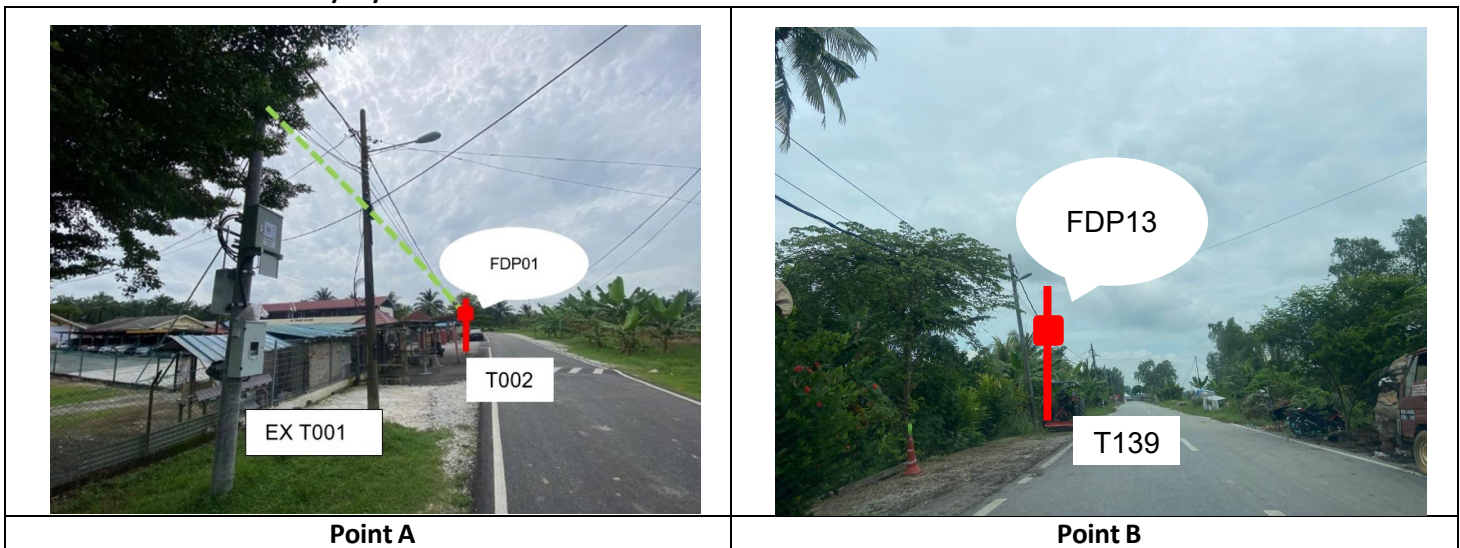


# TECHNICAL PROPOSAL

## POP2 ABAB011 SEKOLAH KEBANGSAAN TANAH LALANG (D-SIDE)

**Company Name** : KNZ ENGINEERING SDN BHD.  
**Company Address** : NO 60 & 60 A JALAN KLEBANG INDAH 1 MEDAN KLEBANG INDAH 30010 IPOH PERAK  
**Prepared By** : SEVANTHI A/P SELVAM  
**Date** : 3/12/2024



### Starting Point

**Site / Boundary Name** : Bagan Datoh  
**Address** : Sk Tanah Lalang, Kampung Tanah Lalang 36100 Bagan Datoh  
**District** : Bagan Datoh  
**Postcode** : 36100  
**State** : Perak  
**GPS Coordinate** : 3.949728, 100.858378  
**LRD** : A

### End Point

**Site / Boundary Name** : Bagan Datoh  
**Address** : Jalan Sungai Dulang, 36300 Sungai Sumun, Perak, Malaysia  
**District** : Bagan Datoh  
**Postcode** : 36100  
**State** : Perak  
**GPS Coordinate** : 3.956145, 100.867727  
**LRD** : B



PROJEK PENYEDIAAN DAN PENYELENGGARAAN POINT OF PRESENCE (POP) FASA 2: HAB INFRASTRUKTUR GENTIAN OPTIK BERHAMPIRAN DENGAN SEKOLAH, KAWASAN PERINDUSTRIAN, PREMIS KERAJAAN DAN KOMUNITI SEKITARNYA OLEH KEMENTERIAN KOMUNIKASI MALAYSIA – ZON UTARA (KKMM.400-11/17/132(1))



## 1.0 WORK SUMMARY

NO	PROPOSED DISTANCE AND METHOD	UNIT	QUANTITY
1	Horizontal Directional Drilling (HDD)	m	0
2	Carriage Way Open Trench (CW)	m	0
3	Grass Verge Open Trenching (GV)	m	0
4	Micro Trenching (MT)	m	0
Total			0

NO	OTHER INFORMATION	UNIT	QUANTITY
1	Installation of Short Span ADSS Fibre Cables	m	6264
2	Install New Pole	ea	139
3	Install New JRC7 Manhole	ea	0
4	Install GI Riser 100mm	ea	0
5	Install Fiber Distribution Point	ea	13
6	Install Closure	ea	6
7	Estimated Time Required for Completion	days	30

