and Standards, Volume I, Part I, Surveys and Investigations, that include but are not limited to the following:

a. Establishment of Horizontal Ground Controls

Establishment of horizontal ground controls based on the Philippine Plane Coordinate System or the Philippines Transverse Mercator Grid and/or Executive Order No. 45 (Adopting the Philippine Reference System of 1992 as the Standard Reference System for Survey in the Philippines).

b. Traverse Survey based on the Second Order Accuracy

c. Research Work of Affected Lots/Real Properties

In the research work for cadastral maps and technical descriptions of affected lots, the names of affected landowners, if any, within the RROW must be taken from the corresponding Municipal, City or Provincial Assessor's Office.
The following data shall be gathered relative to the parcellary survey.

i. From the Assessor's Office
- Tax declaration of Real Property
- Tax Map to determine the owner and address
- Land Classification

ii. From the Affected Landowners
- Tax declaration of Real Property
- Copy of the Transfer Certificate of Title (TCT)
- Tax Clearance
- Pictures taken by the Consultant/Geodetic Engineer

iii. From the Registry of Deeds
- Certified copy of the Transfer Certificate of Title (TCT)

iv. From the Land Management Services (LMS)
- Cadastral Map
- Technical Description of Lot
- Lot Plan in standard LMS Form

v. From the Department of Agrarian Reform
- Areas subject to Land Reform or vast estate landholdings, where there is voluntary offer to sell (VOS) by owners

vi. From the National Commission for Indigenous People
- Areas of ancestral domain (Map)

vii. From the Department of National Defense (DND)
- Maps showing areas of Military Reservation

viii. From the Department of Environment and Natural Resources, DENR
- Protected Areas (maps) from the Protected Areas Management Bureau (PAMB)

The Consultant/Geodetic Engineer shall exhaust all possible measures to obtain all necessary data in the lands to be acquired. Lands with no available data shall be clearly mentioned/specified in the report for further research during the acquisition stage.

d. Closed Traverse and/or Closed Loop

Traverse and/or loop stations must start and end on recovered previously established horizontal ground controls of higher order and follow approximately the course of the boundaries of the affected properties.

e. Angular and Linear Errors of Closures

Angular and linear errors of closures must be in accordance with the specifications and requirements of the Manual for Land Surveys in the Philippines (Land Administrative Order No. 4).

f. Monumenting/Placing of Permanent Reference Points

- Lot Monuments

Standard cylindrical monuments used in defining and marking corners shall be made of concrete (mixture 1:2:3) at least 15 cm in diameter by 40 cm in depth and must be set 35 cm in the ground at the corners of lots within the RROW. The top shall be centered by a galvanized iron spike or by a conical hole not exceeding 20 millimeters in diameter and not less than 10 millimeters in depth to define the corner to which measurement shall be made.

2.3 Survey Operations and Submittal of Parcellary Survey Plans/Returns

During the conduct of Survey Operations, any Aerial Surveys are not allowed to use as stated on DPWH Memorandum dated August 8, 2019 on "Clarification on the Use of Drone Data and LIDAR Data" from Edwin C. Matanguihan – OIC – Assistant Director, Bureau of Design.

The consultant is required to conduct ground surveys in order to have an accuracy of data (such as lot corners or any monuments) as reference to be taken from the actual site affected in preparing the Parcellary Plan.

Upon actual implementation of the project and upon request of DPWH Implementing Office, the Consultant is required to conduct an As-Staked Survey for the purpose of locating the centerline of the proposed road and marking the Road Right-of-Way (RROW) limits. In such way, the DPWH Implementing Office could proceed in the inventory of affected properties.

The computations, plotting/downloading and preparation of survey plans shall be done in accordance with survey requirements and specifications of the DENR/LMS and DPWH Guidelines, Criteria and Standards, Volume I, Part I, Surveys and Investigations.

