



JOB TITLE: AS-BUILT REPORT

SITE NAME: KARATINA O.H RELOCATION

CONTRACTOR: CALIKEN NETWORKS E.A LTD

DATE: 25TH MAY 2025



KEY

Date
Name
Subject
Co-signature



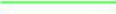
PRD
FOR

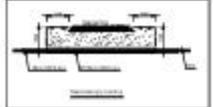


FIBER OPTIC WORKS
KARATINA O.H RELOCATION

KEY

Date							
Name							
Subject							
Co-signature							

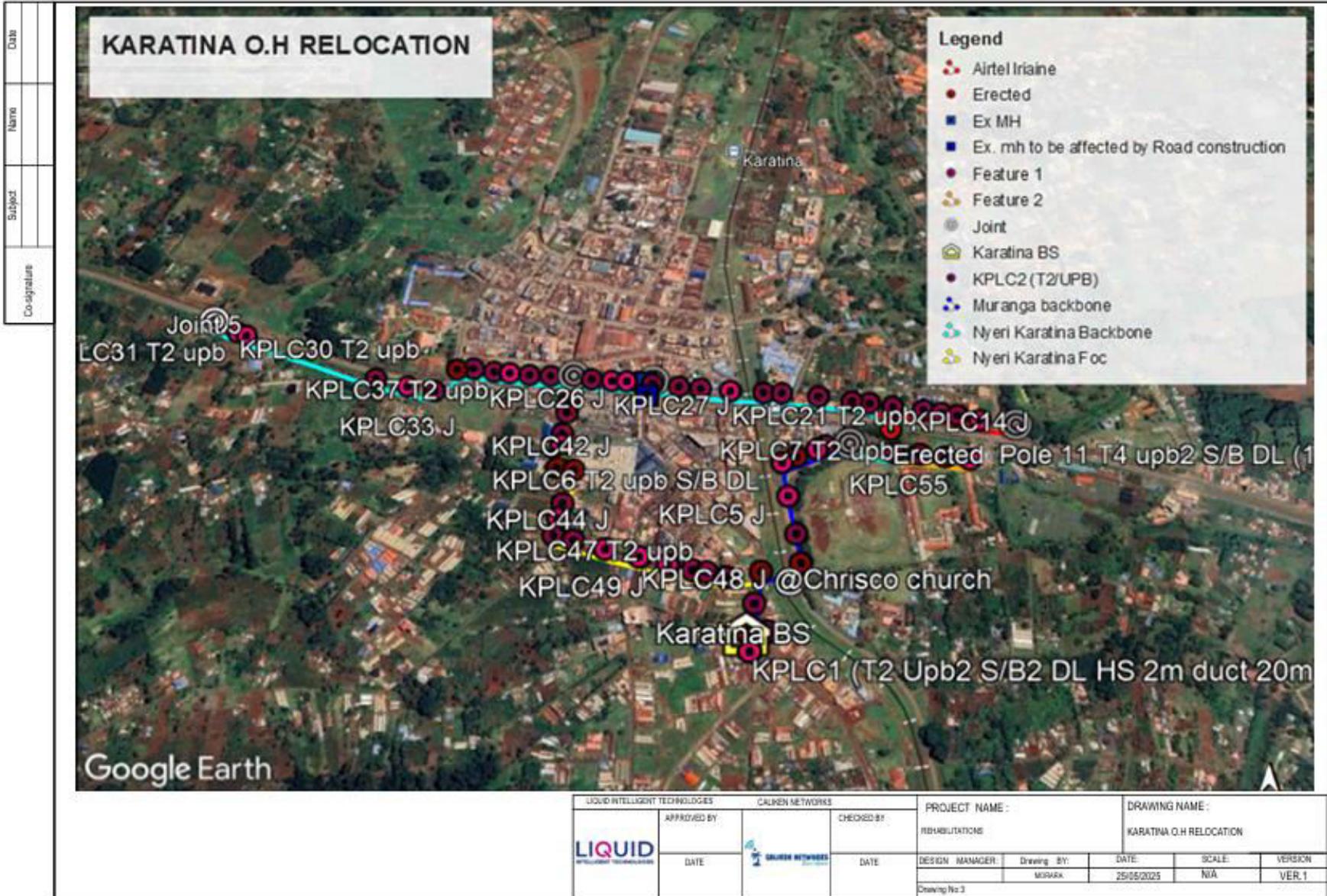
	New Route		Drawing connect		Groove
	Existing Duct		Cable reservation in man hole		Electric line
	Handhole		Label for special case		Railway
	Existing manhole		Tree		Drainage
	New Manhole		Dry land		mountain or hill
	Existing Pole		Hurst		Road and street
	Proposed Pole(P.P)		Grass		Under construction road
	OFC joint		Building		Pond or lake
	MIDSPAN LOOP (10meters length for maintenance) INSIDE MANHOLE		Concrete bridge		Compass
	SPLICE LOOP (15meters each side of OFC) INSIDE MANHOLE		metalic bridge		GPS
	Power cable		Culvert		Fence
	Internet cable (CAT6)		River		Oil site
	Existing equipment		Swamp		Tower
	New equipment				



RC

LIQUID INTELLIGENT TECHNOLOGIES	DALKEN NETWORKS	PROJECT NAME : REHABILITATIONS		DRAWING NAME : KARATINA O.H RELOCATION
APPROVED BY	CHECKED BY	DESIGN MANAGER	Drawing BY:	DATE:
DATE	DATE	MORAK	MORAK	25/05/2025
		SCALE	VERSION	
		N/A	VER.1	
Drawing No:2				