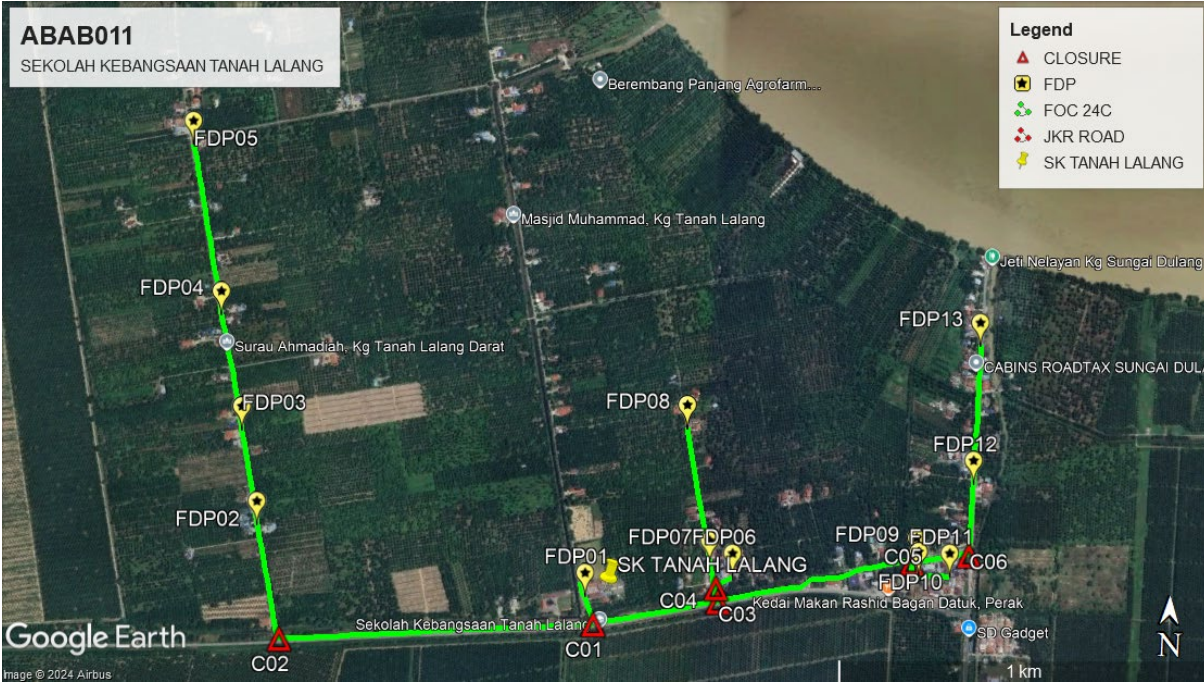
## 2.0 LOCAL AUTHORITY SUMMARY

Daerah Bagan Datoh

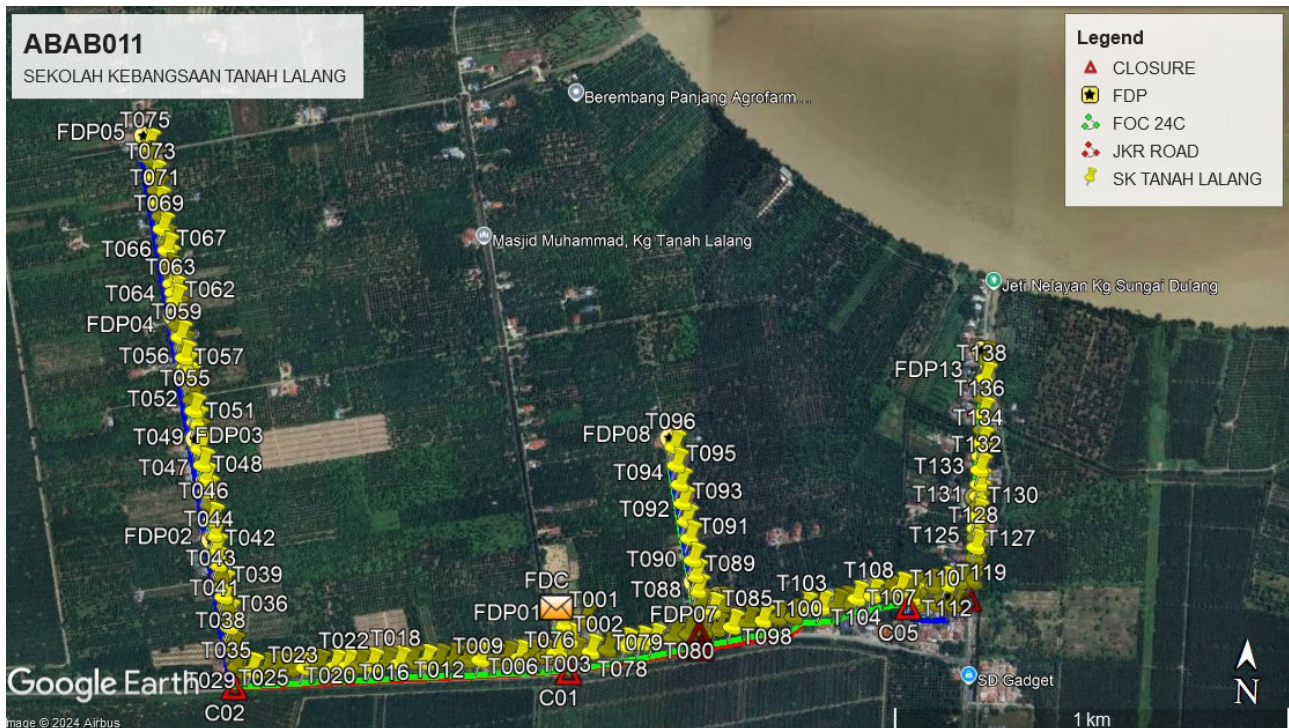
Bil	Items	Owner	Quantity	Distance
1	HDD	JKR	-	-
		Majlis	-	-
		Estate / Private Land	-	-
2	New Pole	JKR	73	2,786m
		Majlis	66	2,510m
		Estate / Private Land	-	-
3	Existing TNB Pole	JKR	-	-
		Majlis	-	-
		Estate / Private Land	-	-
Total				5,296m

Site Plan -KMZ (Overview site area)

