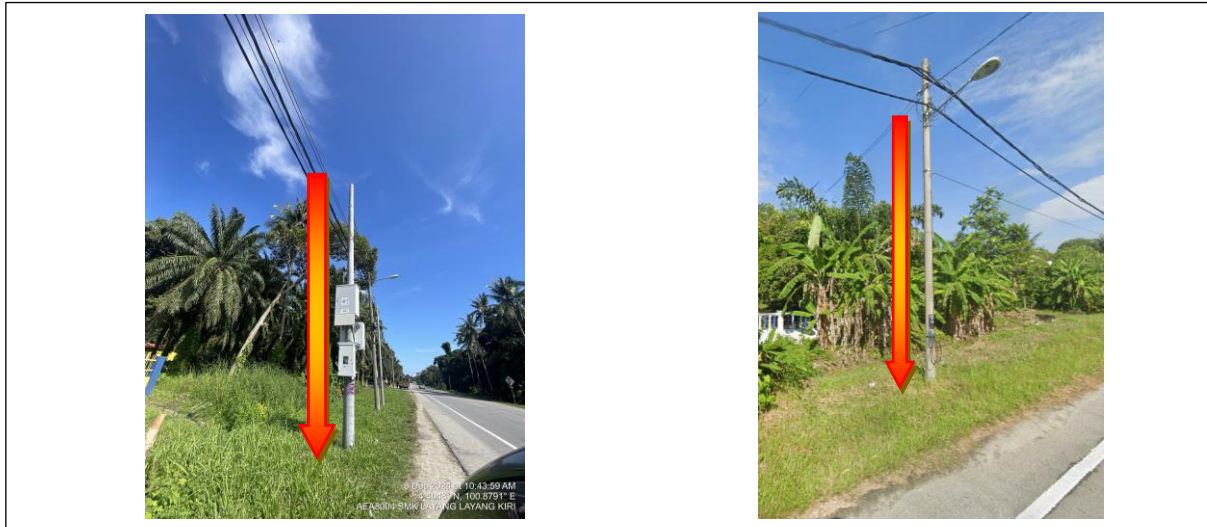


## TECHNICAL PROPOSAL POP2 AEA8004 SEKOLAH MENENGAH KEBANGSAAN LAYANG-LAYANG KIRI (D-SIDE)

Company Name	:	WCWL COMMUNICATIONS SDN BHD
Company Address	:	127, Jalan PUJ 3/3, Taman Puncak Jalil 43300 Subang Jaya Selangor
Prepared By	:	Nur Syahidah Izzatie
Date	:	12/12/2024



POINT A

POINT B

### Starting Point

Site / Boundary Name	:	SEKOLAH MENENGAH KEBANGSAAN LAYANG-LAYANG KIRI
Address	:	72, Kampong Layang Layang Kiri
District	:	Perak Tengah
Postcode	:	32800
State	:	Perak
GPS Coordinate	:	4.401804, 100.878381
LRD	:	A

### End Point

Site / Boundary Name	:	SEKOLAH MENENGAH KEBANGSAAN LAYANG-LAYANG KIRI
Address	:	72, Kampong Layang Layang Kiri
District	:	Perak Tengah
Postcode	:	32800
State	:	Perak
GPS Coordinate	:	4.395049, 100.879851
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))



### Work Summary

No	Proposed Distance and Method	Unit	Qty
1	Horizontal Directional Drilling (HDD)	m	<b>65</b>
2	Carriage Way Open trench (CW)	m	<b>0</b>
3	Grass Verge Open Trenching (GV)	m	<b>0</b>
4	Micro trenching (MT)	m	<b>0</b>
	Total		<b>65</b>

	Other Information	Unit	Qty
1	Proposed Manhole	EA	<b>2</b>
2	Proposed Pole	EA	<b>86</b>
3	Joint Closure	EA	<b>3</b>
4	Estimated time required for completion	days	<b>30</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))



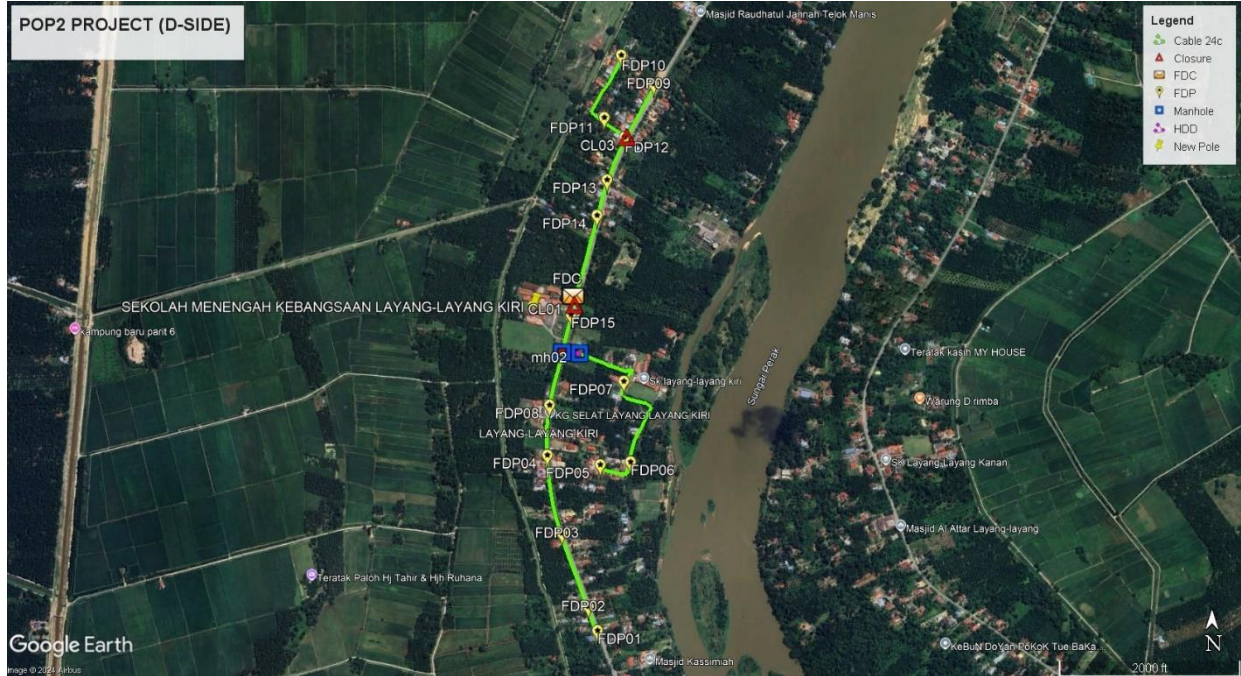
### Local Authority Summary

#### 1. Daerah Perak Tengah

Bil	Items	Owner	Quantity	Distance(m)
1	HDD	JKR	1	65m
		Majlis	-	-
		Estate / Private Land	-	-
2	New Pole	JKR	54pcs	1975m
		Majlis	32pcs	1070m
		Estate / Private Land	-	-
3	Existing TNB Pole	JKR	-	-
		Majlis	-	-
		Estate / Private Land	-	-
Total				3045m