The Plan (A-1 size Mylar or High-grade Tracing Paper) shall consist of the following:

a. Cover Sheet.
b. Location Plan showing the adjoining Towns, Municipalities/Barangays, vicinity map, general notes, direction of meridian, technical description of all controlling points, legend/symbols, index map.
c. Plotted in grid coordinate system.
d. Right-of-way limit is **20 meters** width strip
e. Match line stationing in every sheet of plan.
f. Name of Municipalities/Barangay/Sitio to be traversed/ affected.
g. Technical descriptions of monuments/reference points.
h. Land Classification Status Certification from the DENR (residential, agricultural, commercial, industrial).
i. Stationing at every 20 meters interval.
j. All corners shall be indicated by small circle with their respective number description.
k. Name, license number, date and place of issuance, signature and seal of Geodetic Engineer.
l. Date of survey.
m. Waiver drafted in every sheet of plans.
n. Name of signatories/approving officials in every sheet of plan;
o. Indicate per sheet in tabular form the following.
   - Name of claimant/s or owner/s of lots with corresponding lot no. and lot areas (remaining and affected) in sq. meter.
   - Technical description and tie lines of all lots affected by the ROW.
   - Names of affected lot owners, the area of lot affected and area of lot remaining.
p. Other Related Documents
   - Lot data computation of affected lots,
     The lot data computation that shall delineate the affected area from the mother lot shall be prepared on prescribed LMB Forms.

   - Miscellaneous Data,
     This shall include all research materials and documents pertaining to the affected lots such as Certified True Copies (blue) of OCT/TCT, technical description of the lot, tax declaration of real property and approved subdivision plans in LMS Form.

     In case of untitled lands, secure **(1)**Tax Declaration Tracer showing his and his predecessors' open and continuous possession of the property for at least thirty (30) years; **(2)** Land Classification Status Certification from the DENR that the land is alienable and disposable/ within protected area/timberland; **(3)** Lot Status Certification from DENR; **(4)** Certification from the Registry of Deeds that the Land is untitled; **(5)** Other documents that may show proof of Ownership.

2.4. Subdivision Plans

The subdivision plans shall be prepared in accordance with the requirements of the LMS, DENR, together with other documents to be approved by the said agency to be used for land registration purposes. This plan shall be complied together with the computation of the technical descriptions of the lot.

The subdivision plans shall be signed/certified for conformity by the DPWH-Head of the Implementing Office or Regional Director /District Engineer concerned prior to submission to the LMS, DENR, for approval.

2.5. Approval of Parcellary Survey Plans

The parcellary plans including the copy of the subdivision plans and other related documents, upon completion, shall be submitted by the Consultant to the DPWH - Implementing Office for approval per DO No. 65, series of. 2017 – "Re-issuance of Department Order No. 19, s. 2017, delegating to Regional Directors the approval/signing of documents pertaining to Infrastructure Right-Of-Way (ROW) for national projects including the approval for payments of claims and signing of checks".

The review and approval of the Parcellary Survey Plans by DPWH officials do not relieve the Surveys Consultant/Geodetic Engineer from the responsibility for the accuracy of the survey works and installation of right-of-way and lot monuments.

The approved parcellary and subdivision plans together with an electronic file shall be submitted to the DPWH-Implementing Office for safekeeping and ready future reference.

2.6. Preparation of Individual Sketch Plan

Individual sketch plan of lots affected duly signed and sealed by Geodetic Engineer showing the affected area and the remaining area.

III. IMPLEMENTATION

A. OUTPUTS/DELIVERABLES

Inception Report

The Consultant is required to submit one (1) month after commencement of services. It shall outline a detailed work program and briefly describe the methodology and project schedule (GANTT and S-Curve) proposed to meet the terms of reference. The report shall include the initial findings as well as preliminary layout of the forms to be used for various investigations and calculations. Inception Reports shall be submitted in soft-bound copy with title of the report written at the spine.