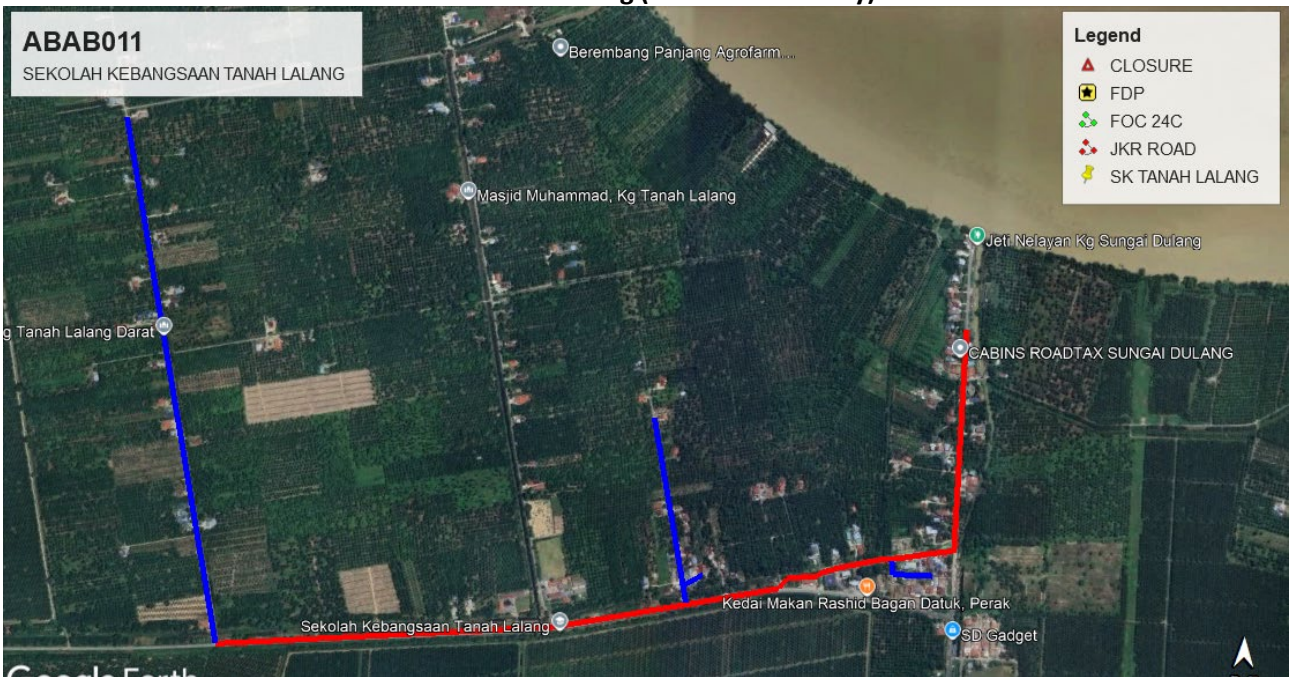
Proposed FDP and Closure



Proposed New Pole



**Site Plan - KMZ Routing (All Local Authority)**

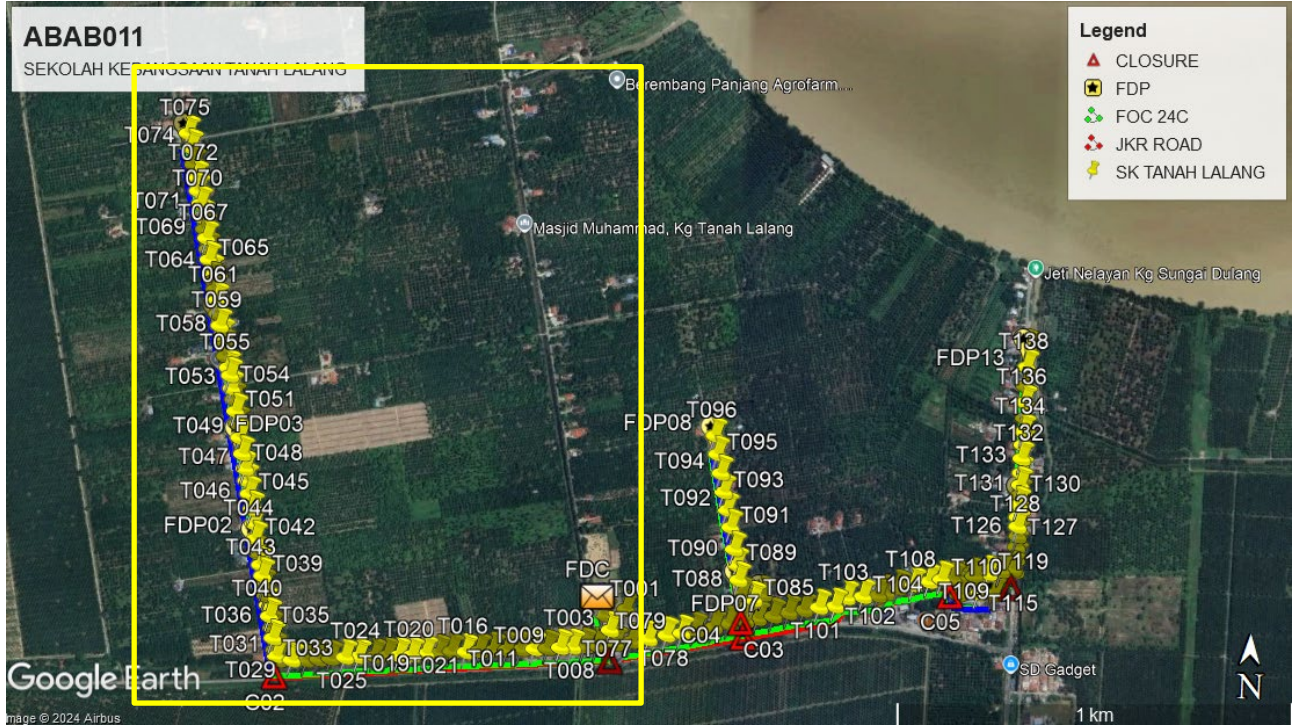


**Red Colour – JKR Road**

**Blue Colour - Majlis Road**

Site Plan – KMZ Routing (All site area)

