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/0068

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

SUBMITTED IN PARTTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF NATIONAL DIPLOMA IN SURVEYING AND GEOINFORMATICS TO THE DEPARTMENT OF SURVEYING, KWARA STATE POLYTECHNIC ILORIN KWARA STATE, NIGERIA.

…….. ……

MURITALA KEHINDE MUJIDAH **DATE**
ND/23/SGI/FT/0068

CERTIFICATION

I, Muritala Kehinde Mujidah, 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.

……. ……

SURV.ABDULSALAM AYUBA **DATE**
Project supervisors

……. ……

SURV.OGUNTAYO BERNARD **DATE**
Project supervisors

……. ……

SURV.AWOLEYE RAPHEAL.S **DATE**
Project coordinator

……. ……

SURV.A.ISAU **DATE**
Head of Department

……. ……

SURV.OPALEYE J.O **DATE**
External Examine

DEDICATION

This project is dedicated to Almighty Allah,

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to Sur. Surv. Abdusalam Ayuba & Surv. Oguntayo Bernard. , my project advisor, for his/her invaluable guidance and support throughout this project. I am also thankful to my colleagues in the surveying and Geo- informatics department for their helpful feedback and collaboration. Finally, I would like to thank my family and friends for their encouragement and understanding.

I extend my deepest appreciation to my exceptional supervisor, Surv. Abdulsalam Ayuba and Oguntayo Bernard, whose invaluable guidance and unwavering support have been instrumental in the success of this project. Your mentorship has significantly shaped my academic experience. I am also grateful to my assistant supervisor Surv. Kazeem, HOD Surv, Abimbola, Surv. Banji, Surv, Felix Diran, Surv. Kabir and Surv. Samuel and others, whose insights and teaching have enriched my knowledge and understanding.

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 COR STATION 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 BACKGROUND OF THE STUDY

1.1 INTRODUCTION

Route survey is a survey for the design and construction of linear works, such as roads and pipelines, is the way of collecting data about a proposed new route for a road utility pipe, railway, rapid transits guide ways, canal, meanwhile surveying comprises of all surveying/survey operation required for the design and construction of engineering works such as traversing of the road, profit, leveling and cross-sectional leveling.

In construction of highways, route survey works are required for the development of the project estimation of cost. Route surveying collect data about proposed new route for road, utility pipe and railway transmit guide, canal and transmission line, route surveying pertains to the laying out of the proposed corridor for transportation system.

In route survey, representation of the plane horizontal features (including the terrain if necessary) on both sides of it within the limits of directs visibility are plotted on a map board using method of instrument surveying.

To carry out a good economic and easy maintenance of construction, investigation and planning, Designing Construction successfully the survey engineer must be familiar with the geometry of horizontal and vertical curve, how they are used in the route, making measurement necessary to verify the

location of the structure, how to determine the volume of work actually performed up to a given level.

Route survey involve in measuring and computing horizontal and vertical angles, elevation and horizontal distance, the results of these surveys are used to prepare detailed plan and profile, and base maps of proposed road ways. The elevations determined in the survey serve as the basic for calculation of construction cut and fill quantities and in determining roadway banking. This section presents a review of basic terminology, concepts and standard procedures used in high way surveys. The principle of mobility is of immense global concern to human and plant in such a way that the objective of mobility is achieved in most conducive manner. It is an idea that has a natural influence on activity of both plants and man, that its effect has direct impact on life, plant, and extend their root in search of nutrients and support, this is a form of mobility. Any obstruction in the course may result to life termination. This may invariably have an adverse effect on the environment. This project is basically on route surveying. Route survey is a process in surveying that can be applied to establishment of horizontal and vertical alignment for transportation facilities these include: high ways, canals, pipelines, transmission lines and rapid transit. A Route Survey is defined as being the required service and product that adequately locates the planned path of a linear project or right of way which crosses a prescribed area of real estate, extending from at least one known point and turning or terminating at another known point. Adequate location shall mean

substantial compliance with the conditions and tolerances expressed in this standard.

A Route Survey is usually required for the planning of a right of way, the acquisition of fee or easement property and for eventual construction layout work. The locations of the facilities within the right of way are often held in respect to the center line or a right-of-way line. A Route Survey is made on the ground to provide for the location of right of way lines, a centerline, or reference lines in relation to property lines and terrain features. Route Surveys shall include but are not limited to the proper location, monumentation, description or platting of the following routes.

Transmission lines for communications, fuel, chemical, water and electrical needs. Canals, waterways, drainage ditches and sewers. View easements, airspace easements, ingress and egress easements such as approach routes.

1.2 AIM OF THE PROJECT

The aim of the project is to provide the longitudinal information of the route which will serve as the information to be used for re-designing of the road and computing for the volume of the land.

1.3 OBJECTIVES OF THE PROJECT

i. To provide the necessary information on;

ii. Horizontal alignment

iii. Vertical alignment

iv. Longitudinal

1.4 SCOPE OF THE PROJECT

i. Reconnaissance survey (initial exploration)

ii. Preliminary survey (data collection)

iii. Data acquisition

iv. Data processing

v. Report writing

1.5 PERSONNEL

The personnel involved in the survey are;

NAME	MATRIC NUMBER	ROLE
ALADE FLORENCE ABOSEDE	**ND/23/SGI/FT/0071**	**GROUP LEADER**
AWOSENL 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 SITE LOCATION

The study area is along Oke- ose sentu road village located at Ilorin East local government Area, Ilorin, Kwara state. The length of this project is 5km covered.

1.6.1 MAP OF THE STUDY AREA

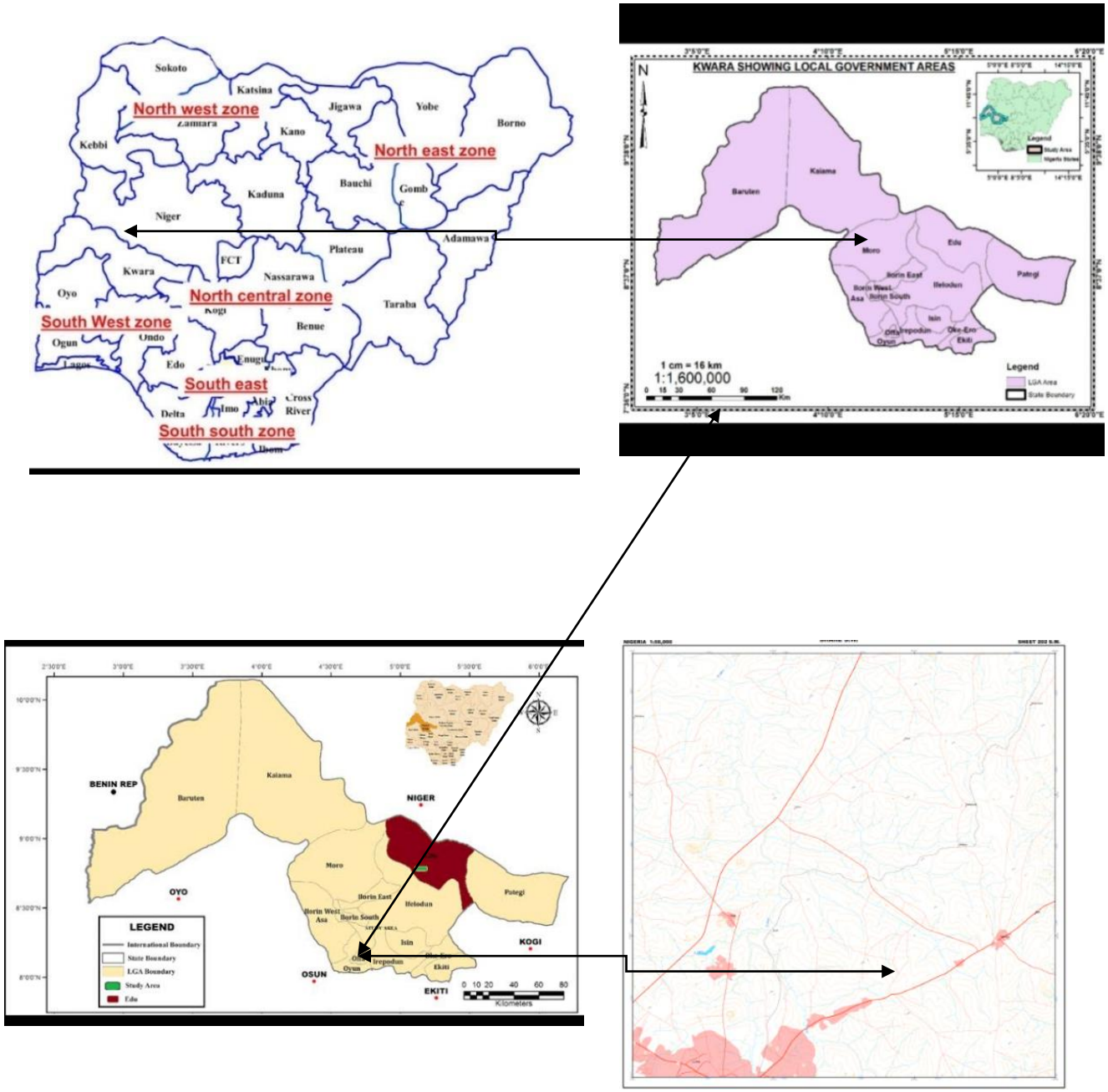

FIG.1.0 Showing Nigeria map, Kwara state map, and topographical map covering the project area .