Final Report

The consultant shall prepare the final report in 3 bound copies. It shall include the following:

a. Parcellary Plan consist of the location plan showing the adjoining towns, Municipalities/Barangays, vicinity map, general notes, direction of meridian, technical description of all controlling points, legend/symbols, index map
b. Land Classification Status Certification from the DENR - CENRO *(alienable and disposable, protected area, and timberland)*.
c. Lot Status Certification from the DENR - CENRO
d. Individual Sketch Plan of affected lots
e. Certified True Copies of Original/Transfer Certificate of Title
f. Certification from the Registry of Deeds for the Verification of ownership of the land
g. Certified True Copies of Tax Declaration
h. Copy of Tracer from the Assessor's Office
i. Copy of Tax Map from the Assessor's Office
j. Lot Data Computation (LDC)
k. Geotagged Photos of the surveyed area showing the installed cylindrical Lot Monuments

B. SUB-CONTRACTING

The Consultant may sub-contract portions of the Consulting Services to an extent as may be approved by the Procuring Entity, provided that the Consultant shall directly undertake, using its own personnel and resources, not less than eighty percent (80%) of the contract works in terms of cost.

C. DURATION OF CONSULTANCY SERVICES

The Consultant's contract period for undertaking the parcellary survey and the preparation of parcellary survey plans of the aforecited project shall not be more than (45) Calendar Days and the Consultant shall commence work within seven (7) days after receipt of Notice to Proceed.

D. SCHEDULES

Indicative **schedule of activities** and **key personnel**:

CONSULTANCY SERVICES IN THE CONDUCT OF PARCELLARY SURVEY - TOLEDO-PINAMUNGAJAN-ALOGUINSAN-MANTALONGON RD., K0050+767 - K0051+995

Brgy. Ibo - Brgy. Cabitoonan, Toledo City, Cebu

Work Schedule		**No. of Weeks**					
Activities	No. of Days	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
1. Reconnaissance Survey and Research Work	10.0						
2. Establishment of Horizontal / Tertiary Control	5.0						
3. Preparation of Complete Survey Works	7.0						
4. Corner Setting/ Monumenting	5.0						
5. Computing/ Graphing Works	16.0						
6. Submission and Approval of Plans	2.0						
Total No. of Days	**45.0**						

CONSULTANCY SERVICES IN THE CONDUCT OF PARCELLARY SURVEY - TOLEDO-PINAMUNGAJAN-ALOGUINSAN-MANTALONGON RD., K0050+767 - K0051+995

Brgy. Ibo - Brgy. Cabitoonan, Toledo City, Cebu

Manpower Schedule		**No. of Weeks**					
Key Personnel	No. of Days	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
1. Geodetic Engineer	45.00						
Technical Support Staff							
2. Instrumentman	27.00						
3. Draftsman	16.00						
4. Researcher	10.00						
5. Survey Aide	27.00						
Administrative Support Staff							
6. Document Checker	12.00						
7. Driver	29.00						

E. MANPOWER REQUIREMENTS

The following experts/professionals and their members should have an appropriate educational degree, relevant training and adequate years of experience in Parcellary Survey, and same staff should be required to carry out the Consulting Services for the project within the duration indicated hereunder, to wit:

Position/Key Staff	No. of Staff	Detailed Tasks/ Responsibilities	Required Qualifications
Geodetic Engineer	1	-Overall guidance, direction, supervision and monitoring in the completeness of survey data and reports -Conduct surveys, research work, data collection and analysis	• Duly Licensed Geodetic Engineer • Must have at least 5 years' experience as a Land Surveyor
Instrumentman	1	-Sets-up/operates survey instruments and records data gathered during survey -Monitors the condition of survey instruments and reports issues for proper action -Able to perform calculations related to measurements and data analysis	• At least a Bachelor's/ College Degree • Must have at least 5 years' experience in surveying and operation of various surveying instruments
Draftsman	1	-Plot and extract survey data -Prepare precise drawings and maps, including measurements and calculations based on the data provided by Geodetic Engineer	• Must possess at least a Bachelor's/College Degree in Engineering or Architecture. • Must have at least 2 years of working experience. • Proficient in AutoCAD Software

F. ASSISTANCE TO BE PROVIDED BY THE CLIENT

In connection with the tasks of the Consultant that require inputs and assistance from other government agencies as well as local NGO's, members of the Congress and officials of the regional/provincial branches of national government agencies, the DPWH shall ensure that the Consultant has access to all relevant information necessary to the performance of the above services. The Consultant is expected to provide office space and equipment and all other resources necessary for completing the services.

