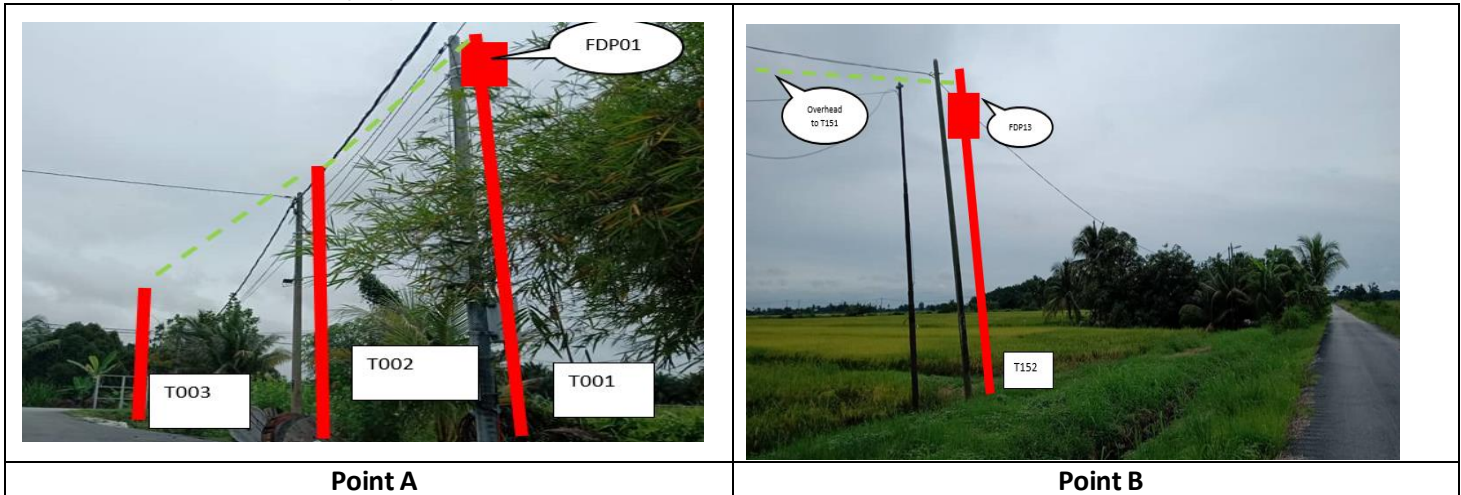


TECHNICAL PROPOSAL

POP2 AEA5072 SEKOLAH MENENGAH KEBANGSAAN SUNGAI MANIK (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 : NATHIYA A/P KRISHNAN
Date : 20/12/2024



Starting Point

Site / Boundary Name : Teluk Intan
 Address : Sekolah Menengah Kebangsaan Sungai Manik, Parit 13B Sungai Manik,
 36000 Teluk Intan
 District : Hilir Perak
 Postcode : 36000
 State : Perak
 GPS Coordinate : 4.07612, 101.10068
 LRD : A

End Point

Site / Boundary Name : Teluk Intan
 Address : Kampung Sungai Bukit, 36750 Chikus, Perak
 District : Hilir Perak
 Postcode : 36750
 State : Perak
 GPS Coordinate : 4.07795, 101.08756
 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	120
2	Carriage Way Open Trench (CW)	m	0
3	Grass Verge Open Trenching (GV)	m	12
4	Micro Trenching (MT)	m	0
Total			0

NO	OTHER INFORMATION	UNIT	QUANTITY
1	Installation of Short Span ADSS Fibre Cables	m	7,130
2	Install New Pole	ea	152
3	Install New JRC7 Manhole	ea	4
4	Install GI Riser 100mm	ea	0
5	Install Fiber Distribution Point	ea	13
6	Install Closure	ea	2
7	Estimated Time Required for Completion	days	30

2.0 LOCAL AUTHORITY SUMMARY

Daerah Hilir Perak

Bil	Items	Owner	Quantity	Distance
1	HDD	JKR	2	120m
		Majlis	-	-
		Estate / Private Land	-	-
2	New Pole	JKR	51	2,550m
		Majlis	101	4,460m
		Estate / Private Land	-	-
3	Existing TNB Pole	JKR	-	-
		Majlis	-	-
		Estate / Private Land	-	-
Total				7,130m