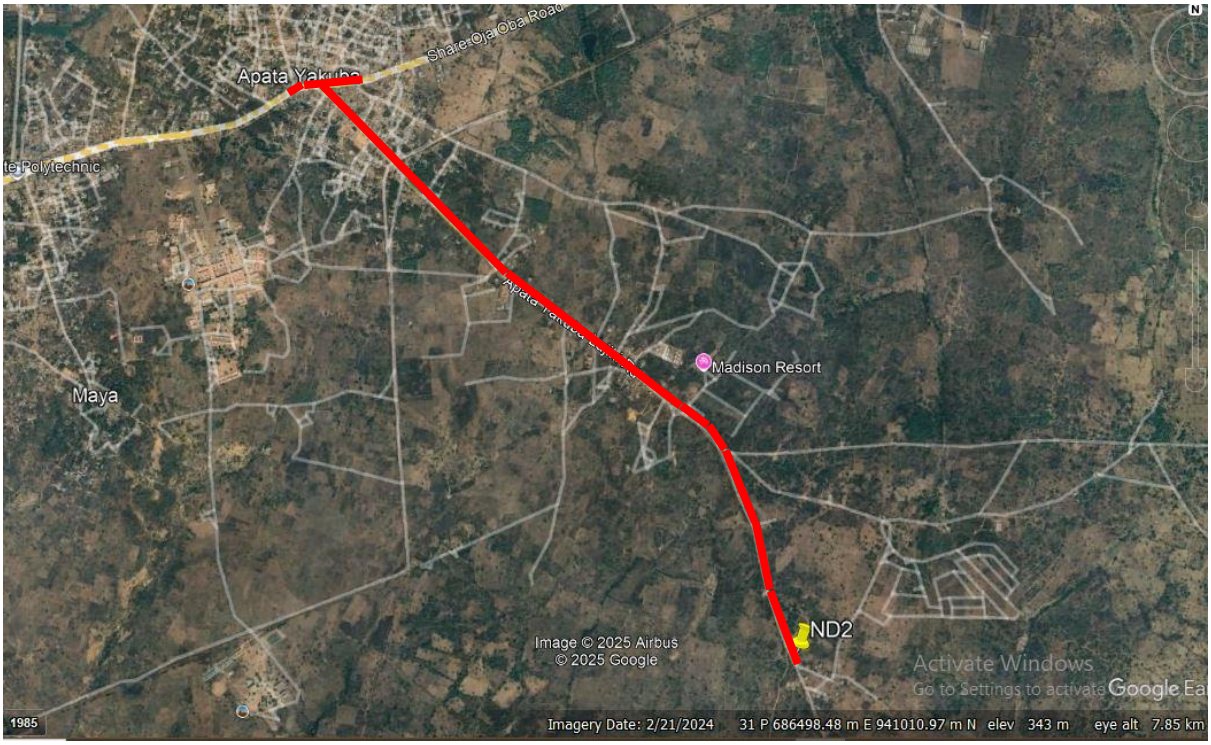

Fig. 1.1 showing the imagery covering the project are

CHAPTERTWO

2.0 LITERATURE REVIEW

Surveying has to do with the determination of the relative spatial location of points on or near the surface of the earth. It is the art of measuring horizontal and vertical Distances between objects, of measuring angles between lines, of determining the direction of lines, and of establishing points by predetermined angular and linear thus determined from the data of survey. Survey data is portrayed graphically by the measurements. Distances, angles, directions, locations, elevations, areas, and volumes construction of maps, profiles, cross sections, and diagrams (Department of Transportation, 2000). Schofield (2001) defined surveying as the science of determining the position, in three dimensions, of natural and man-made features on or beneath the surface of the earth, or in digital form as a three-dimensional mathematical model stored in the Earth. These features may then be represented in analog form as a contoured map, plan computer.

There are different operations in surveying, namely; Control Survey, Boundary Survey, Topographic Survey, Hydrographic Survey, Mining Survey, Construction Survey, Photogrammetric Survey, and Route survey. Route survey is therefore defined as the survey done along a comparatively or chart, or in digital form as a three-dimensional mathematical model stored in the general and route surveying in particular is the comprehensive aim of the project.

Transportation, 2000). transportation. Oregon Earth. These features may

then be represented in analog form as a contoured map, plan from one location to the other for construction purposes. The need for surveying as a base for planning and the process of acquiring data cannot be over emphasized. In view of this, the principle and scope of surveying in the fulcrum upon which every other sector of the economy revolved. It is as well the route alignment with special attention on road network, construction and rehabilitation general and route surveying in particular is the comprehensive aim of the project. Transportation being a great function and purpose of route survey is regarded as movement of people, goods and services from one place to another, be it on land, water or by air (Microsoft Encarta Encyclopaedia, 2009).

In this wise, transportation has country (Nigeria) is involved. Here are some of the benefits derived as a result of good contributed immensely to the economic development of nations in which our dear transportation networks:

i. It aids the movement of goods and services.
ii. Opening up of new land and abandoned area
iii. It assists in national integration.

Besides, route survey has contributed immensely as touching construction sectors, it also assists in the dissemination of ideas and as well technology of the engineering surveying. Engineering surveying which breeds both route and construction survey involves the application of knowledge to the analysis, design and execution of surveying and (1977) opined that Surveyors rely on an

understanding of the science of surveying mapping projects, and the design of land mapping and information systems.

The major reason for carrying out route surveying is to facilitate movement of people, yielding to socio-economic benefits (i.e. by determining the best and alignment of highways, buildings, pipes and other man made or cultural projects or construction project. Surveying can take many forms, it aids in establishing the location general route between terminals). Furthermore, route surveying consists of the following sequence of survey:-

i. Reconnaissance of the terrain between the terminals
ii. Location survey recommended in the reconnaissance report
iii. Preliminary surveys over one more locations along the general route
iv. Construction survey

According to Anderson and Mikhail(1985), route survey refers to the topographical and construction surveys necessary for location and construction of transportation lines or communication such as high ways, railways, canals, transmission comes to working on any engineering project.

The finished product (plan) forms the basis, which further provide special information, such as; the site location, size of the parcel, the dimension lines and pipeline. It is a reality that surveyors are the major professionals needed when it development depends.

1. ***Reconnaissance survey***:- It is a rapid but thorough examination of an

area or a strip of territory within the project area, to determine which of the several possible routes may be worthy of a detailed survey.

2. ***Preliminary survey***: -It is the detailed survey of a strip of territory through which the proposed line is expected to run. The preliminary survey is made of best several lines of directions investigated previously on the reconnaissance survey. The purpose is to prepare an accurate topographic map of the belt of country along the selected route, and thus arrive at a fairly close estimate of the cost of the line/direction surveyed.
3. ***Location survey***:- The location survey is the ground location of the proposed Line marked on the map. The main purpose of location survey is to make minor improvements on the line as may appear desirable on the ground, and to fix up the final grades.

Profile levels are run over the centerline, benchmark is established, and profile which shows the existing ground level and the grade line is attained. Cross section notes are taken in order that the quantity of earthwork for filling or cutting may be computed. Finally, Route survey involves the determination of ground configuration and on all road networks and in construction of new road which will increase the establishing the line on the ground and computing volumes of earthwork involved where applicable (Schofield, 2001). This kind of survey operation is very important in locating physical features both natural and artificial along the proposed route.