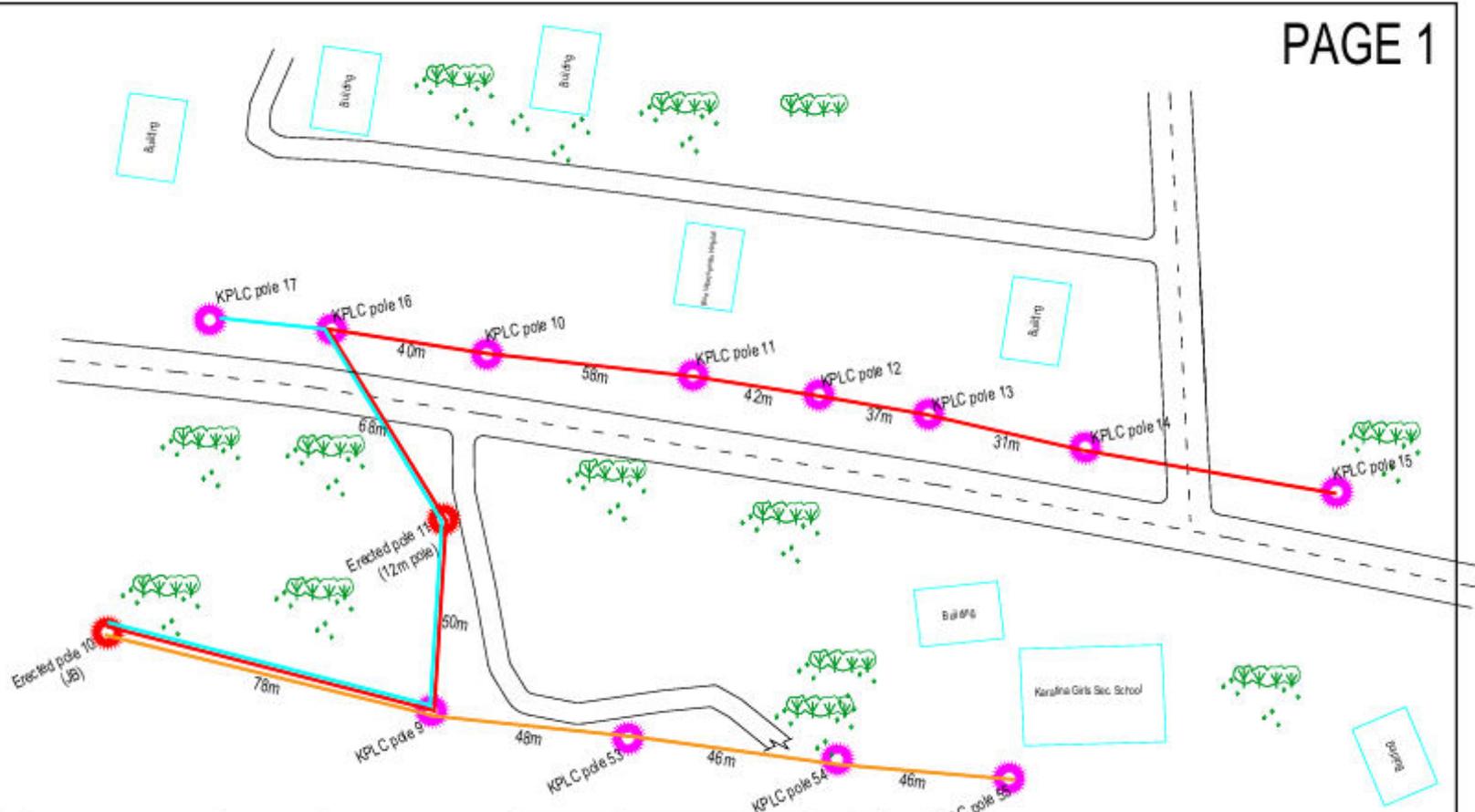
MAP



DESIGN

PAGE 1

Co-signature
Subject
Name
Date



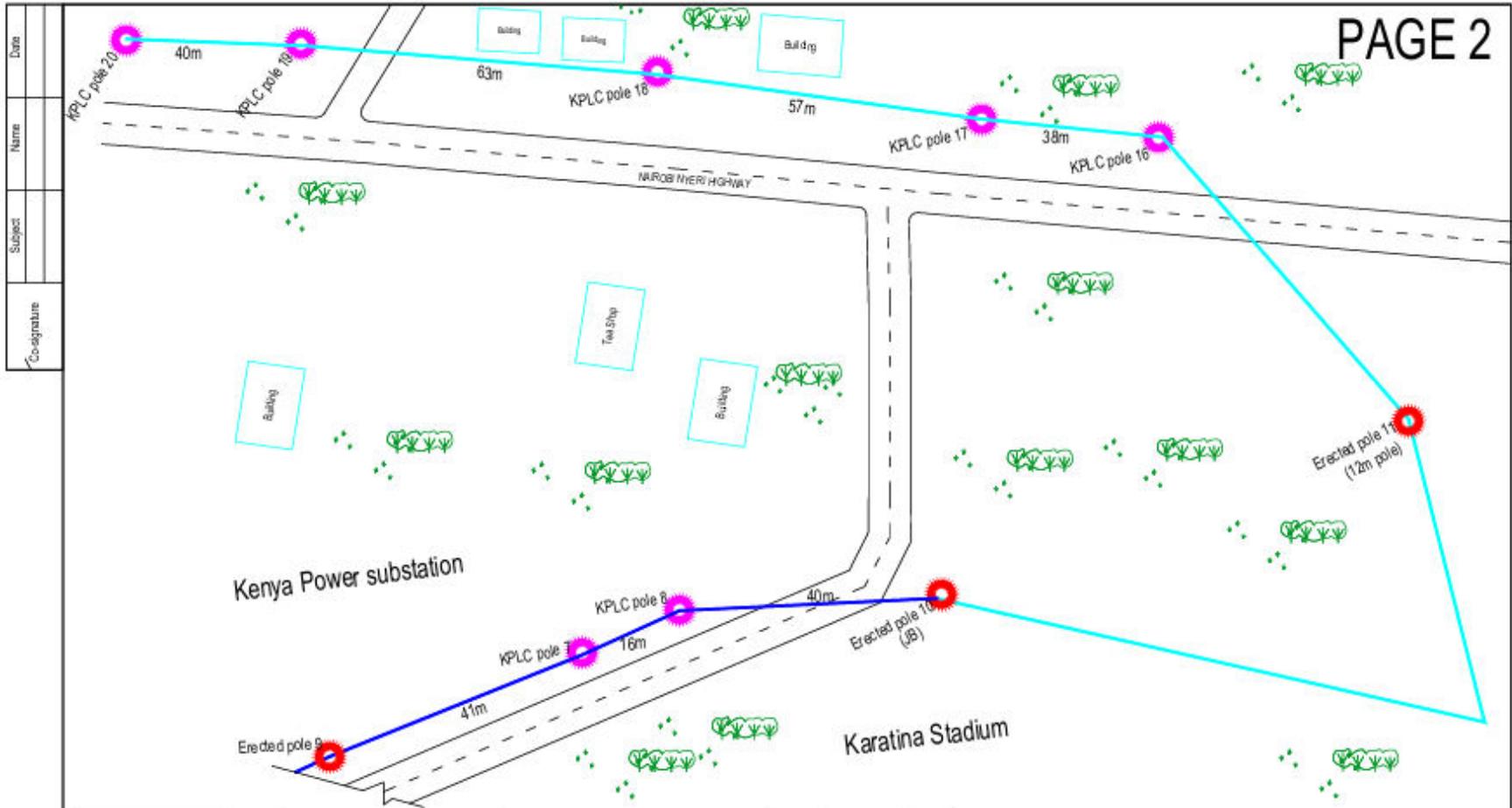
Route survey	Post clear	Break and recover	road	surface	OSP Soil Profile				OSP SOCB			Joint	Warning	Manhole	PVC	ADSS Scope													
ASP	CDM	Stab	Cable	Tar	HS	SR	HT	SP (m)	PS (m)	Traverse (m)	Box (m)	Sign	(m)	(m)	(m)	UT	UT	UT	UT	UT	UT	UT	UT	UT	UT	UT	UT		
4520	31	0	0	0	0	0	0	18	0	0	0	0	18	0	0	1	9	1	55	0	3624	12	896	4520	140				

