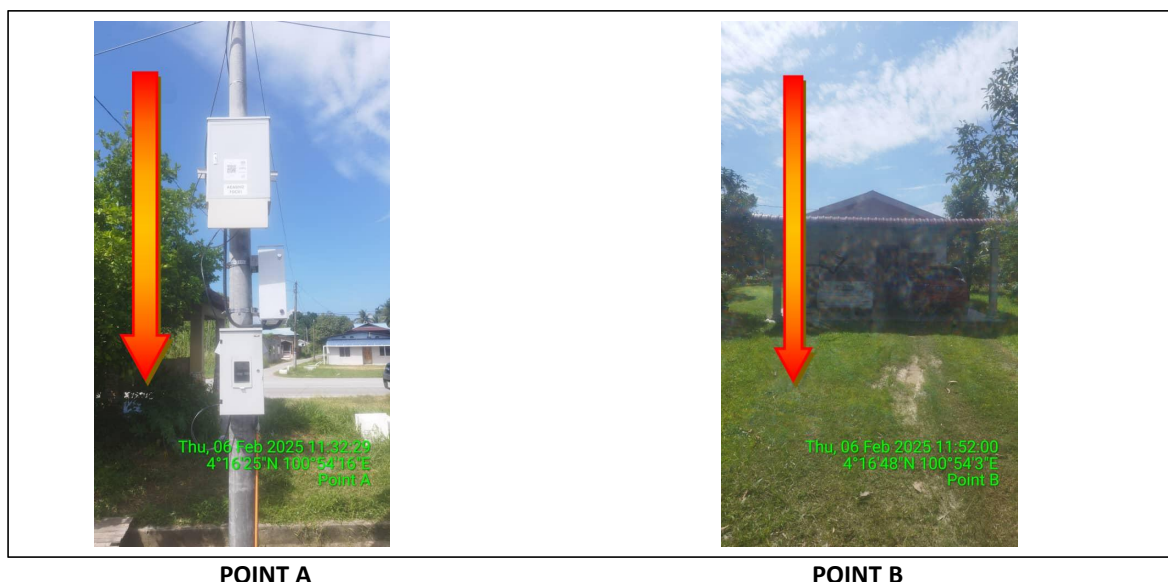


TECHNICAL PROPOSAL

POP2 AEA8002 SEKOLAH MENENGAH KEBANGSAAN SULTAN MUZAFAR SHAH 1 (D-SIDE)

Company Name	:	WCWL COMMUNICATIONS SDN BHD
Company Address	:	127, Jalan PUJ 3/3, Taman Puncak Jalil 43300 Subang Jaya Selangor
Prepared By	:	Zhahin
Date	:	14/07/2025



Starting Point

Site / Boundary Name	:	SEKOLAH MENENGAH KEBANGSAAN SULTAN MUZAFAR SHAH 1
Address	:	Kampung Lambor Kanan
District	:	Lambor Kanan
Postcode	:	32900
State	:	Perak
GPS Coordinate	:	4.273487, 100.904425
LRD	:	A

End Point

Site / Boundary Name	:	SEKOLAH MENENGAH KEBANGSAAN SULTAN MUZAFAR SHAH 1
Address	:	Kampung Lambor Kanan
District	:	Lambor Kanan
Postcode	:	32900
State	:	Perak
GPS Coordinate	:	4.280286, 100.901125
	:	B



PROJEK PENYEDIAAN DAN PENYELENGGARAAN POINT OF PRESENSE (POP) FASA 2: HUB 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	615
2	Carriage Way Open trench (CW)	m	0
3	Grass Verge Open Trenching (GV)	m	0
4	Micro trenching (MT)	m	0
	Total		615

	Other Information	Unit	Qty
1	Proposed Manhole	EA	7
2	Proposed Pole	EA	51
3	Joint Closure	EA	2
4	Estimated time required for completion	days	30



PROJEK PENYEDIAAN DAN PENYELENGGARAAN POINT OF PRESENSE (POP) FASA 2: HUB 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))