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

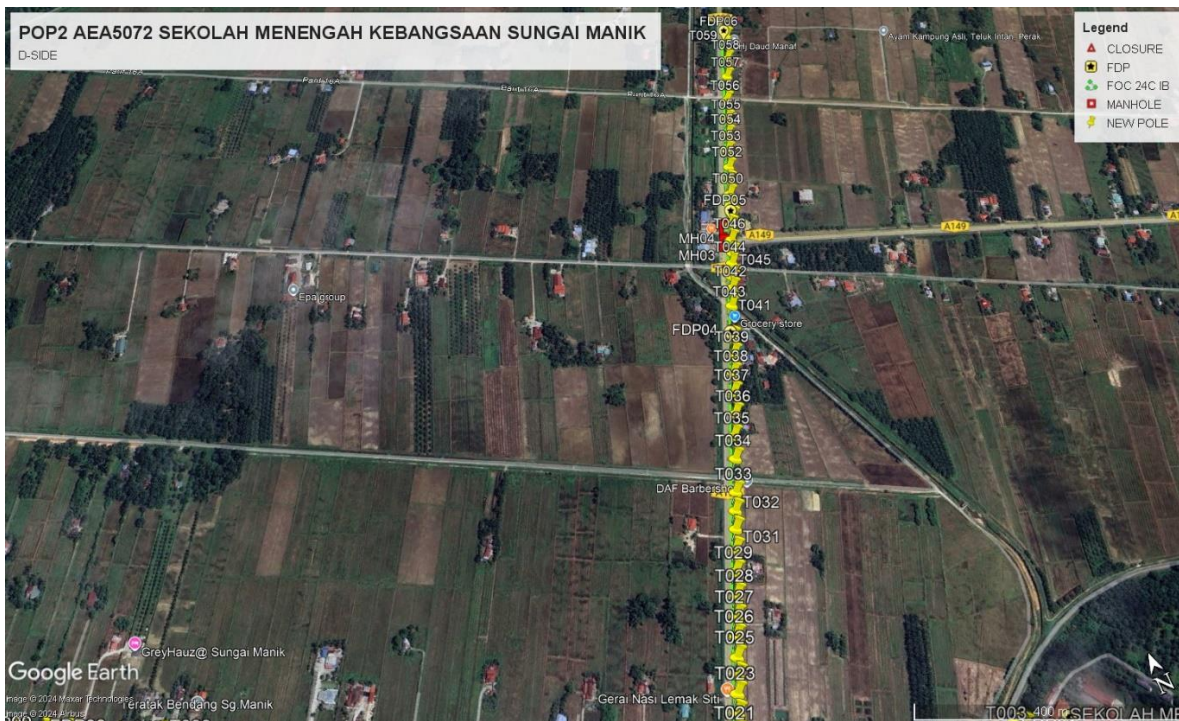


Route 1.1



Route 1.2

Route 2



Route 2.1

3.0 PROPOSED NEW POLE

Proposed New Pole Coordinate					
No.	Pole Number	Distance (m)	Latitude	Longitude	Local Authority
1	T001	40	4.0761165188	101.100677278	Majlis Perbandaran Teluk Intan
2	T002	40	4.0761874178	101.100589589	Majlis Perbandaran Teluk Intan
3	T003	40	4.0761289060	101.100441728	Majlis Perbandaran Teluk Intan
4	T004	40	4.0760220768	101.100264645	Majlis Perbandaran Teluk Intan
5	T005	40	4.0759665099	101.100167316	Majlis Perbandaran Teluk Intan
6	T006	40	4.0759601642	101.099968211	Majlis Perbandaran Teluk Intan
7	T007	40	4.0757305679	101.099592751	Majlis Perbandaran Teluk Intan
8	T008	40	4.0755558860	101.099255072	Majlis Perbandaran Teluk Intan
9	T009	40	4.0753642791	101.098929552	Majlis Perbandaran Teluk Intan
10	T010	40	4.0751839875	101.098618202	Majlis Perbandaran Teluk Intan
11	T011	40	4.0749838570	101.098271693	Majlis Perbandaran Teluk Intan
12	T012	40	4.0748004517	101.09791315	Majlis Perbandaran Teluk Intan
13	T013	40	4.0762402347	101.09959851	Majlis Perbandaran Teluk Intan
14	T014	40	4.0763627668	101.099320684	Majlis Perbandaran Teluk Intan
15	T015	40	4.0765482396	101.098995350	Majlis Perbandaran Teluk Intan
16	T016	40	4.0766823795	101.09865388	Majlis Perbandaran Teluk Intan
17	T017	40	4.0768848055	101.098284860	Majlis Perbandaran Teluk Intan
18	T018	40	4.0770448733	101.097993525	Majlis Perbandaran Teluk Intan
19	T019	40	4.0772047518	101.097654032	Majlis Perbandaran Teluk Intan
20	T020	40	4.0774227397	101.097184448	JKR Hilir Perak
21	T021	40	4.0776555285	101.097281287	JKR Hilir Perak
22	T022	40	4.0778705941	101.097411645	JKR Hilir Perak
23	T023	40	4.0780913901	101.097533341	JKR Hilir Perak
24	T024	40	4.0782862813	101.097653754	JKR Hilir Perak
25	T025	40	4.0785063568	101.09776583	JKR Hilir Perak
26	T026	40	4.0787577632	101.097900568	JKR Hilir Perak