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

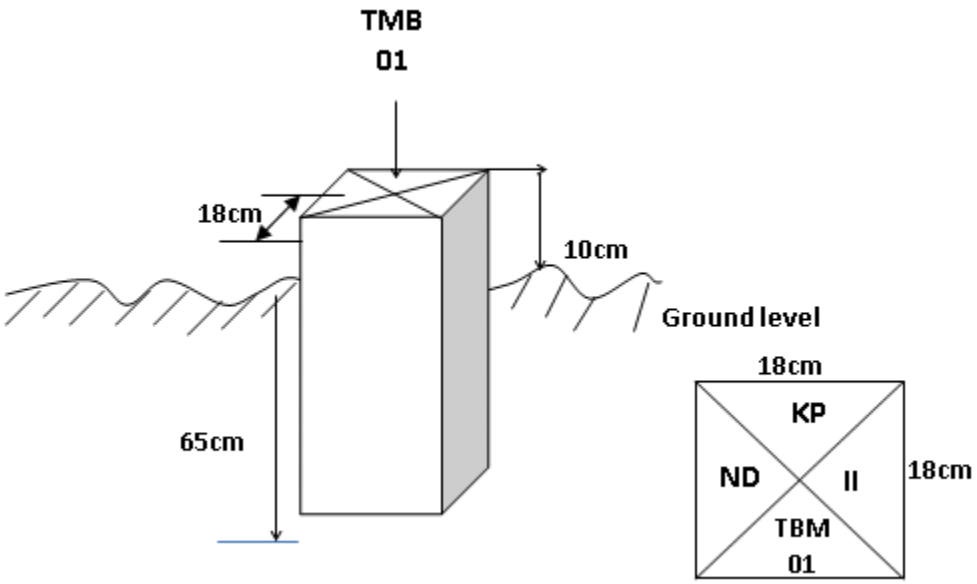

Fig. 3.0 showing typical survey beacon

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. Such information are;IP number,X coordinate, Y coordinate,Radius of Curve, Length of curve, Deflection angle and so on.

4.4 INFORMATION PRESENTATION/ PLAN PRODUCTION

The data acquired were processed into plan for visual presentation with AutoCAD/CivilCAD. The visual display graphical information in AutoCAD was printed as hardcopy of the plan. The longitudinal section, and profile were plotted.

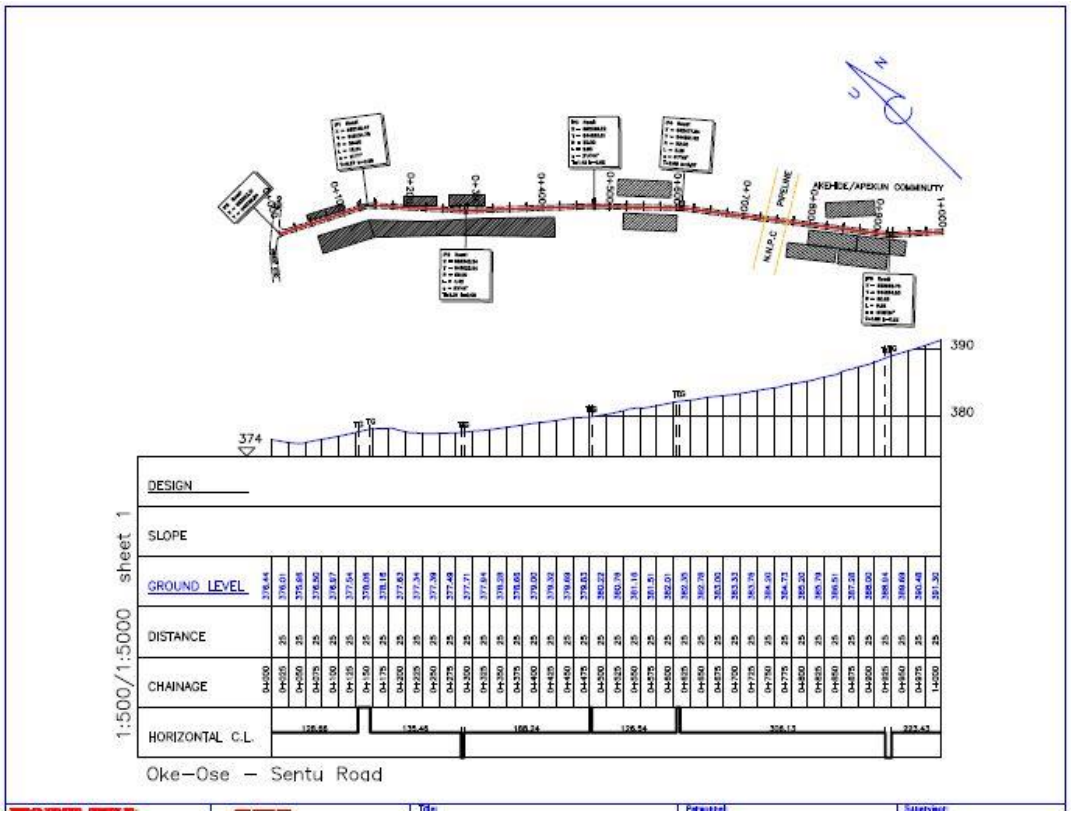

Fig. 4.0 showing the Profile and Longitudinal Section from Chainage 0+000 – 1+000

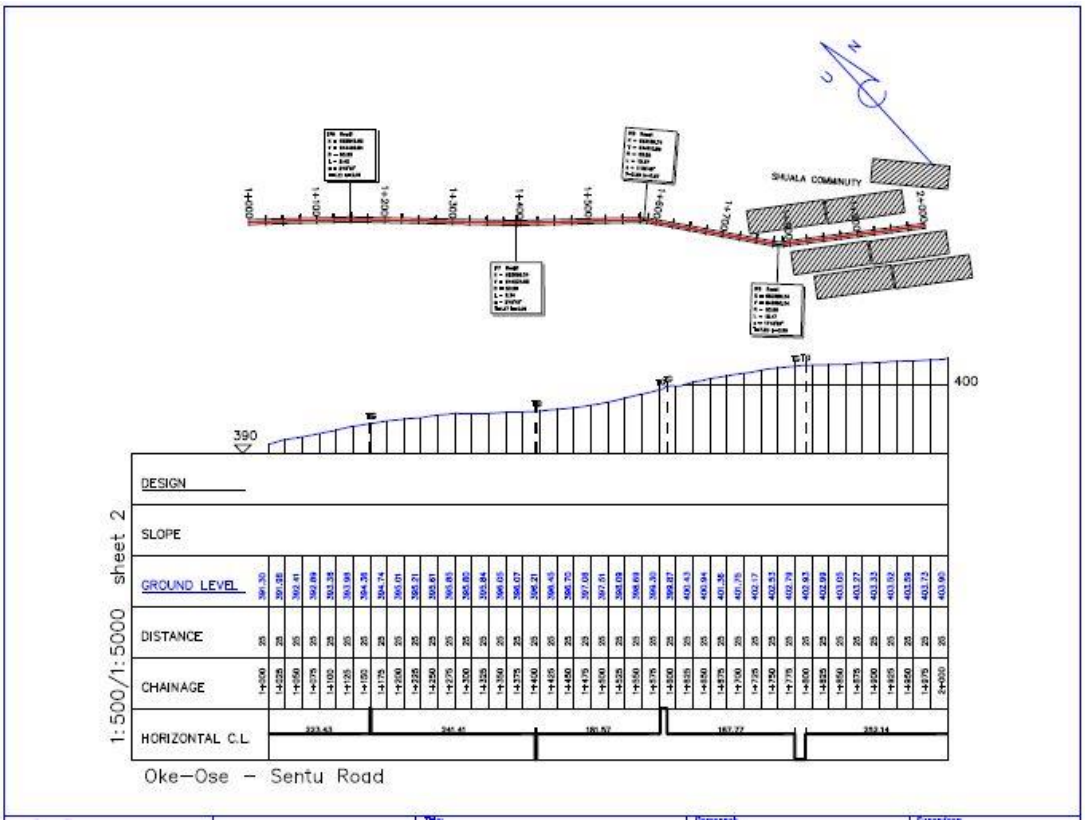

Fig. 4.1 showing the Profile and Longitudinal Section from Chainage 1+000 – 2+000