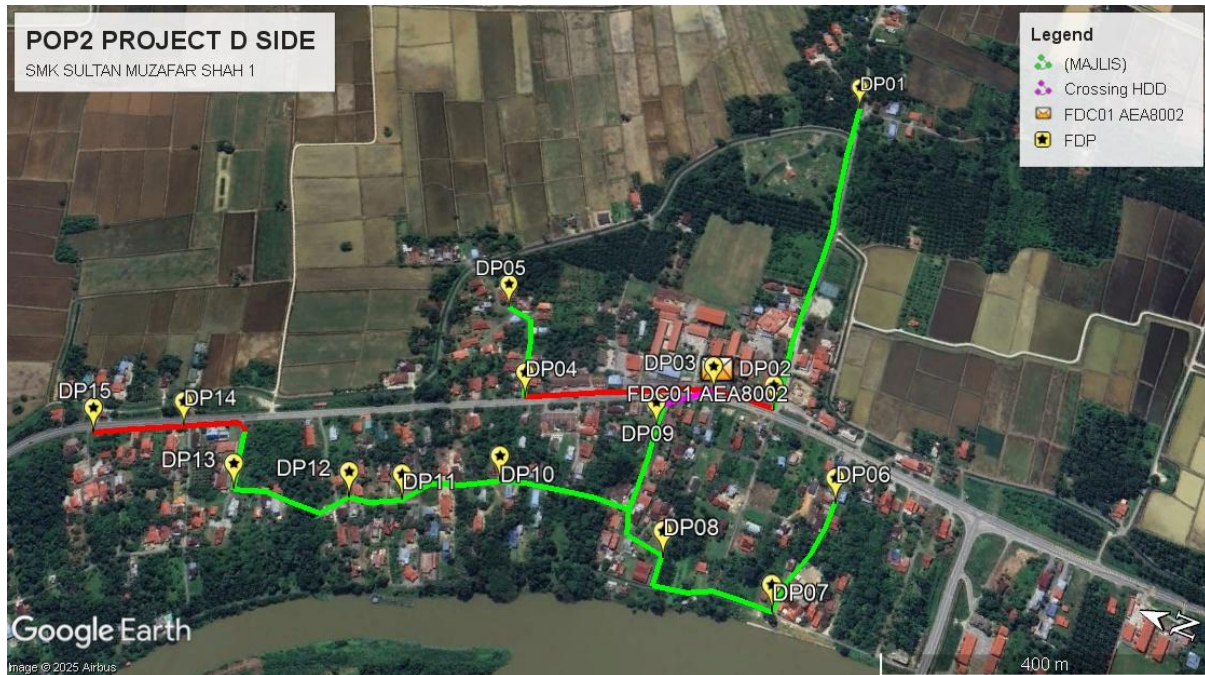
Local Authority Summary

1. Perak Tengah

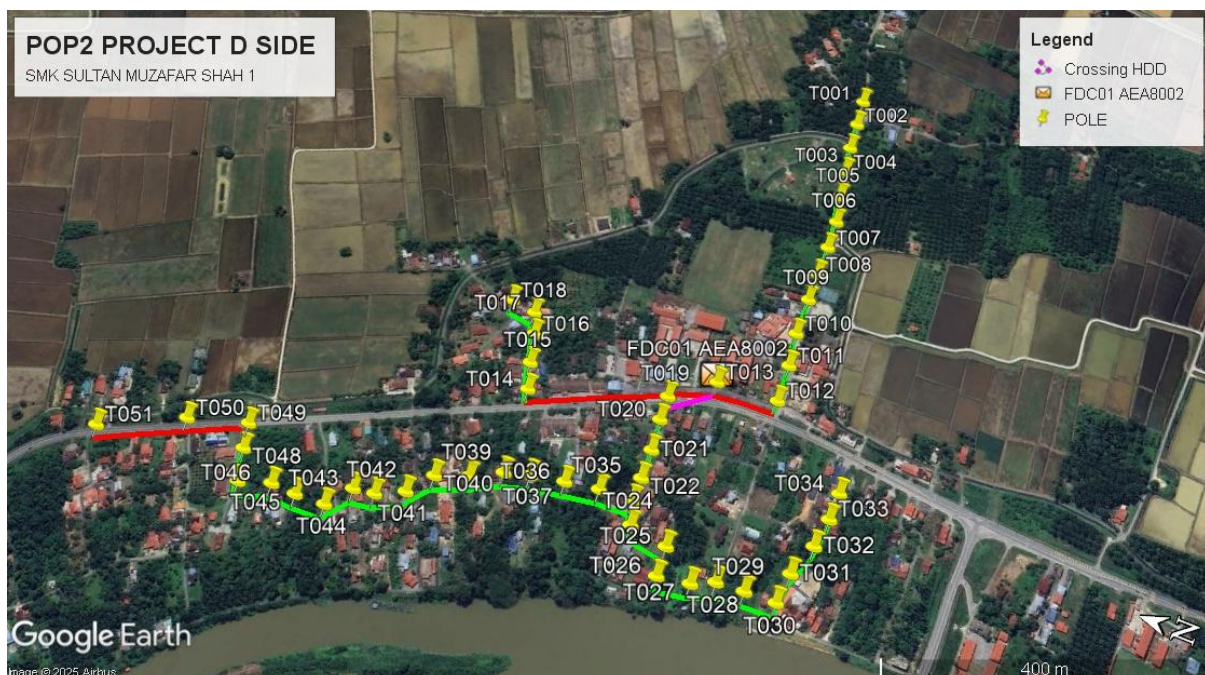
Bil	Items	Owner	Quantity	Distance
1	HDD	JKR	1	618m
		Majlis	-	-
		Estate / Private Land	-	-
2	New Pole	JKR	5	461m
		Majlis	46	1950m
		Estate / Private Land	-	-
3	Existing TNB Pole	JKR	-	-
		Majlis	-	-
		Estate / Private Land	-	-
Total				3029m

Site Plan – KMZ (Overview site area)