Route 1



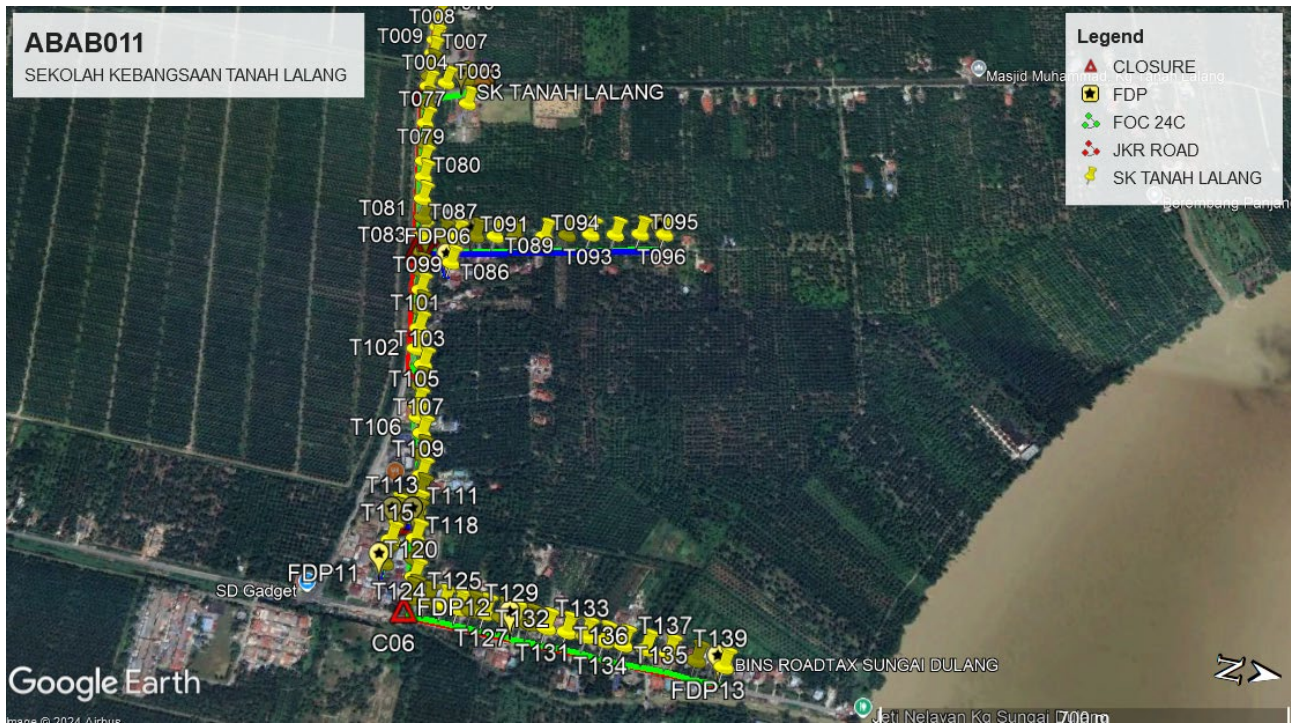
Route 1.1



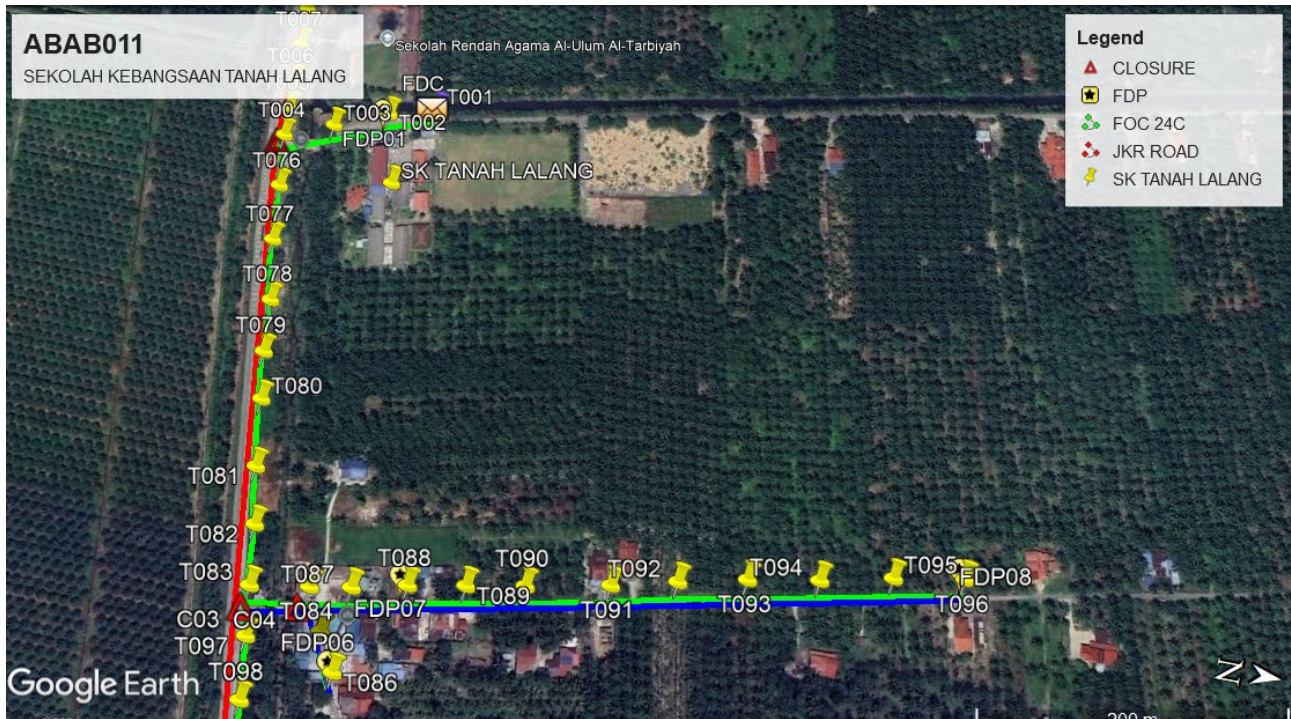


Route 1.2

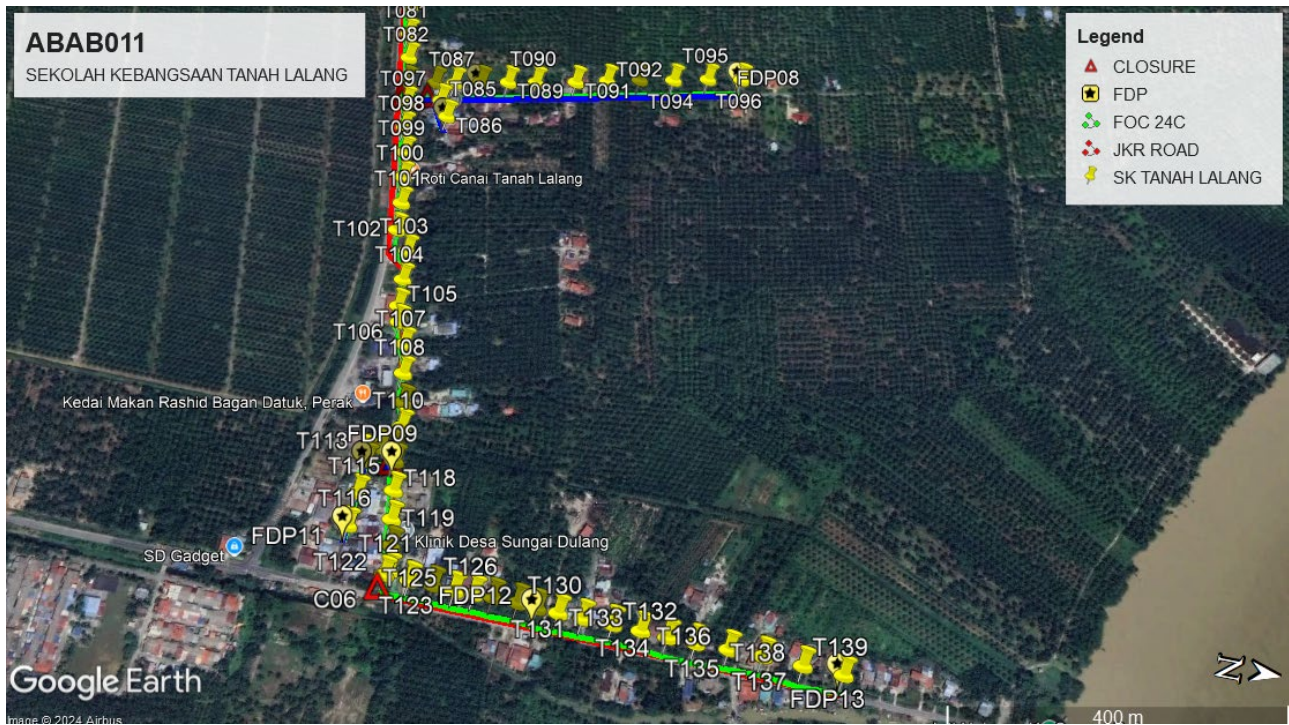
Route 2



Route 2.1



**Route 2.2**



### 3.0 PROPOSED NEW POLE

Proposed New Pole Coordinate					
No.	Pole Number	Distance (m)	Latitude	Longitude	Local Authority
1	T001	40	3.950043782	100.8582424	MPTI
2	T002	40	3.949736128	100.8583407	MPTI
3	T003	40	3.949392185	100.858493	MPTI
4	T004	40	3.949084451	100.8586274	JKR
5	T005	40	3.94905779	100.8584202	JKR
6	T006	40	3.949027189	100.858216	JKR
7	T007	40	3.948999909	100.8579297	JKR
8	T008	40	3.94896958	100.857655	JKR
9	T009	40	3.948951951	100.8573747	JKR
10	T010	40	3.948924798	100.8570867	JKR
11	T011	40	3.948898418	100.8567887	JKR
12	T012	40	3.948876979	100.8564901	JKR
13	T013	40	3.948851753	100.8561674	JKR
14	T014	40	3.948827202	100.8558549	JKR
15	T015	40	3.9487987	100.8555354	JKR
16	T016	40	3.948767495	100.855237	JKR
17	T017	40	3.948768098	100.8549128	JKR
18	T018	40	3.948715724	100.8546331	JKR
19	T019	40	3.948691202	100.8543233	JKR
20	T020	40	3.948646505	100.8540159	JKR
21	T021	40	3.94862256	100.8537251	JKR
22	T022	40	3.948609922	100.8534544	JKR
23	T023	40	3.948586941	100.8531652	JKR
24	T024	40	3.948564454	100.8528072	JKR
25	T025	40	3.948538147	100.8524962	JKR
26	T026	40	3.948500402	100.8521678	JKR