**Site Plan – KMZ (Overview site area)**

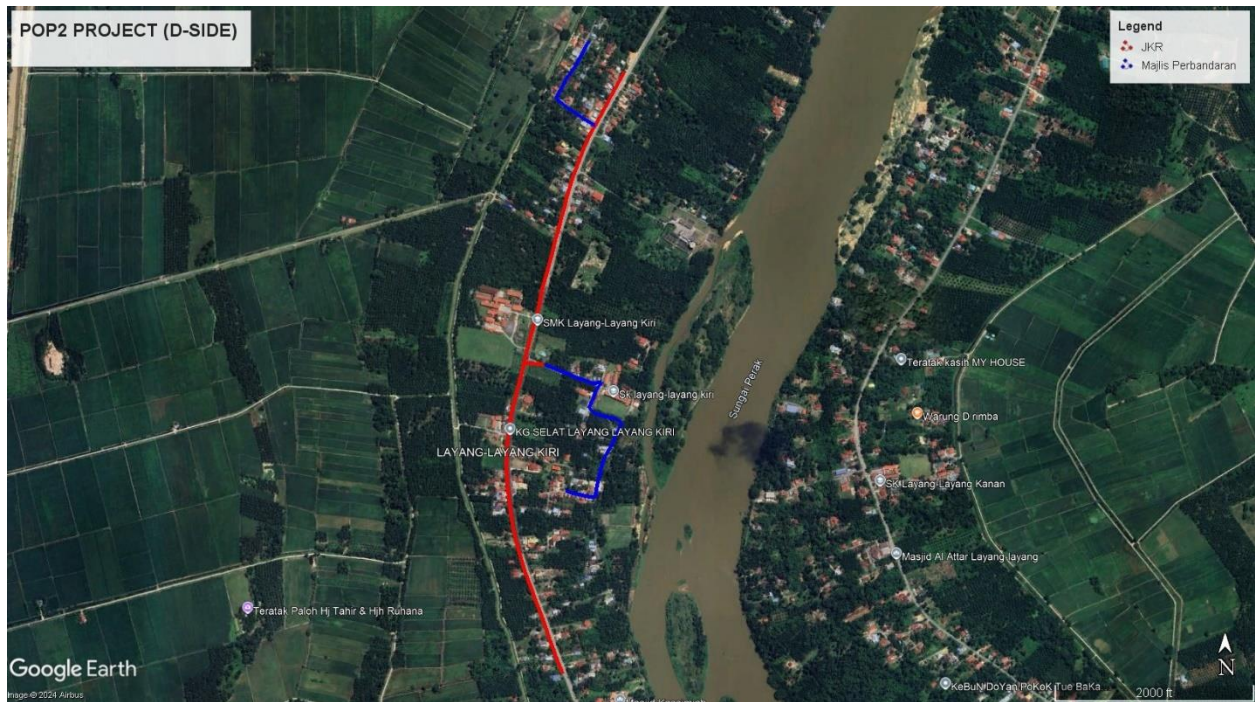
**Proposed FDP and Closure**



**Proposed New Pole**



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

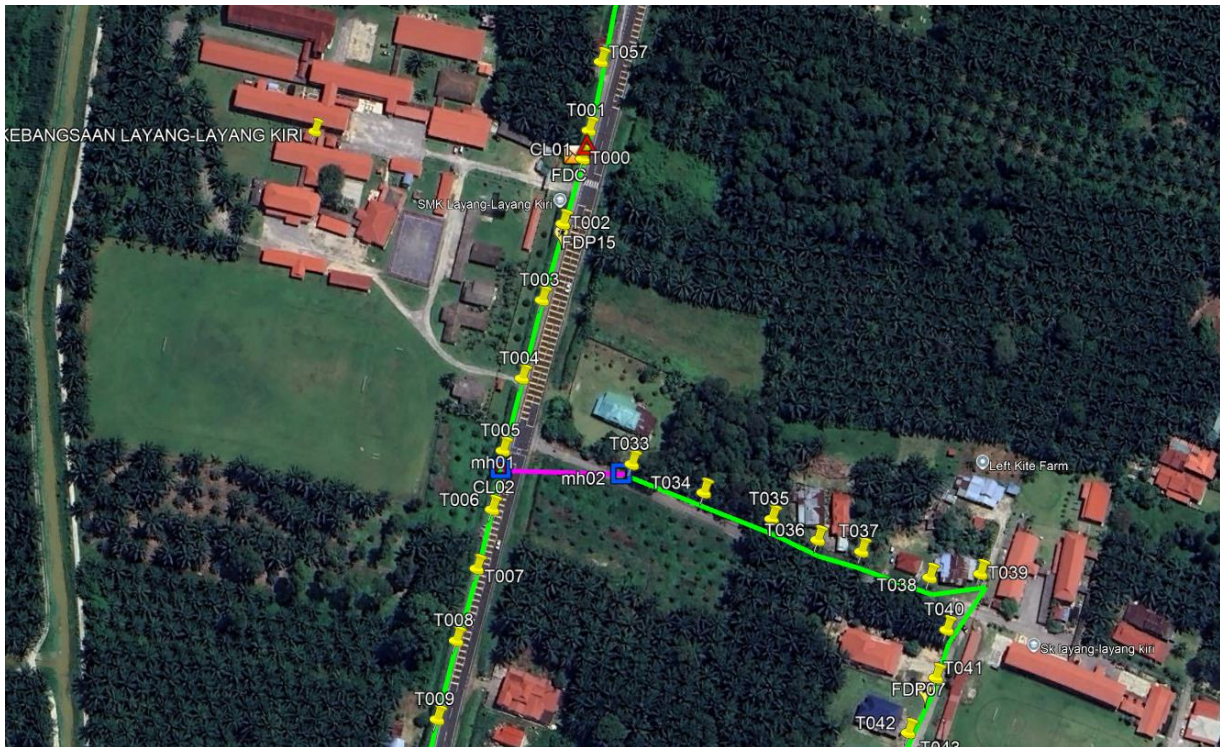
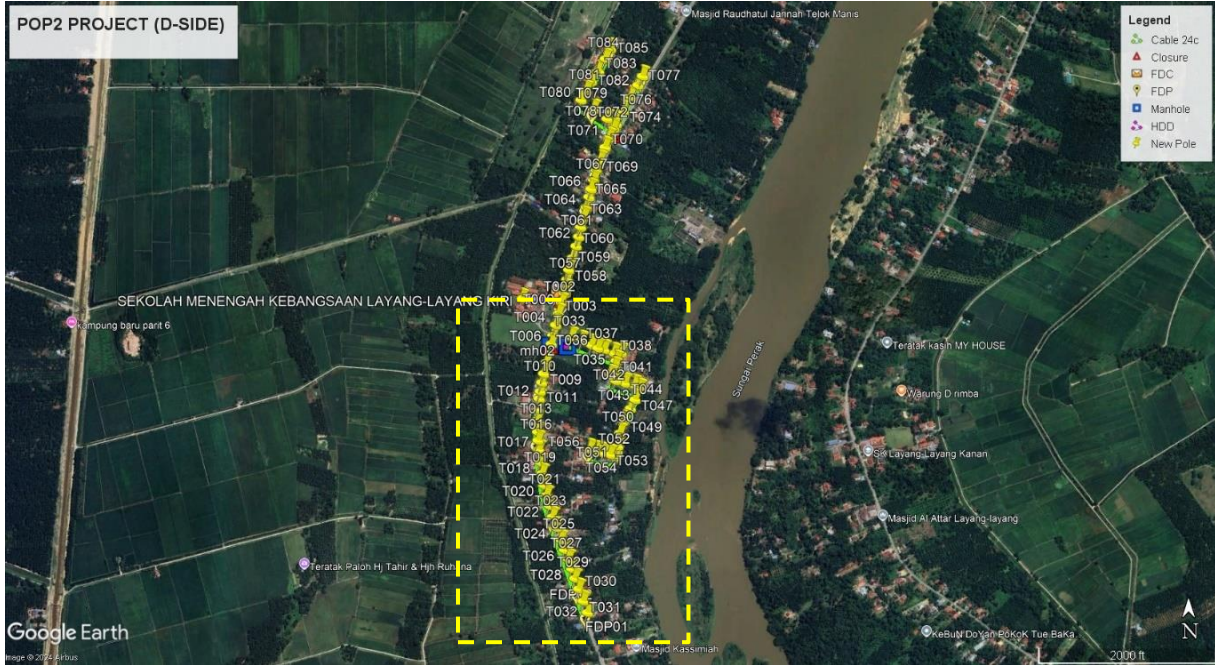


**Red – JKR Perak Tengah**

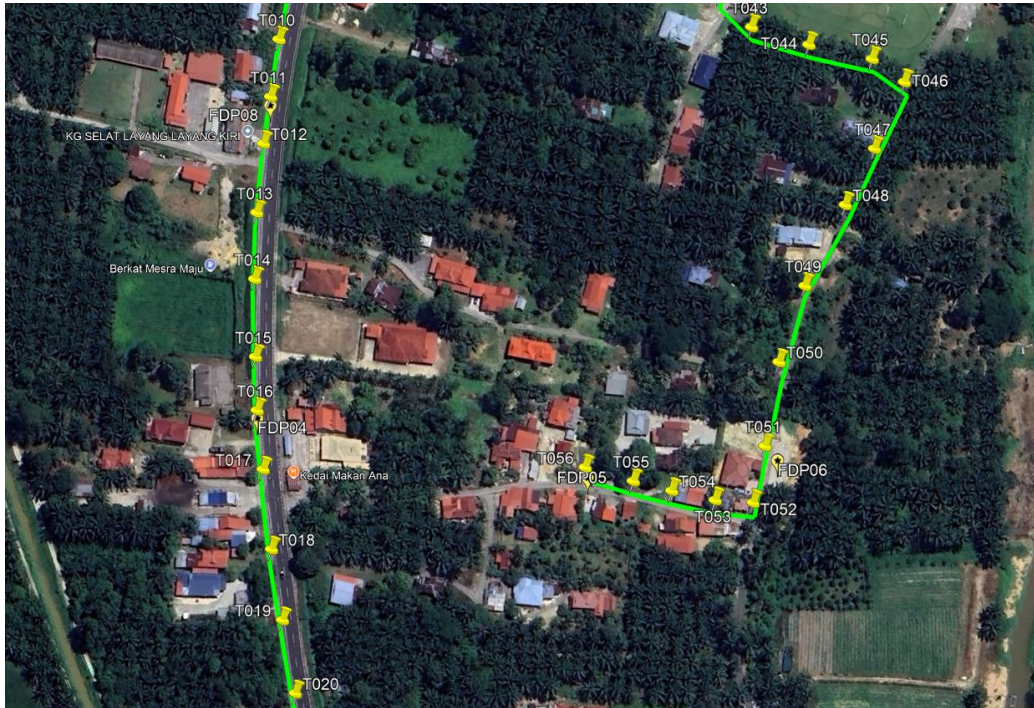
**Blue - Majlis Perbandaran Perak Tengah**

Site Plan – KMZ Routing (All site area)

Route 1



Route 1.1

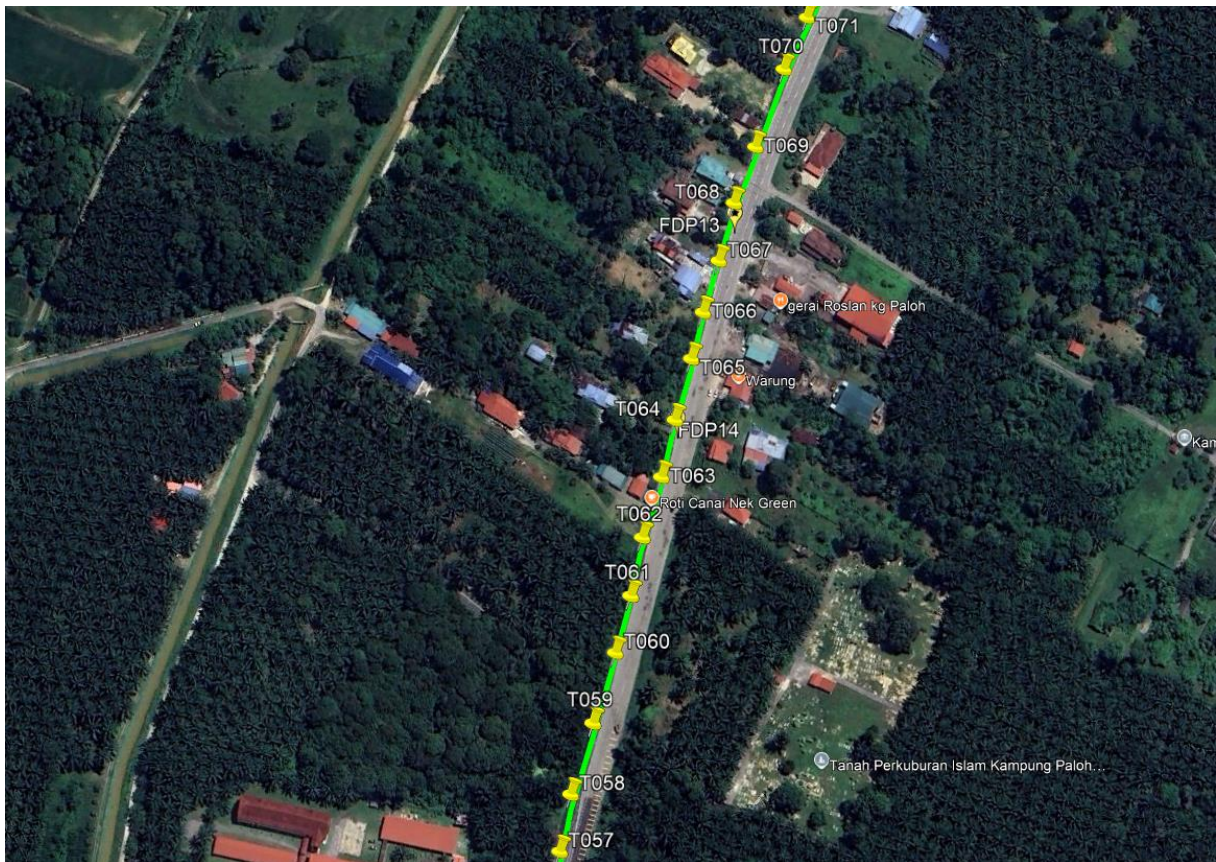
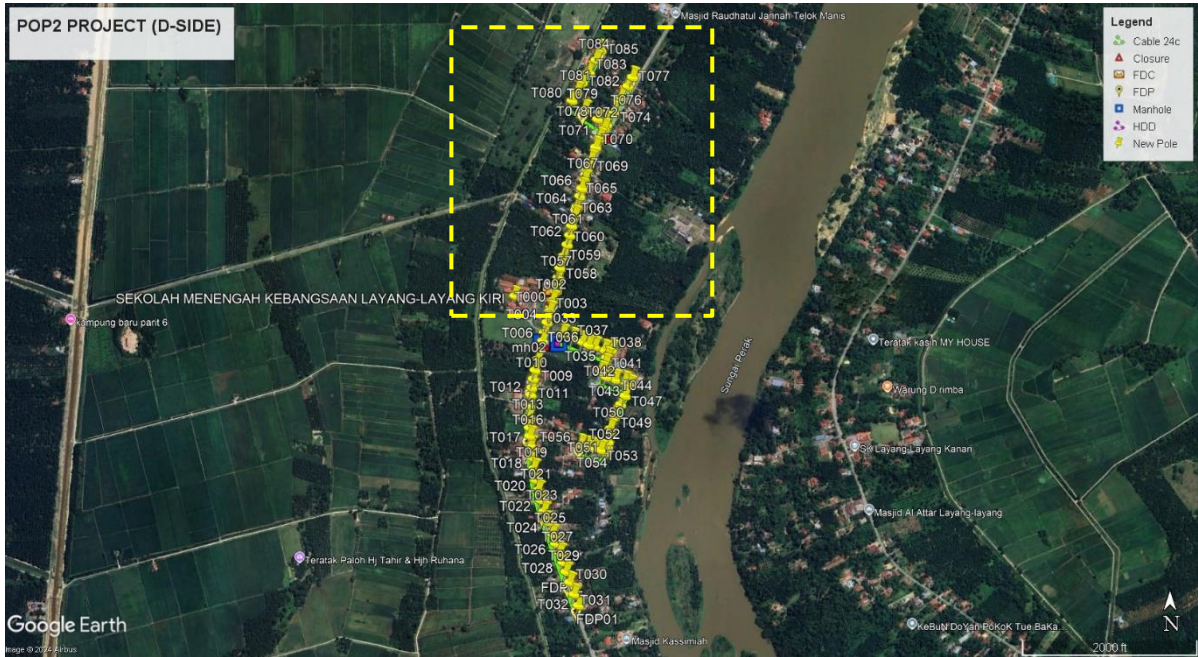