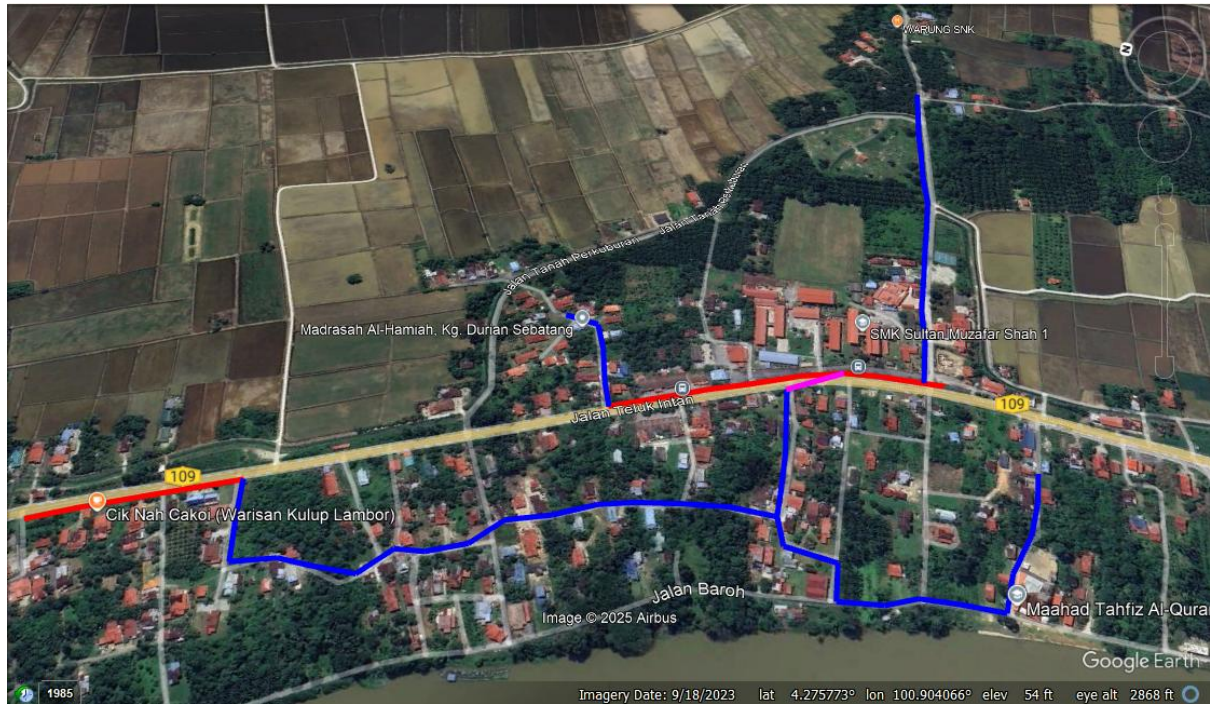
Proposed FDP and Closure



Proposed New Pole



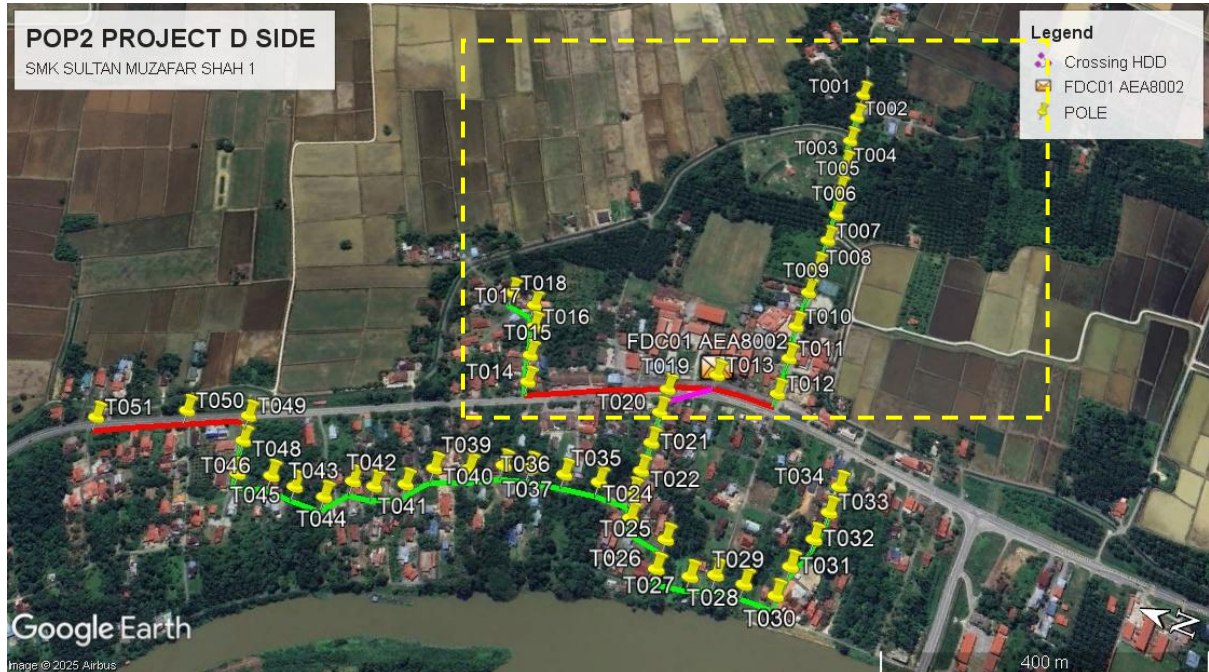
Site Plan – KMZ Routing (All Local Authority)



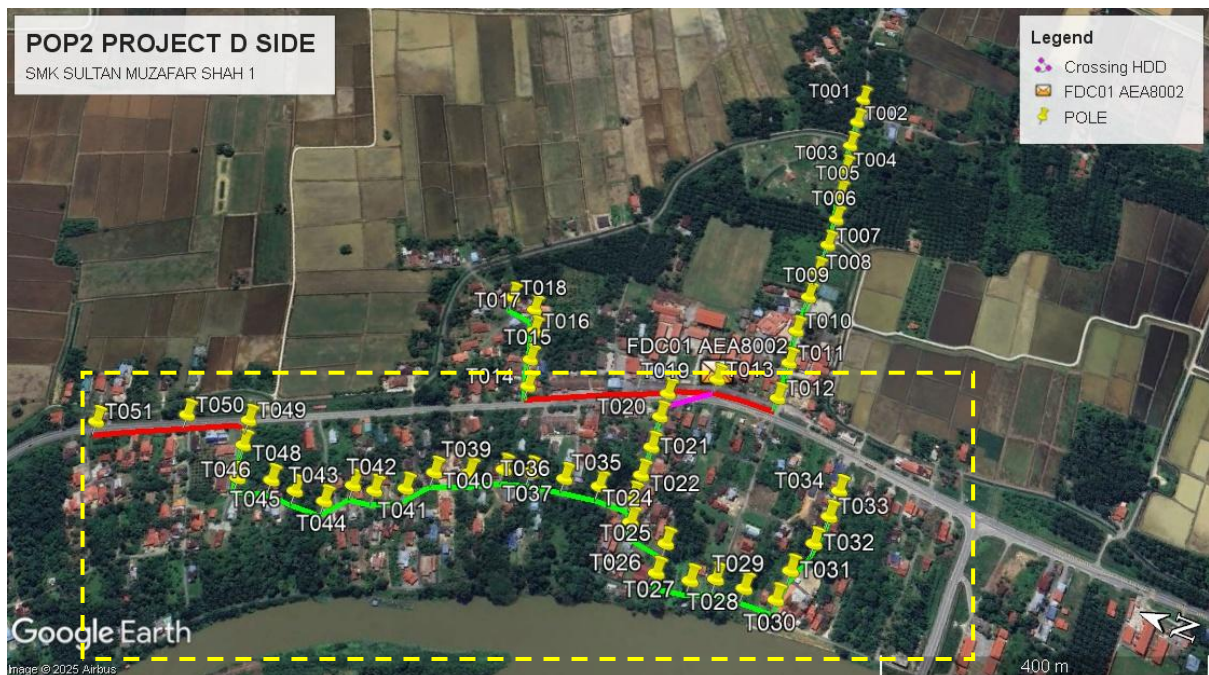
Blue Colour – Majlis Daerah Perak Tengah

Red Colour – JKR Perak

Route 1



Route 2



Site Plan – KMZ Routing (Prop New Manhole)