### 3.0 PROPOSED NEW POLE

Proposed New Pole Coordinate					
No.	Pole Number	Distance (m)	Latitude	Longitude	Local Authority
27	T027	40	3.948474091	100.8518952	JKR
28	T028	40	3.948441625	100.8516177	JKR
29	T029	40	3.948427669	100.8512878	JKR
30	T030	40	3.948409296	100.8509646	JKR
31	T031	40	3.948504913	100.8509283	MPTI
32	T032	40	3.948640877	100.8508899	MPTI
33	T033	40	3.948908763	100.8508402	MPTI
34	T034	40	3.949128539	100.8508003	MPTI
35	T035	40	3.949400329	100.8507397	MPTI
36	T036	40	3.949652236	100.8506958	MPTI
37	T037	40	3.949862447	100.8506407	MPTI
38	T038	40	3.950076108	100.8505848	MPTI
39	T039	40	3.950309085	100.8505491	MPTI
40	T040	40	3.95055495	100.8504883	MPTI
41	T041	40	3.950809892	100.85042	MPTI
42	T042	40	3.951137481	100.8503489	MPTI
43	T043	40	3.951482357	100.8503084	MPTI
44	T044	40	3.95181163	100.8502503	MPTI
45	T045	40	3.952152804	100.8501661	MPTI
46	T046	40	3.952447547	100.8501019	MPTI
47	T047	40	3.952723059	100.8500522	MPTI
48	T048	40	3.953051877	100.849981	MPTI
49	T049	40	3.953417106	100.8499038	MPTI
50	T050	40	3.953734714	100.849844	MPTI
51	T051	40	3.95401225	100.8497891	MPTI
52	T052	40	3.954278951	100.8497365	MPTI
53	T053	40	3.954526929	100.8496811	MPTI

### 3.0 PROPOSED NEW POLE

Proposed New Pole Coordinate					
No.	Pole Number	Distance (m)	Latitude	Longitude	Local Authority
54	T054	40	3.954817636	100.8496344	MPTI
55	T055	40	3.954990273	100.8495812	MPTI
56	T056	40	3.955247017	100.8495107	MPTI
57	T057	40	3.955476718	100.8494667	MPTI
58	T058	40	3.955712974	100.8494261	MPTI
59	T059	45	3.955938192	100.8493524	MPTI
60	T060	45	3.956203473	100.8492887	MPTI
61	T061	45	3.956508644	100.8492587	MPTI
62	T062	45	3.95674825	100.8492126	MPTI
63	T063	45	3.956949331	100.8491706	MPTI
64	T064	45	3.957149354	100.8491177	MPTI
65	T065	45	3.957422292	100.8490439	MPTI
66	T066	45	3.957658421	100.8490069	MPTI
67	T067	45	3.95790629	100.8489711	MPTI
68	T068	45	3.958108365	100.8489184	MPTI
69	T069	45	3.958385036	100.8488487	MPTI
70	T070	45	3.958677804	100.8488073	MPTI
71	T071	45	3.958968393	100.8487362	MPTI
72	T072	45	3.959255188	100.848687	MPTI
73	T073	45	3.959560494	100.8486129	MPTI
74	T074	45	3.959948336	100.8485396	MPTI
75	T075	45	3.960265475	100.8484584	MPTI
76	T076	45	3.94915686	100.8589929	JKR
77	T077	45	3.949223577	100.8593739	JKR
78	T078	45	3.949328109	100.8597809	JKR
79	T079	45	3.94938537	100.860123	JKR
80	T080	45	3.949459258	100.8604253	JKR
81	T081	45	3.94954985	100.8608454	JKR
82	T082	45	3.949645704	100.8611906	JKR
83	T083	45	3.949719886	100.8615458	JKR
84	T084	45	3.950073665	100.8614876	MPTI