3.0 PROPOSED NEW POLE

Proposed New Pole Coordinate					
No.	Pole Number	Distance (m)	Latitude	Longitude	Local Authority
27	T027	40	4.07899129921	101.098037651	JKR Hilir Perak
28	T028	40	4.07924813886	101.098184086	JKR Hilir Perak
29	T029	40	4.07954381764	101.098336578	JKR Hilir Perak
30	T030	40	4.0798275650	101.098498876	JKR Hilir Perak
31	T031	40	4.08009675035	101.098653004	JKR Hilir Perak
32	T032	40	4.08034151455	101.098788457	JKR Hilir Perak
33	T033	40	4.08058756545	101.098933837	JKR Hilir Perak
34	T034	40	4.08105647952	101.099196125	JKR Hilir Perak
35	T035	40	4.08138930922	101.099362435	JKR Hilir Perak
36	T036	40	4.08170487311	101.099562536	JKR Hilir Perak
37	T037	40	4.08203182593	101.099724525	JKR Hilir Perak
38	T038	40	4.0823295975	101.099882232	JKR Hilir Perak
39	T039	40	4.08262738265	101.100063032	JKR Hilir Perak
40	T040	40	4.08289274141	101.100193609	JKR Hilir Perak
41	T041	40	4.08342541925	101.100477031	JKR Hilir Perak
42	T042	40	4.08372739159	101.100661510	JKR Hilir Perak
43	T043	40	4.0839319417	101.100755878	JKR Hilir Perak
44	T044	40	4.0841532478	101.100896728	JKR Hilir Perak
45	T045	40	4.08432902897	101.101006369	JKR Hilir Perak
46	T046	40	4.08457998712	101.101127035	JKR Hilir Perak
47	T047	40	4.08484394096	101.101264287	JKR Hilir Perak
48	T048	40	4.08499865252	101.101384965	JKR Hilir Perak
49	T049	40	4.08521466133	101.101458329	JKR Hilir Perak
50	T050	40	4.08544187969	101.101583230	JKR Hilir Perak
51	T051	40	4.08570900632	101.101727365	JKR Hilir Perak
52	T052	40	4.0859793161	101.101874040	JKR Hilir Perak
53	T053	40	4.08631578546	101.1020411338	JKR Hilir Perak