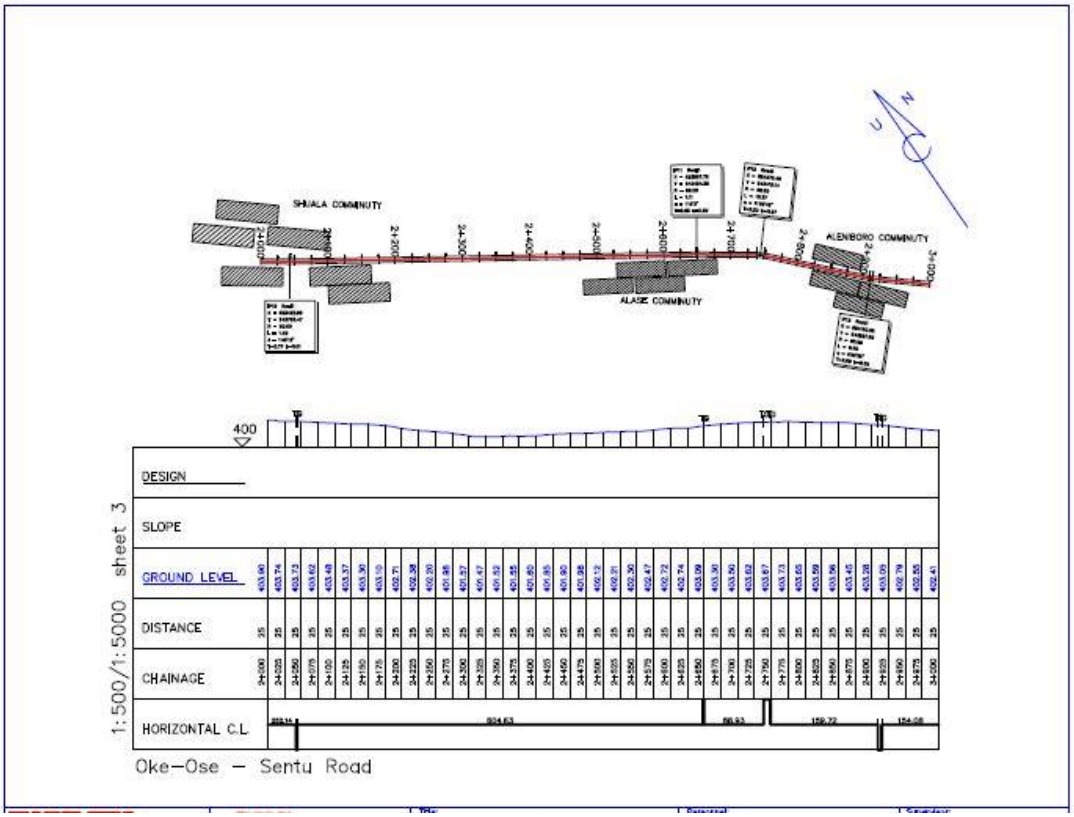

Fig. 4.2 showing the Profile and Longitudinal Section from Chainage 2+000 – 3+000

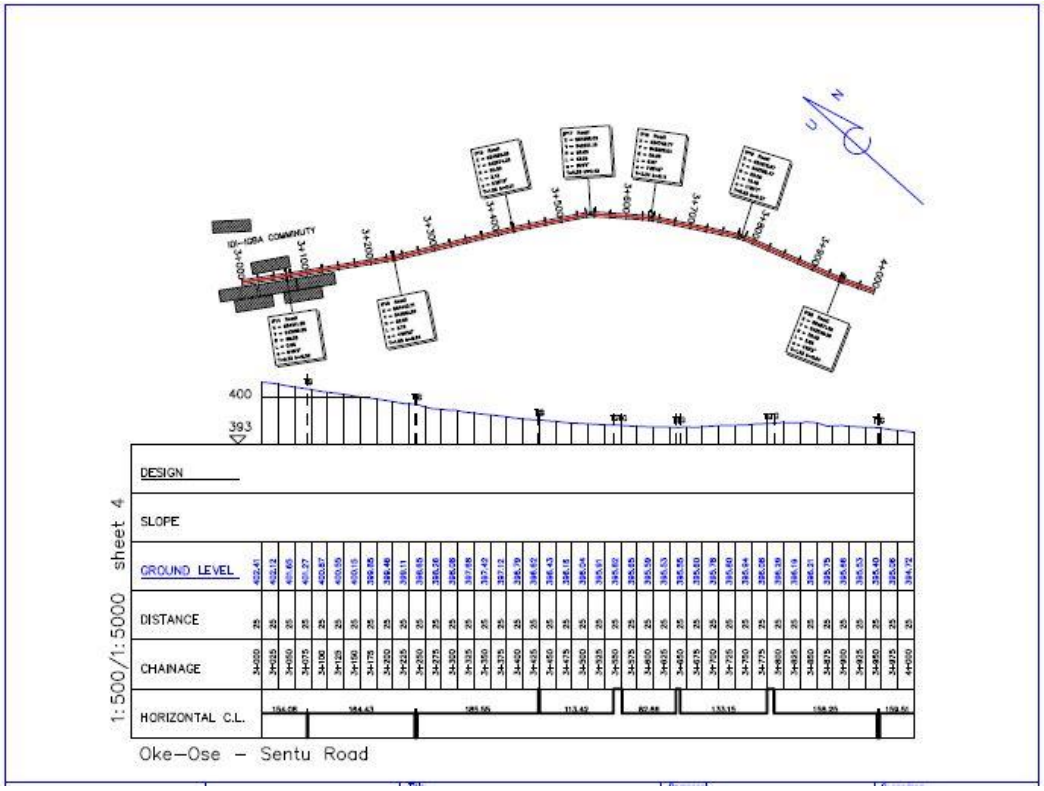

Fig. 4.3 showing the Profile and Longitudinal Section from Chainage 3+000 – 4+000

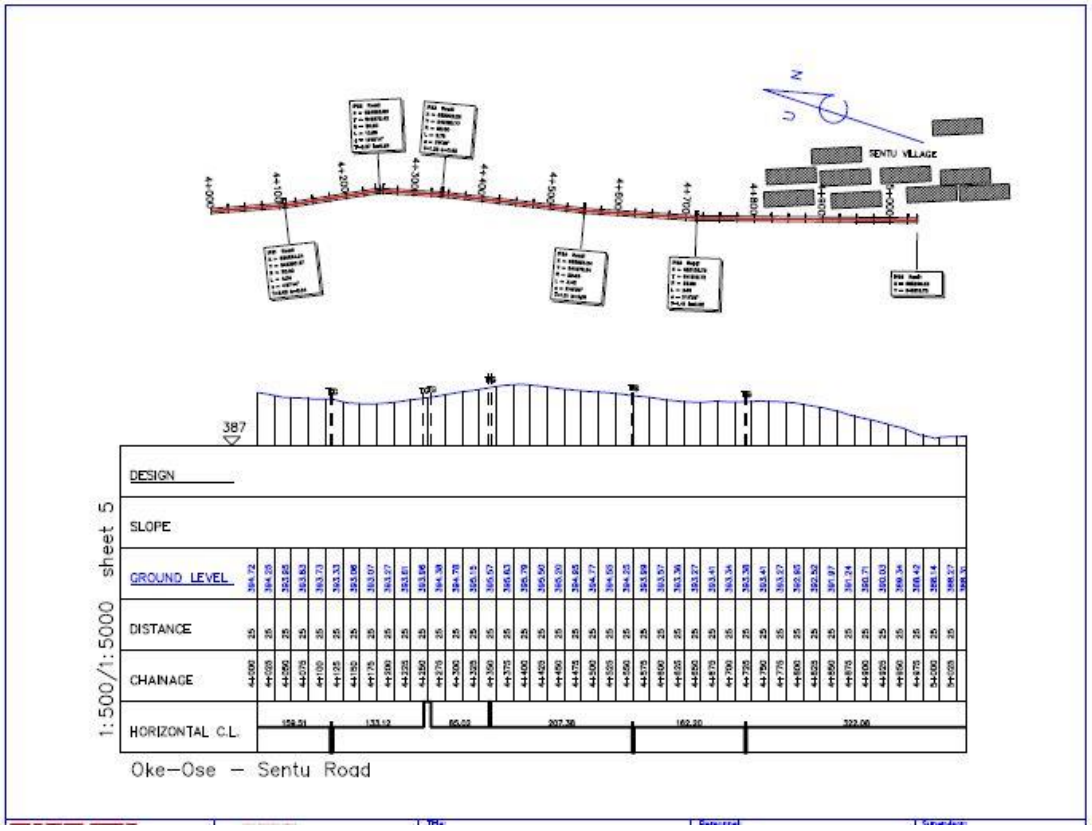

Fig. 4.4 showing the Profile and Longitudinal Section from Chainage 4+000 – 5+025

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.

5.4 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

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.