Prepared:

GINA D. DE VILLA
Unit Head, Environmental, Social and ROW Unit

Submitted:

FRITZIE D. ORTEGA
Chief, Planning & Design Section

Approved:

LESIL M. AMAMIO
BAC Chairperson

Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
CEBU 3RD DISTRICT ENGINEERING OFFICE
Ibo, Toledo City, Cebu, Region VII

BAGONG PILIPINAS

TERMS OF REFERENCE

CONSULTANCY SERVICES IN THE CONDUCT OF PARCELLARY SURVEY - TOLEDO-PINAMUNGAJAN-ALOGUINSAN-MANTALONGON RD, K0064+000 – K0064+754

Brgy. Poblacion, Pinamungajan, Cebu

I. INTRODUCTION

A. BACKGROUND

The Government of the Republic of the Philippines, thru the Department of Public Works and Highways (DPWH) Cebu 3rd District Engineering Office, Ibo, Toledo City, intends to engage the services of Local Consultancy Firms for the conduct of Parcellary Survey of affected lots within the road right of way in order to ensure expeditious implementation of the *Road Widening of Toledo-Pinamungajan-Aloguinsan-Mantalongon Rd., K0064+000 – K0064+754,* located at Brgy. Poblacion, Pinamungajan, Cebu.

B. OBJECTIVE

The objective of the services is to identify affected lots within the Road Right-of-Way (RROW) limits, as indicated in the detailed road design plans approved by the District Engineer or her authorized representative and segregate the affected lots for the purpose of registering them in favor of the Government.

C. PROJECT SCOPE OF WORK

The proposed project which is the parcellary survey of Toledo-Pinamungajan-Aloguinsan-Mantalongon Rd., K0064+000 – K0064+754 has an estimated length of 0.754 k.m.

II. SCOPE OF SERVICES

A. GENERAL

2.1 The Consultant shall coordinate with the Land Management Services (LMS), Department of Environment and Natural Resources (DENR), DPWH-Implementing Office and Regional/District Offices concerned on the RROW acquisition. The services shall be provided in accordance with the improved Infrastructure Right-of- Way (ROW) Procedural Manual and DPWH Department Order (DO) No. 65, series of. 2017 – "Re-issuance of Department Order No. 19, s. 2017, delegating to Regional Directors the approval/signing of documents pertaining to Infrastructure Right-Of-Way (ROW) for national projects including the approval of payments of claims and signing of checks"; and other related Department issuances.

2.2 The Consultant/Geodetic Engineer/Survey Contractor (Geodetic Engineering Partnership or Sole Proprietorship Firm) shall provide all labor, instruments/ equipment like Global

Positioning System and Electronic Total Stations, calibrated by the DENR LMS, materials, supplies, vehicles, and other facilities necessary to perform satisfactorily the survey works herein required, viz:

2.2.1 Detailed Survey and Mapping Requirements

The detailed survey works shall be undertaken in accordance with the common surveying and mapping requirements and specifications stipulated in the Manual for Land Survey in the Philippines (Land Administrative Order No. 4 of the Bureau of Lands); Executive Order No. 4, adopting the Philippine Reference System of 1992 as the Standard Reference System for Survey in the Philippines; and the DPWH Design Guidelines, Criteria and Standards, Volume I, Part I, Surveys and Investigations, that include but are not limited to the following:

a. Establishment of Horizontal Ground Controls

Establishment of horizontal ground controls based on the Philippine Plane Coordinate System or the Philippines Transverse Mercator Grid and/or Executive Order No. 45 (Adopting the Philippine Reference System of 1992 as the Standard Reference System for Survey in the Philippines).