3.0 PROPOSED NEW POLE

Proposed New Pole Coordinate					
No.	Pole Number	Distance (m)	Latitude	Longitude	Local Authority
54	T054	40	4.08664905384	101.102232273	JKR Hilir Perak
55	T055	40	4.0869552642	101.102397884	JKR Hilir Perak
56	T056	40	4.08737545103	101.102618197	JKR Hilir Perak
57	T057	40	4.08787538205	101.102904184	JKR Hilir Perak
58	T058	40	4.08827836008	101.103134471	JKR Hilir Perak
59	T059	40	4.08881132310	101.103411285	JKR Hilir Perak
60	T060	40	4.07750329978	101.096954773	Majlis Perbandaran Teluk Intan
61	T061	40	4.07758298381	101.096803485	Majlis Perbandaran Teluk Intan
62	T062	40	4.07763881805	101.096686396	Majlis Perbandaran Teluk Intan
63	T063	40	4.07770902417	101.096548464	Majlis Perbandaran Teluk Intan
64	T064	40	4.07778468948	101.096386142	Majlis Perbandaran Teluk Intan
65	T065	40	4.07787246675	101.096244991	Majlis Perbandaran Teluk Intan
66	T066	40	4.07797910034	101.096006018	Majlis Perbandaran Teluk Intan
67	T067	40	4.07811789544	101.095784264	Majlis Perbandaran Teluk Intan
68	T068	40	4.07819766971	101.095602992	Majlis Perbandaran Teluk Intan
69	T069	40	4.07829723965	101.095401818	Majlis Perbandaran Teluk Intan
70	T070	40	4.07839109403	101.095198981	Majlis Perbandaran Teluk Intan
71	T071	40	4.07849714495	101.094973393	Majlis Perbandaran Teluk Intan
72	T072	40	4.07859434399	101.094810452	Majlis Perbandaran Teluk Intan
73	T073	40	4.078678153796	101.094654303	Majlis Perbandaran Teluk Intan
74	T074	40	4.07876691619	101.094450744	Majlis Perbandaran Teluk Intan
75	T075	40	4.07889740749	101.094227679	Majlis Perbandaran Teluk Intan
76	T076	40	4.07899773780	101.094036193	Majlis Perbandaran Teluk Intan
77	T077	40	4.07909072516	101.093858970	Majlis Perbandaran Teluk Intan
78	T078	40	4.07923104853	101.093611364	Majlis Perbandaran Teluk Intan
79	T079	40	4.07933522554	101.093378243	Majlis Perbandaran Teluk Intan
80	T080	40	4.07947204551	101.093141547	Majlis Perbandaran Teluk Intan
81	T081	40	4.07958255690	101.092947805	Majlis Perbandaran Teluk Intan
82	T082	40	4.07968681722	101.092744742	Majlis Perbandaran Teluk Intan
83	T083	40	4.07979529483	101.092532773	Majlis Perbandaran Teluk Intan
84	T084	40	4.07989827113	101.092320471	Majlis Perbandaran Teluk Intan

3.0 PROPOSED NEW POLE

Proposed New Pole Coordinate					
No.	Pole Number	Distance (m)	Latitude	Longitude	Local Authority
85	T085	40	4.08000288171	101.092139198	Majlis Perbandaran Teluk Intan
86	T086	40	4.08010091295	101.091928422	Majlis Perbandaran Teluk Intan
87	T087	40	4.08022209285	101.091746162	Majlis Perbandaran Teluk Intan
88	T088	40	4.08030239027	101.091570509	Majlis Perbandaran Teluk Intan
89	T089	40	4.08040588600	101.091396587	Majlis Perbandaran Teluk Intan
90	T090	40	4.08051205698	101.091199080	Majlis Perbandaran Teluk Intan
91	T091	40	4.08064145954	101.090966029	Majlis Perbandaran Teluk Intan
92	T092	40	4.08075858334	101.090737632	Majlis Perbandaran Teluk Intan
93	T093	40	4.08085953635	101.090570501	Majlis Perbandaran Teluk Intan
94	T094	40	4.08091623844	101.090418763	Majlis Perbandaran Teluk Intan
95	T095	40	4.08099205649	101.090265568	Majlis Perbandaran Teluk Intan
96	T096	40	4.08104276285	101.090142762	Majlis Perbandaran Teluk Intan
97	T097	40	4.08121316222	101.089834945	Majlis Perbandaran Teluk Intan
98	T098	40	4.08141253769	101.089509402	Majlis Perbandaran Teluk Intan
99	T099	40	4.08156636301	101.089214822	Majlis Perbandaran Teluk Intan
100	T100	40	4.08173650103	101.08887674	Majlis Perbandaran Teluk Intan
101	T101	40	4.08197733712	101.088424659	Majlis Perbandaran Teluk Intan
102	T102	40	4.08222414254	101.087981927	Majlis Perbandaran Teluk Intan
103	T103	40	4.08238055455	101.087679813	Majlis Perbandaran Teluk Intan
104	T104	40	4.08263196461	101.087214814	Majlis Perbandaran Teluk Intan
105	T105	40	4.08285826525	101.086766448	Majlis Perbandaran Teluk Intan
106	T106	40	4.08300932932	101.08645691	Majlis Perbandaran Teluk Intan
107	T107	40	4.08317579833	101.086137369	Majlis Perbandaran Teluk Intan
108	T108	40	4.08332568989	101.085896806	Majlis Perbandaran Teluk Intan
109	T109	40	4.08346001927	101.085636835	Majlis Perbandaran Teluk Intan
110	T110	40	4.08359025264	101.085360365	Majlis Perbandaran Teluk Intan
111	T111	40	4.08383646076	101.084932268	Majlis Perbandaran Teluk Intan