**Route 1.2**

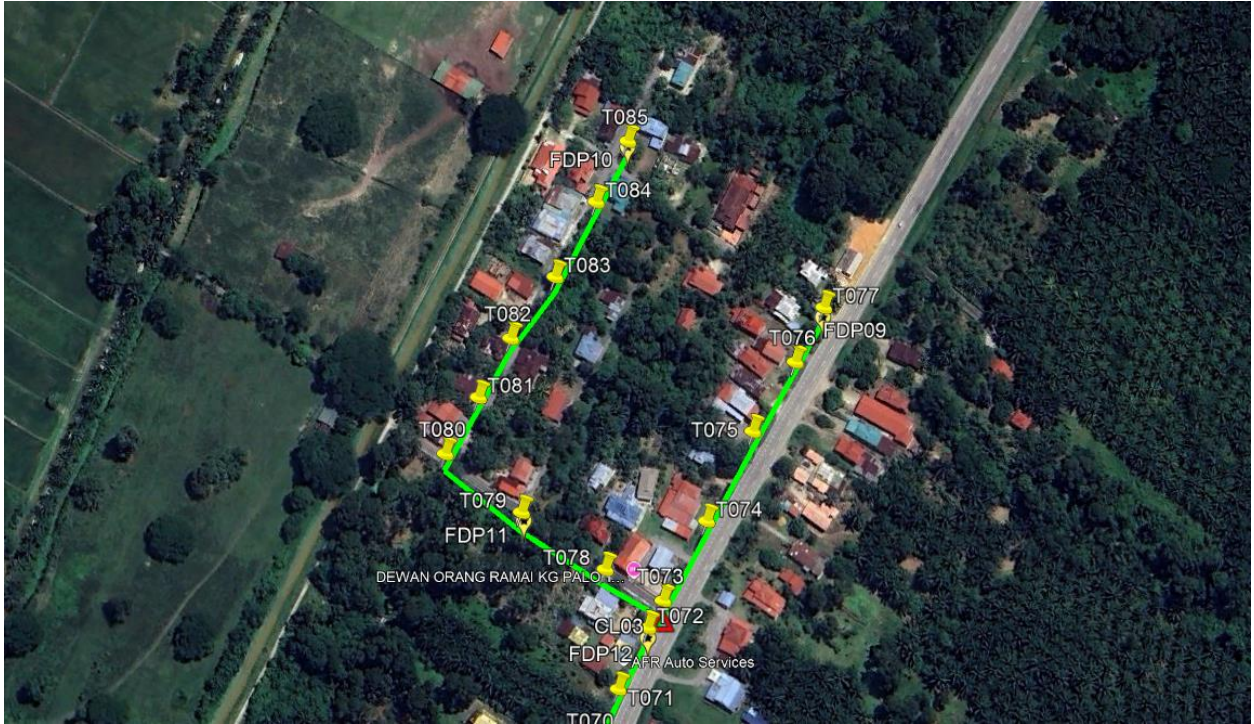


**Route 1.3**

**Route 2**



**Route 2.1**



**Route 2.2**

**Site Plan – KMZ Routing (Proposed New Manhole)**

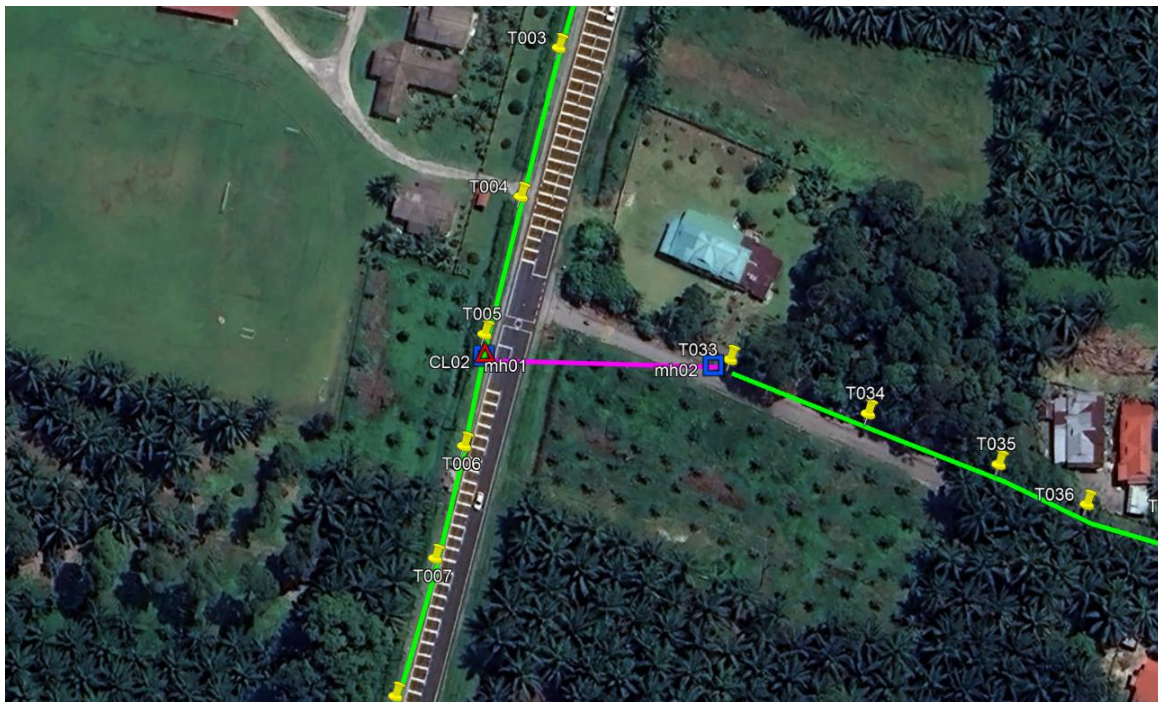
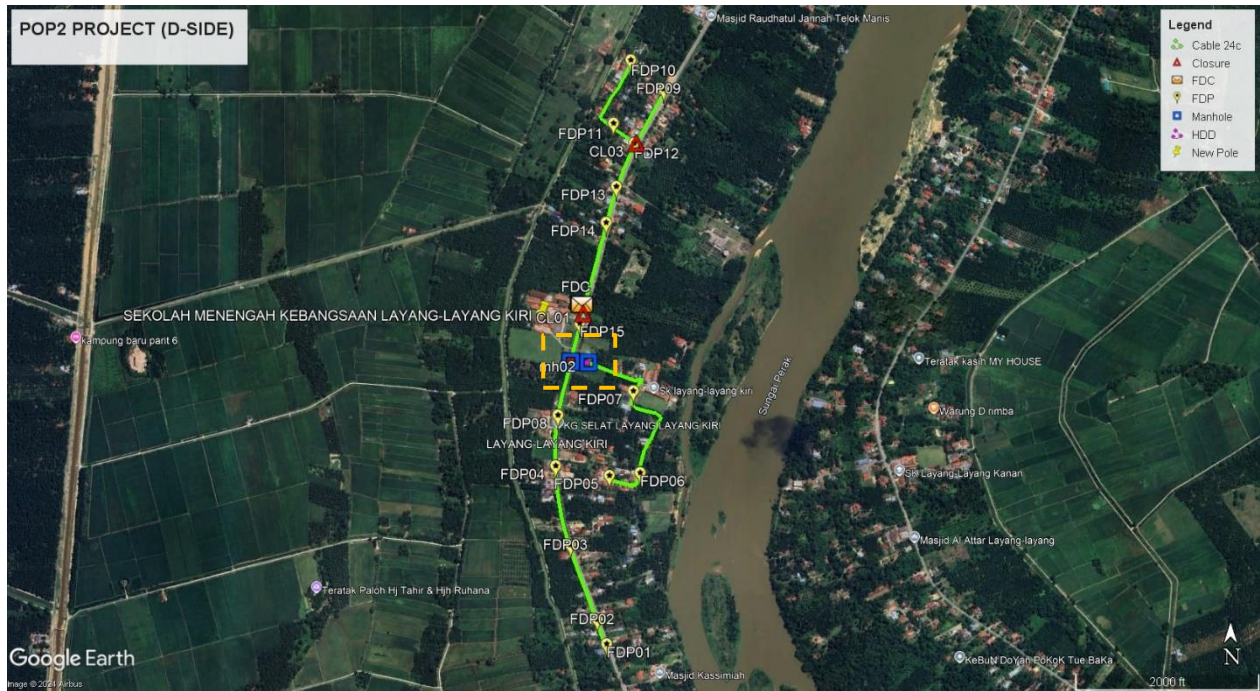


Figure 1: Manhole 1 (4.403495, 100.878750) & Manhole 2 (4.403476, 100.879311)