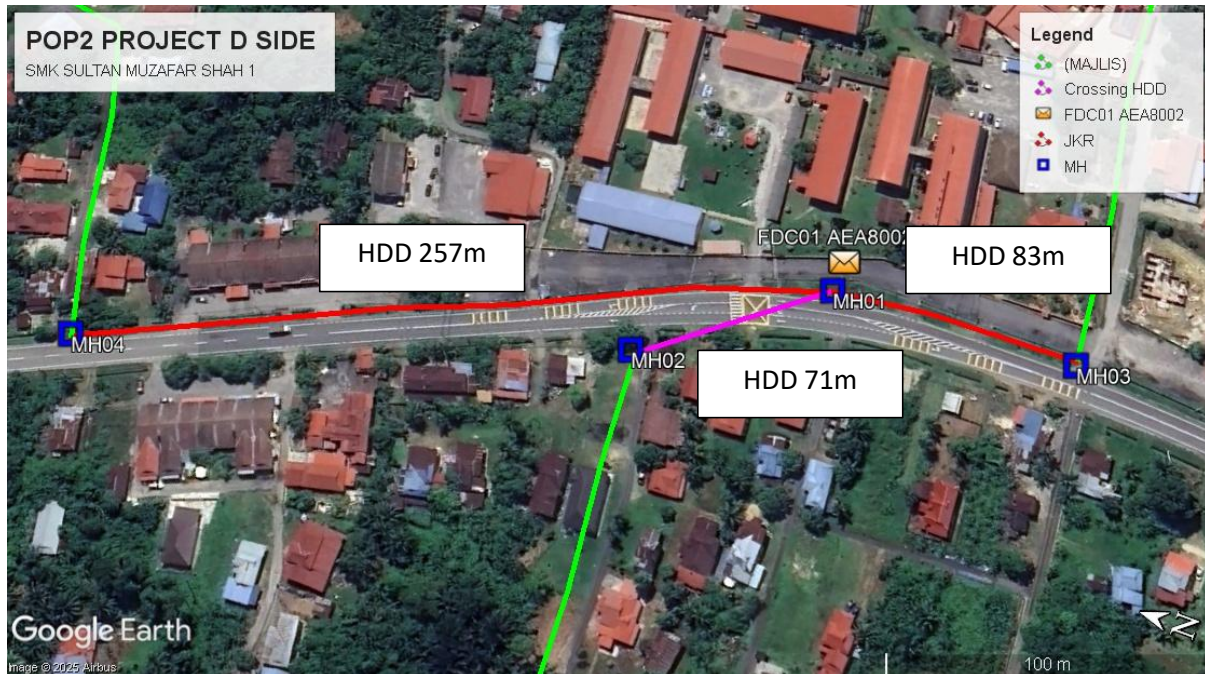


Figure 1: Location 1 (MH1- 4.273507, 100.904366) (MH2- 4.274025, 100.903977)
(MH3- 4.272751, 100.904391) (MH4- 4.275635, 100.903439)

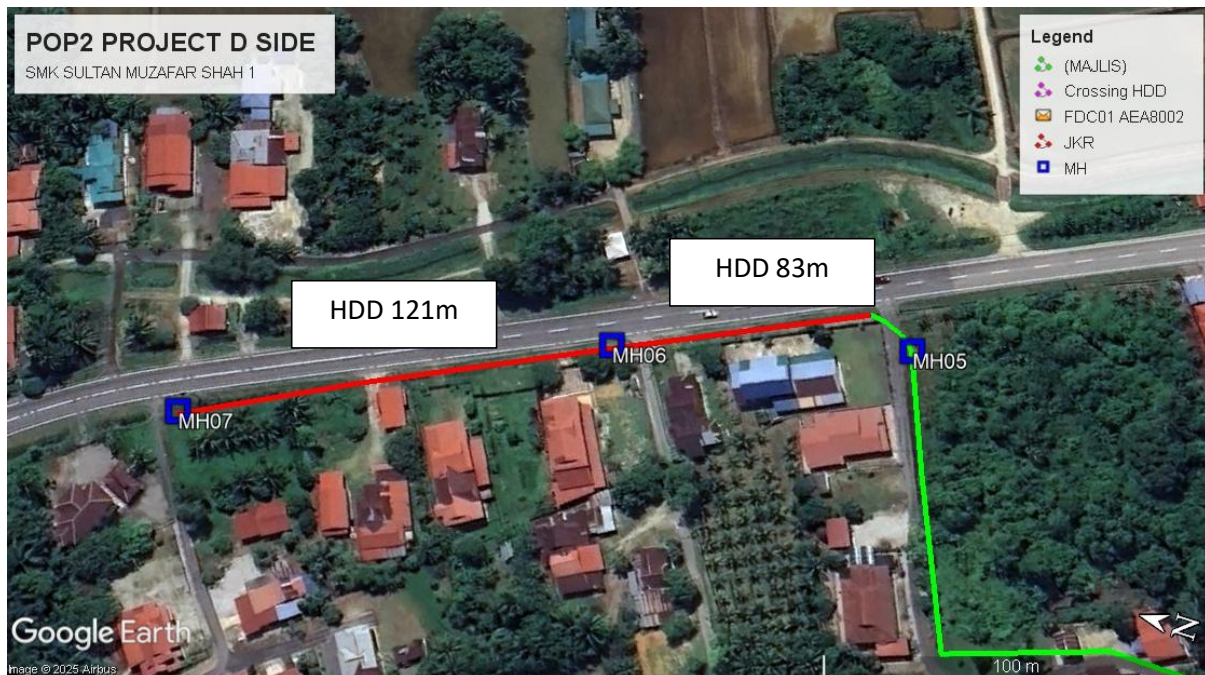


Figure 1: Location 2 (MH5- 4.278593, 100.901800) (MH6- 4.279315, 100.901592)
(MH7- 4.280289, 100.901116)

Proposed New Pole Lat & Long Table

	Pole Number	Distance	Latitude	Longitude	Local Authority
1	FDC01 ABA8228	0	4.273487	100.904425	JKR Perak
2	T001	45	4.272996	100.909113	Majlis Daerah Perak Tengah
3	T002 (9m)	45	4.272969	100.908715	Majlis Daerah Perak Tengah
4	T003 (9m)	45	4.27295	100.908305	Majlis Daerah Perak Tengah
5	T004	45	4.272905	100.907916	Majlis Daerah Perak Tengah
6	T005	45	4.272863	100.907506	Majlis Daerah Perak Tengah
7	T006	45	4.272798	100.907111	Majlis Daerah Perak Tengah
8	T007	45	4.272792	100.906699	Majlis Daerah Perak Tengah
9	T008	45	4.272802	100.906271	Majlis Daerah Perak Tengah
10	T009	45	4.272804	100.905878	Majlis Daerah Perak Tengah
11	T010	45	4.272809	100.905364	Majlis Daerah Perak Tengah
12	T011	45	4.272761	100.904913	Majlis Daerah Perak Tengah
13	T012	45	4.272752	100.904415	JKR Perak
14	T013	45	4.273515	100.90438	JKR Perak
15	T014	45	4.275637	100.903448	JKR Perak
16	T015	45	4.27575	100.903783	Majlis Daerah Perak Tengah
17	T016	45	4.275857	100.904161	Majlis Daerah Perak Tengah
18	T017	45	4.275972	100.904436	Majlis Daerah Perak Tengah
19	T018	45	4.276302	100.904495	Majlis Daerah Perak Tengah
20	T019	45	4.27403	100.904033	Majlis Daerah Perak Tengah
21	T020	45	4.273999	100.903667	Majlis Daerah Perak Tengah
22	T021	45	4.27396	100.903266	Majlis Daerah Perak Tengah
23	T022	45	4.273949	100.902896	Majlis Daerah Perak Tengah
24	T023 (9m)	45	4.273946	100.902604	Majlis Daerah Perak Tengah
25	T024 (9m)	45	4.273865	100.902323	Majlis Daerah Perak Tengah
26	T025 (9m)	45	4.2734	100.902237	Majlis Daerah Perak Tengah
27	T026 (9m)	45	4.273384	100.901879	Majlis Daerah Perak Tengah
28	T027 (9m)	45	4.272999	100.901939	Majlis Daerah Perak Tengah
29	T028 (9m)	45	4.272737	100.902061	Majlis Daerah Perak Tengah
30	T029 (9m)	45	4.272403	100.90208	Majlis Daerah Perak Tengah
31	T030	45	4.272034	100.902089	Majlis Daerah Perak Tengah
32	T031	45	4.271977	100.902461	Majlis Daerah Perak Tengah
33	T032	45	4.27182	100.90286	Majlis Daerah Perak Tengah
34	T033	45	4.271749	100.903227	Majlis Daerah Perak Tengah