3.0 PROPOSED NEW POLE

Proposed New Pole Coordinate					
No.	Pole Number	Distance (m)	Latitude	Longitude	Local Authority
112	T112	40	4.08407248896	101.084494873	Majlis Perbandaran Teluk Intan
113	T113	40	4.08425755808	101.084130503	Majlis Perbandaran Teluk Intan
114	T114	40	4.08442957809	101.083799205	Majlis Perbandaran Teluk Intan
115	T115	40	4.08457763529	101.083520493	Majlis Perbandaran Teluk Intan
116	T116	40	4.07721159834	101.096893951	JKR Hilir Perak
117	T117	40	4.07696787446	101.096749265	JKR Hilir Perak
118	T118	40	4.07672415052	101.096604579	JKR Hilir Perak
119	T119	40	4.07643524623	101.096450773	JKR Hilir Perak
120	T120	40	4.07622763812	101.096324188	JKR Hilir Perak
121	T121	40	4.07603808795	101.096206652	JKR Hilir Perak
122	T122	40	4.07581239822	101.096080021	JKR Hilir Perak
123	T123	40	4.07555061592	101.095926285	JKR Hilir Perak
124	T124	40	4.07512626439	101.095709105	JKR Hilir Perak
125	T125	40	4.07477423879	101.095492113	JKR Hilir Perak
126	T126	40	4.07452156745	101.095311391	JKR Hilir Perak
127	T127	40	4.07433215788	101.095139837	JKR Hilir Perak
128	T128	40	4.07423114907	101.095036378	Majlis Perbandaran Teluk Intan
129	T129	40	4.07429384395	101.094913347	Majlis Perbandaran Teluk Intan
130	T130	40	4.0743705570	101.094747290	Majlis Perbandaran Teluk Intan
131	T131	40	4.07435844665	101.094635224	Majlis Perbandaran Teluk Intan
132	T132	40	4.07445304059	101.094441141	Majlis Perbandaran Teluk Intan
133	T133	40	4.07454300378	101.094259195	Majlis Perbandaran Teluk Intan
134	T134	40	4.07466250248	101.094055727	Majlis Perbandaran Teluk Intan
135	T135	40	4.07477191223	101.093827403	Majlis Perbandaran Teluk Intan
136	T136	40	4.0748601474	101.093626928	Majlis Perbandaran Teluk Intan
137	T137	40	4.07497059774	101.093414267	Majlis Perbandaran Teluk Intan
138	T138	40	4.07506834356	101.093209879	Majlis Perbandaran Teluk Intan
139	T139	40	4.07517723320	101.09299621	Majlis Perbandaran Teluk Intan
140	T140	40	4.07529136100	101.092814561	Majlis Perbandaran Teluk Intan
141	T141	40	4.07540540941	101.092583745	Majlis Perbandaran Teluk Intan
142	T142	40	4.07555006663	101.092279727	Majlis Perbandaran Teluk Intan
143	T143	40	4.0757189552	101.091920466	Majlis Perbandaran Teluk Intan
144	T144	40	4.07595483532	101.091502634	Majlis Perbandaran Teluk Intan
145	T145	40	4.07620002058	101.090970458	Majlis Perbandaran Teluk Intan
146	T146	40	4.07644062455	101.090488742	Majlis Perbandaran Teluk Intan