HDPE/115		Concrete		1 way		2 way		Care Detail		BOSAL Works		PCC Size	
Throat	Body	envelop	flange	duct	duct	duct	duct	duct	duct	duct	duct	duct	duct
0	0	0	0	0	0	36	0	0	0	0	0	3920	600

LIQUID INTELLIGENT TECHNOLOGIES		CALIBEN NETWORKS		PROJECT NAME :		DRAWING NAME :	
APPROVED BY	CHECKED BY	REHABILITATIONS		KARATINA O.H.RELOCATION			
DATE	DATE	DESIGN MANAGER:	Drawing BY:	DATE:	SCALE:	VERSION	
		ISORAK		25/05/2025	N/A	VER.1	

Drawing No:3

DESIGN



Route	Route	Break and recover road surface				OSP Soil Profile				ISP SCOPE			Joint		Warning		Manhole		PVC		ADSS Scope						
km	km	ASP	CCN	Sts	Cable	Tar	HS	SR	HR	U-Pipe (pcs)	Pipe (m)	Tracing (pcs)	Box (pcs)	Tape	(pcs)	(pcs)	P/P (8m)	P/P (10m)	P/P (12m)	KPLC Poles	Equip Poles	Span/OP	Storage	Access	ADSS	Access	Back
4520	31	0	0	0	0	0	18	0	0	0	0	0	0	18	0	0	1	9	1	55	0	3624	12	896	4520	140	

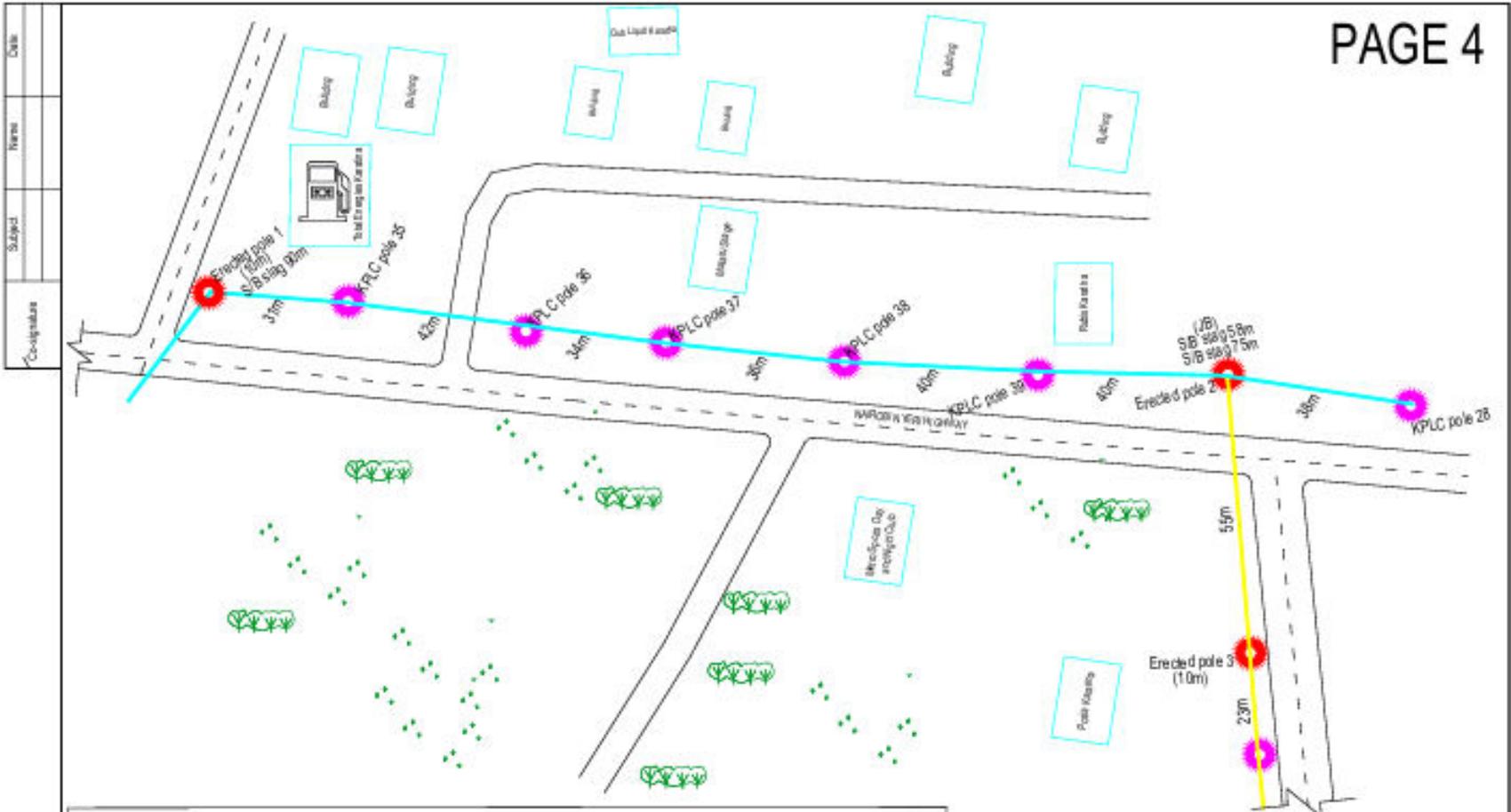
HDFB110			Concrete		1 way		2 way		Core Delling		Open window		BOSAL Works		FOC Size	
Threading	Window	Road	Leveling	More	Excavating	Trenching	Breaking	Breaking	Open window	Above	Under	48C	24C	Under	24C	
0	0	0	0	0	0	36	0	0	0	0	0	3920	600			