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RevisedMa

APENDIX

Name	X		Z
Base_0	937113.1383	671374.3384	290.1564
PT1	945199.3114	682040.6186	376.7882
PT2	945213.5827	682040.105	376.9413
PT3	945211.4969	682003.731	375.523
PT4	945195.8081	682006.6873	375.3559
PT5	945196.7212	682015.1343	376.0015
PT6	945195.2796	682015.2914	375.6575
PT7	945198.1178	682029.9284	376.6706
PT8	945196.9524	682029.9872	376.6791
TBM	945198.2609	682030.3286	376.5831
PT9	945196.8401	682023.3089	376.4395
TBM2	945195.4667	682015.9708	376.149
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PT11	945189.1348	682045.8814	376.1932
PT12	945185.7517	682044.051	375.9832
PT13	945169.6109	682068.3965	375.8128
PT14	945173.2661	682070.4497	376.1018
PT15	945177.4268	682070.1981	376.1243
PT16	945164.7499	682102.3475	377.128
PT17	945158.4899	682099.5777	376.68
PT18	945154.5633	682097.6234	376.4599
PT19	945140.1152	682122.3306	376.9666
PT20	945144.5944	682125.6551	377.2596
PT21	945148.1957	682127.8816	377.3442
PT22	945120.7209	682147.4167	377.4701
PT23	945124.2079	682150.8356	378.0427
PT24	945125.9043	682152.3729	378.0537
PT25	945098.5267	682168.5375	378.0107
PT26	945101.5002	682173.0851	378.1797
PT27	945105.2318	682176.5175	378.1743
PT28	945081.013	682188.1427	377.3532

PT29	945075.531	682192.4098	377.1792
PT30	945070.2634	682187.8348	376.6787
PT31	945073.3156	682183.8423	376.4857
PT32	945080.8774	682194.6302	377.4948
PT33	945085.8588	682197.4173	377.5604
PT34	945063.1386	682219.9257	377.4999
PT35	945058.0674	682215.4796	377.3388
PT36	945052.8936	682210.7118	377.3088
PT37	945031.9359	682232.7354	377.3118
PT38	945036.0137	682236.942	377.4859
PT39	945040.8645	682242.186	377.962
PT40	945019.4543	682262.1929	377.834
PT41	945015.1585	682258.3375	377.7304
PT42	945010.9548	682255.545	377.7909
PT43	944991.5477	682273.7819	377.8099
PT44	944994.356	682278.6763	377.9765
PT45	944998.563	682283.275	378.3025
PT46	944979.1704	682305.5106	378.9486
PT47	944974.4594	682300.9196	378.4325
PT48	944970.2348	682296.8032	378.4865
PT49	944949.0887	682317.9409	378.8185
PT50	944953.3104	682323.2021	378.8761
PT51	944958.2647	682328.3961	379.2777
PT52	944942.5402	682346.5093	379.5567
PT53	944939.1591	682351.5735	379.7302
PT54	944949.0258	682356.25	379.9093
PT55	944952.428	682352.8633	379.9308
PT56	944934.6374	682344.2476	379.2306
PT57	944928.6085	682339.6375	379.1981
PT58	944909.6407	682361.3338	379.4121
PT59	944915.2877	682366.2067	379.7087
PT60	944918.9539	682370.1494	380.1443
PT61	944899.9699	682390.6316	380.2548
PT62	944895.8093	682386.2215	379.8353

PT63	944891.7868	682382.7897	379.7662
PT64	944872.133	682400.2562	380.2427
PT65	944876.4024	682405.0642	380.2813
PT66	944879.6438	682408.1844	380.6578
PT67	944862.5786	682424.9433	380.9054
PT68	944858.8558	682421.764	380.8158
PT69	944855.1193	682417.8594	380.8773
PT70	944851.3951	682421.7055	381.0128
PT71	944843.4494	682416.4083	380.5042
PT72	944848.8235	682411.7505	380.4407
PT73	944836.2365	682437.8065	381.1378
PT74	944835.3606	682436.9188	381.2068
PT75	944839.0823	682440.5946	381.1278
PT76	944843.071	682444.7108	381.3639
PT77	944817.2999	682455.6408	381.5858
PT78	944816.1413	682454.6443	381.7118
PT79	944820.7132	682459.379	381.6384
PT80	944824.2858	682463.1057	381.8139
PT81	944805.9786	682480.9265	382.633
PT82	944797.8519	682472.8444	382.1354
PT83	944801.9151	682477.042	382.1574
PT84	944785.8843	682496.8628	382.6775
PT85	944778.7971	682489.8941	382.4644
PT86	944782.6037	682493.5032	382.4369
PT87	944764.9487	682512.9877	382.8735
PT88	944762.1142	682509.7504	382.9524
PT89	944758.6471	682506.251	382.7369
PT90	944737.3885	682520.9878	383.1014
PT91	944740.6352	682526.4818	383.1414
PT92	944744.8003	682530.9879	383.4055
PT93	944721.6466	682544.3687	383.583
PT94	944718.307	682540.8965	383.5089
PT95	944715.2019	682536.7187	383.4319
PT96	944694.2515	682552.6245	383.8999

PT97	944687.6985	682545.1268	383.3217
PT98	944678.5436	682553.9469	383.4058
PT99	944684.7094	682563.6639	384.1829
PT100	944691.3984	682573.759	384.36
PT101	944702.8429	682568.3649	384.2641
PT102	944705.3511	682578.7386	384.5537
PT103	944698.9057	682584.3335	384.4892
PL	944699.6504	682541.8913	383.8583
PL1	944671.6554	682562.8775	384.1068
PT104	944679.0284	682577.9201	384.475
PT105	944676.2368	682575.2157	384.6084
PT106	944671.7481	682571.3798	384.1429
PT107	944654.0523	682586.8592	384.8209
PT108	944657.6578	682590.8217	385.0929
PT109	944660.9572	682594.7802	384.9365
PT110	944640.3038	682610.2004	385.5405
PT111	944637.8014	682607.0038	385.5779
PT112	944633.7707	682603.0641	385.6409
PT113	944614.0203	682619.1606	386.2424
PT114	944612.7415	682618.6438	386.0484
PT115	944616.4636	682623.3105	386.1459
PT116	944619.5163	682626.8921	386.2865
PT117	944598.8923	682640.3068	386.9915
PT118	944592.8678	682633.8957	387.0579
PT119	944598.5174	682628.3665	386.9764
PT120	944586.2129	682627.0857	387.1628
PT121	944584.8091	682632.0174	387.3333
PT122	944575.0042	682630.7478	387.2937
PT123	944575.1158	682626.5253	387.2332
PT124	944573.1301	682649.1467	387.7229
PT125	944575.6833	682653.2244	387.7684
PT126	944578.8877	682658.1919	387.681
PT127	944558.3109	682672.7449	388.857
PT128	944554.5026	682669.7494	388.8159

PT129	944550.8226	682667.5823	388.7539
PT130	944535.2925	682684.2145	389.5004
PT131	944537.9486	682687.9682	389.5585
PT132	944540.5904	682690.9152	389.5255
AkehindeApekun Community	944577.7487	682638.5626	387.7788
AkehindeApekun Community1	944518.9278	682702.5787	390.1885
PT133	944522.512	682705.9537	390.2825
PT134	944525.3673	682708.1358	390.3206
PT135	944509.9047	682727.933	391.0931
PT136	944505.7564	682725.3564	391.1421
PT137	944501.5483	682723.0234	391.112
PT138	944486.1684	682741.5894	391.9906
PT139	944488.9333	682744.4642	391.8936
PT140	944492.0266	682747.0664	391.7972
PT141	944476.5158	682767.1762	392.2418
PT142	944472.6524	682764.9786	392.3517
PT143	944468.2373	682762.0183	392.3047
PT144	944451.4469	682782.1881	392.9462
PT145	944454.9564	682785.0693	392.8338
PT146	944458.6709	682787.7737	393.0683
PT147	944441.4925	682807.8717	393.1609
PT148	944438.5865	682804.8925	393.3268
PT149	944433.5528	682800.9692	393.3697
TBM4	944424.8384	682795.8702	393.9601
TBM5	944435.8443	682821.7079	393.8164
PT150	944424.5339	682828.4869	393.5674
PT151	944419.91	682824.7327	393.9648
PT152	944415.5249	682820.8982	393.9723
PT153	944399.8947	682839.0127	394.2888
PT154	944403.6364	682842.6181	394.3559
PT155	944409.9349	682847.5503	394.176
PT156	944390.0334	682864.4568	394.4079