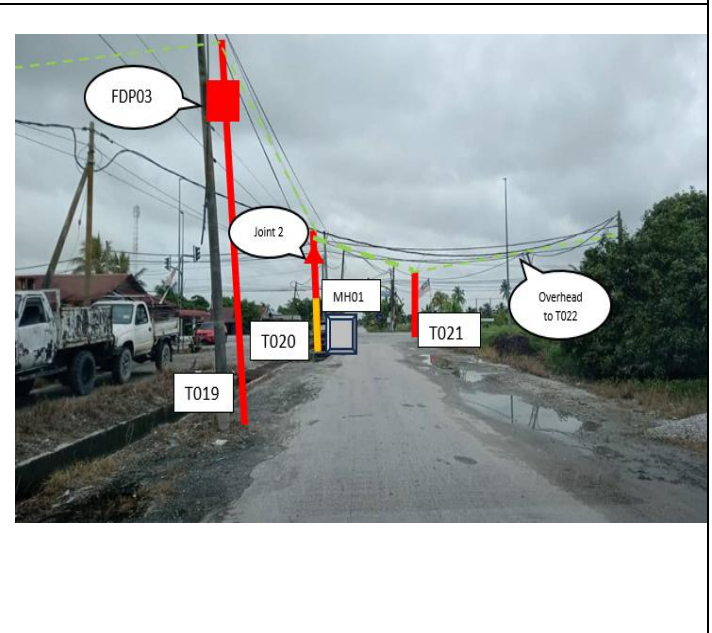
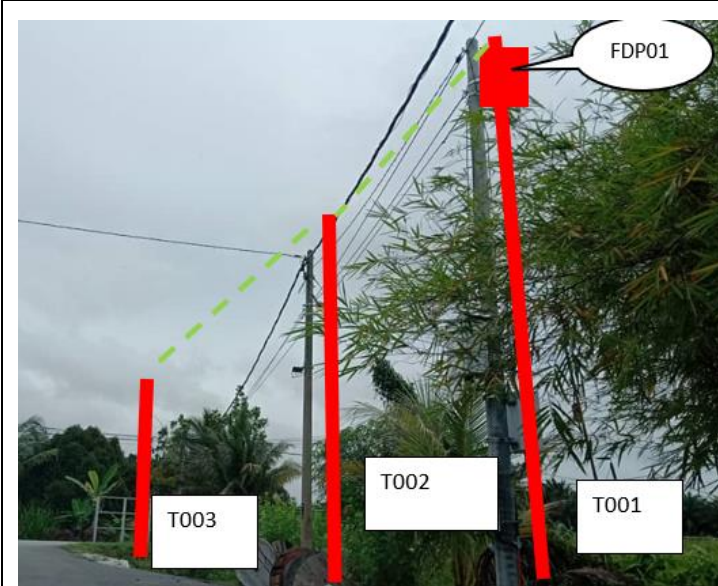


PROJEK PENYEDIAAN DAN PENYELENGGARAAN POINT OF PRESENCE (POP) FASA 2: HAB INFRASTRUKTUR GENTIAN OPTIK BERHAMPIRAN DENGAN SEKOLAH, KAWASAN PERINDUSTRIAN, PREMIS KERAJAAN DAN KOMUNITI SEKITARNYA OLEH KEMENTERIAN KOMUNIKASI MALAYSIA – ZON UTARA (KKMM.400-11/17/132(1))