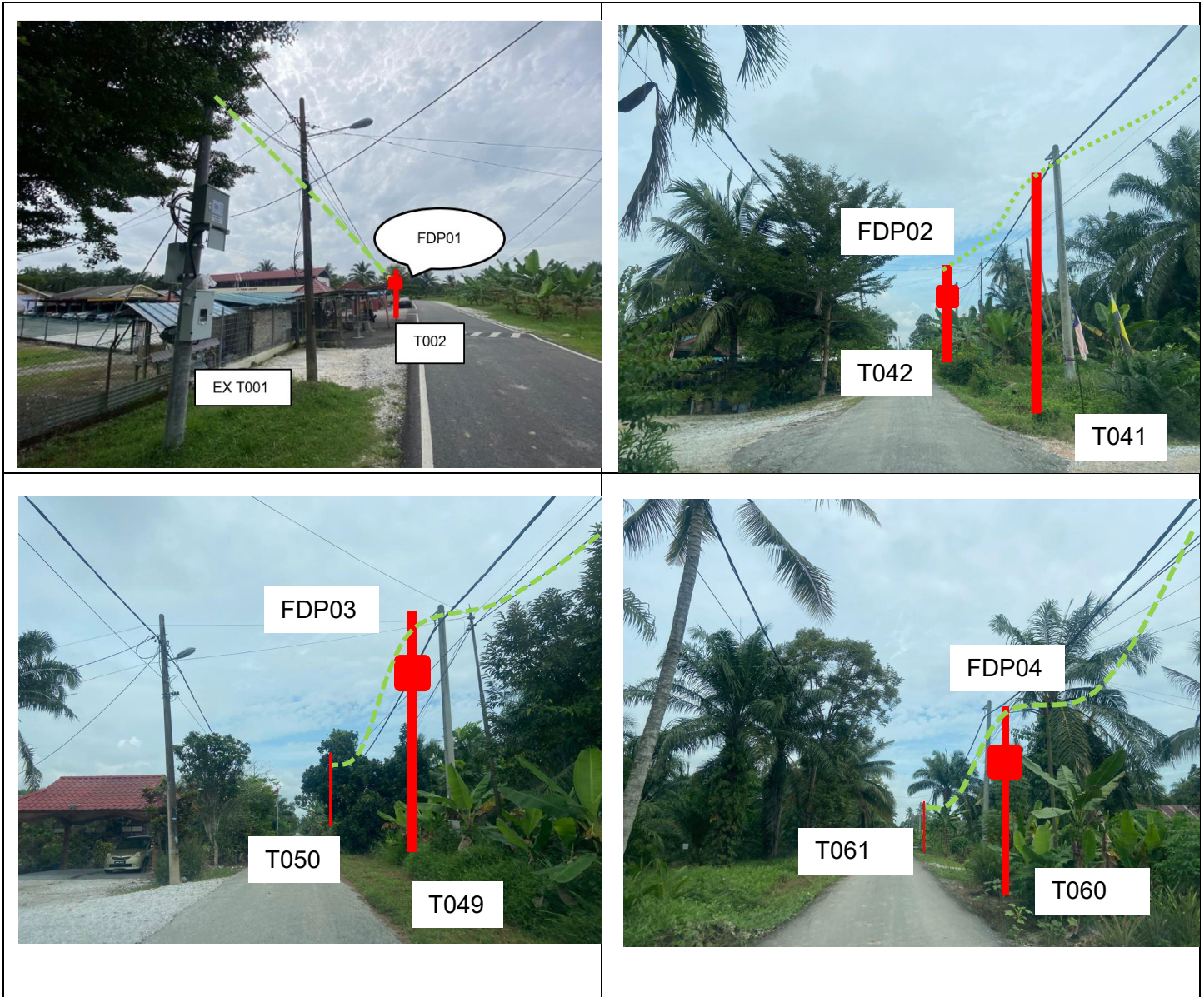
### 3.0 PROPOSED NEW POLE

Proposed New Pole Coordinate					
No.	Pole Number	Distance (m)	Latitude	Longitude	Local Authority
85	T085	45	3.950207169	100.8617259	MPTI
86	T086	45	3.950337906	100.8619382	MPTI
87	T087	45	3.950317622	100.8614439	MPTI
88	T088	45	3.950642583	100.8613678	MPTI
89	T089	45	3.950983524	100.8613044	MPTI
90	T090	45	3.951329907	100.861238	MPTI
91	T091	45	3.951826623	100.8611375	MPTI
92	T092	45	3.952215277	100.8610402	MPTI
93	T093	45	3.952620218	100.8609483	MPTI
94	T094	45	3.953042654	100.8608711	MPTI
95	T095	45	3.953471071	100.8607736	MPTI
96	T096	45	3.953890208	100.8606998	MPTI
97	T097	45	3.949782533	100.8618341	JKR
98	T098	45	3.949852199	100.8621899	JKR
99	T099	45	3.949947646	100.8625328	JKR
100	T100	45	3.950018674	100.862875	JKR
101	T101	45	3.950092143	100.8632215	JKR
102	T102	45	3.950131866	100.8635848	JKR
103	T103	45	3.950329409	100.8638344	JKR
104	T104	45	3.950373898	100.8642054	JKR
105	T105	45	3.950409378	100.8645455	JKR
106	T106	45	3.950472226	100.8647437	JKR
107	T107	45	3.95060475	100.8650003	JKR
108	T108	45	3.950684971	100.8653499	JKR
109	T109	45	3.950775421	100.8656934	JKR
110	T110	45	3.950836674	100.8659783	JKR
111	T111	45	3.950838937	100.8662423	JKR

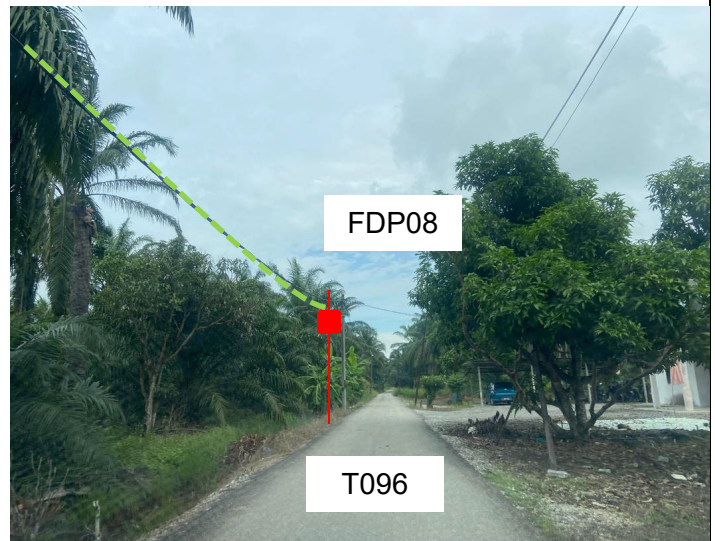
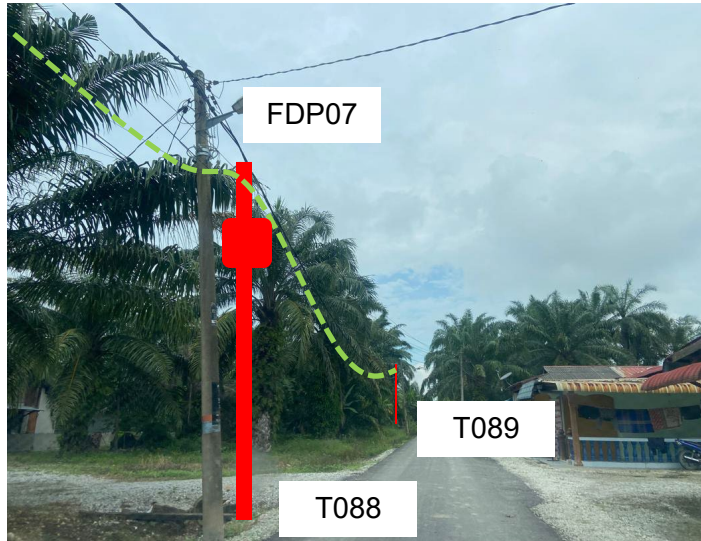
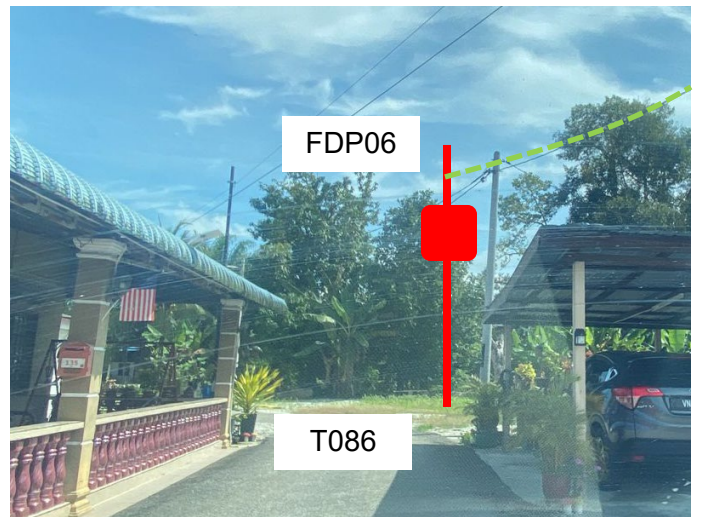
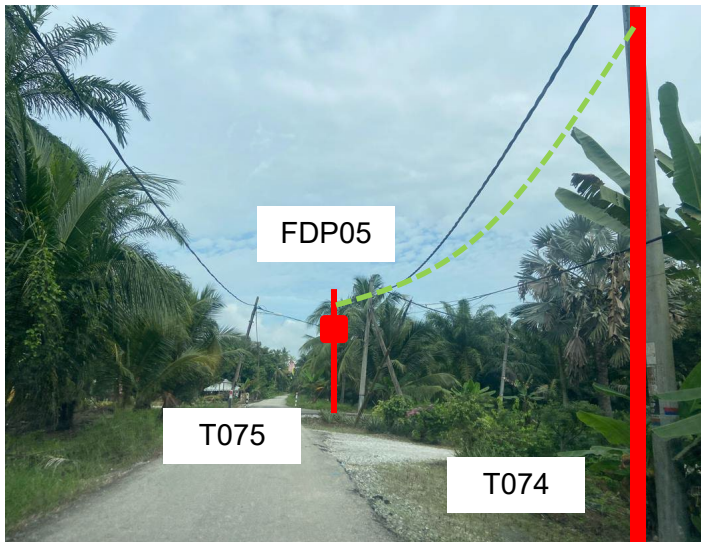
### 3.0 PROPOSED NEW POLE

Proposed New Pole Coordinate					
No.	Pole Number	Distance (m)	Latitude	Longitude	Local Authority
112	T112	45	3.950659546	100.8662639	MPTI
113	T113	45	3.950509947	100.8663606	MPTI
114	T114	45	3.950551649	100.8664408	MPTI
115	T115	45	3.950552139	100.8668157	MPTI
116	T116	45	3.950546065	100.8671921	MPTI
117	T117	45	3.950866384	100.8663831	JKR
118	T118	45	3.950941732	100.866715	JKR
119	T119	45	3.951005549	100.8670349	JKR
120	T120	45	3.951077149	100.8673183	JKR
121	T121	45	3.951126559	100.8675925	JKR
122	T122	45	3.951089592	100.8676441	JKR
123	T123	45	3.951375415	100.8676516	JKR
124	T124	45	3.951638777	100.8676508	JKR
125	T125	45	3.951881662	100.8676662	JKR
126	T126	45	3.952100358	100.8676579	JKR
127	T127	45	3.952310398	100.8676525	JKR
128	T128	45	3.952590195	100.8676579	JKR
129	T129	45	3.952807519	100.8676749	JKR
130	T130	45	3.953043354	100.8676812	JKR
131	T131	45	3.953315499	100.8676882	JKR
132	T132	45	3.953643327	100.8676878	JKR
133	T133	45	3.953955532	100.8676968	JKR
134	T134	45	3.954250464	100.8677084	JKR
135	T135	45	3.954556832	100.8677114	JKR
136	T136	45	3.954916786	100.8677081	JKR
137	T137	45	3.955286731	100.8677059	JKR
138	T138	45	3.955721223	100.8677245	JKR
139	T139	45	3.956161995	100.8677365	JKR