PT157	944385.6411	682860.6606	394.7839
PT158	944380.5788	682856.8006	394.8008
PT159	944364.9122	682872.9292	395.0643
PT160	944368.8609	682876.5834	395.0744
PT161	944373.8897	682881.5008	394.702
PT162	944354.7932	682897.5831	395.1435
PT163	944350.8946	682892.8932	395.2114
PT164	944347.3718	682889.0943	395.5428
PT165	944330.1423	682906.4336	395.8108
PT166	944334.2528	682912.0563	395.6854
PT167	944338.651	682916.5651	395.3885
PT168	944320.7572	682934.996	395.728
PT169	944315.8876	682930.2666	395.9204
PT170	944311.2537	682926.1208	395.8679
PT171	944296.0571	682942.1032	395.8444
PT172	944299.5474	682946.17	395.8974
PT173	944304.0639	682951.5088	395.673
PT174	944289.0102	682967.9022	395.7765
PT175	944283.337	682964.4747	395.8435
PT176	944276.9644	682958.6182	395.9109
PT177	944262.475	682977.1212	396.1149
PT178	944267.6727	682981.617	396.042
PT179	944273.4362	682986.2812	395.8726
PT180	944255.4	683004.6533	396.0681
PT181	944250.0544	683000.1114	396.048
PT182	944245.0969	682995.7019	396.0924
PT183	944230.6346	683014.1895	396.131
PT184	944234.6483	683018.3367	396.144
PT185	944237.8763	683022.113	396.0736
PT186	944223.3704	683038.9967	396.3541
PT187	944218.9587	683035.5434	396.4091
PT188	944214.7573	683032.734	396.3505
PT189	944199.5267	683049.0531	396.6295
PT190	944203.8842	683052.691	396.5721

PT191	944207.8756	683056.3423	396.4497
PT192	944191.8216	683073.5485	396.8382
PT193	944186.1372	683070.4153	396.9311
PT194	944182.9267	683067.975	396.9721
PT195	944169.0942	683086.7656	397.4131
PT196	944171.7168	683089.8515	397.2822
PT197	944174.6798	683092.6625	397.2282
PT198	944160.0731	683110.5351	397.8203
PT199	944157.1557	683108.491	397.7892
PT200	944153.0563	683104.5289	397.7321
PT201	944137.1448	683123.8695	398.4182
PT202	944140.4637	683127.2493	398.4042
PT203	944143.2904	683129.7386	398.3403
PT204	944127.5054	683147.2446	398.7463
PT205	944124.6053	683144.5247	398.9343
PT206	944121.7316	683141.9843	399.0392
PT207	944105.6673	683158.5832	400.0922
PT208	944110.8499	683159.7396	399.4933
PT209	944106.7462	683155.5569	399.5002
PT210	944113.3668	683164.4484	399.2974
PT211	944098.7418	683178.0605	399.5654
PT212	944095.0484	683174.6723	399.7783
PT213	944091.5274	683171.6301	399.8762
PT214	944074.9079	683183.6782	400.4902
PT215	944077.7728	683189.2614	400.3653
PT216	944080.865	683193.482	400.1593
PT217	944063.6186	683204.0268	400.6243
PT218	944061.2017	683200.1972	400.8602
PT219	944058.1635	683196.6145	400.8792
PT220	944040.3841	683210.2302	401.2952
PT221	944042.9584	683214.5465	401.1792
PT222	944045.4711	683218.2193	401.4213
PT223	944028.6562	683229.0962	401.7632
PT224	944025.9486	683225.3792	401.5782

PT225	944023.6204	683222.9664	401.6441
PT226	944005.4506	683234.8729	402.0471
PT227	944007.5753	683238.4222	401.8831
PT228	944009.8044	683241.7863	402.0652
PT229	943990.7831	683255.2935	402.3592
PT230	943987.4627	683250.8742	402.3871
PT231	943985.1048	683247.295	402.353
PT232	943965.4637	683261.1936	402.636
PT233	943968.1904	683265.0817	402.6051
PT234	943971.0972	683267.7621	402.6341
PT235	943953.8996	683283.3009	402.9241
PT236	943950.3365	683280.3363	402.867
PT237	943946.2352	683276.6171	402.855
PT238	943929.9536	683293.6457	403.034
PT239	943937.8304	683302.2593	402.9241
PT240	943934.514	683298.6699	402.9391
PT241	943922.8932	683319.2215	403.0002
PT242	943918.8086	683316.3905	403.1341
PT243	943914.3148	683313.4628	403.171
PT244	943900.179	683331.0373	403.3321
PT245	943905.3067	683335.1927	403.3572
PT246	943909.6235	683338.223	403.0542
PT247	943896.4659	683357.2362	403.2603
PT248	943892.0357	683354.953	403.4442
PT249	943886.5214	683352.4671	403.4612
PT250	943874.8779	683368.9015	403.4962
PT251	943880.5385	683372.5791	403.4413
PT252	943885.0605	683375.6579	403.2514
PT253	943875.3673	683394.5764	403.4564
PT254	943868.9648	683391.2871	403.5534
PT255	943861.8852	683387.7037	403.7203
PT256	943850.8609	683406.4958	403.4833
PT257	943855.2308	683410.6436	403.6394
PT258	943859.3855	683413.5265	403.4705

PT259	943844.9737	683434.5501	403.5495
PT260	943841.1023	683433.1524	403.7225
PT261	943834.3642	683432.3214	403.7144
PT262	943823.183	683448.8343	403.5955
PT263	943827.2737	683452.3623	403.7766
PT264	943831.4921	683456.157	403.7476
PT265	943817.9918	683475.5354	403.5397
PT266	943814.3035	683472.6244	403.7506
PT267	943809.1225	683469.6297	403.6386
SUHALLAHCOMMUNITY	943829.481	683463.1783	404.2717
PT268	943804.4166	683495.6186	403.6028
PT269	943799.4687	683492.9631	403.7517
PT270	943794.4072	683489.7633	403.5156
TBM6	943829.3836	683463.0762	404.2497
PT271	943791.0514	683515.3372	403.5258
PT272	943786.5187	683512.0104	403.6738
PT273	943781.4725	683509.0118	403.4507
PT274	943777.2541	683535.9976	403.4439
PT275	943772.1052	683532.8207	403.5268
PT276	943768.2587	683529.0816	403.3418
PT277	943755.0748	683548.2157	403.3119
PT278	943759.3507	683551.8494	403.3889
PT279	943763.8397	683554.9315	403.425
PT280	943749.7653	683573.0347	403.3001
PT281	943745.271	683570.4858	403.414
PT282	943740.1523	683568.8621	403.22
PT283	943727.6808	683587.6425	402.9841
PT284	943731.9205	683591.4747	403.2912
PT285	943736.1783	683594.4941	403.1083
PT286	943723.4934	683614.3082	402.8764
PT287	943718.4779	683611.8637	403.0073
PT288	943713.2266	683608.8016	402.8282
PT289	943701.6335	683626.9821	402.5364
PT290	943706.2285	683630.6362	402.6514

PT291	943709.9184	683633.2764	402.3815
PT292	943698.0619	683652.7842	402.3056
PT293	943693.6244	683650.2864	402.3576
PT294	943688.5442	683647.2386	401.9605
PT295	943675.0413	683666.9249	402.0186
PT296	943680.3053	683670.3264	402.1567
PT297	943684.1414	683672.7573	402.0927
PT298	943661.1149	683686.9242	401.5427
PT299	943665.9813	683689.6694	402.0488
PT300	943669.9193	683693.0341	401.6279
PT301	943656.8344	683711.6912	401.458
PT302	943652.5036	683710.3803	401.4469
PT303	943645.8779	683707.3704	401.3538
PT304	943635.6962	683726.8128	401.412
PT305	943638.6026	683728.796	401.502
PT306	943642.6387	683732.4744	401.4641
PT307	943628.5267	683753.2603	401.6352
PT308	943626.2475	683750.6891	401.4542
PT309	943622.4039	683748.9201	401.4881
PT310	943610.2648	683766.1461	401.4962
PT311	943612.0387	683767.2548	401.5643
PT312	943617.2167	683773.3478	401.5304
PT313	943604.4299	683790.0098	401.5655
PT314	943601.0873	683787.6098	401.6204
PT315	943598.218	683786.3016	401.6554
PT316	943586.0103	683803.1995	401.7885
PT317	943588.5233	683805.8985	401.8065
PT318	943591.714	683808.3469	401.8456
PT319	943579.1079	683826.4607	401.9187
PT320	943575.3681	683824.6648	401.8486
PT321	943571.4457	683822.26	401.9046
PT322	943561.396	683841.0167	401.9397
PT323	943563.6531	683842.5625	401.8987
PT324	943566.9581	683844.7575	401.9258

