



PROJECT REPORT

ON

ROUTEY SURVEY

OF

OKE-OSE- SENTU ROAD, OFF OLD JEBBA ROAD, ILORIN EAST

LOCAL GOVERNMENT AREA, KWARA STATE.

BY

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MATRIC NO: - ND/23/SGI/FT/0069

BEING A PROJECT REPORT SUBMITTED TO THE DEPARTMENT

OF SURVEYING AND GEO-INFORMATICS, INSTITUTE OF

ENVIRONMENTAL STUDIES.

IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE

AWARD OF ORDINARY NATIONAL DIPLOMA (OND) IN

SURVEYING AND GEO-INFORMATICS, KWARA STATE

POLYTECHNIC, ILORIN.

JUNE, 2025

CERTIFICATE

I, **KAZEEM FARIDAH ENIOLA**, hereby certify that all information contained in this project report were obtained as a result of observations and measurements made by me on the field and that the survey was carried out in accordance with survey rules and regulations and departmental instructions.

.....

KAZEEM FARIDAH ENIOLA

ND/23/SGI/FT/0069

.....

DATE

CERTIFICATION

This is to certify that **KAZEEM FARIDAH ENIOLA** with matriculation number **ND/23/SGI/FT/0069** has successfully carried out the survey duties contained therein in this project write up under my instruction and direct supervision.

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DEDICATION

This project report is dedicated to. My guidance **Mr. And. Mrs. KAZEEM**

ACKNOWLEDGEMENTS

All thanks, glory and adorations are due to Almighty Allah, The Creator of all and The Designer of every fate; for making this path (SURVEYING) part of my fate and for His blessing, mercy, favor, guidance, and assistance in seeing me through from the start to the end of my program and making the program a success.

I am lucky to have family and friends who have aided my academic pursuit in the ways they wouldn't even know. I thank my parents **Mr. and Mrs. Kazeem** for their love, kindness, prayers, and supports both morally and financially. To my siblings for their prayers and advice words cannot be enough to express my gratitude.

And I also give thanks to my project supervisors in the person of Surv. Abdulsalam Ayuba And Suvr. Benard Oguntayo for their strictly and through supervision. I will like to thank all lecturers of this noble department starting from H.O.D Surv. Abinbola isau, Surv. A. Ayuba, Mr. Bello Felix Diran, Surv. Williams Kzeem, Surv. A.O. Akinyede, and also the Director of special duty in IES Surv. A.G. Aremu and other supportive staff of the department of Surveying and Geo-informatics, Kwara State Polytechnic, Ilorin.

To everyone who has supported me thus far, I am sincerely grateful and I will never forget. **MAY GOD BLESS YOU ALL. AMEN**

ABSTRACT

This project report contains the reconnaissance, field work, data processing exercise, and every other procedures undertaken in the course of this project which focused on Route Survey which involves acquisition of data for the purpose of road construction design for the road from GT junction to SENTU Road in Oke- Ose Ilorin East local government of Ilorin, Kwara State. The field work involved, reconnaissance, distance measurement with DGPS and, the numbers of intersection point (I.P), benchmark (B.M), using CORS TECHNOLOGY. The acquired data were processed using appropriate formulae. The plans were produced from the processed data at suitable scales both in digital and graphic formats. Finally a project report was written.

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CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND TO THE STUDY

Route survey's introduction typically establishes the purpose and scope of the survey, defines the types of routes it covers, and outlines the general process involved in conducting the survey. It also emphasizes the importance of route surveys in planning and constructing transportation and utility infrastructure.

Route surveying is comprised of all survey operations required for design and construction of engineering works such as highways, pipelines, canals, or railroads. It is a survey of the earth's surface along a particular route in the compilation and updating of topographical, geological, soil and other maps and the correlation of selected contours and objects with geodetic reference points or landmarks during linear surveys, and also in the study of the dynamics of natural and socioeconomic phenomena in a narrow strip terrain. In a route survey, representations of the actual course of the study and of the plane horizontal features on both sides of it within the limits of direct visibility are plotted using methods of instrument surveying or exploratory surveying.

A completed route survey will provide sufficient qualitative information and dimensional data for indicating the feasible alignment, grades, and cross

sections, and proposed right of way lines. A route survey does not provide construction data as can be developed from a preliminary survey. Rather, a route survey provides information and data pertaining to general location possibilities, feasibilities, and probable cost of right-of-way, construction, use and maintenance.

In view of this, the infrastructural development in terms of operational road construction along Oke-Ose – Sentu road requires the input of surveying information which can be obtained through route surveying. This involves the determination of respective elevations of chainage points for several purposes such as engineering design, road alignments and determination of curves and chainages. Roads are used for various forms of transportation and on it, vehicles move goods from points of production, such as fields and factories directly to markets and shopping centres. Private individuals also rely on roads for safe and efficient travel. Fire department, paramedics and other emergency management agencies depend on this organised operational road system within the area to provide effective emergency services in the community.

In order to achieve this, reliable survey information regarding the route as it now stands become a priority, and this prompted us to carry out the route survey exercise which shall be used for engineering design and construction of the operational road.

In essence, the introduction to a route survey serves as a foundational document, providing context, scope, and purpose for the entire survey process.

AIM(S) AND OBJECTIVES

1.2 AIM(S)

The aim of this project is to carry out the route survey from G.T Junction to Sentu Village. It is also aimed at training the students on how to carry out a route survey and to examine whether the student will be able to carry out route survey which entails production of both horizontal and vertical alignment plans of the route running through the project area.

1.3. OBJECTIVES OF THE STUDY

The objectives of the project are summarized as follows:

- 1) To carryout survey using CORS
- 2) To carryout traversing using DGPS
- 3) To mark out the center line of the route at 25m interval for the longitudinal/cross section profile.
- 4) To fix linear details along the route

1.4 SCOPE OF THE PROJECT

- Reconnaissance
- Chainage marking at 25cm interval along the center line of route
- Monumentation
- DGPS Observation
- Cross sectioning
- Data processing
- Analysis and
- Plotting with a suitable scale.

1.5 PERSONNEL

The personnel involved in the survey are;

NAME	MATRIC NUMBER	ROLE
ALADE FLORENCE ABOSEDE	ND/23/SGI/FT/0071	GROUP LEADER
AWOSEN BOLUWATIFE .O	ND/23/SGI/FT/0072	MEMBER
KAZEEM FARIDAH ENIOLA	ND/23/SGI/FT/0069	MEMBER
MURITALA MUJIDAH KEHINDE	ND/23/SGI/FT/0068	MEMBER
BADMUS FATHIA ARIKE	ND/23/SGI/FT/0070	MEMBER
AZEEZ FARUQ AOMIDE	ND/23/SGI/FT/0060	MEMBER
OLAREWAJU BOLUWATIFE .A	ND/23/SGI/FT/0067	MEMBER

1.6 LOCATION OF THE SITE

The study area is at Sentu – Oke-Ose Road, off Old Jebba road, Ilorin East Local Government Area Kwara State. The length of this project is 5km covered the Latitude (8°32'54.40'')N Longitude(4°39'10.90'')E and Latitude (8°30'52.57'')N Longitude (4°40'55.30'')E.