**Site Plan – Google Map (routing plan, Manhole)**



**Proposed New Manhole Lat & Long Table**

PROPOSED MANHOLE COORDINATE		
POLE NUMBER	LATITUDE	LONGITUDE
MH01	4.403495	100.878750
MH02	4.403476	100.879311

**Overall Pole (Proposed New)**

No.	Pole ID	Distance (m)	Latitude	Longitude	Local Authority
1	FDC	0.00	4.404820435	100.8791311	JKR Perak Tengah
2	T001	14.37	4.40494672	100.8791578	JKR Perak Tengah
3	T002	47.78	4.404532783	100.8790443	JKR Perak Tengah
4	T003	38.83	4.404196068	100.8789534	JKR Perak Tengah
5	T004	39.48	4.403852405	100.8788657	JKR Perak Tengah
6	T005	36.46	4.403535867	100.8787815	JKR Perak Tengah
7	T006	29.21	4.403277856	100.8787336	JKR Perak Tengah
8	T007	29.83	4.403018511	100.8786662	JKR Perak Tengah
9	T008	36.15	4.402705852	100.8785785	JKR Perak Tengah
10	T009	38.94	4.402365502	100.8784976	JKR Perak Tengah
11	T010	30.91	4.402094105	100.8784391	JKR Perak Tengah
12	T011	30.64	4.401822346	100.8783955	JKR Perak Tengah
13	T012	25.13	4.401599568	100.8783587	JKR Perak Tengah
14	T013	36.93	4.401269982	100.8783212	JKR Perak Tengah
15	T014	35.62	4.400950279	100.8783085	JKR Perak Tengah
16	T015	41.89	4.400574014	100.8783149	JKR Perak Tengah
17	T016	28.76	4.400315846	100.8783241	JKR Perak Tengah
18	T017	31.87	4.400030998	100.8783525	JKR Perak Tengah
19	T018	43.19	4.39964504	100.8783923	JKR Perak Tengah
20	T019	38.59	4.39930226	100.878444	JKR Perak Tengah
21	T020	39.94	4.398948936	100.8785066	JKR Perak Tengah
22	T021	36.08	4.398633641	100.8785816	JKR Perak Tengah
23	T022	36.48	4.398317567	100.8786683	JKR Perak Tengah
24	T023	39.44	4.397976998	100.8787659	JKR Perak Tengah
25	T024	38.72	4.397649448	100.8788829	JKR Perak Tengah
26	T025	45.28	4.397267674	100.8790233	JKR Perak Tengah
27	T026	35.72	4.396966673	100.8791344	JKR Perak Tengah
28	T027	34.79	4.39667747	100.8792528	JKR Perak Tengah
29	T028	34.47	4.396386141	100.8793577	JKR Perak Tengah
30	T029	34.33	4.396092721	100.8794525	JKR Perak Tengah
31	T030	37.91	4.395773318	100.8795706	JKR Perak Tengah
32	T031	44.16	4.395400703	100.8797068	JKR Perak Tengah
33	T032	41.55	4.395053418	100.8798436	JKR Perak Tengah
34	T033	939.37	4.403477328	100.8793487	Majlis Perbandaran Perak Tengah
35	T034	37.70	4.403353633	100.8796639	Majlis Perbandaran Perak Tengah
36	T035	35.39	4.403238536	100.8799602	Majlis Perbandaran Perak Tengah
37	T036	24.52	4.403147927	100.880161	Majlis Perbandaran Perak Tengah
38	T037	22.10	4.403096661	100.8803528	Majlis Perbandaran Perak Tengah
39	T038	35.80	4.402982797	100.8806536	Majlis Perbandaran Perak Tengah
40	T039	25.18	4.402996952	100.8808794	Majlis Perbandaran Perak Tengah
41	T040	31.81	4.402754723	100.8807278	Majlis Perbandaran Perak Tengah
42	T041	23.93	4.402545232	100.8806798	Majlis Perbandaran Perak Tengah

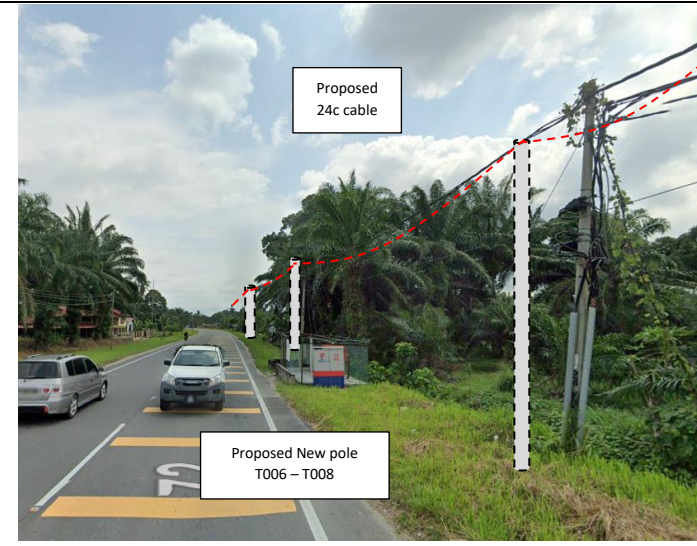
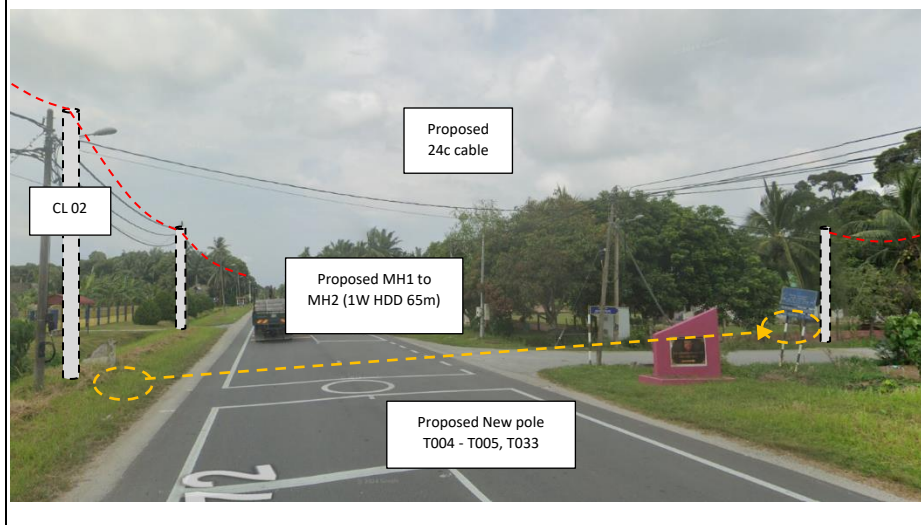
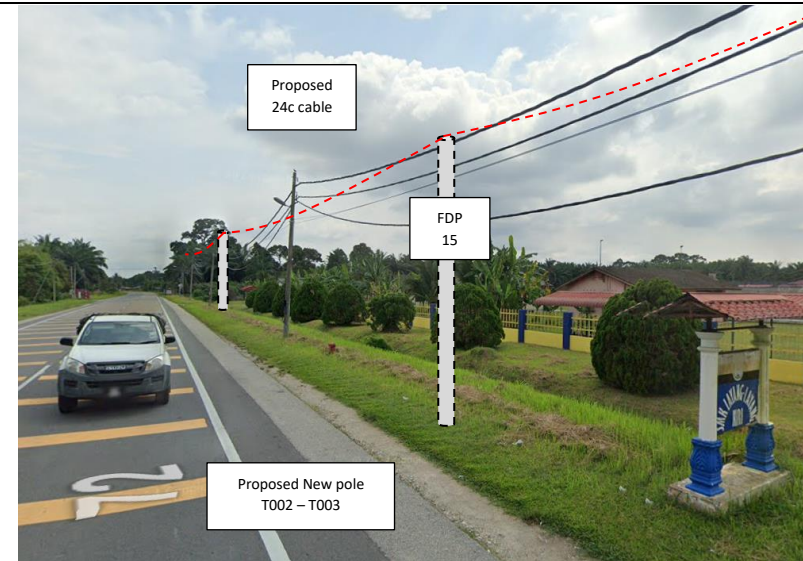
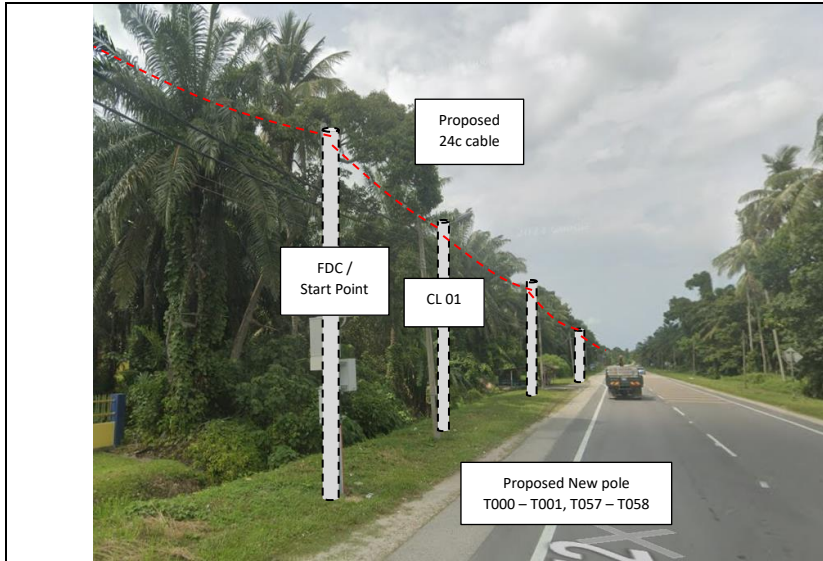