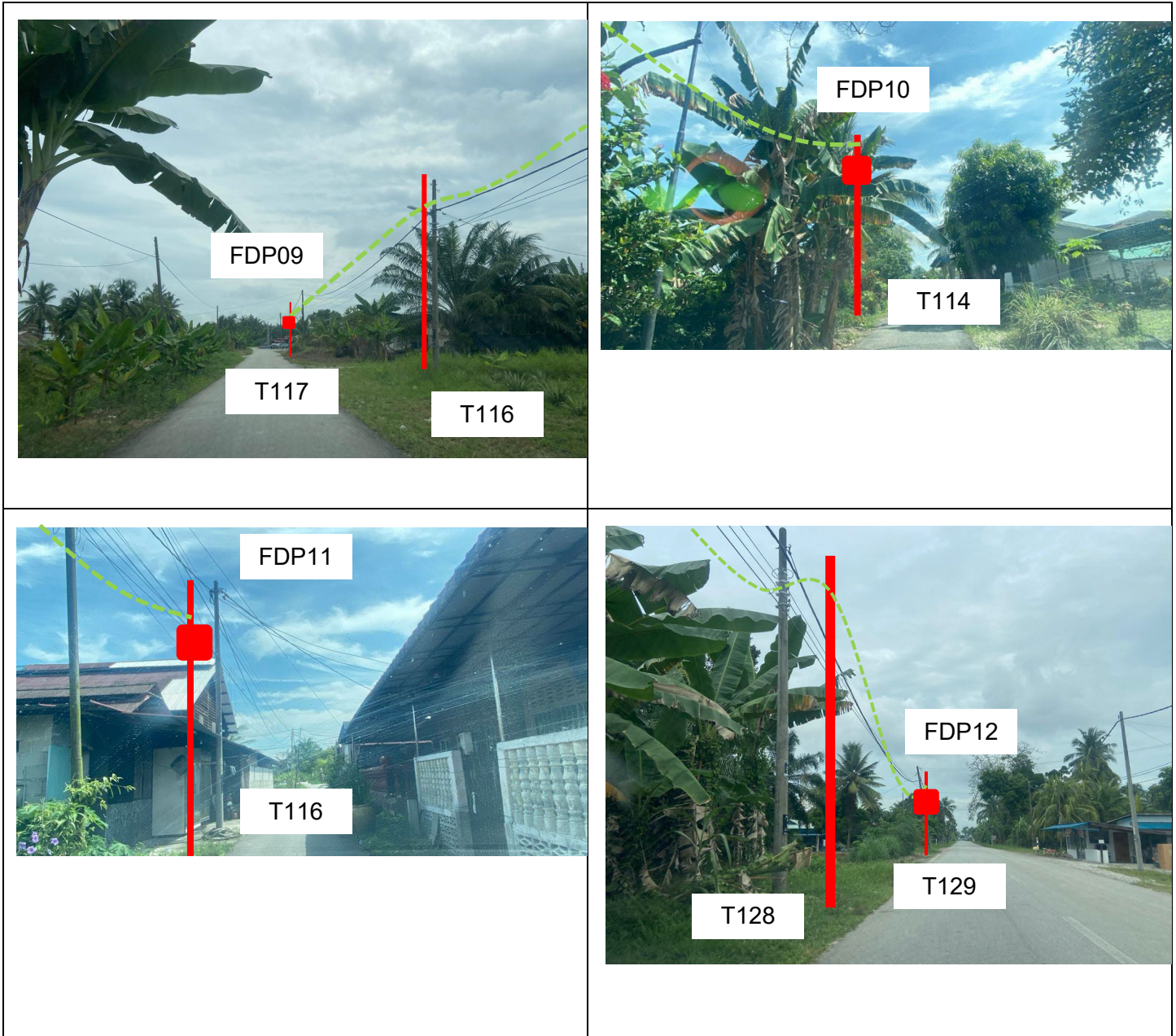
**4.0 SITE PHOTOS - PROPOSED NEW POLE**



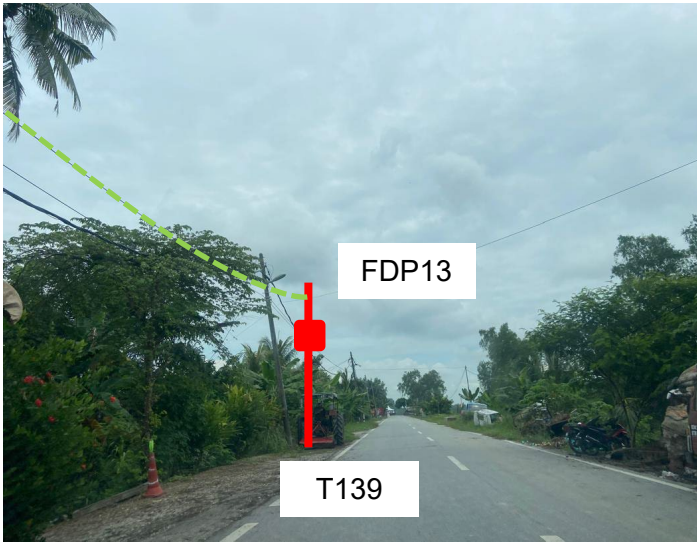
#### 4.0 SITE PHOTOS - PROPOSED NEW POLE