1.6.1 MAP OF THE STUDY AREA

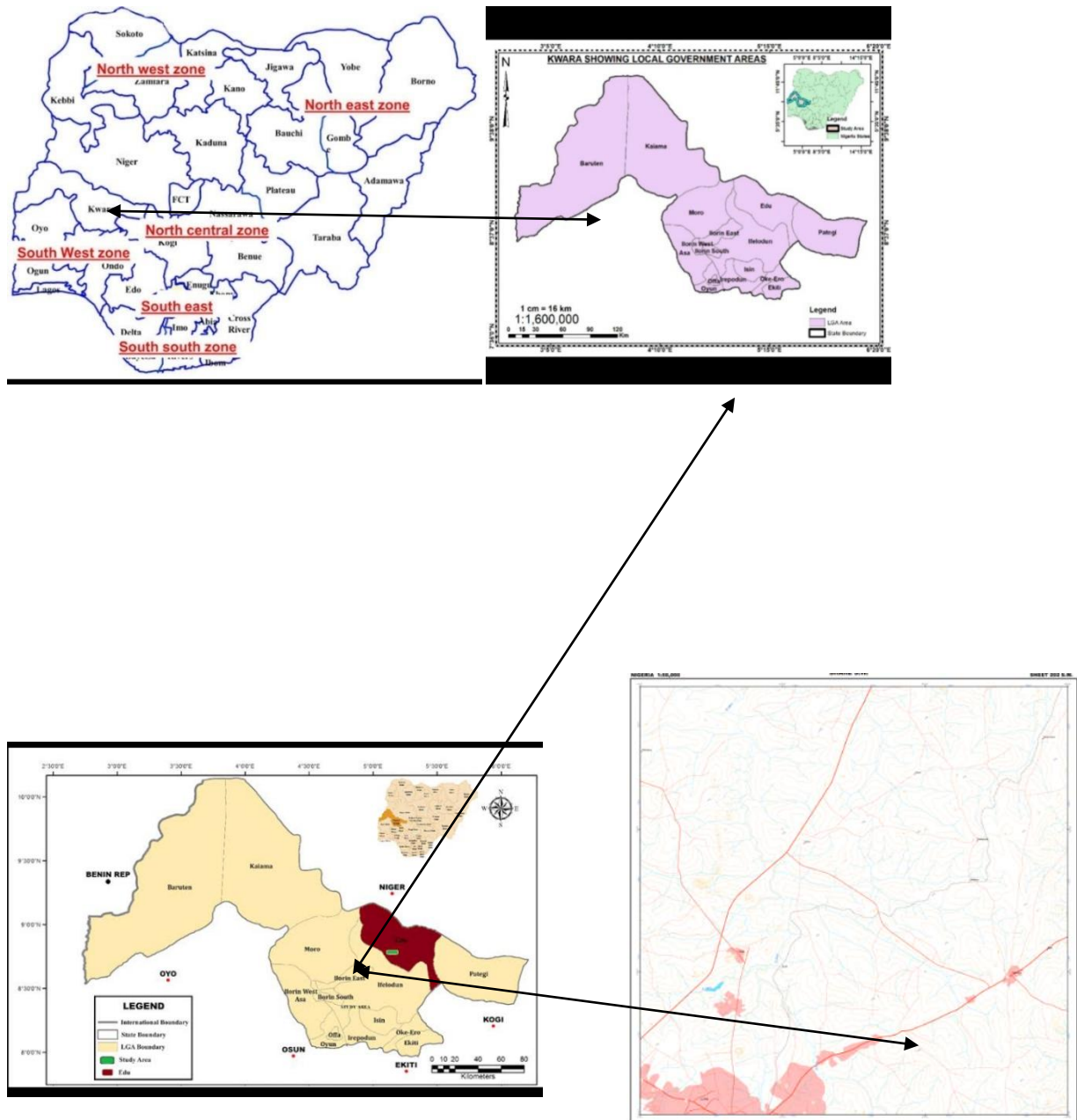


FIG.1.0 Showing Nigeria map, Kwara state map, and topographical map covering the project area .



Fig. 1.1 showing the imagery covering the project area

CHAPTER TWO

2.0 LITERATURE REVIEW

Route survey is to establish the horizontal and vertical alignment for transportation facilities which are assumed to form a network that includes the transport of people or goods by roads, highways, railways, pipelines and others. Route survey alignment planning, design and construction work includes obtaining necessary information regarding terrain and land use, making surveys to determine detailed topography and establishing horizontal and vertical control required for construction layout.

In general view, route survey consists of determining ground configuration and the location of objects within a proposed route, thereby establishing the linear alignment of the route and determining volumes of earthwork required for construction. The most important aspect in route survey alignment project is the establishment of horizontal and vertical control required for planning, design, construction and final as built surveys for the realignment.

With the advent of the Roman Empire, there was a need for armies to be able to travel quickly from one area to another and the roads that existed were often, which leads to poor movement of large number of people. To solve this problem, the Romans built roads which was with the use deep roadbeds of

crushed stones as an underlying layer to ensure that they are kept dry, as water flows out from the crushed stone, instead of becoming mud in clay soils.

In the medieval Islamic world, many roads were built throughout the Arab Empire, the most sophisticated road were those of the Baghdad, which were paved with tar in the 8th century. Tar was derived from petroleum, accessed from oil fields in the region, through the chemical process of destructive distillation.

In the new construction method, 18th and 19th centuries; new roads and bridges began to be built, often based on Roman designs. Although there were attempt to rediscover Roman methods, there was little useful innovation in road building before the 18th century.

Roam road design using large stones at the bottom and gravel on top with depth of two meters was used by General George Wade 1725 and 1737 in constructing 250 miles (400km) of road and 40 bridges to improve Britain's control of the Scottish Highlands.

Route survey is also the determination of the part of a proposed road in order to portray the relief of the path and also the design and construction of linear works like road and pipelines or railways.

Road is one of the most important infrastructures which cannot be neglected. It plays a major role in the development of nations, because it aids a

better road transportation management system also it serves a thoroughfare, route or way on land between two places which has been paved or otherwise improve for the transportation of goods and services

The aim of this project is to carry out the route survey from G T junction to Sentu village. The project is also aimed at training the students on how to carry out a route survey and to examine whether the student will be able to carry out route survey which entails production of both horizontal and vertical alignment plans of the route run-in through the project area.

In modern route surveying, both Continuous Operating Reference Stations (CORS) and total stations are used, each offering unique advantages. CORS systems, utilizing GNSS (Global Navigation Satellite System) technology, provide high accuracy and efficient surveying in open areas, while total stations offer greater precision and are particularly useful in obstructed areas.

CORS Systems:

CORS stations are stationary GNSS receivers that continuously record satellite data, enabling real-time and post-processing positioning for users in which highly Accuracy: CORS systems, especially with precise point positioning (PPP), can achieve centimeter-level accuracy, making them suitable for various applications, including route surveying.

CORS systems effectively offer efficient surveying by providing a fast and cost-effective way to obtain precise coordinates. CORS networks can cover large areas, facilitating surveying across extensive routes. Due to Obstructed Area CORS systems limitation can be affected by obstacles and atmospheric conditions, leading to inaccurate positioning in shaded or urban environments.

Software Requirements: Post-processing and analysis of CORS data require specialized software, adding to the workload. WHILE

Total Stations:

Total stations are electronic surveying instruments that measure angles, distances, and elevations with high precision.

Advantages:

High Accuracy: Total stations offer high accuracy, particularly in close-range surveying, making them ideal for detailed route surveys and construction layout.

Versatility: Total stations can be used for various surveying tasks, including horizontal and vertical measurements, as well as 3D modeling.

Robustness: Total stations are generally less affected by atmospheric conditions and obstacles compared to CORS systems, making them suitable for obstructed areas.

Limitations:

Time-Consuming: Setting up and using total stations can be time-consuming, especially for large-scale surveys.

Labor-Intensive: Total stations require skilled surveyors to operate and interpret data, potentially increasing labor costs.

Comparison:

Accuracy:

CORS systems offer high accuracy in open areas, while total stations excel in precision and are less susceptible to interference in obstructed areas.

Efficiency:

CORS systems are more efficient for large-scale surveys and can cover extensive areas, while total stations are more suitable for detailed, precise measurements.

Cost: CORS systems may require initial investment in hardware and software, while total stations may involve higher labor costs.

However, In modern route surveying, the choice between CORS technology and Total Stations depends on the specific project requirements, survey environment, and desired accuracy. For open areas and extensive surveys, CORS technology offer efficiency and accuracy, while total stations

provide high precision and robustness in obstructed areas. In some cases, a combination of both methods can be used to optimize survey accuracy and efficiency.

CHAPTER THREE

3.0 METHODOLOGY

This can be termed as a set of methods and principles used to perform a particular activity. For the activities to be successfully performed, proper planning is very important. This involves development of a work plan showing how goals and objectives are to be accomplished. Hence, planning is one of the essential factors for the effective project execution and management. Proper planning was taken for the execution of this project and this involved;

1. The choice of the most appropriate techniques for carry out of the project
2. Selection of equipment used
3. The design of a monitoring scheme that really helped in achieving the required accuracy for the project, starting from reconnaissance to the final product of the project.

3.1 RECONNAISSANCE

This is an important and first aspect in any survey project carried out to obtain the general view of the study area in terms of the nature of the terrain and to adequately plan the best ways to the set aim and objectives of the project. The importance of reconnaissance to any survey work of any size and nature cannot

be over-emphasized. Experience has proved that time spent in carrying out a good reconnaissance is not a wasted time since it contributes to the quick execution of any survey exercise and promotes easy survey work. Reconnaissance simply connotes the summation of all activities preceding the actual execution of a survey job. It involves taking a general study or view of an area of operation with a view of knowing how best the operation is to be carried out in terms of energy and time. As this project was concerned, the reconnaissance was carried out in two stages.

The two stages of reconnaissance are;

- i. Office planning
- ii. Field planning

3.1.1 OFFICE PLANNING

Office planning is also known as office reconnaissance. It is a vital component of route surveying, enabling surveyors to gather existing data and information before conducting fieldwork. This process involves a thorough review of available resources, including maps, aerial imagery, and existing reports.