35	T034	45	4.271727	100.903566	Majlis Daerah Perak Tengah
36	T035 (9m)	45	4.274361	100.902588	Majlis Daerah Perak Tengah
37	T036 (9m)	45	4.274773	100.902526	Majlis Daerah Perak Tengah
38	T037	45	4.275181	100.902453	Majlis Daerah Perak Tengah
39	T038	45	4.275485	100.902365	Majlis Daerah Perak Tengah
40	T039	45	4.275846	100.902176	Majlis Daerah Perak Tengah
41	T040 (9m)	45	4.27623	100.902032	Majlis Daerah Perak Tengah
42	T041 (9m)	45	4.276459	100.901733	Majlis Daerah Perak Tengah
43	T042	45	4.276789	100.901575	Majlis Daerah Perak Tengah
44	T043 (9m)	45	4.277049	100.90154	Majlis Daerah Perak Tengah
45	T044(9m)	45	4.277274	100.901247	Majlis Daerah Perak Tengah
46	T045	45	4.277653	100.901232	Majlis Daerah Perak Tengah
47	T046	45	4.277972	100.901247	Majlis Daerah Perak Tengah
48	T047	45	4.278353	100.901124	Majlis Daerah Perak Tengah
49	T048	45	4.278495	100.901507	Majlis Daerah Perak Tengah
50	T049 (9m)	45	4.278621	100.901924	JKR Perak
51	T050 (9m)	45	4.279318	100.901595	JKR Perak
52	T051	45	4.280291	100.901119	JKR Perak

Bil	Type	7.5m	9m	Total
1	No Of Pole	34	17	51



PROJEK PENYEDIAAN DAN PENYELENGGARAAN POINT OF PRESENSE (POP) FASA 2: HUB 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))

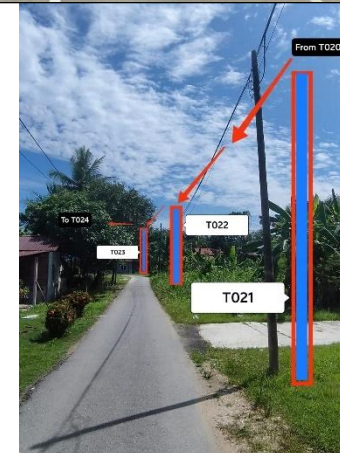
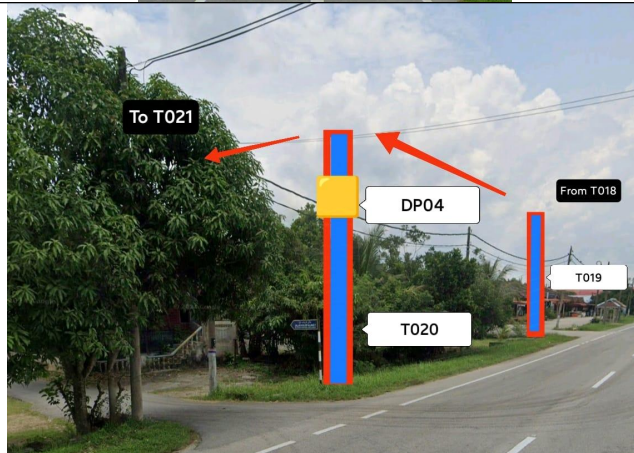
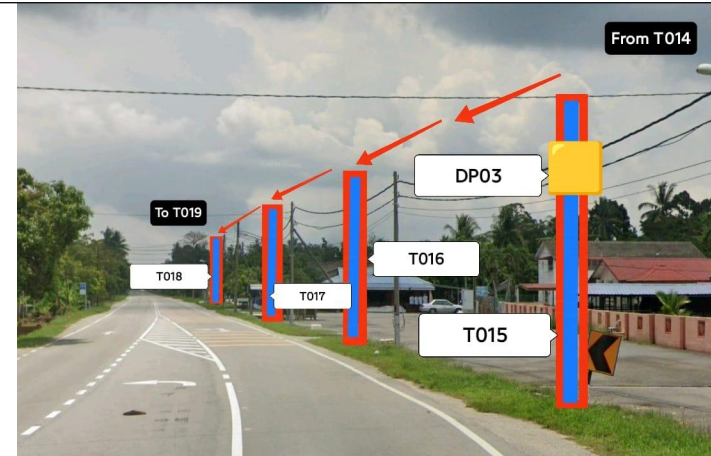
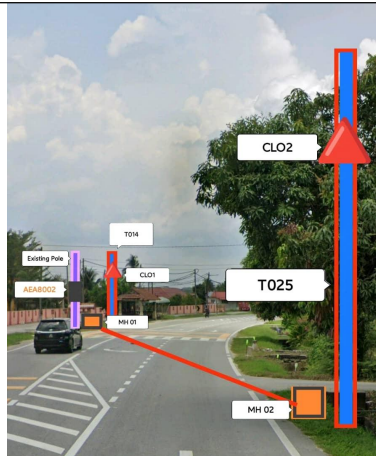


Site Photos – Proposed to install pole 7.5m



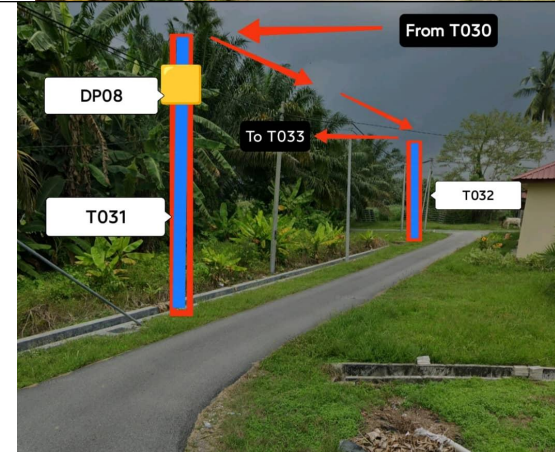
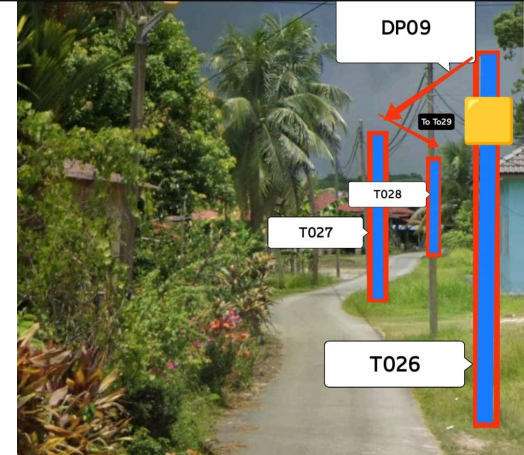
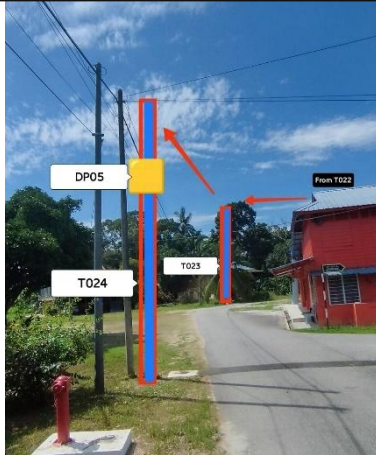