LIQUID INTELLIGENT TECHNOLOGIES		CALIKEN NETWORKS	
APPROVED BY	DATE	CHECKED BY	DATE

PROJECT NAME :		DRAWING NAME :	
REHABILITATIONS		KARATINA OJ RELOCATION	
DESIGN MANAGER:	Drawing By:	DATE:	SCALE:
	WOKKA	25/05/2025	N/A
Drawing No:3		VERSION	VER.1

Date	
Name	
Subject	
Co-signature	

DESIGN



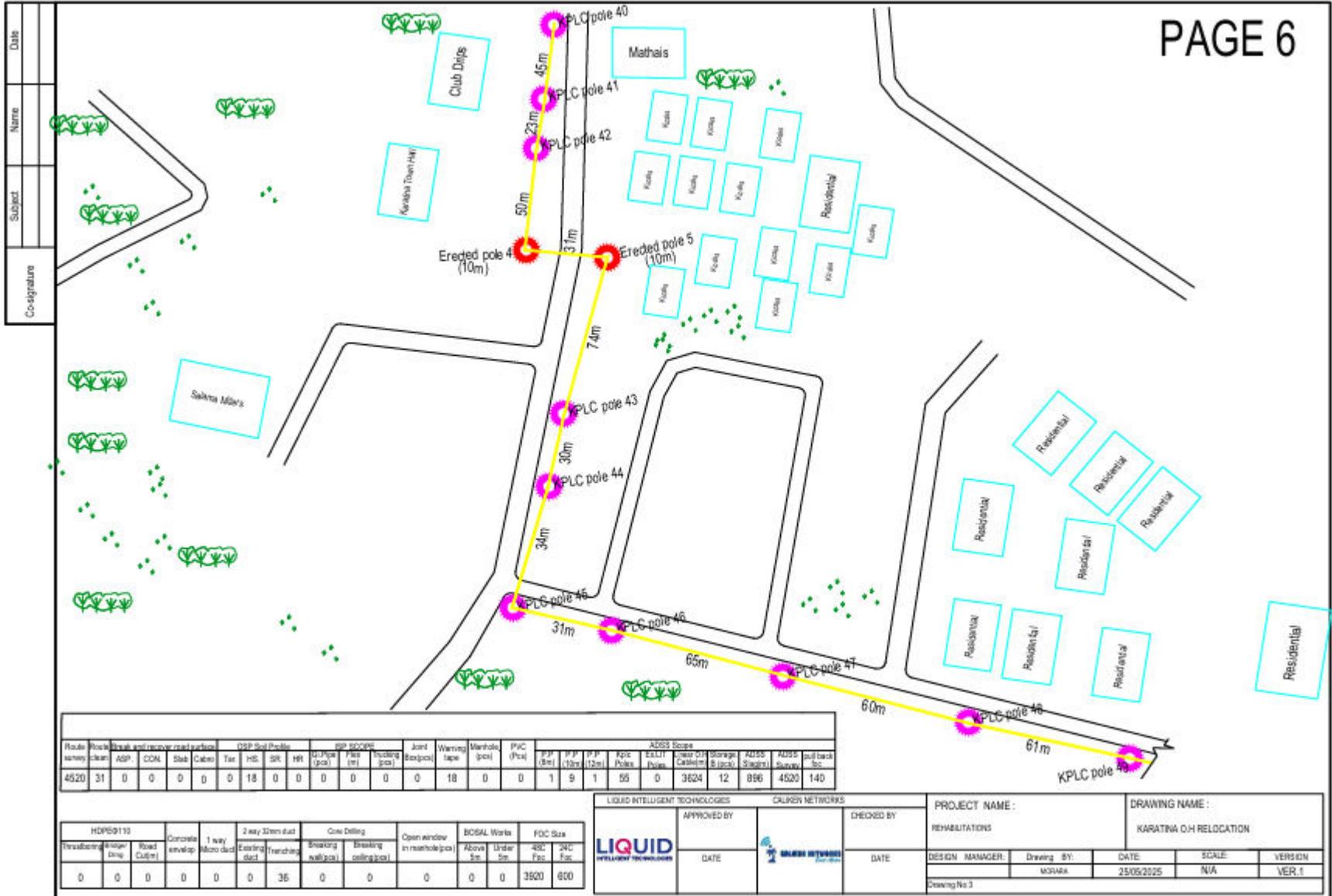
Co-ordinator	Name	Date

Race	Trench	Depth	Cable and accessories				Cable				Joints				ACCESSORIES											
			ASB	CON	Slab	Cable	Tot	HS	SR	HR	Splice	Wiring	Wiring	Wiring	Wiring	Wiring	Wiring	Wiring	Wiring	Wiring	Wiring	Wiring	Wiring	Wiring	Wiring	Wiring
4520	31	0	0	0	0	0	18	0	0	0	0	0	0	18	0	0	1	5	1	55	0	3024	12	856	4520	143

HDPD112		Concrete		1 way		2 way		Cable		Open		BOSAL		PDC	
Material	Qty														
0	0	0	0	0	0	30	0	0	0	0	0	3020	690		

				PROJECT NAME : RE-INSTALLATION		DRAWING NAME : KIRATNA O.H RELOCATION	
APPROVED BY	CHECKED BY	DESIGN MANAGER	Drawing BY	DATE	SCALE	VERSION	
DATE	DATE	DATE	DATE	DATE	SCALE	VERSION	
				25/05/2025	N/A	VER.1	

DESIGN



Date
Name
Subject
Co-signature

Route	How to	Work	and	recovery	road	purposes	OSP Rod Profile				OSP 800mm				ADSS Scope											
Number	Clear	ASP	CON	Slab	Cable	Tax	HS	SR	HR	OP Pole (pc)	FS (m)	Working (pc)	Joint (pc)	Warning tape	Manhole (pc)	PVC (Pvc)	SP (8m)	SP (12m)	SP (12m)	Kpic Poles	ELT/ Cable (m)	Storage (kg)	ADSS (kg)	ADSS (kg)	ADSS (kg)	Full back (kg)
4520	31	0	0	0	0	0	18	0	0	0	0	0	0	18	0	0	1	9	1	55	0	3624	12	896	4520	140