3.1.2. FIELD PLANNING

The field reconnaissance was first carried out before the actual operation. This aspect involved site visitation to the project site by all the group members to have a pre-requisite knowledge of how it looks and how the field operation will be carried out.

During the visit, the control points planned to be used were marked, the reconnaissance facilitated the planning and carrying out of the actual survey as it was taking into consideration, the possible problem that are likely to be encountered, how such problems can be overcome or reduced to the barest minimum.

3.2 FIELD PREPARATION

This involved the operation carried out before the actual observation. The operation involved marking of chainages which is done at 25cm interval.

3.3. MONUMENTATION

Temporary bench mark (TBM) were established and coordinated along the entire route of the project, which were meant to serve as controls for

establishing Centerline chainage, setting out of curve and other road features during the actual construction.

The position of these beacons were selected in such a way that they are intervisible to each other, not too far from the proposed road and considerable number of Centerline can be set out from them.

The property beacon used were precast with dimensions 18cm square by 75cm in length. 65cm of the precast beacon was buried beneath the surface and 10cm above. This was done in compliance with the specification of cadastral survey regulations as specified in CAP 425 law of the federation of Nigeria. The property beacon was made of concrete mixture of ratio 3:2:1 of sand, granite and cement. The iron rod protruding at the center of the beacon formed the station mark.

The numbering was done serially from the beginning to the end of the proposed road and were prefixed with the identification number KP ND11 001

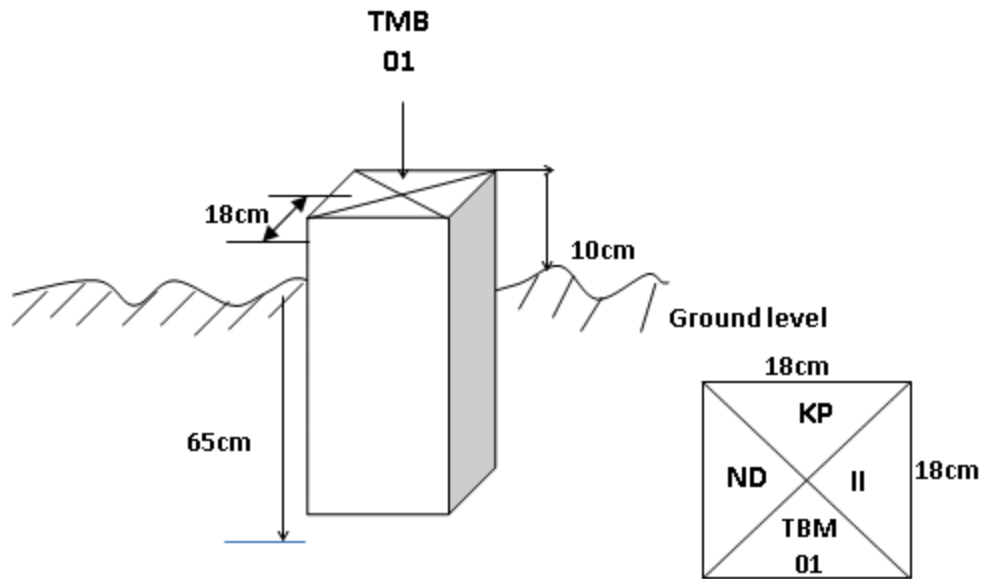


Fig. 3.0 showing typical survey beacon

3.4. EQUIPMENT USED

3.4.1 HARDWARE USED

- i. Differential GPS
- ii. Handheld GPS
- iii. Linen tape
- iv. Power supplies
- v. Nails and bottles cork
- vi. Hammer
- vii. Cabling and connectors

3.4.2 SOFTWARE USED

- i. AutoCAD/ CivilCAD 2014
- ii. Microsoft office (word and excel)
- iii. Notepad

3.5. METHOD USED

CORS TECHNOLOGY

CORS stands for (Continuously Operating Reference Station). It is a type of GPS or GNSS (Global Navigation Satellite System) station that:

1. Collects and transmits GPS/GNSS data continuously.
2. Provides real-time corrections to improve the accuracy of GPS signals.

CORS are used to enhance the precision and reliability of GPS positioning for various applications, including surveying, mapping, navigation, and more.

How you use a CORS with a data logger when collecting survey data:

How to Use a CORS with a Data Logger

1. Set Up Your GNSS Receiver & Data Logger
 - Mount the GNSS antenna securely on your survey pole or tripod.

- Connect your data logger/controller to the GNSS receiver. The data logger is usually a handheld device or tablet used to configure settings and record data.

2. Configure the CORS Connection

- On the data logger, enter the CORS network settings:
- Enter the username
- IP address & port of the CORS provider.
- You'll need mobile internet (, hotspot) on your data logger or receiver to access the CORS network in real time.

3. Select Correction Service Type

- Choose RTK corrections (Real-Time Kinematic) if you want live centimeter-level accuracy.
- Some systems also allow post-processing (PPK), where you log raw data and apply CORS corrections later.

4. Start Receiving Corrections

- Once connected, the GNSS receiver will start applying correction data from the CORS.
- The data logger will show “Fixed RTK” or “Float RTK” status, indicating correction quality.

5. Begin Surveying & Logging Points

- Move to the points you want to survey.
- Use the data logger to record positions, adding descriptions, codes, or attributes as needed.
- Each recorded point will have high-precision coordinates

6. Save & Export Data

- After collecting your points, you can export the data (CSV, DXF, shape files, etc.) from the data logger for further use in GIS, CAD, or mapping software.

In Simple Terms:

The CORS sends corrections to your rover via the internet. Your data logger controls the receiver and records corrected point data.

CHAPTER FOUR

4.0 DATA PROCESSING AND RESULT ANALYSIS

This stage involves downloading of the acquired data on field from the digital equipment to the personal computer for further processing. The data obtained were downloaded using a data transfer cable. After successfully downloaded of those data, they were edited using Microsoft Excel and Notepad Software which made it possible to easily import the edited copy into AutoCAD for drafting and designing. The coordinate obtained were in X, Y, Z format which were used for plotting the route's longitudinal profile

4.1. DATA DOWNLO1ADING

1. The instrument was connected to the personal computer via downloading cable, the corresponding software was launched and the instrument port was selected.
2. All the folders on the instrument were displayed. The folder containing the data for the group was then copied and pasted on another folder already created on the local drive of the personal computer.
3. The folder was launched and the file containing the data was opened with notepad application.

4. The results were in the format; Point ID, Easting, Northings and Height. The downloaded data were edited in Notepad, Microsoft Excel and a script were prepared in Notepad in order to be plotted in AutoCAD.

4.2 DATA PROCESSING

Data processing is a critical component of route surveys, enabling the transformation of raw data into usable information for design, analysis, and decision-making. Route surveys involve collecting vast amounts of data, including topographic information, environmental factors, and infrastructure details.

The data processing stage involves several key steps, including data cleaning, transformation, analysis, and visualization. Data cleaning removes errors, inconsistencies, and outliers, ensuring the accuracy and reliability of the data. Data transformation converts the data into suitable formats, while data analysis applies algorithm