PROJEK PENYEDIAAN DAN PENYELENGGARAAN POINT OF PRESENSE (POP) FASA 2: HUB INFRASTRUKTUR GENTIAN OPTIK BERHAMPIRAN DENGAN SEKOLAH, KAWASAN PERINDUSTRIAN, PREMIS KERAJAAN DAN KOMUNITI SEKITARNYA OLEH KEMENTERIAN KOMUNIKASI MALAYSIA – ZON UTARA (KKMM.400-11/17/132(1))



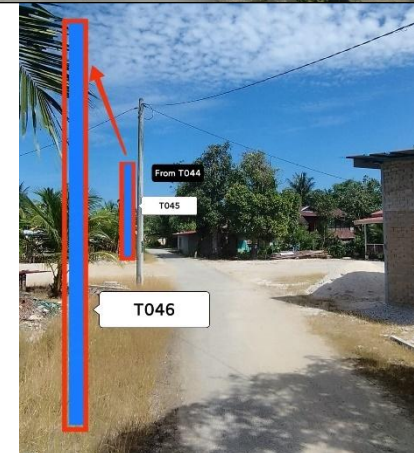
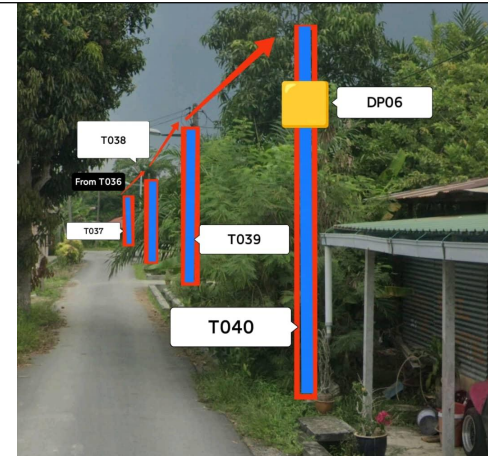
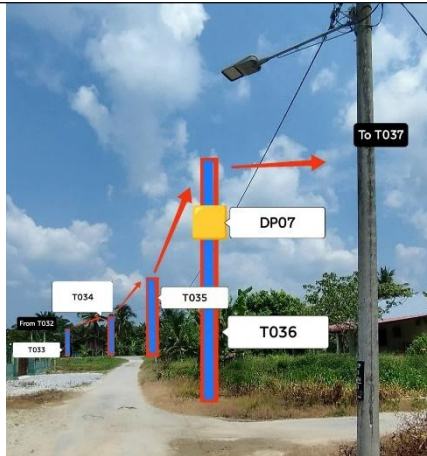


PROJEK PENYEDIAAN DAN PENYELENGGARAAN POINT OF PRESENSE (POP) FASA 2: HUB INFRASTRUKTUR GENTIAN OPTIK BERHAMPIRAN DENGAN SEKOLAH, KAWASAN PERINDUSTRIAN, PREMIS KERAJAAN DAN KOMUNITI SEKITARNYA OLEH KEMENTERIAN KOMUNIKASI MALAYSIA – ZON UTARA (KKMM.400-11/17/132(1))



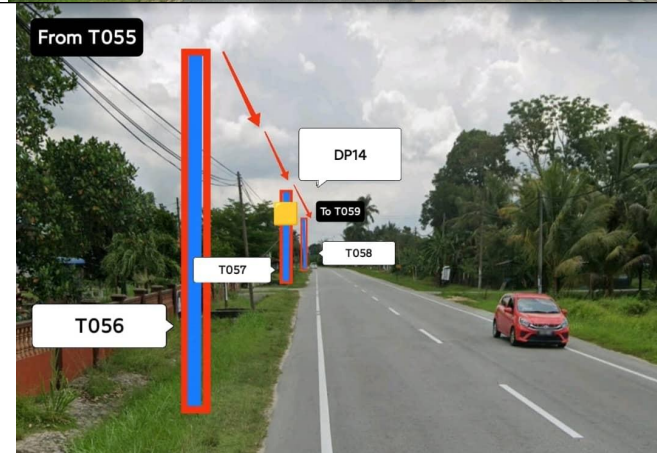
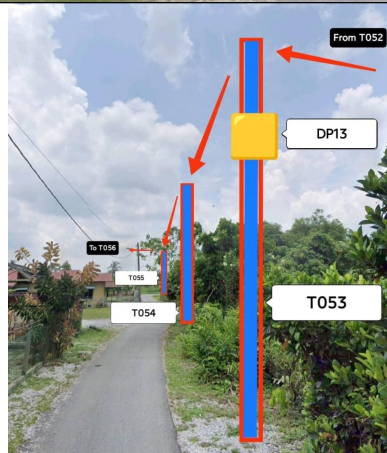
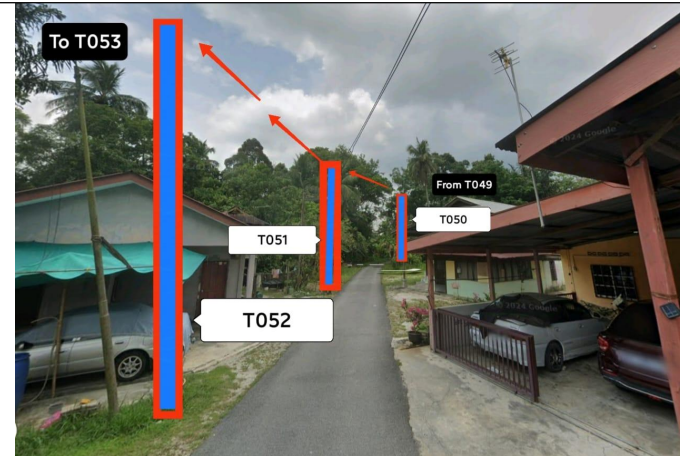
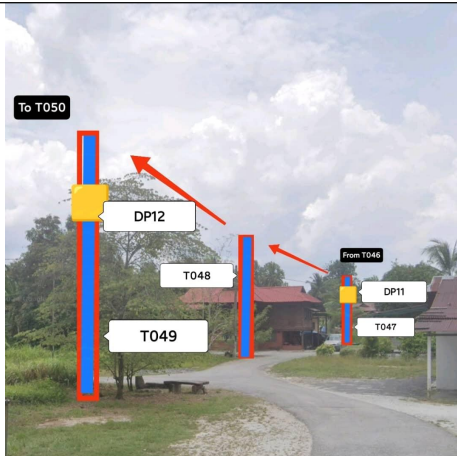