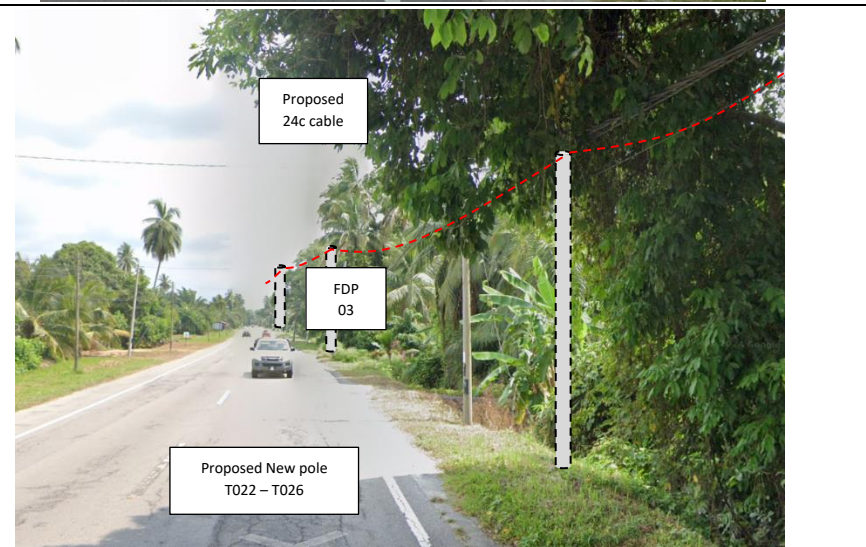
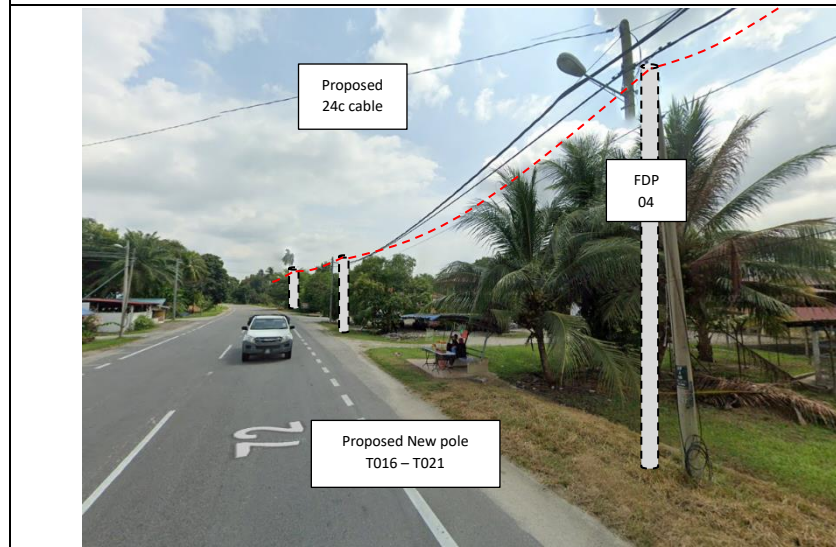
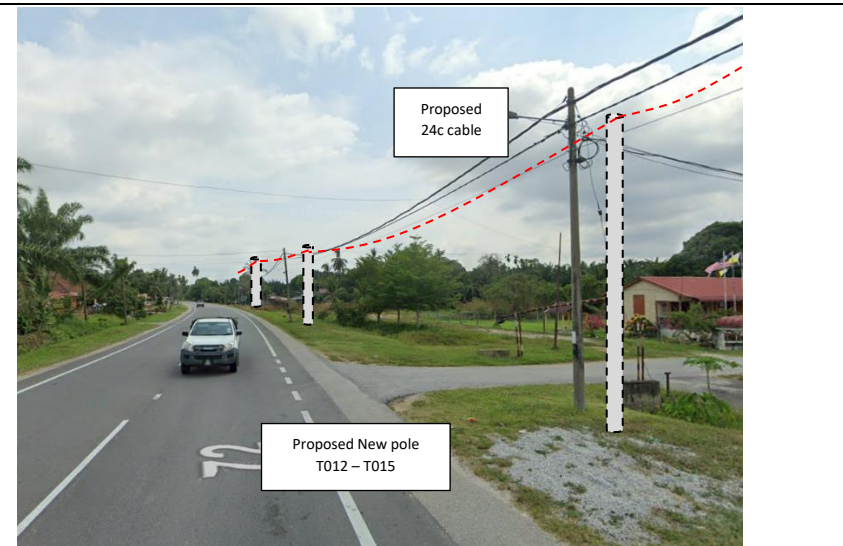
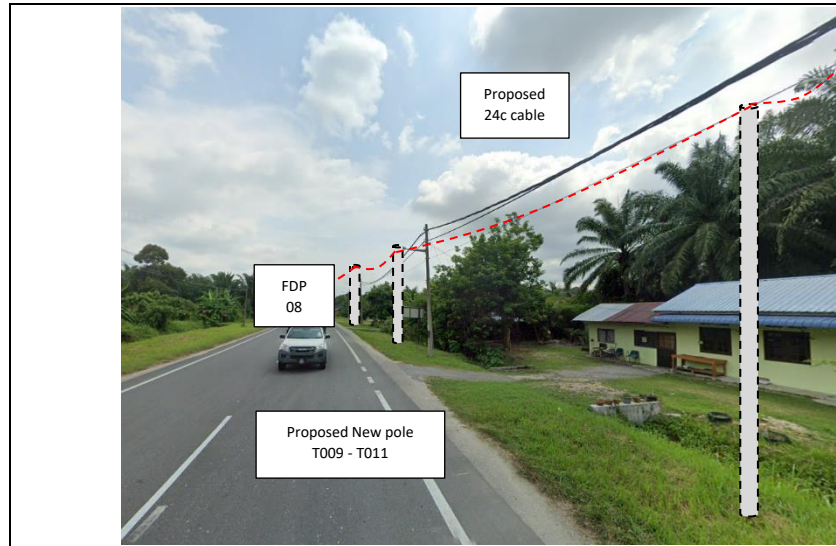
PROJEK PENYEDIAAN DAN PENYELENGGARAAN POINT OF PRESENCE (POP) FASA 2: HAB INFRASTRUKTUR GENTIAN OPTIK BERHAMPIRAN DENGAN SEKOLAH, KAWASAN PERINDUSTRIAN, PREMIS KERAJAAN DAN KOMUNITI SEKITARNYA OLEH KEMENTERIAN KOMUNIKASI MALAYSIA - ZON UTARA (KKMM.400-11/17/132(1))

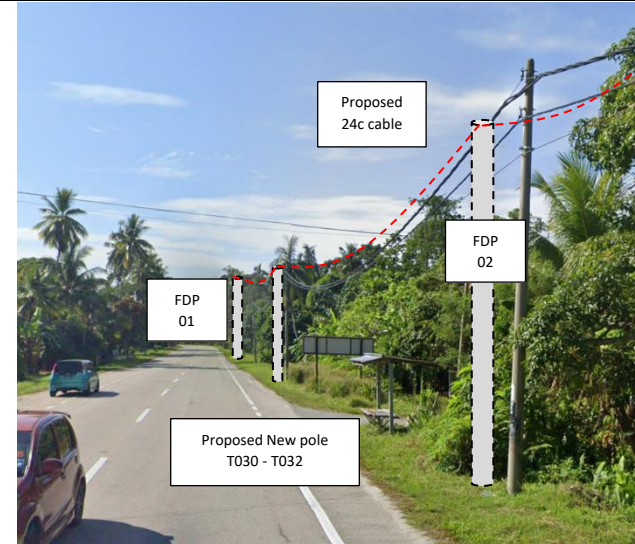
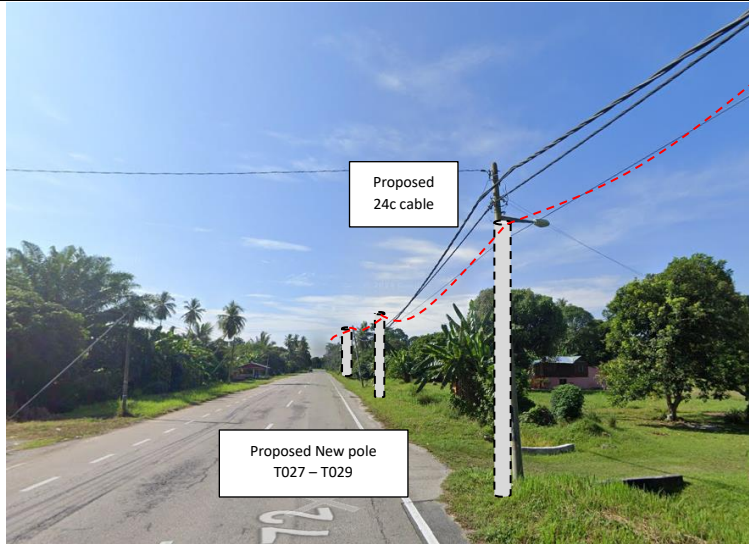


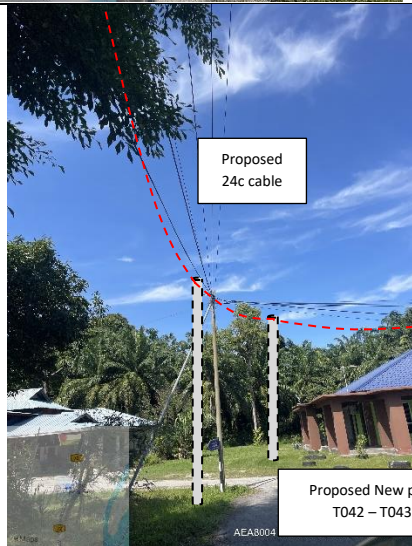
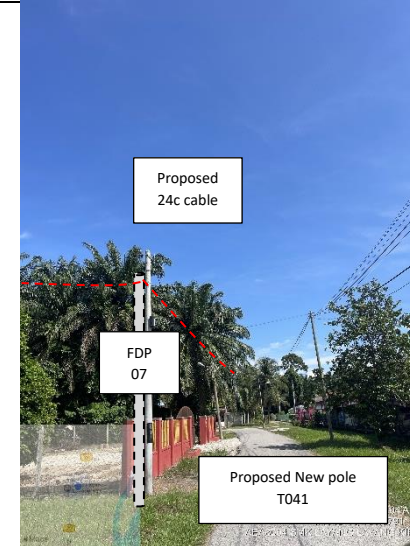
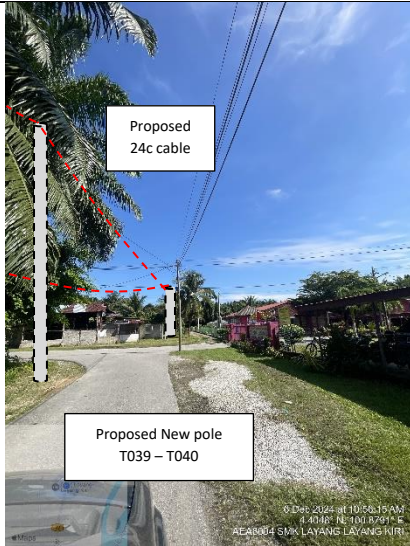
43	T042	29.84	4.402306397	100.8805581	Majlis Perbandaran Perak Tengah
44	T043	24.13	4.402151124	100.8807093	Majlis Perbandaran Perak Tengah
45	T044	32.20	4.402069861	100.8809869	Majlis Perbandaran Perak Tengah
46	T045	34.78	4.402002279	100.8812919	Majlis Perbandaran Perak Tengah
47	T046	21.23	4.401891011	100.8814468	Majlis Perbandaran Perak Tengah
48	T047	39.03	4.401571249	100.8813031	Majlis Perbandaran Perak Tengah
49	T048	33.96	4.401301077	100.8811614	Majlis Perbandaran Perak Tengah
50	T049	48.63	4.400911345	100.8809642	Majlis Perbandaran Perak Tengah
51	T050	42.90	4.400547222	100.8808378	Majlis Perbandaran Perak Tengah
52	T051	45.27	4.400145642	100.8807736	Majlis Perbandaran Perak Tengah
53	T052	30.88	4.399873879	100.8807182	Majlis Perbandaran Perak Tengah
54	T053	20.50	4.399886718	100.8805345	Majlis Perbandaran Perak Tengah
55	T054	23.66	4.399930643	100.8803265	Majlis Perbandaran Perak Tengah
56	T055	21.20	4.39997713	100.8801419	Majlis Perbandaran Perak Tengah
57	T056	26.72	4.400042486	100.879911	Majlis Perbandaran Perak Tengah
58	T057	584.89	4.405249815	100.8792113	JKR Perak Tengah
59	T058	33.18	4.40554254	100.8792676	JKR Perak Tengah
60	T059	42.51	4.405907034	100.8793815	JKR Perak Tengah
61	T060	41.80	4.406264671	100.879496	JKR Perak Tengah
62	T061	33.40	4.406554181	100.8795748	JKR Perak Tengah
63	T062	33.80	4.406851853	100.8796347	JKR Perak Tengah
64	T063	36.16	4.40716121	100.8797336	JKR Perak Tengah
65	T064	33.72	4.407455663	100.8798047	JKR Perak Tengah
66	T065	36.46	4.407771795	100.8798905	JKR Perak Tengah
67	T066	27.67	4.408012666	100.8799519	JKR Perak Tengah
68	T067	31.66	4.408284308	100.8800362	JKR Perak Tengah
69	T068	35.11	4.408589068	100.8801176	JKR Perak Tengah
70	T069	35.00	4.408882564	100.8802304	JKR Perak Tengah
71	T070	49.42	4.409299057	100.8803841	JKR Perak Tengah
72	T071	33.79	4.4095761	100.8805081	JKR Perak Tengah
73	T072	37.37	4.40987843	100.880654	JKR Perak Tengah
74	T073	17.03	4.410011213	100.88073	JKR Perak Tengah
75	T074	50.24	4.410406511	100.8809479	JKR Perak Tengah
76	T075	55.95	4.410852789	100.881179	JKR Perak Tengah
77	T076	45.26	4.411199241	100.8813918	JKR Perak Tengah
78	T077	34.24	4.411471377	100.8815352	JKR Perak Tengah
79	T078	189.41	4.4101675	100.8804421	Majlis Perbandaran Perak Tengah
80	T079	55.85	4.410449061	100.8800268	Majlis Perbandaran Perak Tengah
81	T080	53.21	4.410738573	100.8796464	Majlis Perbandaran Perak Tengah
82	T081	36.22	4.411021278	100.8798075	Majlis Perbandaran Perak Tengah
83	T082	37.40	4.411317089	100.8799667	Majlis Perbandaran Perak Tengah
84	T083	42.26	4.411625927	100.8801874	Majlis Perbandaran Perak Tengah
85	T084	47.83	4.412003124	100.8803932	Majlis Perbandaran Perak Tengah
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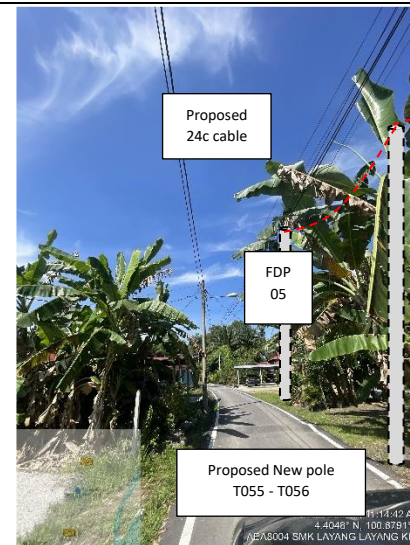
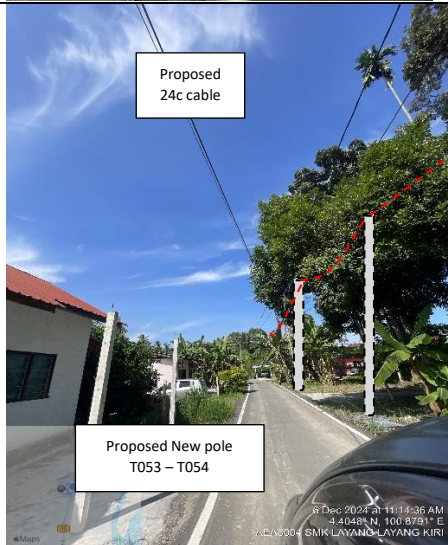
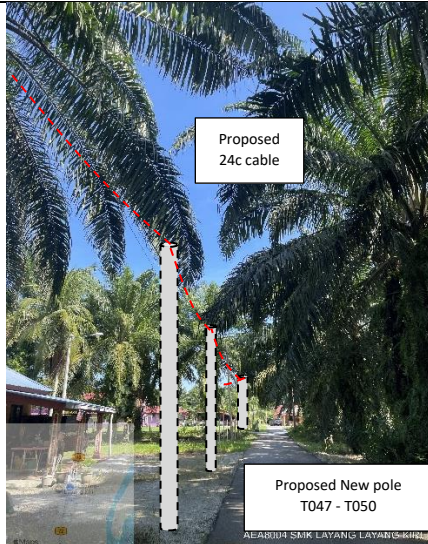
Site Photos – Proposed to install pole