PT325	943554.4378	683864.8661	402.0649
PT326	943551.3817	683862.7412	402.0289
PT327	943548.9228	683861.2826	402.0618
PT328	943535.8388	683879.3339	402.1429
PT329	943538.8922	683881.1834	402.114
PT330	943542.1026	683883.083	402.204
PT331	943530.9396	683903.1817	402.2822
PT332	943526.8542	683900.8846	402.2491
PT333	943523.1581	683899.0221	402.4031
PT334	943511.4923	683917.6451	402.2792
PT335	943514.739	683919.6465	402.2862
PT336	943518.0445	683921.5	402.3533
PT337	943505.8006	683941.223	402.4984
PT338	943501.1889	683938.8883	402.5274
PT339	943497.3361	683936.9038	402.5353
ALASEVILLAGE	943494.7758	683935.2259	402.6553
PT340	943487.3043	683956.8233	402.7385
PT341	943489.7819	683959.7089	402.7575
PT342	943493.0901	683961.8955	402.6666
PT343	943480.0921	683981.2281	402.8557
PT344	943477.4603	683979.1111	402.7316
PT345	943473.3492	683976.5894	402.8186
PT346	943460.7742	683994.7588	403.0757
PT347	943467.0251	683999.7445	403.3348
PT348	943464.2529	683997.7579	403.0817
PT349	943448.7551	684014.6229	403.3758
PT350	943451.9211	684017.09	403.2569
PT351	943454.9145	684019.1124	403.3959
PT352	943443.2138	684038.5313	403.588
PT353	943439.7865	684036.9625	403.432
PT354	943435.1743	684034.5073	403.5069
PT355	943422.9729	684052.1211	403.583
PT356	943427.307	684055.38	403.6141
PT357	943430.4895	684057.4076	403.6992

PT358	943414.8774	684079.2519	403.8163
PT359	943410.1399	684075.4604	403.6772
PT360	943407.3851	684073.9407	403.5122
PT361	943388.6448	684091.4718	403.7762
PT362	943391.8457	684094.2952	403.7163
PT363	943395.6373	684098.3464	403.7253
PT364	943379.293	684114.2439	403.6714
PT365	943375.7588	684111.5989	403.6683
PT366	943372.5748	684109.0532	403.6363
PT367	943355.6978	684124.7617	403.5133
PT368	943358.2462	684127.4281	403.6634
PT369	943361.5982	684130.6232	403.6694
PT370	943344.2061	684146.9629	403.5245
PT371	943340.8383	684143.1835	403.5764
PT372	943338.1269	684139.6902	403.5203
PT373	943320.6924	684154.5711	403.5264
PT374	943323.6205	684158.1677	403.5614
PT375	943327.5834	684162.264	403.4665
PT376	943309.7565	684176.8825	403.4535
PT377	943305.988	684172.2219	403.3285
PT378	943301.6684	684169.123	403.5694
ALENIBORO COMMUNITY	943295.1906	684165.8769	403.0973
PT379	943284.425	684187.6907	403.1025
PT380	943287.8642	684190.5568	403.1965
PT381	943291.5454	684193.5658	403.4116
PT382	943277.6054	684210.4032	403.1217
PT383	943273.9365	684207.8053	402.9646
PT384	943270.9348	684205.8485	402.9056
PT385	943256.6207	684222.0705	402.6606
PT386	943261.406	684225.8545	402.7717
PT387	943264.1889	684227.7611	402.9428
PT388	943242.6954	684239.7167	402.5087
PT389	943246.5477	684242.8199	402.5398

PT390	943250.452	684245.9078	402.5219
PT391	943235.6224	684264.6083	402.2889
PT392	943231.2568	684261.1853	402.3969
PT393	943226.8776	684258.436	402.4078
PT394	943213.6383	684275.2502	402.0999
PT395	943217.4194	684278.3404	402.158
PT396	943221.2829	684281.9056	402.013
PT397	943205.1744	684300.1505	401.8681
PT398	943201.3406	684296.5815	401.715
PT399	943198.0586	684293.6023	401.552
PT400	943184.4706	684309.0084	401.327
PT401	943186.9846	684311.3878	401.3761
PT402	943190.6023	684314.4672	401.3481
PT403	943176.7069	684332.7967	401.1502
PT404	943173.6748	684330.5262	400.8842
PT405	943170.3468	684328.276	401.0601
PT406	943155.2092	684345.6126	400.8052
PT407	943157.8364	684348.8567	400.6273
PT408	943161.3277	684351.9879	400.7473
PT409	943145.1575	684369.7496	400.2214
PT410	943142.3349	684367.5714	400.2464
PT411	943138.8915	684364.7133	400.4823
PT412	943123.2326	684381.8995	400.2554
PT413	943126.1959	684384.6415	399.9804
PT414	943129.0684	684387.6425	400.0895
PT415	943114.7773	684405.78	399.7496
PT416	943111.083	684403.7854	399.6165
PT417	943107.4628	684401.0247	399.6505
PT418	943091.8415	684419.0445	399.2945
PT419	943095.3792	684421.478	399.1506
PT420	943098.9551	684423.8377	399.3997
PT421	943085.3415	684442.691	399.0988
PT422	943081.8596	684440.7096	399.0557
PT423	943078.5202	684438.6023	398.9587

IDIIGBA COMMUNITY	943075.6787	684436.2337	399.0676
PT424	943065.9759	684458.9724	398.5508
PT425	943068.5092	684460.3314	398.3778
PT426	943071.9397	684463.4258	398.8219
PT427	943056.6447	684483.0256	398.321
PT428	943054.5423	684481.0522	398.1469
PT429	943052.1992	684479.6521	398.1649
PT430	943038.9297	684498.4989	397.99
PT431	943041.5844	684500.7572	397.8441
PT432	943044.1537	684502.6235	397.9951
PT433	943030.7205	684521.9251	397.7282
PT434	943027.2382	684519.8957	397.5842
PT435	943024.1493	684518.0298	397.6521
PT436	943011.2795	684536.3394	397.4482
PT437	943013.9786	684538.5772	397.3783
PT438	943017.8077	684541.2645	397.3963
PT439	943003.6053	684559.8129	397.0914
PT440	943000.6897	684557.8405	397.0834
PT441	942996.4293	684555.0007	397.1223
PT442	942983.3069	684573.2767	396.8934
PT443	942987.0958	684576.7556	396.7625
PT444	942990.1604	684578.7073	396.8495
PT445	942977.2988	684597.0554	396.7316
PT446	942974.381	684595.5861	396.6306
PT447	942970.146	684593.0876	396.6015
PT448	942957.6471	684611.6192	396.4636
PT449	942961.3365	684614.4748	396.4547
PT450	942964.4001	684616.5938	396.4018
PT451	942948.4289	684638.2917	396.2329
PT452	942945.3367	684636.3086	396.1168
PT453	942942.0213	684634.4203	396.2358
PT454	942928.2963	684652.7347	396.0799
PT455	942931.5741	684654.9602	396.0239
PT456	942934.4489	684657.2323	396.01

PT457	942919.4924	684675.8828	395.8801
PT458	942916.4728	684673.3947	395.897
PT459	942913.3979	684670.9453	396.0229
PT460	942898.0799	684689.1339	395.992
PT461	942901.1893	684692.0202	395.8401
PT462	942903.5755	684694.1833	395.6701
PT463	942881.3438	684705.3767	395.6951
PT464	942883.541	684707.9028	395.6491
PT465	942885.9228	684710.7824	395.6662
PT466	942863.4092	684720.8151	395.5871
PT467	942865.9324	684724.0461	395.6482
PT468	942867.7598	684726.7477	395.4832
PT469	942849.3671	684738.7086	395.5092
PT470	942847.0685	684735.9157	395.6041
PT471	942845.2032	684732.8986	395.5361
PT472	942823.1578	684742.5587	395.53
PT473	942828.0348	684748.7677	395.4821
PT474	942831.7779	684754.2576	395.5552
PT475	942814.6852	684767.0441	395.5912
PT476	942808.2832	684778.1248	395.5143
PT477	942802.6298	684776.1885	395.4882
PT478	942804.9253	684770.4576	395.5472
PT479	942800.7019	684764.9157	395.5571
PT480	942798.3098	684761.2379	395.465
PT481	942784.8894	684770.4043	395.723
PT482	942787.1349	684773.9475	395.6591
PT483	942789.1137	684777.2315	395.4491
PT484	942771.9118	684790.4554	395.7091
PT485	942769.5658	684787.674	395.6871
PT486	942767.2751	684783.0602	395.841
PT487	942746.1962	684794.2045	395.841
PT488	942747.2074	684798.2786	395.719
PT489	942750.1152	684802.3606	395.9241
PT490	942728.5994	684812.4491	395.961