PROJEK PENYEDIAAN DAN PENYELENGGARAAN POINT OF PRESENSE (POP) FASA 2: HUB INFRASTRUKTUR GENTIAN OPTIK BERHAMPIRAN DENGAN SEKOLAH, KAWASAN PERINDUSTRIAN, PREMIS KERAJAAN DAN KOMUNITI SEKITARNYA OLEH KEMENTERIAN KOMUNIKASI MALAYSIA – ZON UTARA (KKMM.400-11/17/132(1))



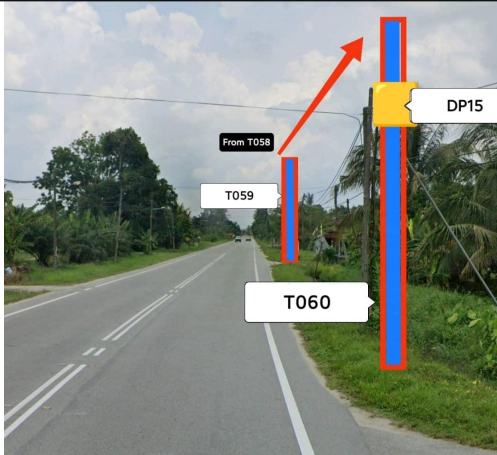


PROJEK PENYEDIAAN DAN PENYELENGGARAAN POINT OF PRESENSE (POP) FASA 2: HUB INFRASTRUKTUR GENTIAN OPTIK BERHAMPIRAN DENGAN SEKOLAH, KAWASAN PERINDUSTRIAN, PREMIS KERAJAAN DAN KOMUNITI SEKITARNYA OLEH KEMENTERIAN KOMUNIKASI MALAYSIA – ZON UTARA (KKMM.400-11/17/132(1))





PROJEK PENYEDIAAN DAN PENYELENGGARAAN POINT OF PRESENSE (POP) FASA 2: HUB 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))





PROJEK PENYEDIAAN DAN PENYELENGGARAAN POINT OF PRESENSE (POP) FASA 2: HUB 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	
2	Majlis Daerah Perak Tengah	
3		
4		
5		
6		



LEGEND	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.
12C FOC		Installed 1:4 / 1:8 / 1:32 splitter	9m Installed Pole (9m)		9 Suspension	JB30 C7 New Manhole (PIT)	Micro-Trenching (Meter)	MH1 MH NO.
24C FOC	2797	Installed Patch Cord	Installed Pole (7.5M)	90	↑ Tension	New Manhole(JRC7)	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	4 Existing TNB Pole		FDP with (1:8) splitter	17 HDD (Meter)	# Active Outdoor Cabinet	CL01 Closure NO.
144C FOC		Existing Closure	Installed Riser		Existing Manhole	Open Cut (Meter)	C01 FDC NO.	DP1 FDP NO.

KEY PLAN :

POP2 PROJECT IN PERAK

OWNER/DEVELOPOR :

APEX COMMUNICATIONS SDN BHD

APEX COMMUNICATIONS SDN BHD
12th FLOOR, MENARA HAP SENG,
50250 JALAN P. RAMLEE
KUALA LUMPUR

MAIN CONTRACTOR :

WCWL COMMUNICATIONS SDN BHD

127, JALAN PUU 3/3, TAMAN PUNCAK JALIL,
BANDAR PUTRA PERMAI,
43300 SERI KEMBANGAN, SELANGOR
TEL: +603 6888 5983
E-MAIL : info@wcwlcommunications.com.my
WEBSITE: https://wcwl.com.my

PROJECT TITLE :

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

DRAWING TITLE:

AS - BUILT DRAWING SITE PLAN DRAWING
AEA8002
SEKOLAH MENENGAH KEBANGSAAN SULTAN MUZAFAR
SHAH 1

PROJECT PHASE:

POP 2

Design By : ENGINEER

Date : FEB 2025

Drawn By : ENGINEER

Scale : NOT TO SCALE

Checked By : ENGINEER

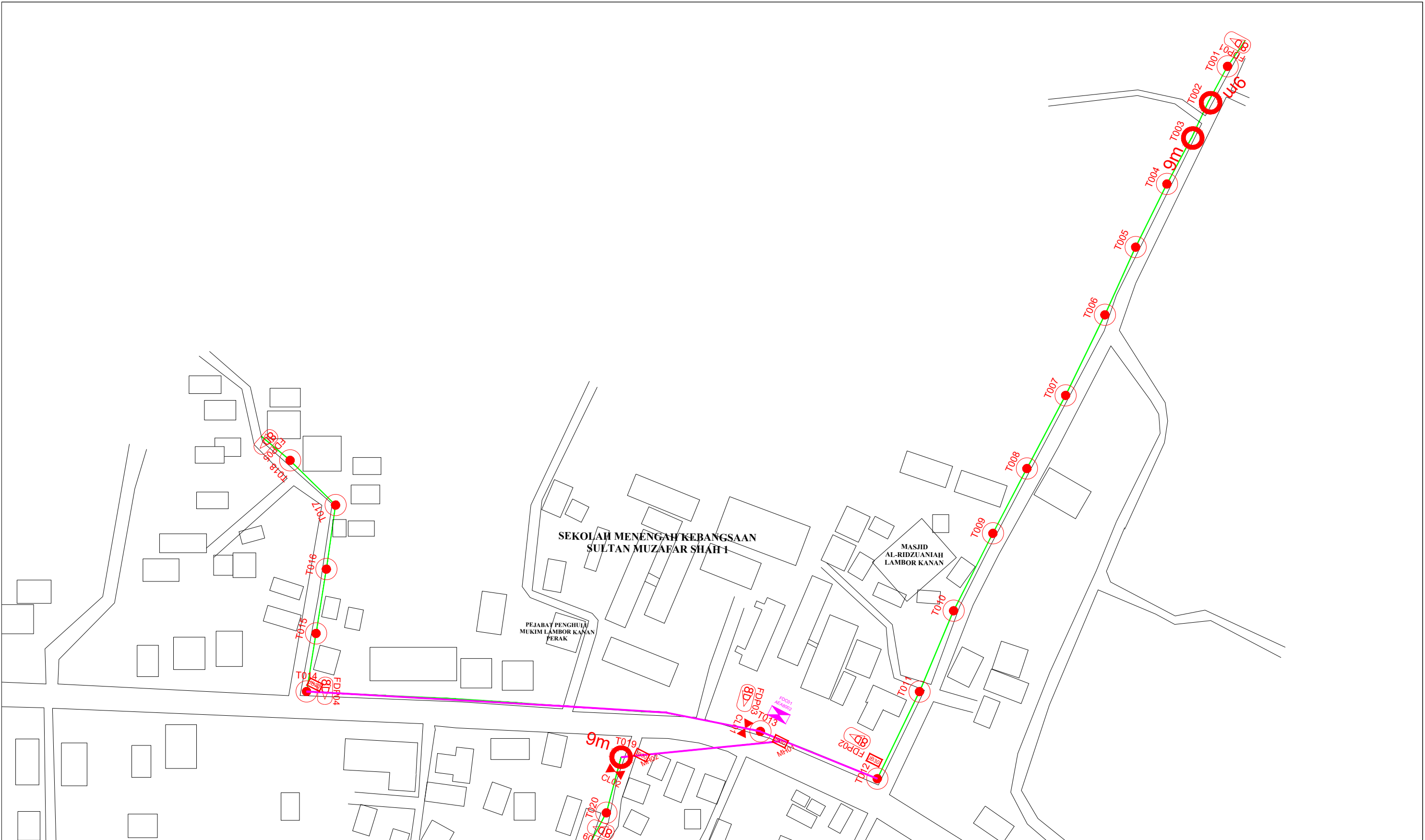
Job Number :