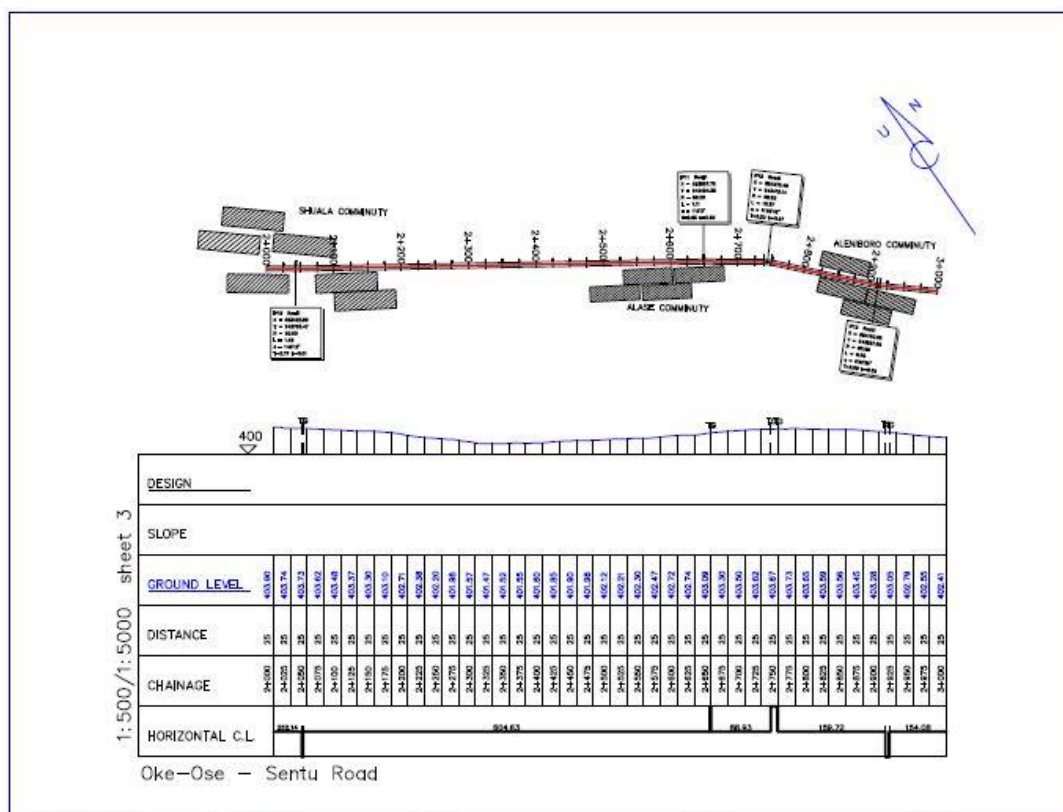
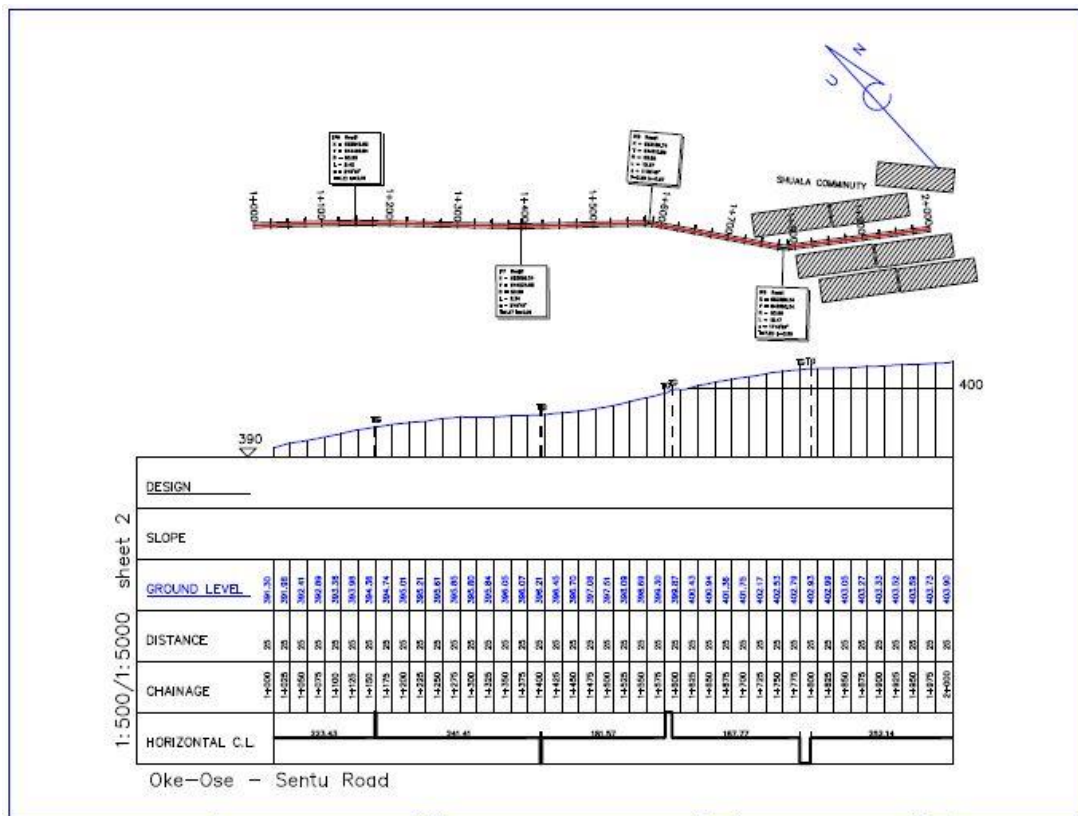
The downloaded data from the equipment was further edited using Microsoft Excel and Notepad, the final edited copy was saved as text file containing X, Y, Z coordinates of all points observed in the field.

4.3 RESULT ANALYSIS

The results were analyzed so as to check the accuracy of the job by comparing the result obtained with the minimum allowable error acceptable for this order of survey job in accordance with survey rules and departmental instructions.

4.3.1 LONGITUDINAL /HORIZONTAL ALIGNMENT PROFILE

1. In CivilCAD environment, Road menu was clicked and HORIZONTAL ALIGNMENT chosen
2. Options button was clicked in the appeared dialogue box and Define section was then clicked to choose the section format and the distance between the sections. Format 2 was chosen and the distance between sections was taken to be 25m.
3. Having chosen these options,OK was clicked twice.
4. Pick tool was selected from the right pane dialogue box to pick the intersection points (IP), and appropriate radius values of curve was given to each IP as specified by the client.
5. Apply button was then clicked to effect all the given parameters on the drawing. On each IP position, information about the IP is been displayed.



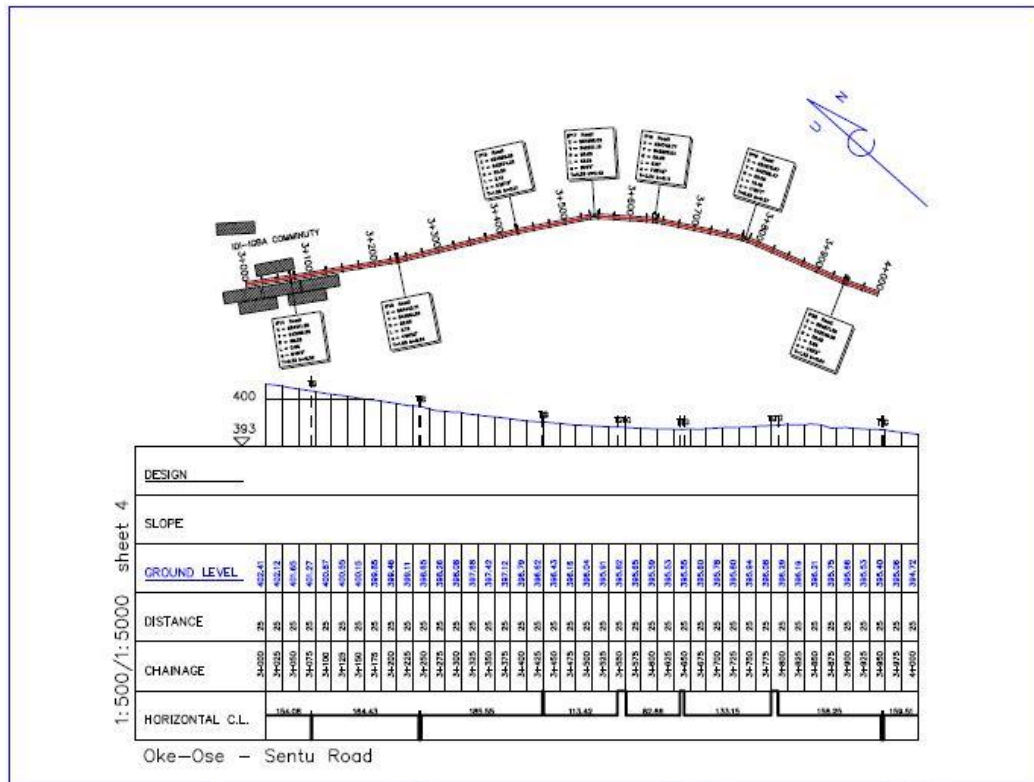


Fig. 4.3 showing the Profile and Longitudinal Section from Chainage 3+000 – 4+000