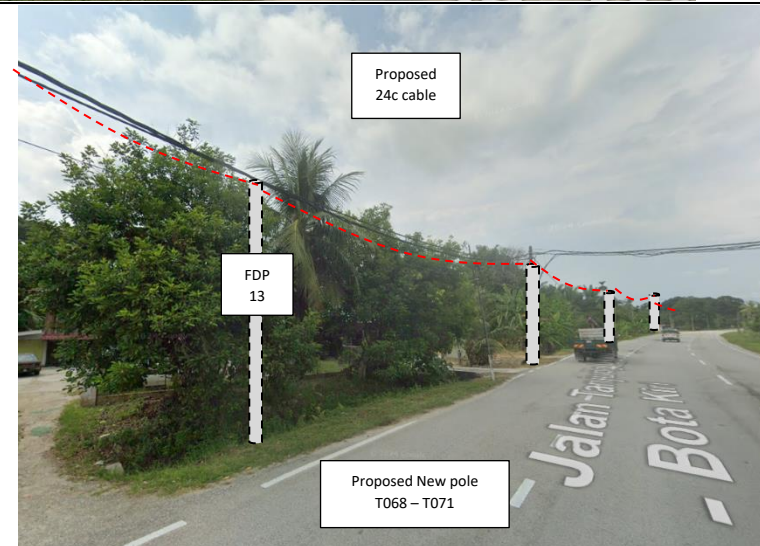
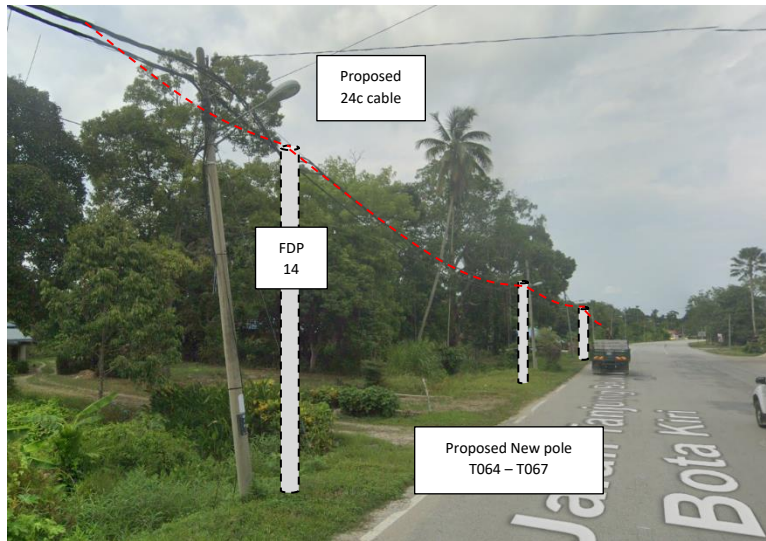
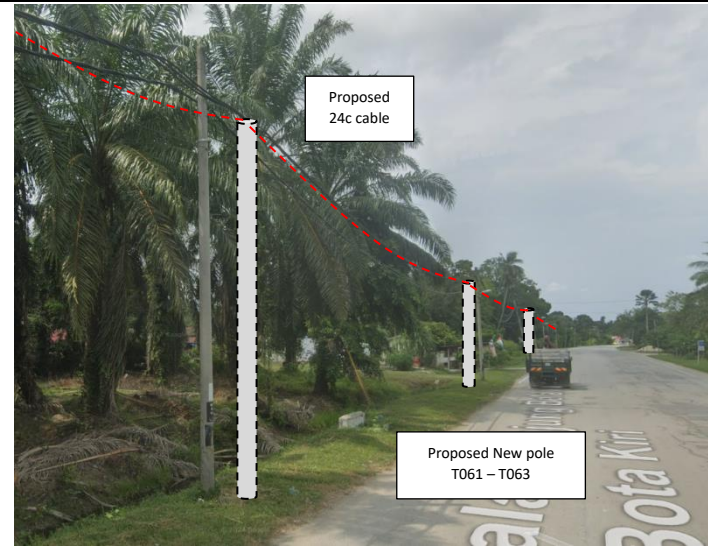
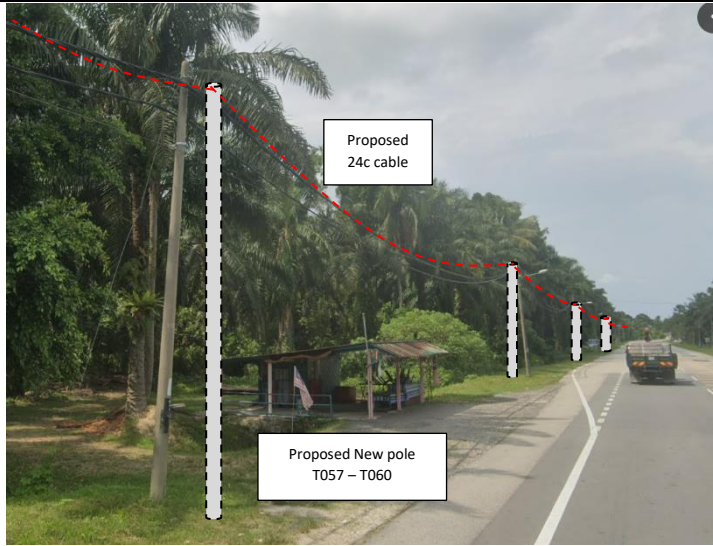


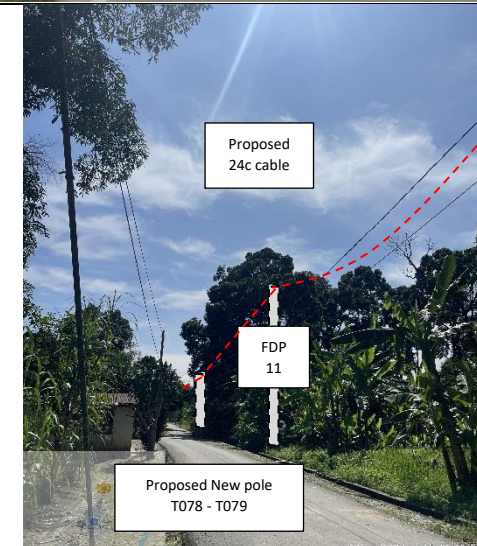
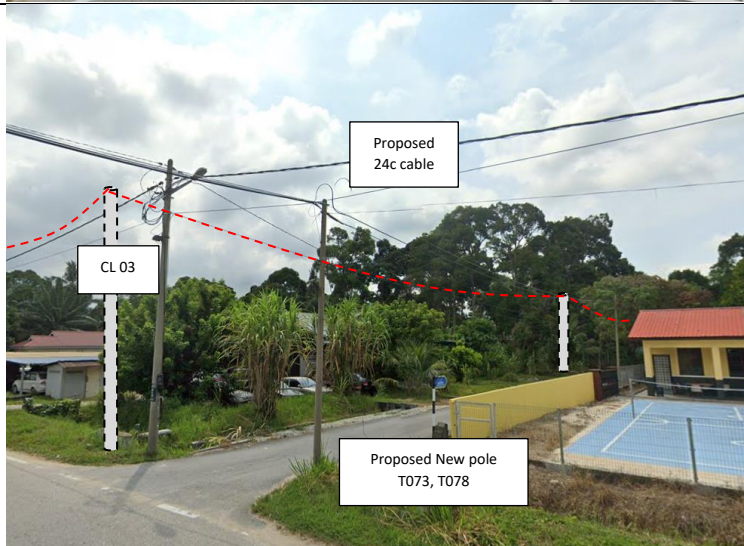
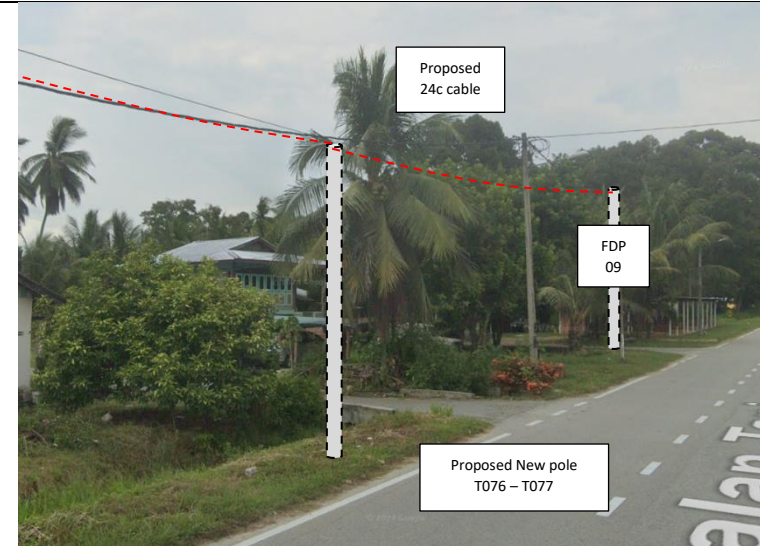
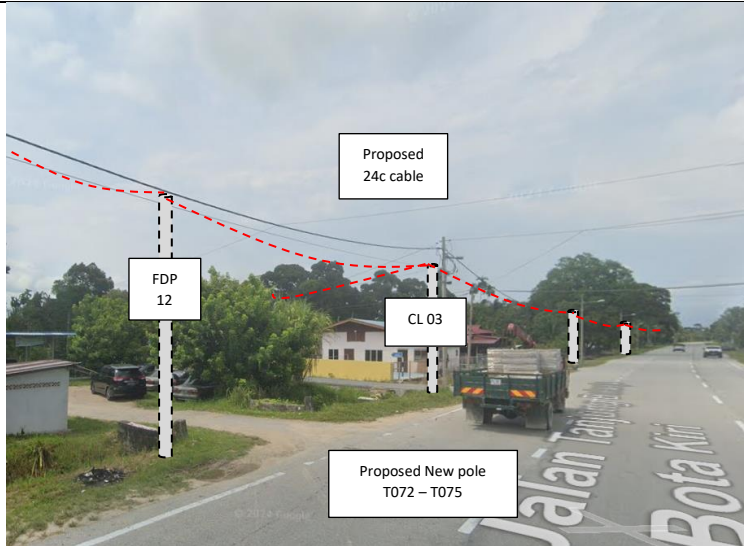