DRAWING NUMBER : ABA8228 - ABD - 01B

Sheet : 2/3

THIS PRINT AND ITS COPYRIGHT ARE THE PROPERTY OF APEX COMMUNICATIONS SDN BHD

Size : A3



LEGEND		NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	NOS.	ACTUAL HOMEPASS :							
	12C FOC	2797	Installed 1:4 / 1:8 / 1:32 splitter		Installed Pole (9m)	90		Suspension		New Manhole (PIT)		Micro-Trenching (Meter)		MH NO.			
	24C FOC		Installed Patch Cord		Installed Pole (7.5M)			Tension		New Manhole(JRC7)		Temporary Infra (Meter)		Existing TNB Pole NO.			
	48C FOC			FDC			Installed Pole (6.7M)		Pole Ring		FDP Boundary		Loop / Coil (Meter)		New Pole NO.		
	96C FOC			Closure			Existing TNB Pole		FDP with (1:8) splitter		HDD (Meter)		Active Outdoor Cabinet		Closure NO.		
	144C FOC		Existing Closure		Installed Riser		Existing Manhole		Open Cut (Meter)		FDC NO.		FDP NO.				
KEY PLAN : POP2 PROJECT IN PERAK			OWNER/DEVELOPOR : APEX COMMUNICATIONS SDN BHD 12th FLOOR, MENARA HAP SENG, 50250 JALAN P. RAMLEE KUALA LUMPUR			MAIN CONTRACTOR : WCWL COMMUNICATIONS SDN BHD 127, JALAN PUJ 3/3, TAMAN PUNCAK JALIL, BANDAR PUTRA PERMAI, 43300 SERI KEMBANGAN, SELANGOR TEL: +603 5888 5983 E-MAIL : info@wcwcommunications.com.my WEBSITE: https://wcwl.com.my			PROJECT TITLE : CONTRACTOR FOR SURVEY, TECHNICAL PROPOSAL AND WAYLEAVE, & PERMIT APPROVAL - POP2 PROJECT			DRAWING TITLE: AS - BUILT DRAWING SITE PLAN DRAWING AEA8002 SEKOLAH MENENGAH KEBANGSAAN SULTAN MUZAFAR SHAH 1		Design By : ENGINEER		Date : FEB 2025	
														Drawn By : ENGINEER		Scale : NOT TO SCALE	
														Checked By : ENGINEER		Job Number :	
														DRAWING NUMBER : ABA8228 - ABD - 01B		Sheet : 2/3	
POP 2			THIS PRINT AND ITS COPYRIGHT ARE THE PROPERTY OF APEX COMMUNICATIONS SDN BHD			Size : A3			PROJECT PHASE: POP 2								



LEGEND		NOS.		NOS.		NOS.		NOS.		NOS.		NOS.		ACTUAL HOMEPASS :							
	12C FOC		Installed 1:4 / 1:8 / 1:32 splitter		Installed Pole (9m)		Suspension		New Manhole (PIT)		Micro-Trenching (Meter)		MH NO.								
	24C FOC	2797	Installed Patch Cord		Installed Pole (7.5M)		Tension		New Manhole(JRC7)		Temporary Infra (Meter)		Existing TNB Pole NO.								
	48C FOC			1			Pole Ring				Loop / Coil (Meter)		New Pole NO.								
	96C FOC			4			FDP with (1:8) splitter	17		HDD (Meter)		Active Outdoor Cabinet	CL01	Closure NO.							
	144C FOC						Existing Manhole			Open Cut (Meter)		FDC NO.	DP1	FDP NO.							
			KEY PLAN :	OWNER/DEVELOPOR :			MAIN CONTRACTOR :			PROJECT TITLE :			DRAWING TITLE:			Design By : ENGINEER		Date : FEB 2025			
			POP2 PROJECT IN PERAK									CONTRACTOR FOR SURVEY, TECHNICAL PROPOSAL AND WAYLEAVE, & PERMIT APPROVAL - POP2 PROJECT			AS - BUILT DRAWING SITE PLAN DRAWING AEA8002 SEKOLAH MENENGAH KEBANGSAAN SULTAN MUZAFAR SHAH 1			Drawn By : ENGINEER		Scale : NOT TO SCALE	
			APEX COMMUNICATIONS SDN BHD 12th FLOOR, MENARA HAP SENG, 50250 JALAN P. RAMLEE KUALA LUMPUR			WCWL COMMUNICATIONS SDN BHD 127, JALAN PUJ 3/3, TAMAN PUNCAK JALIL, BANDAR PUTRA PERMAI, 43300 SERI KEMBANGAN, SELANGOR TEL: +603 6888 5983 E-MAIL : info@wcwlcommunications.com.my WEBSITE: https://wcwl.com.my			PROJECT PHASE: POP 2			Checked By : ENGINEER			Job Number :		Sheet : 2/3				
												DRAWING NUMBER : ABA8228 - ABD - 01B			THIS PRINT AND ITS COPYRIGHT ARE THE PROPERTY OF APEX COMMUNICATIONS SDN BHD		Size : A3				