b. Traverse Survey based on the Second Order Accuracy

c. Research Work of Affected Lots/Real Properties

In the research work for cadastral maps and technical descriptions of affected lots, the names of affected landowners, if any, within the RROW must be taken from the corresponding Municipal, City or Provincial Assessor's Office.
The following data shall be gathered relative to the parcellary survey.

i. From the Assessor's Office
- Tax declaration of Real Property
- Tax Map to determine the owner and address
- Land Classification

ii. From the Affected Landowners
- Tax declaration of Real Property
- Copy of the Transfer Certificate of Title (TCT)
- Tax Clearance
- Pictures taken by the Consultant/Geodetic Engineer

iii. From the Registry of Deeds
- Certified copy of the Transfer Certificate of Title (TCT)

iv. From the Land Management Services (LMS)
- Cadastral Map
- Technical Description of Lot
- Lot Plan in standard LMS Form

v. From the Department of Agrarian Reform
- Areas subject to Land Reform or vast estate landholdings, where there is voluntary offer to sell (VOS) by owners

vi. From the National Commission for Indigenous People
- Areas of ancestral domain (Map)

vii. From the Department of National Defense (DND)
- Maps showing areas of Military Reservation

viii. From the Department of Environment and Natural Resources, DENR
- Protected Areas (maps) from the Protected Areas Management Bureau (PAMB)

The Consultant/Geodetic Engineer shall exhaust all possible measures to obtain all necessary data in the lands to be acquired. Lands with no available data shall be clearly mentioned/specified in the report for further research during the acquisition stage.

d. Closed Traverse and/or Closed Loop

Traverse and/or loop stations must start and end on recovered previously established horizontal ground controls of higher order and follow approximately the course of the boundaries of the affected properties.

e. Angular and Linear Errors of Closures

Angular and linear errors of closures must be in accordance with the specifications and requirements of the Manual for Land Surveys in the Philippines (Land Administrative Order No. 4).

f. Monumenting/Placing of Permanent Reference Points

- Lot Monuments

Standard cylindrical monuments used in defining and marking corners shall be made of concrete (mixture 1:2:3) at least 15 cm in diameter by 40 cm in depth and must be set 35 cm in the ground at the corners of lots within the RROW. The top shall be centered by a galvanized iron spike or by a conical hole not exceeding 20 millimeters in diameter and not less than 10 millimeters in depth to define the corner to which measurement shall be made.

2.3 Survey Operations and Submittal of Parcellary Survey Plans/Returns

During the conduct of Survey Operations, any Aerial Surveys are not allowed to use as stated on DPWH Memorandum dated August 8, 2019 on "Clarification on the Use of Drone Data and LIDAR Data" from Edwin C. Matanguihan – OIC – Assistant Director, Bureau of Design.

The consultant is required to conduct ground surveys in order to have an accuracy of data (such as lot corners or any monuments) as reference to be taken from the actual site affected in preparing the Parcellary Plan.

Upon actual implementation of the project and upon request of DPWH Implementing Office, the Consultant is required to conduct an As-Staked Survey for the purpose of locating the centerline of the proposed road and marking the Road Right-of-Way (RROW) limits. In such way, the DPWH Implementing Office could proceed in the inventory of affected properties.

The computations, plotting/downloading and preparation of survey plans shall be done in accordance with survey requirements and specifications of the DENR/LMS and DPWH Guidelines, Criteria and Standards, Volume I, Part I, Surveys and Investigations.

The Plan (A-1 size Mylar or High-grade Tracing Paper) shall consist of the following:

a. Cover Sheet.
b. Location Plan showing the adjoining Towns, Municipalities/Barangays, vicinity map, general notes, direction of meridian, technical description of all controlling points, legend/symbols, index map.
c. Plotted in grid coordinate system.
d. Right-of-way limit is **20 meters** width strip
e. Match line stationing in every sheet of plan.
f. Name of Municipalities/Barangay/Sitio to be traversed/ affected.
g. Technical descriptions of monuments/reference points.
h. Land Classification Status Certification from the DENR (residential, agricultural, commercial, industrial).
i. Stationing at every 20 meters interval.
j. All corners shall be indicated by small circle with their respective number description.
k. Name, license number, date and place of issuance, signature and seal of Geodetic Engineer.
l. Date of survey.
m. Waiver drafted in every sheet of plans.
n. Name of signatories/approving officials in every sheet of plan;
o. Indicate per sheet in tabular form the following.
   - Name of claimant/s or owner/s of lots with corresponding lot no. and lot areas (remaining and affected) in sq. meter.
   - Technical description and tie lines of all lots affected by the ROW.
   - Names of affected lot owners, the area of lot affected and area of lot remaining.
p. Other Related Documents
   - Lot data computation of affected lots,
     The lot data computation that shall delineate the affected area from the mother lot shall be prepared on prescribed LMB Forms.

   - Miscellaneous Data,
     This shall include all research materials and documents pertaining to the affected lots such as Certified True Copies (blue) of OCT/TCT, technical description of the lot, tax declaration of real property and approved subdivision plans in LMS Form.

     In case of untitled lands, secure **(1)**Tax Declaration Tracer showing his and his predecessors' open and continuous possession of the property for at least thirty (30) years; **(2)** Land Classification Status Certification from the DENR that the land is alienable and disposable/ within protected area/timberland; **(3)** Lot Status Certification from DENR; **(4)** Certification from the Registry of Deeds that the Land is untitled; **(5)** Other documents that may show proof of Ownership.

2.4. Subdivision Plans

The subdivision plans shall be prepared in accordance with the requirements of the LMS, DENR, together with other documents to be approved by the said agency to be used for land registration purposes. This plan shall be complied together with the computation of the technical descriptions of the lot.

The subdivision plans shall be signed/certified for conformity by the DPWH-Head of the Implementing Office or Regional Director /District Engineer concerned prior to submission to the LMS, DENR, for approval.

2.5. Approval of Parcellary Survey Plans

The parcellary plans including the copy of the subdivision plans and other related documents, upon completion, shall be submitted by the Consultant to the DPWH - Implementing Office for approval per DO No. 65, series of. 2017 – "Re-issuance of Department Order No. 19, s. 2017, delegating to Regional Directors the approval/signing of documents pertaining to Infrastructure Right-Of-Way (ROW) for national projects including the approval for payments of claims and signing of checks".

The review and approval of the Parcellary Survey Plans by DPWH officials do not relieve the Surveys Consultant/Geodetic Engineer from the responsibility for the accuracy of the survey works and installation of right-of-way and lot monuments.

The approved parcellary and subdivision plans together with an electronic file shall be submitted to the DPWH-Implementing Office for safekeeping and ready future reference.

2.6. Preparation of Individual Sketch Plan

Individual sketch plan of lots affected duly signed and sealed by Geodetic Engineer showing the affected area and the remaining area.

III. IMPLEMENTATION

A. OUTPUTS/DELIVERABLES

Inception Report

The Consultant is required to submit one (1) month after commencement of services. It shall outline a detailed work program and briefly describe the methodology and project schedule (GANTT and S-Curve) proposed to meet the terms of reference. The report shall include the initial findings as well as preliminary layout of the forms to be used for various investigations and calculations. Inception Reports shall be submitted in soft-bound copy with title of the report written at the spine.

Final Report

The consultant shall prepare the final report in 3 bound copies. It shall include the following:

a. Parcellary Plan consist of the location plan showing the adjoining towns, Municipalities/Barangays, vicinity map, general notes, direction of meridian, technical description of all controlling points, legend/symbols, index map
b. Land Classification Status Certification from the DENR - CENRO *(alienable and disposable, protected area, and timberland).*
c. Lot Status Certification from the DENR - CENRO
d. Individual Sketch Plan of affected lots
e. Certified True Copies of Original/Transfer Certificate of Title
f. Certification from the Registry of Deeds for the Verification of ownership of the land
g. Certified True Copies of Tax Declaration
h. Copy of Tracer from the Assessor's Office
i. Copy of Tax Map from the Assessor's Office
j. Lot Data Computation (LDC)
k. Geotagged Photos of the surveyed area showing the installed cylindrical Lot Monuments

B. SUB-CONTRACTING

The Consultant may sub-contract portions of the Consulting Services to an extent as may be approved by the Procuring Entity, provided that the Consultant shall directly undertake, using its own personnel and resources, not less than eighty percent (80%) of the contract works in terms of cost.