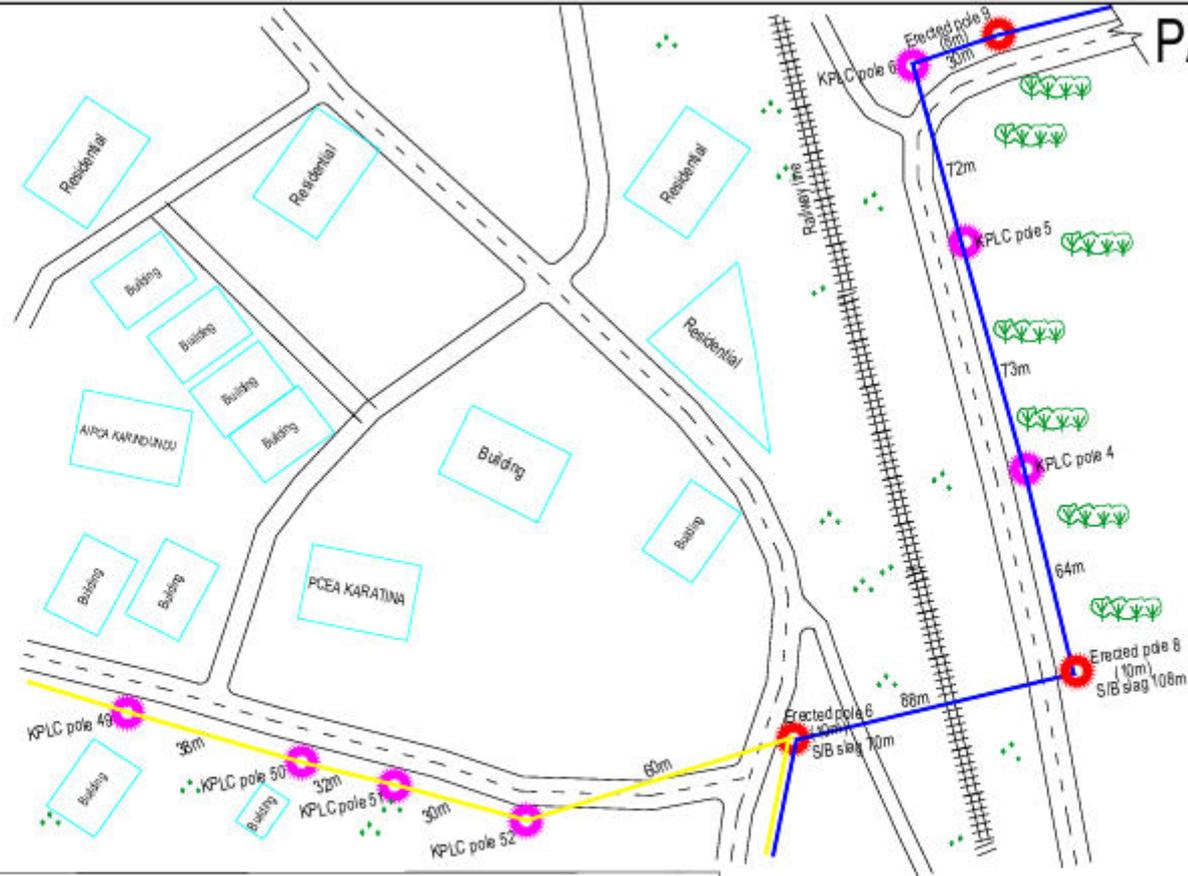
HDPD110		Concrete envelop		1 way Micro duct		2 way 32mm duct		Core Drilling		Open window in manhole (pc)		BOSAL Works		FOC Size	
Trenching	Window (mm)	Road Cut (m)	Micro duct	Existing duct	Trenching	Breaking wall (pc)	Breaking ceiling (pc)	Open window in manhole (pc)	Above 5m	Under 5m	400 Fac	JWC Fac	3500	600	
0	0	0	0	0	0	0	36	0	0	0	0	0	3500	600	

LIQUID INTELLIGENT TECHNOLOGIES		CALKEN NETWORKS	
APPROVED BY	DATE	CHECKED BY	DATE

PROJECT NAME :		DRAWING NAME :	
REHABILITATIONS		KARATINA D.H RELOCATION	
DESIGN MANAGER :	DRAWING BY :	DATE :	SCALE :
	MORAK	25/05/2025	N/A
Drawing No.3		VERSION :	VER.1

DESIGN

Date	
Name	
Subject	
Signature	



Route	How	Break and recover cost surface	OSP Soil Profile			ISP SCOPE			Joint	Warning	Manhole	PVC	ADSS Scope													
Survey	Clear	ASP	CCM	Slab	Cable	Tar	HS	SR	HR	Co/Pipe	Flt	Tr/Slag	Box	type	(pc)	(Pc)	FF	FF	FF	KPLC	ELLIT	Lower	Storage	ADSS	ADSS	pull back
4520	31	0	0	0	0	0	18	0	0	0	0	0	18	0	0	1	0	1	55	0	3624	12	696	4520	140	

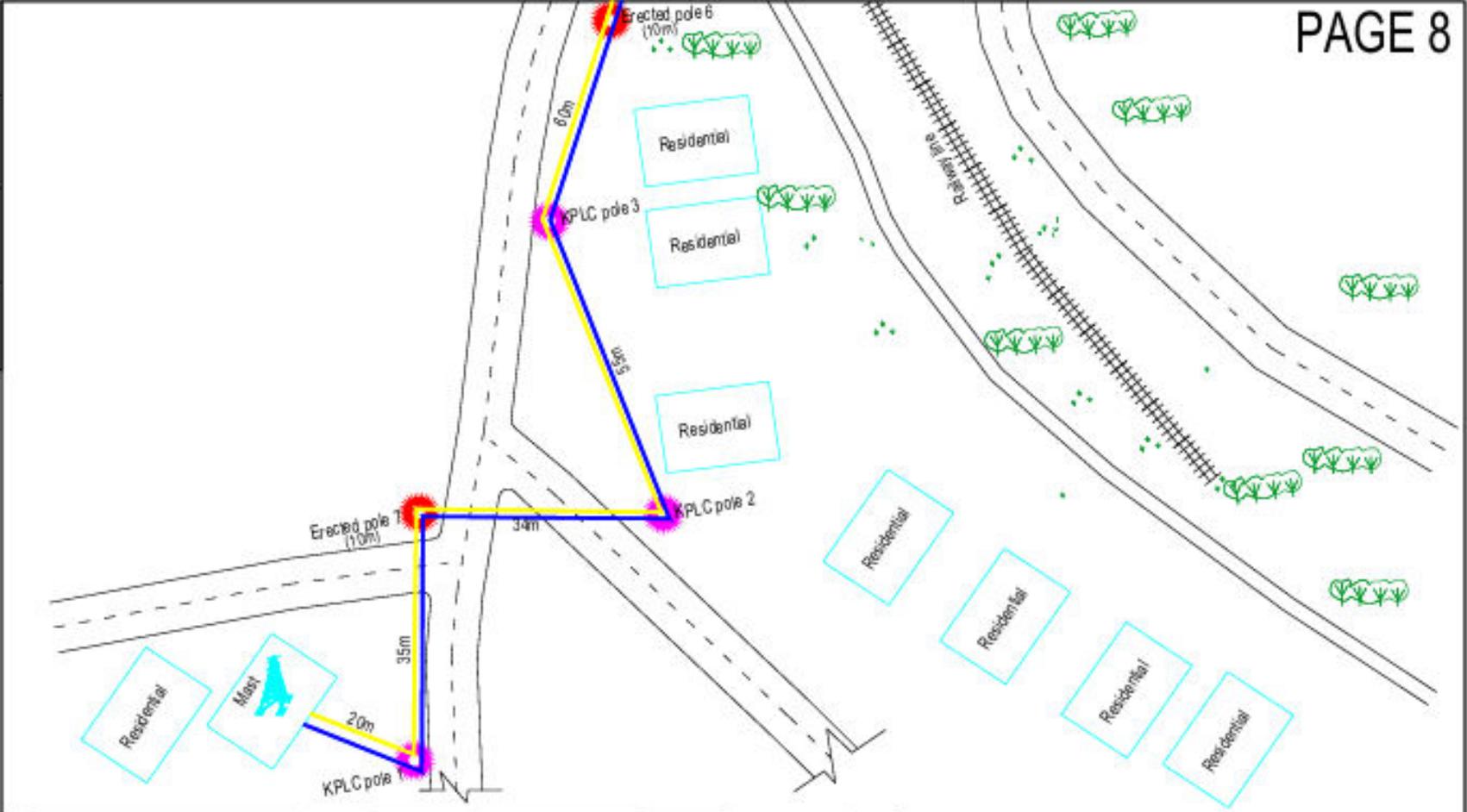
HOPEB ID		Concrete envelop		1 way Micro duct		2 way 33mm duct		Core Drilling		Open window in manhole		BOSAL Works		FDC Size	
Transition	Splice	Road	Curbs	Existing	Micro duct	Existing	Trenching	Drinking	Drilling	Open window	Above	Under	45C	24C	FDC
0	0	0	0	0	0	0	36	0	0	0	0	0	3920	800	