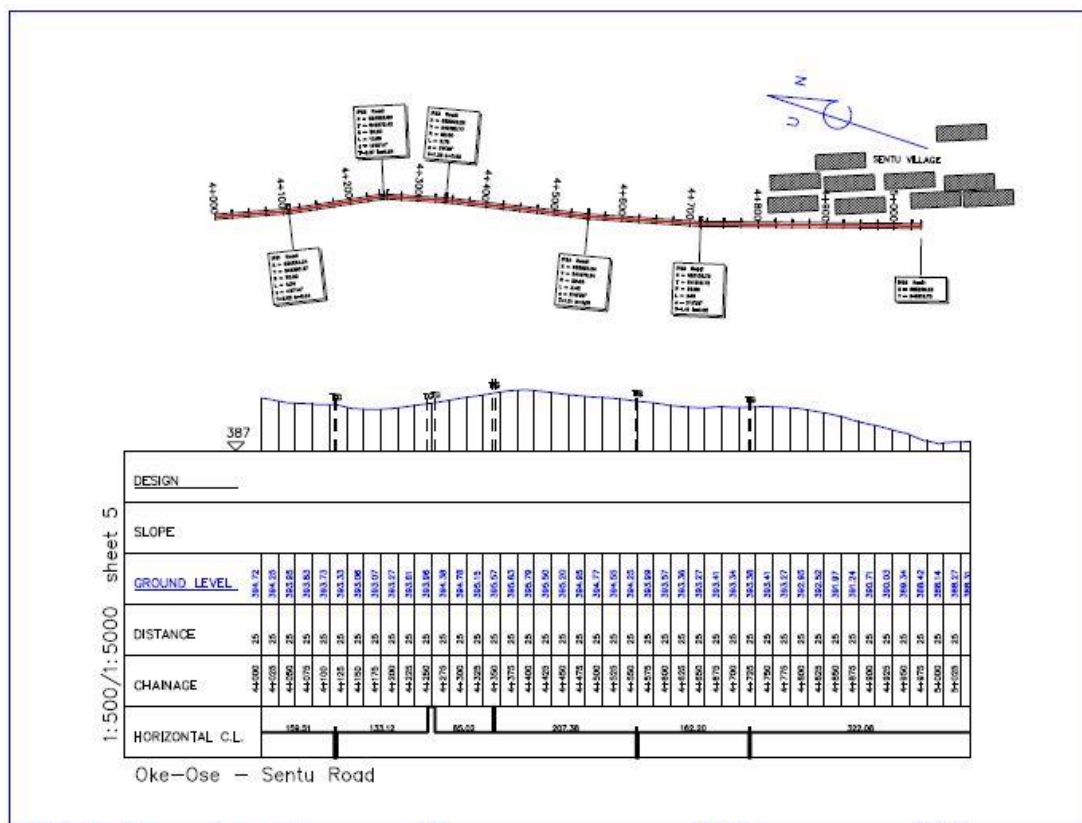


Fig. 4.4 showing the Profile and Longitudinal Section from Chainage 4+000 – 5+025

CHAPTER FIVE

5.0 SUMMARY, PROBLEM ENCOUNTERED, RECOMMENDATION AND CONCLUSION.

5.1 SUMMARY

The project covered a total length of 5km. The field work however involved the following processes; Recce, monumentation traversing and detailing. CORS was used for data acquisition and its software for downloading and transforming the acquired data respectively. The adjusted coordinates were used for the production of the final plans.

5.2. PROBLEMS ENCOUNTERED

- Accuracy concerns: Accuracy decrease distance from the CORS station. Interference from vegetation or buildings which also affect signal quality.
- Station Maintenance: CORS require regular maintenance and monitoring to ensure their reliability and accuracy. Unmaintained stations can introduce errors into the positioning data.

- **Inadequate CORS Coverage:** In areas with sparse CORS networks, the ability to provide accurate positioning across the entire route can be limited.

5.3 SOLUTION TO THE PROBLEMS

- **Optimize station placement:** Choose CORS that are strategically located for optimal coverage and accuracy in your survey area.
- **Use higher-quality receivers:** Employ survey-grade GPS receivers that are more robust to interference and capable of maintaining high accuracy.
- **Implement error detection and correction techniques:** Utilize post-processing techniques or real-time kinematic (RTK) methods to minimize errors.

5.5 CONCLUSION

CORS systems are a valuable tool for route surveys, providing accurate, reliable, and efficient positioning solutions. With their ability to deliver centimeter-level accuracy and streamline survey workflows, CORS systems are becoming increasingly important for a wide range of surveying and mapping applications.

5.4 RECOMMENDATION

Using CORS stations in route surveys offers significant advantages in terms of accuracy, efficiency, and cost-effectiveness. Choosing the appropriate CORS network, utilizing compatible equipment, and implementing effective field procedures are crucial for achieving high-quality survey results. By leveraging this technology, surveyors can achieve higher quality results while reducing project timelines and expenses

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APPENDIX

APPENDIX II

Name	N	E	H
Base_0	937113.1	671374.3	290.1564
PT1	945199.3	682040.6	376.7882
PT2	945213.6	682040.1	376.9413
PT3	945211.5	682003.7	375.523
PT4	945195.8	682006.7	375.3559
PT5	945196.7	682015.1	376.0015
PT6	945195.3	682015.3	375.6575
PT7	945198.1	682029.9	376.6706
PT8	945197	682030	376.6791
TBM	945198.3	682030.3	376.5831
PT9	945196.8	682023.3	376.4395
TBM2	945195.5	682016	376.149
PT10	945180.9	682042.2	375.4776
PT11	945189.1	682045.9	376.1932
PT12	945185.8	682044.1	375.9832
PT13	945169.6	682068.4	375.8128
PT14	945173.3	682070.4	376.1018
PT15	945177.4	682070.2	376.1243
PT16	945164.7	682102.3	377.128
PT17	945158.5	682099.6	376.68
PT18	945154.6	682097.6	376.4599
PT19	945140.1	682122.3	376.9666
PT20	945144.6	682125.7	377.2596
PT21	945148.2	682127.9	377.3442

PT22	945120.7	682147.4	377.4701
PT23	945124.2	682150.8	378.0427
PT24	945125.9	682152.4	378.0537
PT25	945098.5	682168.5	378.0107
PT26	945101.5	682173.1	378.1797
PT27	945105.2	682176.5	378.1743
PT28	945081	682188.1	377.3532
PT29	945075.5	682192.4	377.1792
PT30	945070.3	682187.8	376.6787
PT31	945073.3	682183.8	376.4857
PT32	945080.9	682194.6	377.4948
PT33	945085.9	682197.4	377.5604
PT34	945063.1	682219.9	377.4999
PT35	945058.1	682215.5	377.3388
PT36	945052.9	682210.7	377.3088
PT37	945031.9	682232.7	377.3118
PT38	945036	682236.9	377.4859
PT39	945040.9	682242.2	377.962
PT40	945019.5	682262.2	377.834
PT41	945015.2	682258.3	377.7304
PT42	945011	682255.5	377.7909
PT43	944991.5	682273.8	377.8099
PT44	944994.4	682278.7	377.9765
PT45	944998.6	682283.3	378.3025
PT46	944979.2	682305.5	378.9486
PT47	944974.5	682300.9	378.4325
PT48	944970.2	682296.8	378.4865
PT49	944949.1	682317.9	378.8185

PT50	944953.3	682323.2	378.8761
PT51	944958.3	682328.4	379.2777
PT52	944942.5	682346.5	379.5567
PT53	944939.2	682351.6	379.7302
PT54	944949	682356.3	379.9093
PT55	944952.4	682352.9	379.9308
PT56	944934.6	682344.2	379.2306
PT57	944928.6	682339.6	379.1981
PT58	944909.6	682361.3	379.4121
PT59	944915.3	682366.2	379.7087
PT60	944919	682370.1	380.1443
PT61	944900	682390.6	380.2548
PT62	944895.8	682386.2	379.8353
PT63	944891.8	682382.8	379.7662
PT64	944872.1	682400.3	380.2427
PT65	944876.4	682405.1	380.2813
PT66	944879.6	682408.2	380.6578
PT67	944862.6	682424.9	380.9054
PT68	944858.9	682421.8	380.8158
PT69	944855.1	682417.9	380.8773
PT70	944851.4	682421.7	381.0128
PT71	944843.4	682416.4	380.5042
PT72	944848.8	682411.8	380.4407
PT73	944836.2	682437.8	381.1378
PT74	944835.4	682436.9	381.2068
PT75	944839.1	682440.6	381.1278
PT76	944843.1	682444.7	381.3639
PT77	944817.3	682455.6	381.5858

PT78	944816.1	682454.6	381.7118
PT79	944820.7	682459.4	381.6384
PT80	944824.3	682463.1	381.8139
PT81	944806	682480.9	382.633
PT82	944797.9	682472.8	382.1354
PT83	944801.9	682477	382.1574
PT84	944785.9	682496.9	382.6775
PT85	944778.8	682489.9	382.4644
PT86	944782.6	682493.5	382.4369
PT87	944764.9	682513	382.8735
PT88	944762.1	682509.8	382.9524
PT89	944758.6	682506.3	382.7369
PT90	944737.4	682521	383.1014
PT91	944740.6	682526.5	383.1414
PT92	944744.8	682531	383.4055
PT93	944721.6	682544.4	383.583
PT94	944718.3	682540.9	383.5089
PT95	944715.2	682536.7	383.4319
PT96	944694.3	682552.6	383.8999
PT97	944687.7	682545.1	383.3217
PT98	944678.5	682553.9	383.4058
PT99	944684.7	682563.7	384.1829
PT100	944691.4	682573.8	384.36
PT101	944702.8	682568.4	384.2641
PT102	944705.4	682578.7	384.5537
PT103	944698.9	682584.3	384.4892
PL	944699.7	682541.9	383.8583
PL1	944671.7	682562.9	384.1068