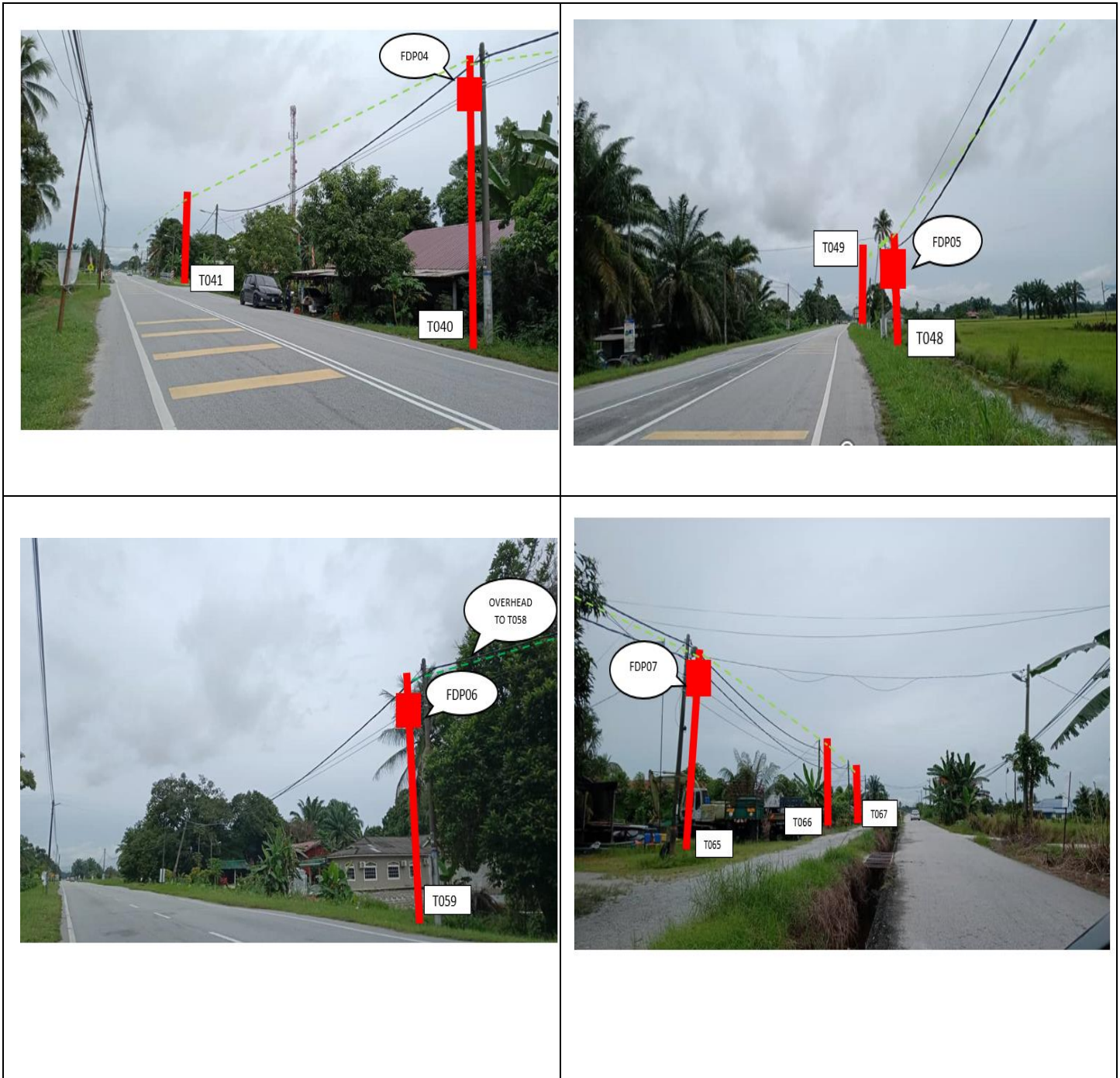


147	T147	40	4.07673353234	101.089940626	Majlis Perbandaran Teluk Intan
148	T148	40	4.07705400493	101.089319221	Majlis Perbandaran Teluk Intan
149	T149	40	4.07728939523	101.088867613	Majlis Perbandaran Teluk Intan
150	T150	40	4.07748348248	101.088494195	Majlis Perbandaran Teluk Intan
151	T151	40	4.07769387848	101.088036383	Majlis Perbandaran Teluk Intan
152	T152	40	4.07795280144	101.087563310	Majlis Perbandaran Teluk Intan