LIQUID INTELLIGENT TECHNOLOGIES		CALIBRE NETWORKS	
APPROVED BY	DATE	CHECKED BY	DATE

PROJECT NAME :		DRAWING NAME :	
REHABILITATIONS		KARATINA D.H RELOCATION	
DESIGN MANAGER:	Drawing BY:	DATE:	SCALE:
	MURUKA	25/05/2025	N/A
Version		VERSION	
Drawing No.3		VER.1	

DESIGN

Date	
Name	
Subject	
Signature	



Route survey	Grade	ASR	CON.	Sub	Cable	Tax	OSP Soil Profile				SD C/COR				Joint (box/joint)	Spanning (m)	Manhole (mm)	PVC (PVC)	ADSS Scope									
							10' (30')	20' (60')	30' (90')	40' (120')	10' (30')	20' (60')	30' (90')	40' (120')					PP (0m)	PP (10m)	PP (20m)	PP (30m)	PP (40m)	PP (50m)	PP (60m)	PP (70m)	PP (80m)	PP (90m)
4520	S1	0	0	0	0	0	18	0	0	0	0	0	0	18	0	0	1	9	1	55	0	3824	12	688	4520	143		

NEPC@110		Concrete envelop	1 way splice out	3 way splice out	Conducting		Open window in manhole (mm)	BOSAL blocks		FDC Size	
Insulation (mm)	Road Cut-off				10mm/12mm	16mm/19mm		10mm/12mm	Under/Over		400/340
0	0	0	0	0	36	0	0	0	0	3820	600

	APPROVED BY	CHECKED BY
	DATE	DATE

PROJECT NAME : SE-HS/T/10/08		DRAWING NAME : KARATWA OH RELOCATION	
DESIGN MANAGER	Drawing By	DATE	SCALE
Drawing No:1	ibomwa	25/05/2025	N/A
			VERSION VER.1

DESIGN

Route survey	Route clean	Break and recover road surface				OSP Soil Profile				ISP SCOPE			Joint Box(pcs)	Warning tape	Manhole (pcs)	PVC (Pcs)	ADSS Scope									
		ASP.	CON.	Slab	Cabro	Tar.	HS.	SR	HR	Gi.Pipe (pcs)	Flex (m)	Trucking (pcs)					P.P (8m)	P.P (10m)	P.P (12m)	Kplc Poles	Ex.LIT Poles	Linear O.H Cable(m)	Storage. B (pcs)	ADSS Slag(m)	ADSS Survey	pull back foc
4520	31	0	0	0	0	0	18	0	0	0	0	0	0	18	0	0	1	9	1	55	0	3624	12	896	4520	140

HDPEΦ110			Concrete envelop	1 way Micro duct	2 way 32mm duct		Core Drilling		Open window in manhole(pcs)	BOSAL Works		FOC Size	
Thrust boring	Bridge/ Drng	Road Cut(m)			Existing duct	Trenching	Breaking wall(pcs)	Breaking ceiling(pcs)		Above 5m	Under 5m	48C Foc	24C Foc
0	0	0	0	0	0	36	0	0	0	0	3920	600	

POLE PITS MEASUREMENTS








Pole pit 9
14.04.2025 11:00
- 48319, 37.12411
Next to Mathai Super Market, Karatiga