PT104	944679	682577.9	384.475
PT105	944676.2	682575.2	384.6084
PT106	944671.7	682571.4	384.1429
PT107	944654.1	682586.9	384.8209
PT108	944657.7	682590.8	385.0929
PT109	944661	682594.8	384.9365
PT110	944640.3	682610.2	385.5405
PT111	944637.8	682607	385.5779
PT112	944633.8	682603.1	385.6409
PT113	944614	682619.2	386.2424
PT114	944612.7	682618.6	386.0484
PT115	944616.5	682623.3	386.1459
PT116	944619.5	682626.9	386.2865
PT117	944598.9	682640.3	386.9915
PT118	944592.9	682633.9	387.0579
PT119	944598.5	682628.4	386.9764
PT120	944586.2	682627.1	387.1628
PT121	944584.8	682632	387.3333
PT122	944575	682630.7	387.2937
PT123	944575.1	682626.5	387.2332
PT124	944573.1	682649.1	387.7229
PT125	944575.7	682653.2	387.7684
PT126	944578.9	682658.2	387.681
PT127	944558.3	682672.7	388.857
PT128	944554.5	682669.7	388.8159
PT129	944550.8	682667.6	388.7539
PT130	944535.3	682684.2	389.5004
PT131	944537.9	682688	389.5585

PT132	944540.6	682690.9	389.5255
Akehinde Apekun Community	944577.7	682638.6	387.7788
Akehinde Apekun Community1	944518.9	682702.6	390.1885
PT133	944522.5	682706	390.2825
PT134	944525.4	682708.1	390.3206
PT135	944509.9	682727.9	391.0931
PT136	944505.8	682725.4	391.1421
PT137	944501.5	682723	391.112
PT138	944486.2	682741.6	391.9906
PT139	944488.9	682744.5	391.8936
PT140	944492	682747.1	391.7972
PT141	944476.5	682767.2	392.2418
PT142	944472.7	682765	392.3517
PT143	944468.2	682762	392.3047
PT144	944451.4	682782.2	392.9462
PT145	944455	682785.1	392.8338
PT146	944458.7	682787.8	393.0683
PT147	944441.5	682807.9	393.1609
PT148	944438.6	682804.9	393.3268
PT149	944433.6	682801	393.3697
TBM4	944424.8	682795.9	393.9601
TBM5	944435.8	682821.7	393.8164
PT150	944424.5	682828.5	393.5674
PT151	944419.9	682824.7	393.9648
PT152	944415.5	682820.9	393.9723
PT153	944399.9	682839	394.2888

PT154	944403.6	682842.6	394.3559
PT155	944409.9	682847.6	394.176
PT156	944390	682864.5	394.4079
PT157	944385.6	682860.7	394.7839
PT158	944380.6	682856.8	394.8008
PT159	944364.9	682872.9	395.0643
PT160	944368.9	682876.6	395.0744
PT161	944373.9	682881.5	394.702
PT162	944354.8	682897.6	395.1435
PT163	944350.9	682892.9	395.2114
PT164	944347.4	682889.1	395.5428
PT165	944330.1	682906.4	395.8108
PT166	944334.3	682912.1	395.6854
PT167	944338.7	682916.6	395.3885
PT168	944320.8	682935	395.728
PT169	944315.9	682930.3	395.9204
PT170	944311.3	682926.1	395.8679
PT171	944296.1	682942.1	395.8444
PT172	944299.5	682946.2	395.8974
PT173	944304.1	682951.5	395.673
PT174	944289	682967.9	395.7765
PT175	944283.3	682964.5	395.8435
PT176	944277	682958.6	395.9109
PT177	944262.5	682977.1	396.1149
PT178	944267.7	682981.6	396.042
PT179	944273.4	682986.3	395.8726
PT180	944255.4	683004.7	396.0681
PT181	944250.1	683000.1	396.048

PT182	944245.1	682995.7	396.0924
PT183	944230.6	683014.2	396.131
PT184	944234.6	683018.3	396.144
PT185	944237.9	683022.1	396.0736
PT186	944223.4	683039	396.3541
PT187	944219	683035.5	396.4091
PT188	944214.8	683032.7	396.3505
PT189	944199.5	683049.1	396.6295
PT190	944203.9	683052.7	396.5721
PT191	944207.9	683056.3	396.4497
PT192	944191.8	683073.5	396.8382
PT193	944186.1	683070.4	396.9311
PT194	944182.9	683068	396.9721
PT195	944169.1	683086.8	397.4131
PT196	944171.7	683089.9	397.2822
PT197	944174.7	683092.7	397.2282
PT198	944160.1	683110.5	397.8203
PT199	944157.2	683108.5	397.7892
PT200	944153.1	683104.5	397.7321
PT201	944137.1	683123.9	398.4182
PT202	944140.5	683127.2	398.4042
PT203	944143.3	683129.7	398.3403
PT204	944127.5	683147.2	398.7463
PT205	944124.6	683144.5	398.9343
PT206	944121.7	683142	399.0392
PT207	944105.7	683158.6	400.0922
PT208	944110.8	683159.7	399.4933
PT209	944106.7	683155.6	399.5002

PT210	944113.4	683164.4	399.2974
PT211	944098.7	683178.1	399.5654
PT212	944095	683174.7	399.7783
PT213	944091.5	683171.6	399.8762
PT214	944074.9	683183.7	400.4902
PT215	944077.8	683189.3	400.3653
PT216	944080.9	683193.5	400.1593
PT217	944063.6	683204	400.6243
PT218	944061.2	683200.2	400.8602
PT219	944058.2	683196.6	400.8792
PT220	944040.4	683210.2	401.2952
PT221	944043	683214.5	401.1792
PT222	944045.5	683218.2	401.4213
PT223	944028.7	683229.1	401.7632
PT224	944025.9	683225.4	401.5782
PT225	944023.6	683223	401.6441
PT226	944005.5	683234.9	402.0471
PT227	944007.6	683238.4	401.8831
PT228	944009.8	683241.8	402.0652
PT229	943990.8	683255.3	402.3592
PT230	943987.5	683250.9	402.3871
PT231	943985.1	683247.3	402.353
PT232	943965.5	683261.2	402.636
PT233	943968.2	683265.1	402.6051
PT234	943971.1	683267.8	402.6341
PT235	943953.9	683283.3	402.9241
PT236	943950.3	683280.3	402.867
PT237	943946.2	683276.6	402.855

PT238	943930	683293.6	403.034
PT239	943937.8	683302.3	402.9241
PT240	943934.5	683298.7	402.9391
PT241	943922.9	683319.2	403.0002
PT242	943918.8	683316.4	403.1341
PT243	943914.3	683313.5	403.171
PT244	943900.2	683331	403.3321
PT245	943905.3	683335.2	403.3572
PT246	943909.6	683338.2	403.0542
PT247	943896.5	683357.2	403.2603
PT248	943892	683355	403.4442
PT249	943886.5	683352.5	403.4612
PT250	943874.9	683368.9	403.4962
PT251	943880.5	683372.6	403.4413
PT252	943885.1	683375.7	403.2514
PT253	943875.4	683394.6	403.4564
PT254	943869	683391.3	403.5534
PT255	943861.9	683387.7	403.7203
PT256	943850.9	683406.5	403.4833
PT257	943855.2	683410.6	403.6394
PT258	943859.4	683413.5	403.4705
PT259	943845	683434.6	403.5495
PT260	943841.1	683433.2	403.7225
PT261	943834.4	683432.3	403.7144
PT262	943823.2	683448.8	403.5955
PT263	943827.3	683452.4	403.7766
PT264	943831.5	683456.2	403.7476
PT265	943818	683475.5	403.5397

PT266	943814.3	683472.6	403.7506
PT267	943809.1	683469.6	403.6386
SUHALLAH COMMUNITY	943829.5	683463.2	404.2717
PT268	943804.4	683495.6	403.6028
PT269	943799.5	683493	403.7517
PT270	943794.4	683489.8	403.5156
TBM6	943829.4	683463.1	404.2497
PT271	943791.1	683515.3	403.5258
PT272	943786.5	683512	403.6738
PT273	943781.5	683509	403.4507
PT274	943777.3	683536	403.4439
PT275	943772.1	683532.8	403.5268
PT276	943768.3	683529.1	403.3418
PT277	943755.1	683548.2	403.3119
PT278	943759.4	683551.8	403.3889
PT279	943763.8	683554.9	403.425
PT280	943749.8	683573	403.3001
PT281	943745.3	683570.5	403.414
PT282	943740.2	683568.9	403.22
PT283	943727.7	683587.6	402.9841
PT284	943731.9	683591.5	403.2912
PT285	943736.2	683594.5	403.1083
PT286	943723.5	683614.3	402.8764
PT287	943718.5	683611.9	403.0073
PT288	943713.2	683608.8	402.8282
PT289	943701.6	683627	402.5364
PT290	943706.2	683630.6	402.6514
PT291	943709.9	683633.3	402.3815