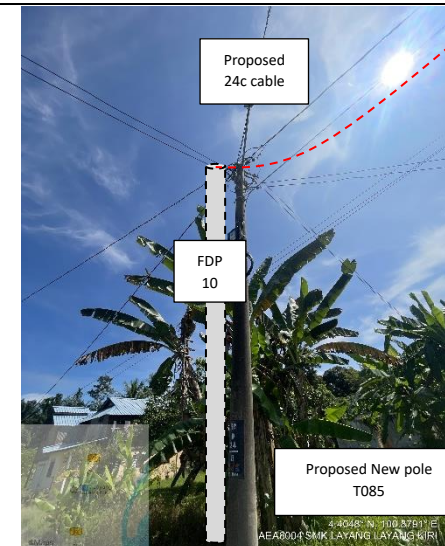
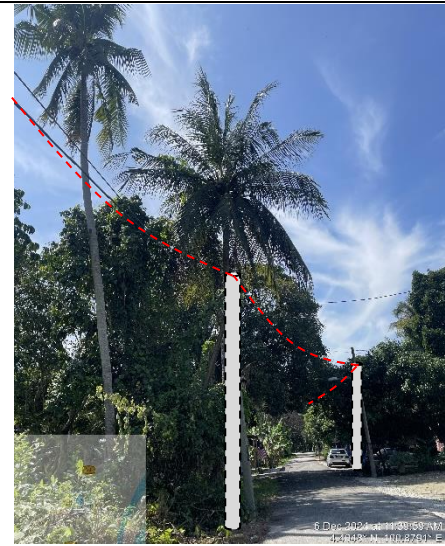












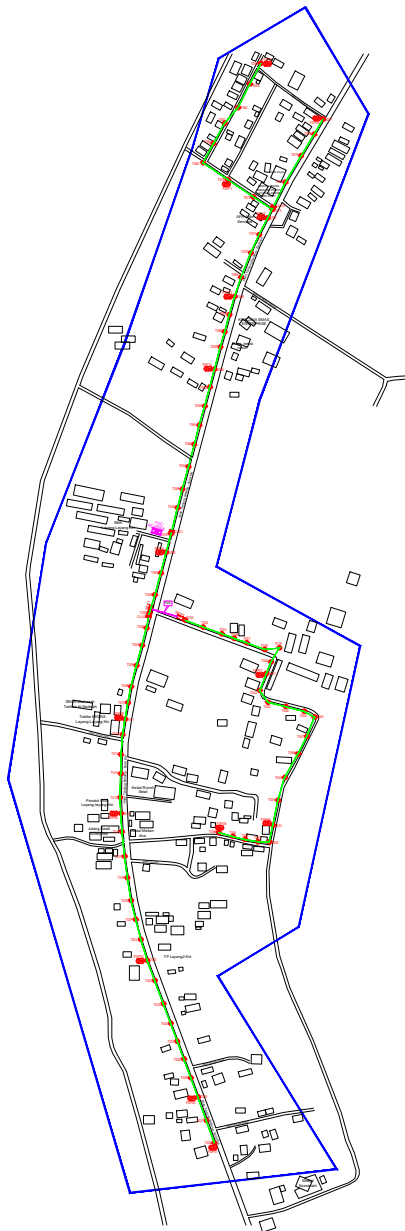


PROJEK PENYEDIAAN DAN PENYELENGGARAAN POINT OF PRESENCE (POP) FASA 2: HAB INFRASTRUKTUR GENTIAN OPTIK BERHAMPIRAN DENGAN SEKOLAH, KAWASAN PERINDUSTRIAN, PREMIS KERAJAAN DAN KOMUNITI SEKITARNYA OLEH KEMENTERIAN KOMUNIKASI MALAYSIA - ZON UTARA (KKMM.400-11/17/132(1))



### 3rd Parties Dependencies

No.	Local Council/ Authority	Remark
1	JKR Perak Tengah	
2	Majlis Perbandaran Perak Tengah	
3		
4		
5		
6		

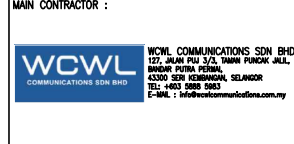
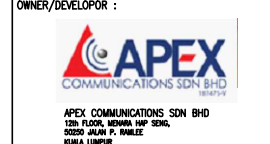


LEGEND	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.				
12C FOC		Installed 1:4 / 1:8 / 1:32 splitter		Installed Pole (9m)		Suspension		New Manhole (PIT)		Micro-Trenching (Meter)		MHI	MH NO.
24C FOC	2302	Installed Patch Cord		Installed Pole (7.5M)	86	Tension		New Manhole(JRC7)	2	Temporary Infra (Meter)		TKS-1	Existing TNB Pole NO.
48C FOC		FDC	1	Installed Pole (6.7M)		Pole Ring		FDP Boundary		Loop / Coil (Meter)		P001	New Pole NO.
96C FOC		Closure	3	Existing TNB Pole		FDP with (1:8) splitter	15	HDD (Meter)	65	Active Outdoor Cabinet		CL01	Closure NO.
144C FOC		Existing Closure		Installed Riser		Existing Manhole		Open Cut (Meter)		FDC NO.		DP1	FDP NO.

ACTUAL HOMEPASS :

KEY PLAN :  
  
POP2 PROJECT IN PERAK

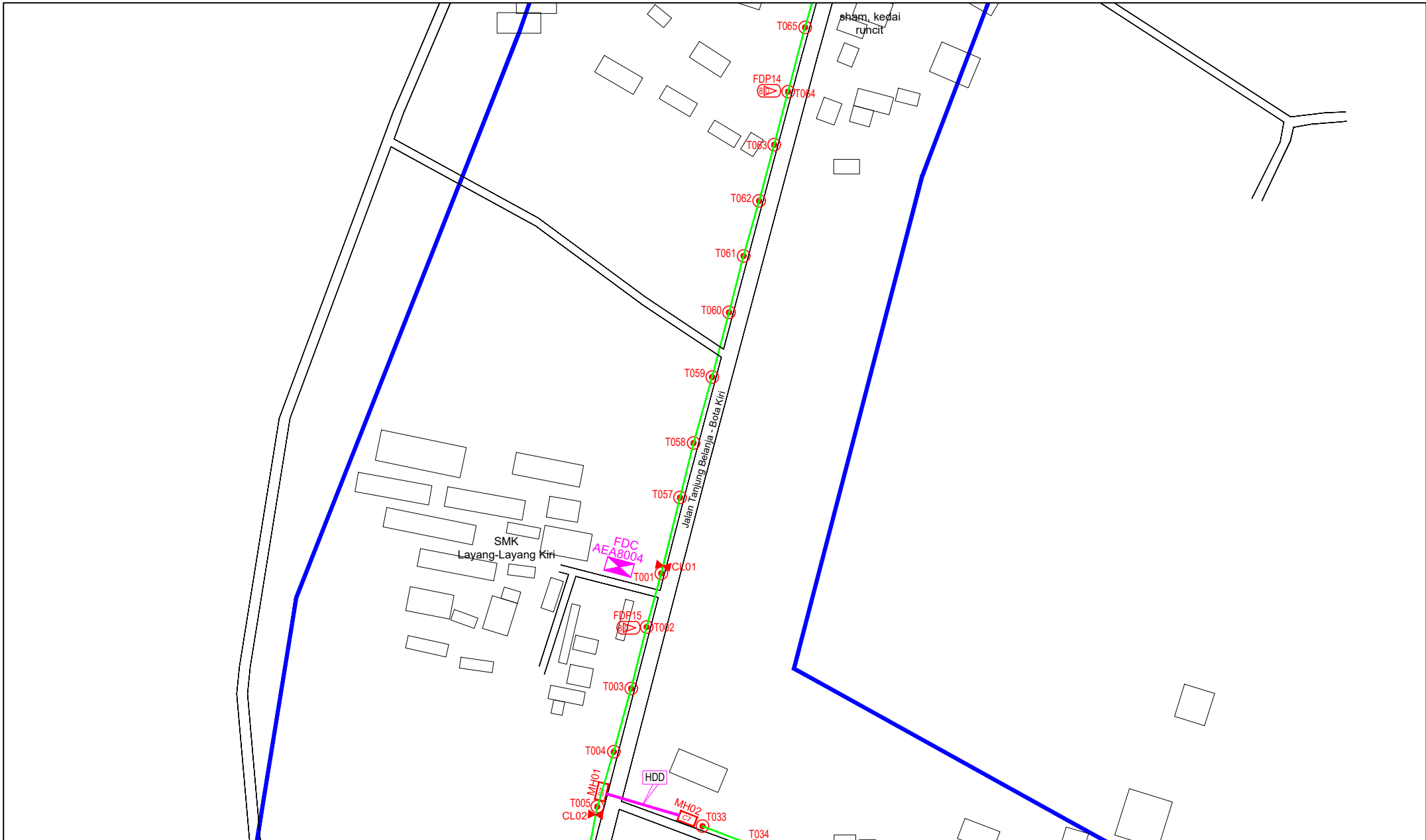
OWNER/DEVELOPER :