4.0 SITE PHOTOS - PROPOSED NEW POLE



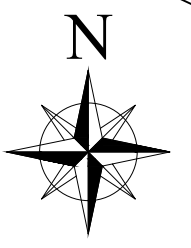
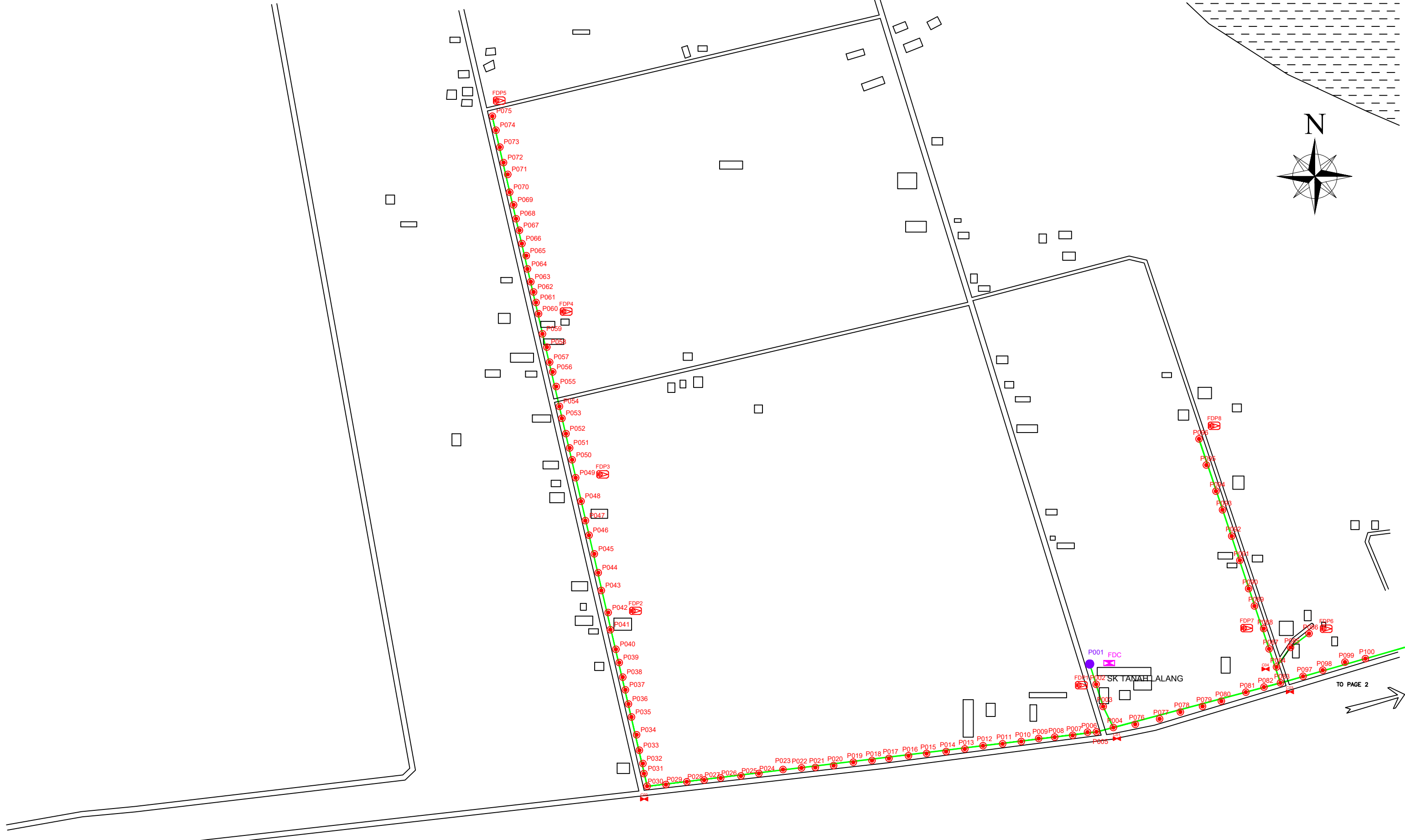
#### 4.0 SITE PHOTOS - PROPOSED NEW POLE



	<p>PROJEK PENYEDIAAN DAN PENYELENGGARAAN POINT OF PRESENCE (POP) FASA 2: HAB INFRASTRUKTUR GENTIAN OPTIK BERHAMPIRAN DENGAN SEKOLAH, KAWASAN PERINDUSTRIAN, PREMIS KERAJAAN DAN KOMUNITI SEKITARNYA OLEH KEMENTERIAN KOMUNIKASI MALAYSIA – ZON UTARA (KKMM.400-11/17/132(1))</p>	
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### 5.0 3<sup>rd</sup> PARTIES DEPENDENCIES

NO	LOCAL COUNCIL / AUTHORITY	REMARK
1	Majlis Perbandaran Teluk Intan	2,510M
2	JKR Bagan Datoh	2,786M



TO PAGE 2

LEGEND					
	12C FOC		Installed 1:4 splitter in FDC		INSTALLED POLE (9M)
	24C FOC		FDP		NEW MANHOLE
	48C FOC		CLOSURE		EXISTING MANHOLE
	90C FOC		NEW MANHOLE (PT)		EXISTING ALLO POLE
	144C FOC		INSTALLED POLE		LOOP
			FDP BOUNDARY		TENSION SMALL / TENSION BIG
			NEW MANHOLE (PT)		FDP NO.
			INSTALLED POLE		FDC NO.
			NEW MANHOLE (PT)		MH NO.
			NEW MANHOLE (PT)		EXISTING TNB POLE NO.
			NEW MANHOLE (PT)		NEW POLE NO.
			NEW MANHOLE (PT)		SEE SHEET XXX

KEY PLAN

KEPENTERIAN KOMUNIKASI DAN DIGITAL

PROJECT OWNER

APEX COMMUNICATIONS SDN BHD

PRIVASAT

MAIN CONTRACTOR

KNZ Engineering

SUB-CONTRACTOR

KNZ ENGINEERING SDN BHD  
 NO. 60 & 60A, Jalan Klebang Indah 1, Medan Klebang Indah, 30100 Ipoh, Perak  
 No Tel: 019-3695071  
 Email: admin@knzengineering.com.my  
 Website: www.knzengineering.com.my

PROJECT TITLE

SEKOLAH KEBANGSAAN TANAH LALANG

DRAWING TITLE

TP DRAWING POP 2 AT SEKOLAH KEBANGSAAN TANAH LALANG

PROJECT PHASE

PROJECT PHASE 2

DESIGN BY	NABIL	DATE	04/12/2024
DRAWN BY	NABIL	SCALE	NOT TO SCALE
CHECKED BY	AZHAN HARIS	JOB NUMBER	ABAB011
DRAWING NUMBER		ABAB011	
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		A3	



FROM PAGE 1

LEGEND					
	12C FOC		INSTALLED POLE (9M)		NEW MANHOLE
	24C FOC		INSTALLED RISER		HOUSE NUMBER
	48C FOC		CLOSURE		EXISTING ALLO POLE
	90C FOC		NEW MANHOLE (PT)		LOOP
	144C FOC		INSTALLED POLE		FDP BOUNDARY
			INSTALLED POLE (9M)		TENSION SMALL / TENSION BIG
			INSTALLED RISER		EXISTING MANHOLE
			CLOSURE		CLOSURE NO.
			NEW MANHOLE (PT)		FDP NO.
			INSTALLED POLE		FDC NO.
			SUSPENSION BIG		MH NO.
			SUSPENSION SMALL		EXISTING TNB POLE NO.
			FDC		NEW POLE NO.

KEY PLAN

PROJECT OWNER

MAIN CONTRACTOR

SUB-CONTRACTOR

KNZ ENGINEERING SDN BHD  
 NO. 60 & 60A, Jalan Klebang Indah 1, Medan Klebang Indah, 30100 Ipoh, Perak  
 No Tel: 019-3695071  
 Email: admin@knzengineering.com.my  
 Website: www.knzengineering.com.my

PROJECT TITLE

SEKOLAH KEBANGSAAN TANAH LALANG

DRAWING TITLE

TP DRAWING POP 2 AT SEKOLAH KEBANGSAAN TANAH LALANG

PROJECT PHASE

PROJECT PHASE 2

DESIGN BY	NABIL	DATE	04/12/2024
DRAWN BY	NABIL	SCALE	NOT TO SCALE
CHECKED BY	AZHAN HARIS	JOB NUMBER	ABAB011
DRAWING NUMBER		ABAB011	
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