PT292	943698.1	683652.8	402.3056
PT293	943693.6	683650.3	402.3576
PT294	943688.5	683647.2	401.9605
PT295	943675	683666.9	402.0186
PT296	943680.3	683670.3	402.1567
PT297	943684.1	683672.8	402.0927
PT298	943661.1	683686.9	401.5427
PT299	943666	683689.7	402.0488
PT300	943669.9	683693	401.6279
PT301	943656.8	683711.7	401.458
PT302	943652.5	683710.4	401.4469
PT303	943645.9	683707.4	401.3538
PT304	943635.7	683726.8	401.412
PT305	943638.6	683728.8	401.502
PT306	943642.6	683732.5	401.4641
PT307	943628.5	683753.3	401.6352
PT308	943626.2	683750.7	401.4542
PT309	943622.4	683748.9	401.4881
PT310	943610.3	683766.1	401.4962
PT311	943612	683767.3	401.5643
PT312	943617.2	683773.3	401.5304
PT313	943604.4	683790	401.5655
PT314	943601.1	683787.6	401.6204
PT315	943598.2	683786.3	401.6554
PT316	943586	683803.2	401.7885
PT317	943588.5	683805.9	401.8065
PT318	943591.7	683808.3	401.8456
PT319	943579.1	683826.5	401.9187

PT320	943575.4	683824.7	401.8486
PT321	943571.4	683822.3	401.9046
PT322	943561.4	683841	401.9397
PT323	943563.7	683842.6	401.8987
PT324	943567	683844.8	401.9258
PT325	943554.4	683864.9	402.0649
PT326	943551.4	683862.7	402.0289
PT327	943548.9	683861.3	402.0618
PT328	943535.8	683879.3	402.1429
PT329	943538.9	683881.2	402.114
PT330	943542.1	683883.1	402.204
PT331	943530.9	683903.2	402.2822
PT332	943526.9	683900.9	402.2491
PT333	943523.2	683899	402.4031
PT334	943511.5	683917.6	402.2792
PT335	943514.7	683919.6	402.2862
PT336	943518	683921.5	402.3533
PT337	943505.8	683941.2	402.4984
PT338	943501.2	683938.9	402.5274
PT339	943497.3	683936.9	402.5353
ALASE VILLAGE	943494.8	683935.2	402.6553
PT340	943487.3	683956.8	402.7385
PT341	943489.8	683959.7	402.7575
PT342	943493.1	683961.9	402.6666
PT343	943480.1	683981.2	402.8557
PT344	943477.5	683979.1	402.7316
PT345	943473.3	683976.6	402.8186
PT346	943460.8	683994.8	403.0757

PT347	943467	683999.7	403.3348
PT348	943464.3	683997.8	403.0817
PT349	943448.8	684014.6	403.3758
PT350	943451.9	684017.1	403.2569
PT351	943454.9	684019.1	403.3959
PT352	943443.2	684038.5	403.588
PT353	943439.8	684037	403.432
PT354	943435.2	684034.5	403.5069
PT355	943423	684052.1	403.583
PT356	943427.3	684055.4	403.6141
PT357	943430.5	684057.4	403.6992
PT358	943414.9	684079.3	403.8163
PT359	943410.1	684075.5	403.6772
PT360	943407.4	684073.9	403.5122
PT361	943388.6	684091.5	403.7762
PT362	943391.8	684094.3	403.7163
PT363	943395.6	684098.3	403.7253
PT364	943379.3	684114.2	403.6714
PT365	943375.8	684111.6	403.6683
PT366	943372.6	684109.1	403.6363
PT367	943355.7	684124.8	403.5133
PT368	943358.2	684127.4	403.6634
PT369	943361.6	684130.6	403.6694
PT370	943344.2	684147	403.5245
PT371	943340.8	684143.2	403.5764
PT372	943338.1	684139.7	403.5203
PT373	943320.7	684154.6	403.5264
PT374	943323.6	684158.2	403.5614

PT375	943327.6	684162.3	403.4665
PT376	943309.8	684176.9	403.4535
PT377	943306	684172.2	403.3285
PT378	943301.7	684169.1	403.5694
ALENIBORO COMMUNITY	943295.2	684165.9	403.0973
PT379	943284.4	684187.7	403.1025
PT380	943287.9	684190.6	403.1965
PT381	943291.5	684193.6	403.4116
PT382	943277.6	684210.4	403.1217
PT383	943273.9	684207.8	402.9646
PT384	943270.9	684205.8	402.9056
PT385	943256.6	684222.1	402.6606
PT386	943261.4	684225.9	402.7717
PT387	943264.2	684227.8	402.9428
PT388	943242.7	684239.7	402.5087
PT389	943246.5	684242.8	402.5398
PT390	943250.5	684245.9	402.5219
PT391	943235.6	684264.6	402.2889
PT392	943231.3	684261.2	402.3969
PT393	943226.9	684258.4	402.4078
PT394	943213.6	684275.3	402.0999
PT395	943217.4	684278.3	402.158
PT396	943221.3	684281.9	402.013
PT397	943205.2	684300.2	401.8681
PT398	943201.3	684296.6	401.715
PT399	943198.1	684293.6	401.552
PT400	943184.5	684309	401.327
PT401	943187	684311.4	401.3761

PT402	943190.6	684314.5	401.3481
PT403	943176.7	684332.8	401.1502
PT404	943173.7	684330.5	400.8842
PT405	943170.3	684328.3	401.0601
PT406	943155.2	684345.6	400.8052
PT407	943157.8	684348.9	400.6273
PT408	943161.3	684352	400.7473
PT409	943145.2	684369.7	400.2214
PT410	943142.3	684367.6	400.2464
PT411	943138.9	684364.7	400.4823
PT412	943123.2	684381.9	400.2554
PT413	943126.2	684384.6	399.9804
PT414	943129.1	684387.6	400.0895
PT415	943114.8	684405.8	399.7496
PT416	943111.1	684403.8	399.6165
PT417	943107.5	684401	399.6505
PT418	943091.8	684419	399.2945
PT419	943095.4	684421.5	399.1506
PT420	943099	684423.8	399.3997
PT421	943085.3	684442.7	399.0988
PT422	943081.9	684440.7	399.0557
PT423	943078.5	684438.6	398.9587
IDI IGBA COMMUNITY	943075.7	684436.2	399.0676
PT424	943066	684459	398.5508
PT425	943068.5	684460.3	398.3778
PT426	943071.9	684463.4	398.8219
PT427	943056.6	684483	398.321
PT428	943054.5	684481.1	398.1469

PT429	943052.2	684479.7	398.1649
PT430	943038.9	684498.5	397.99
PT431	943041.6	684500.8	397.8441
PT432	943044.2	684502.6	397.9951
PT433	943030.7	684521.9	397.7282
PT434	943027.2	684519.9	397.5842
PT435	943024.1	684518	397.6521
PT436	943011.3	684536.3	397.4482
PT437	943014	684538.6	397.3783
PT438	943017.8	684541.3	397.3963
PT439	943003.6	684559.8	397.0914
PT440	943000.7	684557.8	397.0834
PT441	942996.4	684555	397.1223
PT442	942983.3	684573.3	396.8934
PT443	942987.1	684576.8	396.7625
PT444	942990.2	684578.7	396.8495
PT445	942977.3	684597.1	396.7316
PT446	942974.4	684595.6	396.6306
PT447	942970.1	684593.1	396.6015
PT448	942957.6	684611.6	396.4636
PT449	942961.3	684614.5	396.4547
PT450	942964.4	684616.6	396.4018
PT451	942948.4	684638.3	396.2329
PT452	942945.3	684636.3	396.1168
PT453	942942	684634.4	396.2358
PT454	942928.3	684652.7	396.0799
PT455	942931.6	684655	396.0239
PT456	942934.4	684657.2	396.01