Pole pit 5
14.04.2025 12:14
- 48403, 37.12868
G48H199J, Karatiga

ERECTED POLES



15.04.2025 15:04
-48252, 37.12223
Nyeri - Karatina Highway, Karatina



16/04/2023 14:15
48892 3712861
G48H+H9J, Karatina



17.04.2025 09:20
- 48444, 37.12418
G48F+9P7, A2, Karatina



18.04.2025 11:34
48401, 37.12863
G48H+H9J, Karatina



16.04.2025 09:19
-48245, 37.12225
G49C+4WQ, Kirigu Primary School Rd, Karatina



CABLE PULLING STRINGING



 PT. SINDO NETWORKS

17.04.2025 09:20
-48444, 37.12418
C48E+007, A2, Keratina



18.04.2025 10:00
48417_37.12944
G48H+GOV, Karatina



16.04.2025 13:44
-48376,37 12922
G48H+GOV, Karatina



15.04.2025 15:38
48183_37_11843
G499+5F4, Karatina



17.04.2025 10:22
- 48320, 37, 12408
Next to Mathai Super Market, Karatina



 **SAKURA NETWORKS**

17-04-2025 10:08
48396.37.12410
G48F+9P7, A2, Karatina



17.04.2025 13:21
-48502, 37.12757
G48G+3JH, Karatina



15.04.2025 15:03
-48240, 37.12226
G49C+4WQ, Kirigu Primary School Rd, Karatina



15.04.2025 15:49
48196, 37.11854
G499+5F4, Karatina



17.04.2025 14:52
48686, 37 12702
Industrial street, Karatina



17.04.2025 12:48
-48401, 37.12828
G48H+GOV, Karatina





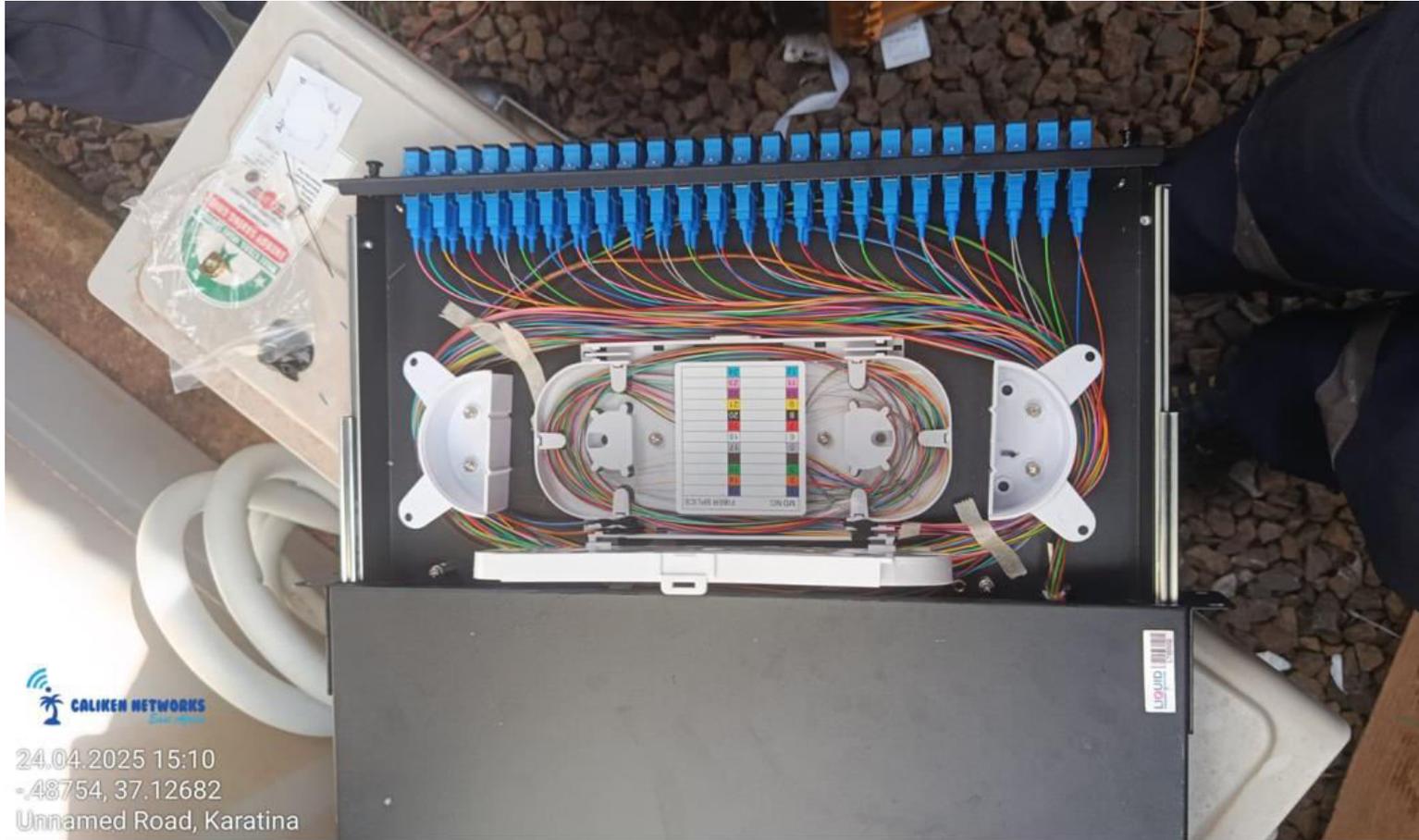
SHAKER NETWORKS
15.04.2025 10:42
-48325, 37.12572
G48G+G9G, Karatina