MAIN CONTRACTOR :  
  
CONTRACTOR FOR SURVEY, TECHNICAL PROPOSAL AND WAYLEAVE, & PERMIT APPROVAL - POP2 PROJECT

DRAWING TITLE:  
AS-BUILT SITE PLAN DRAWING AEA8004  
SEKOLAH MENENGAH KEBANGSAAN LAYANG-LAYANG KIRI  
PROJECT PHASE:  
POP 2

Design By : ENGINEER	Date : DEC 2024
Drawn By : CAD ENGINEER	Scale : NOT TO SCALE
Checked By : ENGINEER	Job Number : 1
DRAWING NUMBER : ABA8211-ABD-01	Sheet : 1/5
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Size : A3	



LEGEND	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.
12C FOC	Installed 1:4 / 1:8 / 1:32 splitter	Installed Pole (9m)	Suspension	8B30 New Manhole (PIT)	Micro-Trenching (Meter)	MH1	MH NO.		
24C FOC	Installed Patch Cord	Installed Pole (7.5M)	Tension	8B7 New Manhole(JRC7)	Temporary Infra (Meter)	TKS-1	Existing TNB Pole NO.		
48C FOC	FDC	Installed Pole (6.7M)	Pole Ring	FDP Boundary	Loop / Coil (Meter)	PO01	New Pole NO.		
96C FOC	Closure	Existing TNB Pole	FDP with (1:8) splitter	HDD (Meter)	Active Outdoor Cabinet	CL01	Closure NO.		
144C FOC	Existing Closure	Installed Riser	Existing Manhole	Open Cut (Meter)	FDC NO.	DP1	FDP NO.		

ACTUAL HOMEPASS :

KEY PLAN :  
**POP2 PROJECT IN PERAK**

OWNER/DEVELOPER :  
**APEX COMMUNICATIONS SDN BHD**  
APEX COMMUNICATIONS SDN BHD  
12th FLOOR, MENARA HAP SDN BHD,  
30300, JALAN P. P. RAJEE,  
KUALA LUMPUR

MAIN CONTRACTOR :  
**WCWL COMMUNICATIONS SDN BHD**  
WCWL COMMUNICATIONS SDN BHD  
127, JALAN PUJ 3/3, TAMAN PUNCAK JAYA,  
BANDAR PUTRA PERAI,  
43300 SERI KEMBANGAN, SELANGOR  
TEL: +603 8988 9983  
E-MAIL: info@wcwlcommunications.com.my

PROJECT TITLE :  
CONTRACTOR FOR SURVEY, TECHNICAL PROPOSAL AND WAYLEAVE, & PERMIT APPROVAL - POP2 PROJECT

DRAWING TITLE:  
**AS-BUILT SITE PLAN DRAWING AEA8004 SEKOLAH MENENGAH KEBANGSAAN LAYANG-LAYANG KIRI**

PROJECT PHASE:  
**POP 2**

Design By : ENGINEER	Date : DEC 2024
Drawn By : CAD ENGINEER	Scale : NOT TO SCALE
Checked By : ENGINEER	Job Number : 1
DRAWING NUMBER : <b>AB8211-ABD-01A</b>	Sheet : 2/5
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Size : A3	





LEGEND	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.		
12C FOC		Installed 1:4 / 1:8 / 1:32 splitter		Installed Pole (9m)		Suspension		BE30 New Manhole (PIT)		Micro-Trenching (Meter)		MH1 MH NO.
24C FOC	2302	Installed Patch Cord		Installed Pole (7.5M)	86	Tension		BE7 New Manhole(JRC7)	2	Temporary Infra (Meter)		TKS-1 Existing TNB Pole NO.
48C FOC		FDC	1	Installed Pole (6.7M)		Pole Ring		FDP Boundary		Loop / Coil (Meter)		PO01 New Pole NO.
96C FOC		Closure	3	Existing TNB Pole		FDP with (1:8) splitter	15	HDD (Meter)	65	Active Outdoor Cabinet	#	CL01 Closure NO.
144C FOC		Existing Closure		Installed Riser		Existing Manhole		Open Cut (Meter)		FDC NO.	CO1	DP1 FDP NO.

ACTUAL HOMEPASS :

KEY PLAN :  
  
POP2 PROJECT IN PERAK

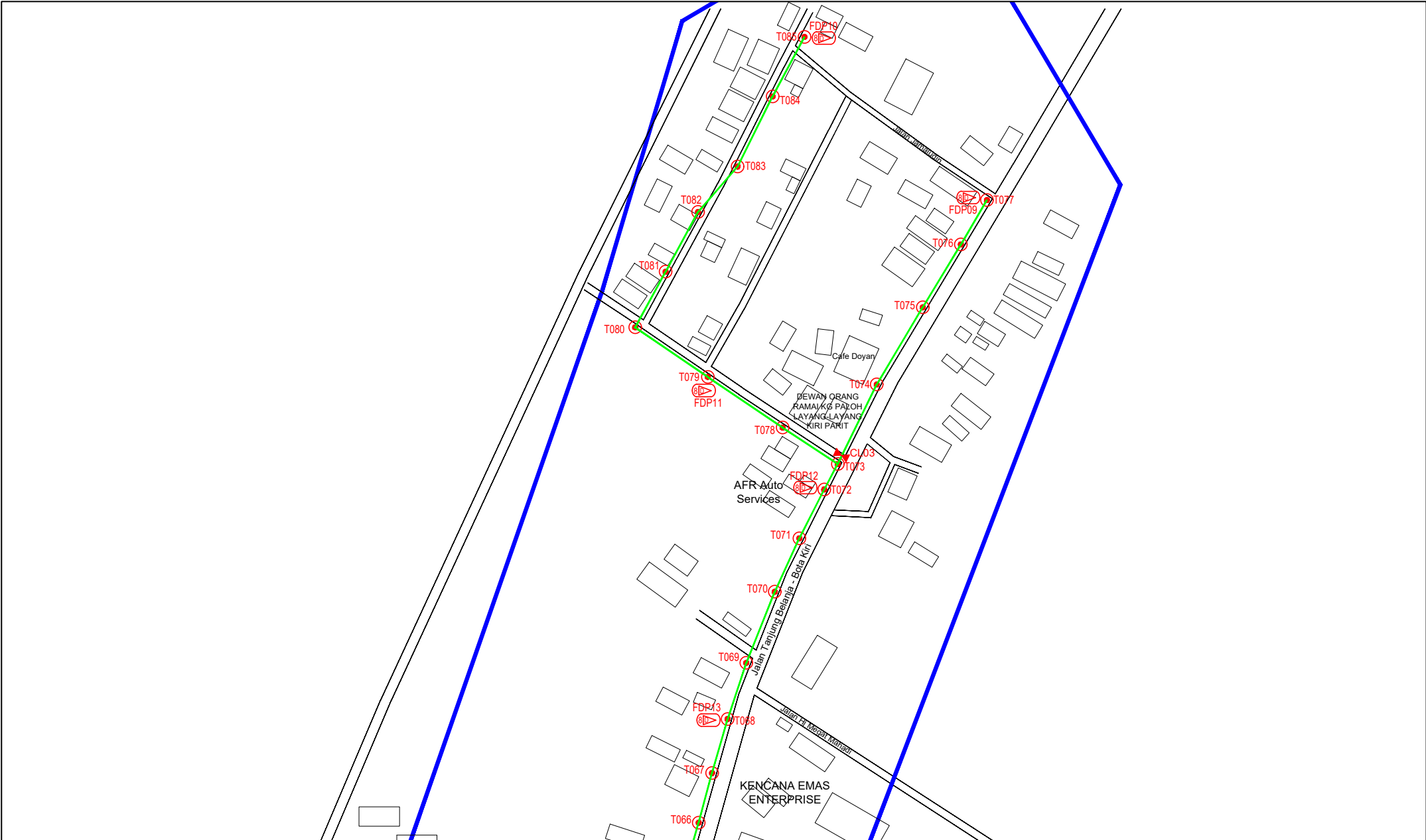
OWNER/DEVELOPER :



MAIN CONTRACTOR :  
  
PROJECT TITLE :  
  
CONTRACTOR FOR SURVEY, TECHNICAL PROPOSAL AND WAYLEAVE, & PERMIT APPROVAL - POP2 PROJECT

DRAWING TITLE:  
AS-BUILT SITE PLAN DRAWING  
AEA8004  
SEKOLAH MENENGAH KEBANGSAAN  
LAYANG-LAYANG KIRI  
  
PROJECT PHASE:  
POP2

Design By : ENGINEER	Date : DEC 2024
Drawn By : CAD ENGINEER	Scale : NOT TO SCALE
Checked By : ENGINEER	Job Number : 1
DRAWING NUMBER : AB8211-ABD-01C	Sheet : 4/5
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Size : A3	



LEGEND	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.
12C FOC		Installed 1:4 / 1:8 / 1:32 splitter		Installed Pole (9m)		Suspension		MS0	New Manhole (PIT)
24C FOC	2302	Installed Patch Cord		Installed Pole (7.5M)	86	Tension		MS7	New Manhole(JRC7)
48C FOC		FDC	1	Existing TNB Pole		Pole Ring			FDP Boundary
96C FOC		Closure	3	Installed Riser		FDP with (1:8) splitter	15		HDD (Meter)
144C FOC		Existing Closure				Existing Manhole			Open Cut (Meter)
									Micro-Trenching (Meter)
									Temporary Infra (Meter)
									Loop / Coil (Meter)
									Active Outdoor Cabinet
									FDC NO.
									MH1
									TKS-1
									Existing TNB Pole NO.
									P001
									New Pole NO.
									CL01
									Closure NO.
									DP1
									FDP NO.

ACTUAL HOMEPASS :

KEY PLAN :  
  
POP2 PROJECT IN PERAK

OWNER/DEVELOPOR :  
  
**APEX COMMUNICATIONS SDN BHD**  
12th FLOOR, MENARA HAP SENG,  
52000 ALHAI P. HILIR,  
KUALA LUMPUR

MAIN CONTRACTOR :  
  
**WCWL COMMUNICATIONS SDN BHD**  
WCWL COMMUNICATIONS SDN BHD  
127, JALAN PULU 3/2, TAMAN PUNCAK AJAL,  
BANDAR PUTERI PERAI,  
43300 SERI KEMBANGAN, SELANGOR  
TEL : +603 8988 0963  
E-MAIL : info@wcwlcommunications.com.my

PROJECT TITLE :  
  
CONTRACTOR FOR SURVEY, TECHNICAL PROPOSAL AND WAYLEAVE, & PERMIT APPROVAL - POP2 PROJECT

DRAWING TITLE:  
AS-BUILT SITE PLAN DRAWING  
AEA8004  
SEKOLAH MENENGAH KEBANGSAAN  
LAYANG-LAYANG KIRI

PROJECT PHASE:  
POP 2

Design By : ENGINEER	Date : DEC 2024
Drawn By : CAD ENGINEER	Scale : NOT TO SCALE
Checked By : ENGINEER	Job Number : 1
Drawing Number : ABA8211-ABD-01D	Sheet : 5/5
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