C. DURATION OF CONSULTANCY SERVICES

The Consultant's contract period for undertaking the parcellary survey and the preparation of parcellary survey plans of the aforecited project shall not be more than (30) Calendar Days and the Consultant shall commence work within seven (7) days after receipt of Notice to Proceed.

D. SCHEDULES

Indicative **schedule of activities** and **key personnel**:

CONSULTANCY SERVICES IN THE CONDUCT OF PARCELLARY SURVEY - TOLEDO-PINAMUNGAJAN-ALOGUINSAN-MANTALONGON RD., K0064+000 K0064+754

Brgy. Poblacion, Pinamungajan, Cebu

Work Schedule		**No. of Weeks**			
Activities	No. of Days	Week 1	Week 2	Week 3	Week 4
1. Reconnaissance Survey and Research Work	8.0				
2. Establishment of Horizontal / Tertiary Control	3.0				
3. Preparation of Complete Survey Works	5.0				
4. Corner Setting/ Monumenting	2.0				
5. Computing/ Graphing Works	10.0				
6. Submission and Approval of Plans	2.0				
Total No. of Days	**30.0**				

CONSULTANCY SERVICES IN THE CONDUCT OF PARCELLARY SURVEY - TOLEDO-PINAMUNGAJAN-ALOGUINSAN-MANTALONGON RD., K0064+000 - K0064+754

Brgy. Poblacion, Pinamungajan, Cebu

Manpower Schedule		**No. of Weeks**			
Key Personnel	No. of Days	Week 1	Week 2	Week 3	Week 4
1. Geodetic Engineer	30.0				
Technical Support Staff					
2. Instrumentman	18.0				
3. Draftsman	10.0				
4. Researcher	8.0				
5. Survey Aide	18.0				
Administrative Support Staff					
6. Document Checker	10.0				
7. Driver	20.0				

E. MANPOWER REQUIREMENTS

The following experts/professionals and their members should have an appropriate educational degree, relevant training and adequate years of experience in Parcellary Survey, and same staff should be required to carry out the Consulting Services for the project within the duration indicated hereunder, to wit:

Position/Key Staff	No. of Staff	Detailed Tasks/ Responsibilities	Required Qualifications
Geodetic Engineer	1	-Overall guidance, direction, supervision and monitoring in the completeness of survey data and reports -Conduct surveys, research work, data collection and analysis	• Duly Licensed Geodetic Engineer • Must have at least 5 years' experience as a Land Surveyor
Instrumentman	1	-Sets-up/operates survey instruments and records data gathered during survey -Monitors the condition of survey instruments and reports issues for proper action -Able to perform calculations related to measurements and data analysis	• At least a Bachelor's/ College Degree • Must have at least 5 years' experience in surveying and operation of various surveying instruments
Draftsman	1	-Plot and extract survey data -Prepare precise drawings and maps, including measurements and calculations based on the data provided by Geodetic Engineer	• Must possess at least a Bachelor's/College Degree in Engineering or Architecture. • Must have at least 2 years of working experience. • Proficient in AutoCAD Software

F. ASSISTANCE TO BE PROVIDED BY THE CLIENT

In connection with the tasks of the Consultant that require inputs and assistance from other government agencies as well as local NGO's, members of the Congress and officials of the regional/provincial branches of national government agencies, the DPWH shall ensure that the Consultant has access to all relevant information necessary to the performance of the above services. The Consultant is expected to provide office space and equipment and all other resources necessary for completing the services.

Prepared:

GINA D. DE VILLA
Unit Head, Environmental, Social and ROW Unit

Submitted:

FRITZIE D. ORTEGA
Chief, Planning & Design Section

Approved:

LESIL M. AMAMIO
BAC Chairperson