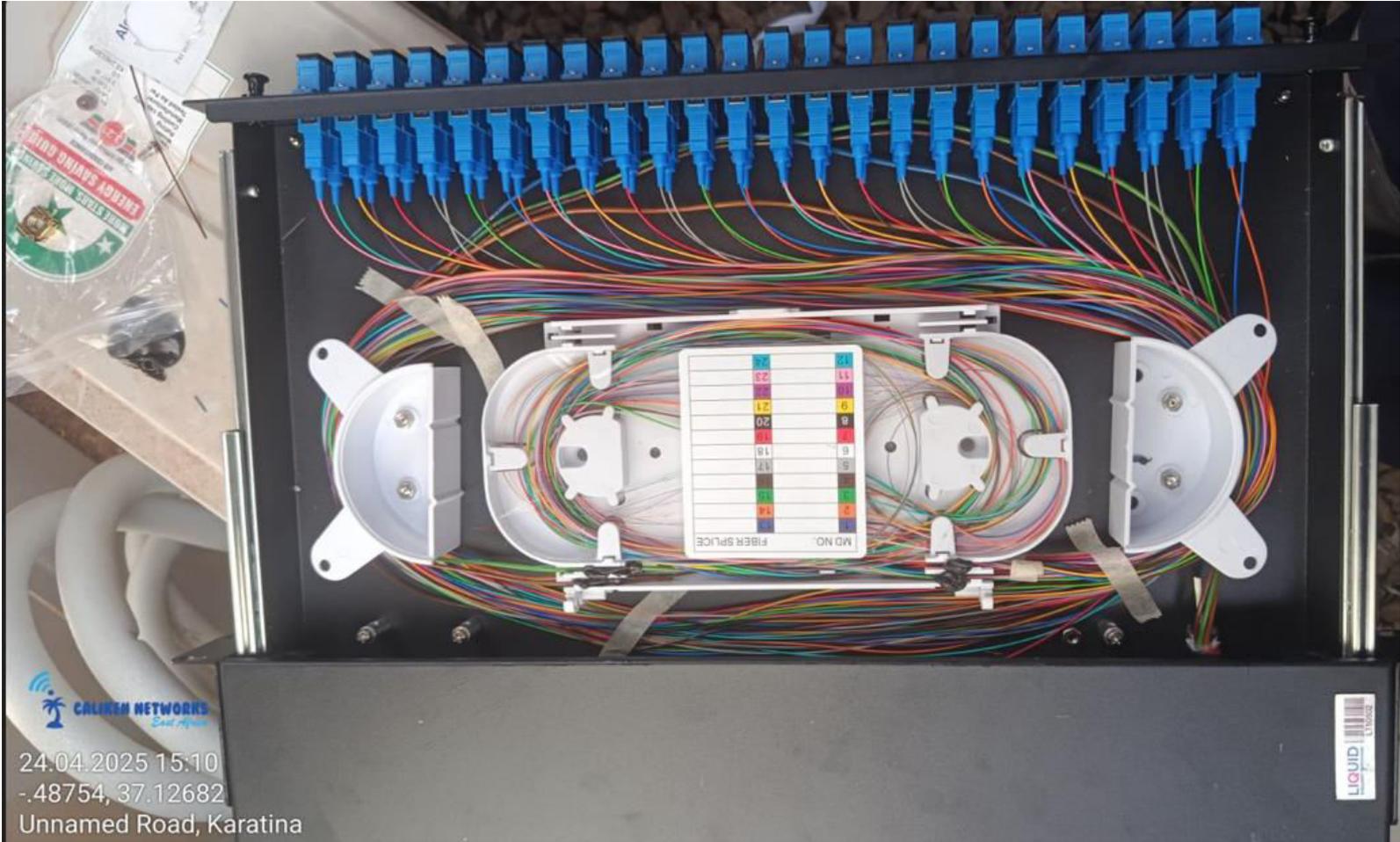
STORAGE BRACKETS





SPLICING AT ODF





RACK



24.04.2025 16:20
-48758, 37.12686
Unnamed Road, Karatina

RECEIPT

19 - COUNTY GOVERNMENT OF NYERI



Website: www.nyeri.go.ke
P.O Box: 1112-10100 Nyeri Kenya
Email: info@nyeri.co.ke
Phone: +254 714 952 473



OFFICIAL RECEIPT

Receipt No. 019100A202504/0000227 09-Apr-2025 11:08



CCA2504-00022 (09-Apr-2025 10:43) LIQUID TELECOMMUNICATIONS KENYA CABLE STRINGING ON EXISTING POLES AT KARATINA OVERHEAD REHABILITATION (3513 METERS) [Nyeri Town]

1 Way-leave for poles(other than KPLC) - Per meter per annum	175,650.00
Total	175,650.00

Served By: MURIGU JOSEPH KIBIRU

Payments Summary for Receipt No. 019100A202504/0000227, Invoice(s): CCA2504-00022

1 Direct Credit_09 Apr 2025_1140760319 KCB - Revenue Account_Ref:S92064663	175,650.00
Total	175,650.00

COUNTY GOVERNMENT OF NYERI
NYERI TOWN SUB-COUNTY

09 APR 2025

CGNFD - PAID
COUNTY TREASURY

PERMIT



COUNTY GOVERNMENT OF NYERI

When replying please quote
Our reference no and date.

P.O. BOX 1112-10100
NYERI
Email: infrastructure@nyeri.go.ke

DEPARTMENT OF TRANSPORT, PUBLIC WORKS, INFRASTRUCTURE & ENERGY

OUR REF: CGN/DIR/LETT/V/20

DATE: 9th APRIL 2025

LIQUID TELCOM KENYA,
SAMMER BUSINESS PARK,
P.O. BOX 62499- 00200,
NAIROBI

RE: AUTHORITY TO CABLE STRING ALONG EXISTING POSTS AT KARATINA OVERHEAD
REHABILITATION – KARATINA TOWN

Your letter dated 29th JANUARY 2025 on the above subject refers:

Your application requesting permission to cable sting along existing posts at the above-mentioned site has been considered and approved having paid the relevant fees as per attached receipt dated 26th MARCH 2025

You are therefore authorized to carry out the works subject to adhering to the Conditions below.

1. Obtain clearance from other road agencies where that is applicable.
2. The installation to be done as per the submitted and approved layout plan.
3. Make good the grounds and reinstate to working conditions all other facilities that may have been tampered with upon completing the works and leave the site clean and tidy.
4. Notify this office when commencing and allow inspection compliance with the above condition.


Eng. Solomon Ngatia Nderitu
Ag. Director Roads and Transport
TRANSPORT, PUBLIC WORKS, INFRASTRUCTURE AND ENERGY

SITE ACCEPTANCE

 LIQUID <small>INTELLIGENT TECHNOLOGIES</small>			
AERIAL ACCEPTANCE FORM			
Site Name: <u>KARATINA O.H. RELOCATION</u>			
DATE: <u>21/05/25</u>	Section: <u>KARATINA</u>	Distance: <u>4500m</u>	
	From: <u>-0.425677 28</u>	To: <u>01(-0.467330)</u>	
No.	DESCRIPTION	ACCEPTED	ACCEPTED WITH REMARKS
		YES NO	(Minor Deficiencies)
1	Height of Poles (12m, 10m, 8m)	✓	<u>8m - 1pc, 10m - 2, 12m - 10</u>
2	Spacing of Poles (x 60m) (x 150)	✓	
3	Depth of pit (pole length / 2)	✓	
4	Stay Support	✓	<u>2pc</u>
5	Tension Sets	✓	<u>102 pc</u>
6	Cable Loop/ Slack management	✓	<u>12</u>
7	Compaction / Reinforcements	✓	
8	Clearance from Power Facilities	✓	
9	Cable Tensioning & Sag	✓	
10	Overall Quality Performance Score:	<u>3</u>	
GENERAL REMARKS <u>IMPRESSIVE WORK DONE</u>			
<u>SITE INSPECTED & ACCEPTED.</u>			
<u>MEETS HIT STANDARDS</u>			
The Scope of Work contracted has been satisfactorily completed and is in accordance with the contract specification and drawings unless otherwise stated under "ACCEPTED WITH REMARKS"			
COMPANY:	Name:	Signature:	
<u>CARLTON NETWORK</u>	<u>MARANDA KENNEDY</u>	<u>[Signature]</u>	
LIQUID INTELLIGENT TECHNOLOGIES	Name:	Signature:	
	<u>ROBERTS MURPHY</u>	<u>20/05/25</u> <u>[Signature]</u>	
PERFORMANCE RATING		ACTION	
4	Excellent	Exceeds quality expectations	
3	Good	Meets quality expectations	
2	Fair	Accepted with minor deficiencies	
1	Poor	Major deficiencies observed. Failed Acceptance	

Clearances met
 25m
 24P - 600m
 43P - 3920