PT457	942919.5	684675.9	395.8801
PT458	942916.5	684673.4	395.897
PT459	942913.4	684670.9	396.0229
PT460	942898.1	684689.1	395.992
PT461	942901.2	684692	395.8401
PT462	942903.6	684694.2	395.6701
PT463	942881.3	684705.4	395.6951
PT464	942883.5	684707.9	395.6491
PT465	942885.9	684710.8	395.6662
PT466	942863.4	684720.8	395.5871
PT467	942865.9	684724	395.6482
PT468	942867.8	684726.7	395.4832
PT469	942849.4	684738.7	395.5092
PT470	942847.1	684735.9	395.6041
PT471	942845.2	684732.9	395.5361
PT472	942823.2	684742.6	395.53
PT473	942828	684748.8	395.4821
PT474	942831.8	684754.3	395.5552
PT475	942814.7	684767	395.5912
PT476	942808.3	684778.1	395.5143
PT477	942802.6	684776.2	395.4882
PT478	942804.9	684770.5	395.5472
PT479	942800.7	684764.9	395.5571
PT480	942798.3	684761.2	395.465
PT481	942784.9	684770.4	395.723
PT482	942787.1	684773.9	395.6591
PT483	942789.1	684777.2	395.4491
PT484	942771.9	684790.5	395.7091

PT485	942769.6	684787.7	395.6871
PT486	942767.3	684783.1	395.841
PT487	942746.2	684794.2	395.841
PT488	942747.2	684798.3	395.719
PT489	942750.1	684802.4	395.9241
PT490	942728.6	684812.4	395.961
PT491	942726.5	684808.8	396.019
PT492	942724	684805.7	396.0389
PT493	942703.8	684815.8	396.1288
PT494	942705.5	684820	396.0899
PT495	942706.9	684823.5	396.205
PT496	942685.2	684832	395.9899
PT497	942683.3	684828.8	396.1598
PT498	942681.9	684824.9	396.3408
SABO COMMUNITY	942700.7	684830.8	396.12
PT499	942662.3	684838.5	396.1607
PT500	942660.6	684835.9	396.1627
PT501	942659.4	684832.4	396.1977
PT502	942637.5	684838.7	396.8165
PT503	942638.6	684844.3	395.8056
PT504	942640.3	684848.8	395.7327
PT505	942618.5	684855.9	396.0546
PT506	942617	684852	396.0585
PT507	942615.5	684848.3	395.6225
PT508	942594.7	684855	395.6774
PT509	942594.9	684860.6	395.6794
PT510	942596.2	684864.5	395.5445
PT511	942572.8	684870.5	395.4184

PT512	942571.9	684865.3	395.5373
PT513	942570.1	684861.2	395.5612
PT514	942547.4	684867.6	395.5091
PT515	942548.3	684871.6	395.4762
PT516	942549.5	684876.4	395.4712
PT517	942527.1	684883.1	395.1201
PT518	942525.3	684878.2	395.104
PT519	942523.8	684874.8	395.165
PT520	942504.5	684881.6	395.2779
PT521	942504.7	684886.6	394.918
PT522	942505.6	684890.5	394.842
PT523	942483.6	684899	394.4579
PT524	942481	684894.2	394.3448
PT525	942479.3	684890.8	394.3748
PT526	942459.5	684899	394.0797
PT527	942461.3	684903.1	393.9368
PT528	942462.9	684907.1	393.9938
PT529	942443.1	684917.1	393.9038
PT530	942440.8	684913.1	393.9077
PT531	942438.5	684909.2	394.0016
PT532	942417.9	684919.9	393.6826
PT533	942418.8	684923.7	393.6616
PT534	942420.7	684927.4	393.8017
PT535	942399.4	684937.8	393.8146
PT536	942397.4	684934.3	393.7496
PT537	942395.4	684931.4	393.8265
PT538	942376.3	684940.9	393.1745
PT539	942377.8	684945.1	393.1815

PT540	942379.9	684949.1	393.3016
PT541	942357.8	684960.9	392.8755
PT542	942355.1	684957	393.0325
PT543	942352.5	684953	392.9864
PT544	942333.7	684964.1	393.1104
PT545	942335.1	684966.8	393.0774
PT546	942336.9	684970.1	393.0615
PT547	942316.8	684980.7	393.4094
PT548	942315	684977.4	393.2634
PT549	942312.8	684974	393.4113
PT550	942292.9	684984.6	393.6503
PT551	942294.5	684988.8	393.5963
PT552	942295.8	684992.1	393.8044
PT553	942274.7	685002.9	394.0113
PT554	942272.4	684998.6	393.9422
PT555	942270.3	684995.2	394.0232
PT556	942250.1	685002.7	394.3881
PT557	942251.4	685006.3	394.2462
PT558	942252.9	685010.2	394.5312
PT559	942230.9	685016.9	394.6821
PT560	942229.3	685012.6	394.62
PT561	942228.5	685008.6	394.753
PT562	942205.9	685014	395.0919
PT563	942206.3	685017.4	394.9939
PT564	942207.4	685022.4	395.108
PT565	942184.5	685026.3	395.5768
PT566	942183.8	685022.3	395.4278
PT567	942182.4	685018.3	395.5327

PT568	942160.9	685023.1	395.6606
PT569	942161.6	685026.9	395.7736
PT570	942162.3	685031	395.7387
PT571	942138.4	685037.3	395.8365
PT572	942137.3	685032	395.9045
PT573	942136.1	685027.6	395.9264
PT574	942114.1	685033.3	395.6873
PT575	942114.6	685036.9	395.6823
PT576	942115.6	685041.7	395.5394
PT577	942091.7	685045.3	395.4452
PT578	942090.9	685041.8	395.3602
PT579	942089.5	685038	395.4101
PT580	942067.4	685042.8	395.185
PT581	942067.8	685046.3	395.104
PT582	942068.7	685050.1	395.1771
PT583	942045.6	685056	394.803
PT584	942044.4	685052.1	394.8289
PT585	942043.3	685047.6	395.2068
PT586	942022.1	685052.6	394.8137
PT587	942023	685057.5	394.6988
PT588	942024	685060.7	394.4838
PT589	942001.2	685064.5	394.5327
PT590	942000.6	685061.4	394.4856
PT591	941999.9	685057.7	394.6626
PT592	941977.9	685061.9	394.4264
PT593	941978.2	685065.2	394.2385
PT594	941978.6	685068.7	394.2355
PT595	941956.1	685074	394.0724

PT596	941955.4	685070.6	393.9873
PT597	941954.9	685067.3	394.1103
PT598	941931.1	685071.5	393.9181
PT599	941931.8	685075.7	393.5872
PT600	941932.6	685079	393.5632
PT601	941910.1	685084.5	393.4451
PT602	941908.9	685081.2	393.3271
PT603	941907.5	685077.6	393.454
PT604	941884.6	685083.9	393.3579
PT605	941886.8	685091.8	393.294
PT606	941885.6	685088.1	393.2559
PT607	941864.5	685098.7	393.3139
PT608	941862.4	685093.9	393.4578
PT609	941861.7	685089.2	393.2957
PT610	941840.8	685096.2	393.3476
PT611	941841.2	685100.2	393.3317
PT612	941842.5	685104.1	393.2928
PT613	941820.2	685110.7	393.4426
PT614	941818.7	685106.7	393.3076
PT615	941816.1	685101.4	393.4565
PT616	941795.8	685109.6	393.6834
PT617	941798.4	685117.8	393.4445
PT618	941797.1	685114.5	393.4265
PT619	941773.6	685116.6	393.4543
PT620	941774.7	685120.4	393.3884
PT621	941776.1	685125.5	393.5564
PT622	941752.8	685132.1	393.1173
PT623	941751	685126.7	393.2072

PT624	941749.3	685122.2	393.2872
PT625	941729	685128.8	392.9981
PT626	941729.5	685133.2	392.8461
PT627	941730.9	685137.2	392.7742
PT628	941709.3	685144.1	392.3991
PT629	941707.5	685139.3	392.423
PT630	941705.3	685135.4	392.5969
PT631	941685.8	685151.3	391.8119
PT632	941684.1	685145.7	391.8919
PT633	941682.6	685141.8	391.8788
PT634	941659.5	685148.9	391.2957
PT635	941660.7	685153.8	390.9597
PT636	941662.3	685158.4	391.1748
PT637	941642.6	685165.6	390.7387
PT638	941640.6	685161.2	390.6247
PT639	941638.7	685156.8	390.7506
PT640	941617.1	685164.8	390.1645
PT641	941618.4	685169.5	390.0186
PT642	941620.9	685174.6	390.0676
PT643	941599.5	685181.6	389.3895
PT644	941597.4	685176.9	389.4675
PT645	941595.2	685171.8	389.3384
PT646	941573.5	685179	388.6103
PT647	941574.9	685183.3	388.5753
PT648	941576.8	685187.9	388.2504
PT649	941555.5	685194.7	387.9843
PT650	941553.8	685190.8	387.9912
PT651	941552	685188.1	387.8992

PT652	941534.2	685203.7	388.6022
PT653	941510.7	685205.6	388.307