PT491	942726.4943	684808.765	396.019
PT492	942724.0019	684805.6696	396.0389
PT493	942703.8227	684815.8262	396.1288
PT494	942705.4738	684819.9722	396.0899
PT495	942706.9138	684823.4574	396.205
PT496	942685.2176	684831.9825	395.9899
PT497	942683.2504	684828.7935	396.1598
PT498	942681.874	684824.9194	396.3408
SABOCOMMUNITY	942700.7356	684830.7734	396.12
PT499	942662.2554	684838.5144	396.1607
PT500	942660.5857	684835.8979	396.1627
PT501	942659.3604	684832.4011	396.1977
PT502	942637.4736	684838.6947	396.8165
PT503	942638.5562	684844.3351	395.8056
PT504	942640.3038	684848.7554	395.7327
PT505	942618.5075	684855.8983	396.0546
PT506	942617.0277	684852.0444	396.0585
PT507	942615.5106	684848.2592	395.6225
PT508	942594.6976	684855.0244	395.6774
PT509	942594.8737	684860.6215	395.6794
PT510	942596.1613	684864.5323	395.5445
PT511	942572.82	684870.5496	395.4184
PT512	942571.9328	684865.2961	395.5373
PT513	942570.1299	684861.1896	395.5612
PT514	942547.3865	684867.6452	395.5091
PT515	942548.2937	684871.5592	395.4762
PT516	942549.4998	684876.3959	395.4712
PT517	942527.0676	684883.0739	395.1201
PT518	942525.3424	684878.1604	395.104
PT519	942523.7625	684874.7738	395.165
PT520	942504.4984	684881.5953	395.2779
PT521	942504.7351	684886.5658	394.918
PT522	942505.636	684890.5132	394.842
PT523	942483.5944	684899.0221	394.4579

PT524	942481.018	684894.2358	394.3448
PT525	942479.285	684890.7949	394.3748
PT526	942459.5423	684899.0009	394.0797
PT527	942461.2753	684903.1202	393.9368
PT528	942462.9358	684907.1113	393.9938
PT529	942443.1193	684917.0781	393.9038
PT530	942440.8494	684913.1487	393.9077
PT531	942438.5318	684909.2078	394.0016
PT532	942417.8925	684919.8801	393.6826
PT533	942418.8122	684923.6578	393.6616
PT534	942420.6731	684927.4387	393.8017
PT535	942399.4106	684937.8293	393.8146
PT536	942397.3716	684934.3422	393.7496
PT537	942395.3752	684931.3563	393.8265
PT538	942376.2934	684940.8933	393.1745
PT539	942377.8315	684945.0571	393.1815
PT540	942379.881	684949.1363	393.3016
PT541	942357.8121	684960.8981	392.8755
PT542	942355.1213	684957.0359	393.0325
PT543	942352.4667	684952.9538	392.9864
PT544	942333.6644	684964.0668	393.1104
PT545	942335.0946	684966.8165	393.0774
PT546	942336.8785	684970.1311	393.0615
PT547	942316.7818	684980.7475	393.4094
PT548	942314.9698	684977.4086	393.2634
PT549	942312.8463	684973.983	393.4113
PT550	942292.924	684984.5543	393.6503
PT551	942294.5479	684988.7684	393.5963
PT552	942295.7973	684992.1433	393.8044
PT553	942274.68	685002.9288	394.0113
PT554	942272.4209	684998.6016	393.9422
PT555	942270.2904	684995.1759	394.0232
PT556	942250.0879	685002.7275	394.3881
PT557	942251.3594	685006.2882	394.2462

PT558	942252.8767	685010.1529	394.5312
PT559	942230.9184	685016.9299	394.6821
PT560	942229.3308	685012.5615	394.62
PT561	942228.5472	685008.6228	394.753
PT562	942205.9487	685013.9539	395.0919
PT563	942206.3166	685017.3805	394.9939
PT564	942207.3601	685022.4341	395.108
PT565	942184.4559	685026.3144	395.5768
PT566	942183.7674	685022.2938	395.4278
PT567	942182.4283	685018.2884	395.5327
PT568	942160.8874	685023.07	395.6606
PT569	942161.6141	685026.8807	395.7736
PT570	942162.2732	685031.0276	395.7387
PT571	942138.3589	685037.2751	395.8365
PT572	942137.2903	685032.0111	395.9045
PT573	942136.0997	685027.605	395.9264
PT574	942114.0819	685033.258	395.6873
PT575	942114.5822	685036.9475	395.6823
PT576	942115.5937	685041.6827	395.5394
PT577	942091.745	685045.3212	395.4452
PT578	942090.9481	685041.7684	395.3602
PT579	942089.5163	685038.0234	395.4101
PT580	942067.3633	685042.8022	395.185
PT581	942067.8411	685046.2946	395.104
PT582	942068.7372	685050.1092	395.1771
PT583	942045.6291	685056.0343	394.803
PT584	942044.3567	685052.0736	394.8289
PT585	942043.2642	685047.5964	395.2068
PT586	942022.0781	685052.5735	394.8137
PT587	942023.0464	685057.479	394.6988
PT588	942023.9656	685060.6862	394.4838
PT589	942001.2129	685064.4853	394.5327
PT590	942000.5514	685061.3667	394.4856
PT591	941999.882	685057.7357	394.6626

PT592	941977.9124	685061.9074	394.4264
PT593	941978.2384	685065.2384	394.2385
PT594	941978.6397	685068.7095	394.2355
PT595	941956.1329	685073.9571	394.0724
PT596	941955.4305	685070.579	393.9873
PT597	941954.8629	685067.2672	394.1103
PT598	941931.1109	685071.4514	393.9181
PT599	941931.8133	685075.6797	393.5872
PT600	941932.5542	685079.0256	393.5632
PT601	941910.1274	685084.4853	393.4451
PT602	941908.8854	685081.2404	393.3271
PT603	941907.483	685077.6353	393.454
PT604	941884.6497	685083.9101	393.3579
PT605	941886.8225	685091.7512	393.294
PT606	941885.5771	685088.0566	393.2559
PT607	941864.4542	685098.7064	393.3139
PT608	941862.4252	685093.9467	393.4578
PT609	941861.6913	685089.2418	393.2957
PT610	941840.8388	685096.1581	393.3476
PT611	941841.2315	685100.202	393.3317
PT612	941842.4802	685104.1253	393.2928
PT613	941820.1712	685110.6963	393.4426
PT614	941818.7218	685106.7191	393.3076
PT615	941816.1128	685101.3931	393.4565
PT616	941795.8031	685109.5647	393.6834
PT617	941798.3814	685117.7795	393.4445
PT618	941797.1034	685114.5376	393.4265
PT619	941773.5708	685116.5524	393.4543
PT620	941774.6648	685120.42	393.3884
PT621	941776.1148	685125.5019	393.5564
PT622	941752.8201	685132.0982	393.1173
PT623	941751.0131	685126.7158	393.2072
PT624	941749.2822	685122.1811	393.2872
PT625	941729.0303	685128.7752	392.9981

PT626	941729.4633	685133.1793	392.8461
PT627	941730.8535	685137.1978	392.7742
PT628	941709.2981	685144.0612	392.3991
PT629	941707.4574	685139.2507	392.423
PT630	941705.3222	685135.4118	392.5969
PT631	941685.829	685151.2839	391.8119
PT632	941684.1103	685145.6923	391.8919
PT633	941682.5799	685141.7543	391.8788
PT634	941659.483	685148.8559	391.2957
PT635	941660.7388	685153.8004	390.9597
PT636	941662.2962	685158.4075	391.1748
PT637	941642.5668	685165.5895	390.7387
PT638	941640.6177	685161.1986	390.6247
PT639	941638.6665	685156.8328	390.7506
PT640	941617.0918	685164.7728	390.1645
PT641	941618.4436	685169.5335	390.0186
PT642	941620.9271	685174.5754	390.0676
PT643	941599.5417	685181.5604	389.3895
PT644	941597.3606	685176.9095	389.4675
PT645	941595.2113	685171.7891	389.3384
PT646	941573.5071	685178.976	388.6103
PT647	941574.8928	685183.2655	388.5753
PT648	941576.836	685187.8655	388.2504
PT649	941555.5342	685194.7273	387.9843
PT650	941553.8172	685190.7789	387.9912
PT651	941551.994	685188.0741	387.8992
PT652	941534.1789	685203.6529	388.6022
PT653	941510.7258	685205.6168	388.307