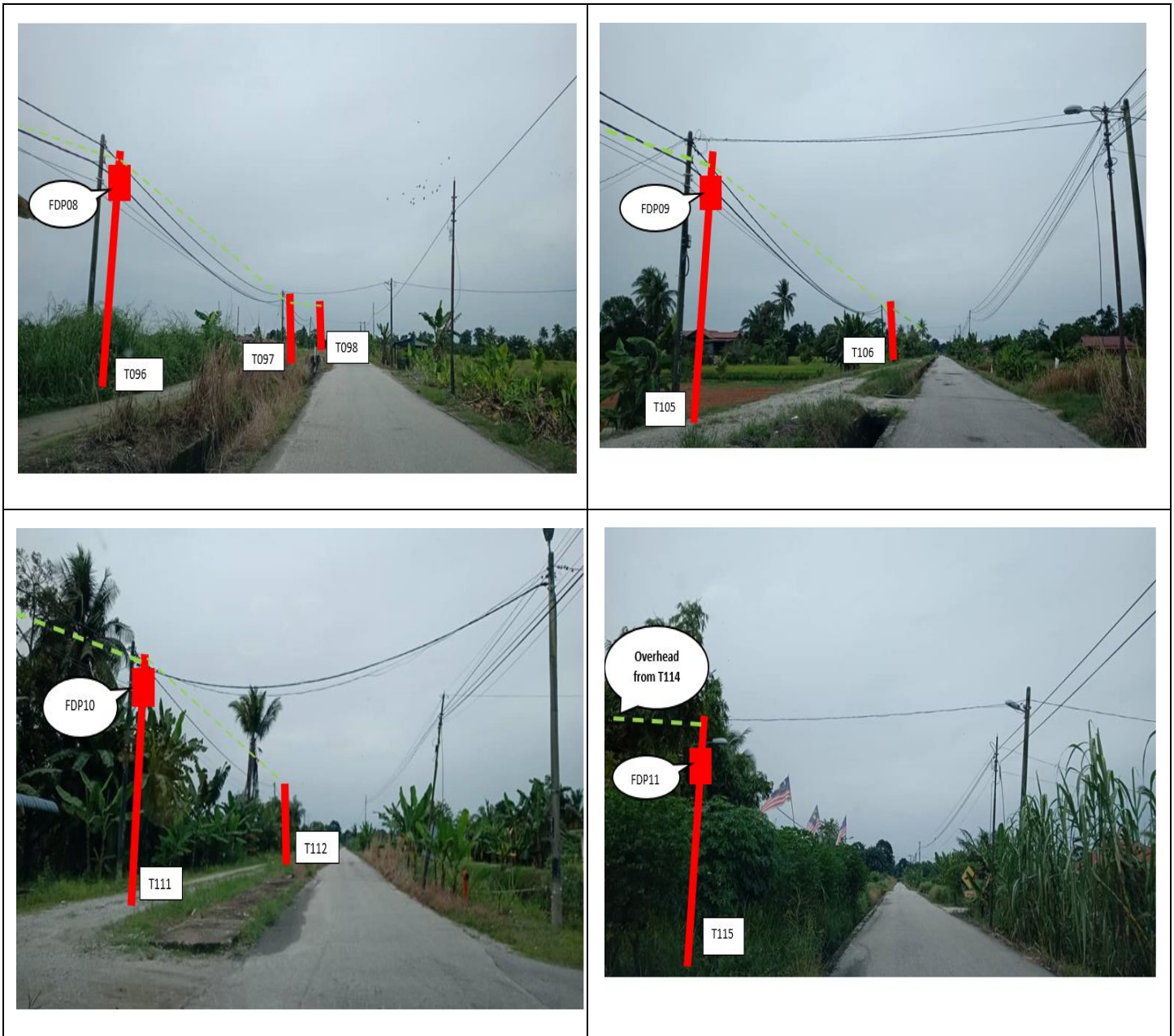
4.0 SITE PHOTOS - PROPOSED NEW POLE



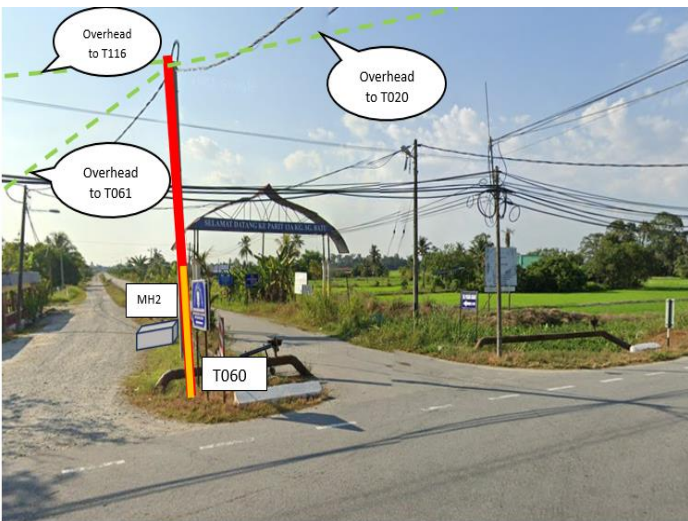
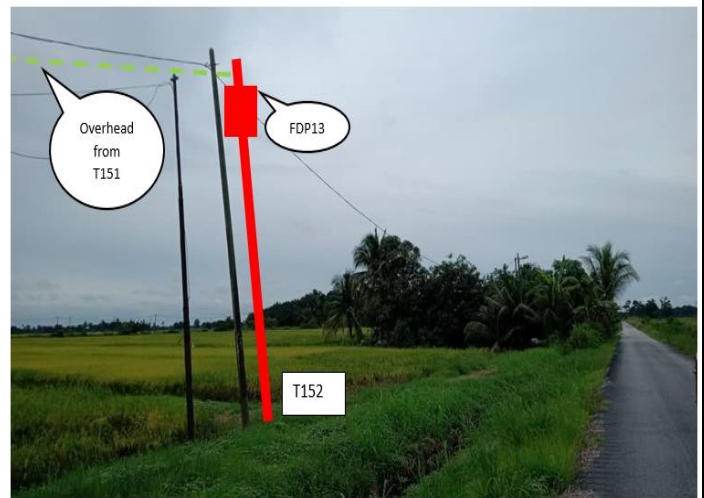
4.0 SITE PHOTOS - PROPOSED NEW POLE





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 3rd PARTIES DEPENDENCIES

NO	LOCAL COUNCIL / AUTHORITY	REMARK
1	Majlis Perbandaran Teluk Intan	4,460M
2	JKR Hilir Perak	2,670M




LEGEND

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

KEY PLAN

PROJECT OWNER



PROJECT OWNER



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 MENENGAH KEBANGSAAN SUNGAI MANIK

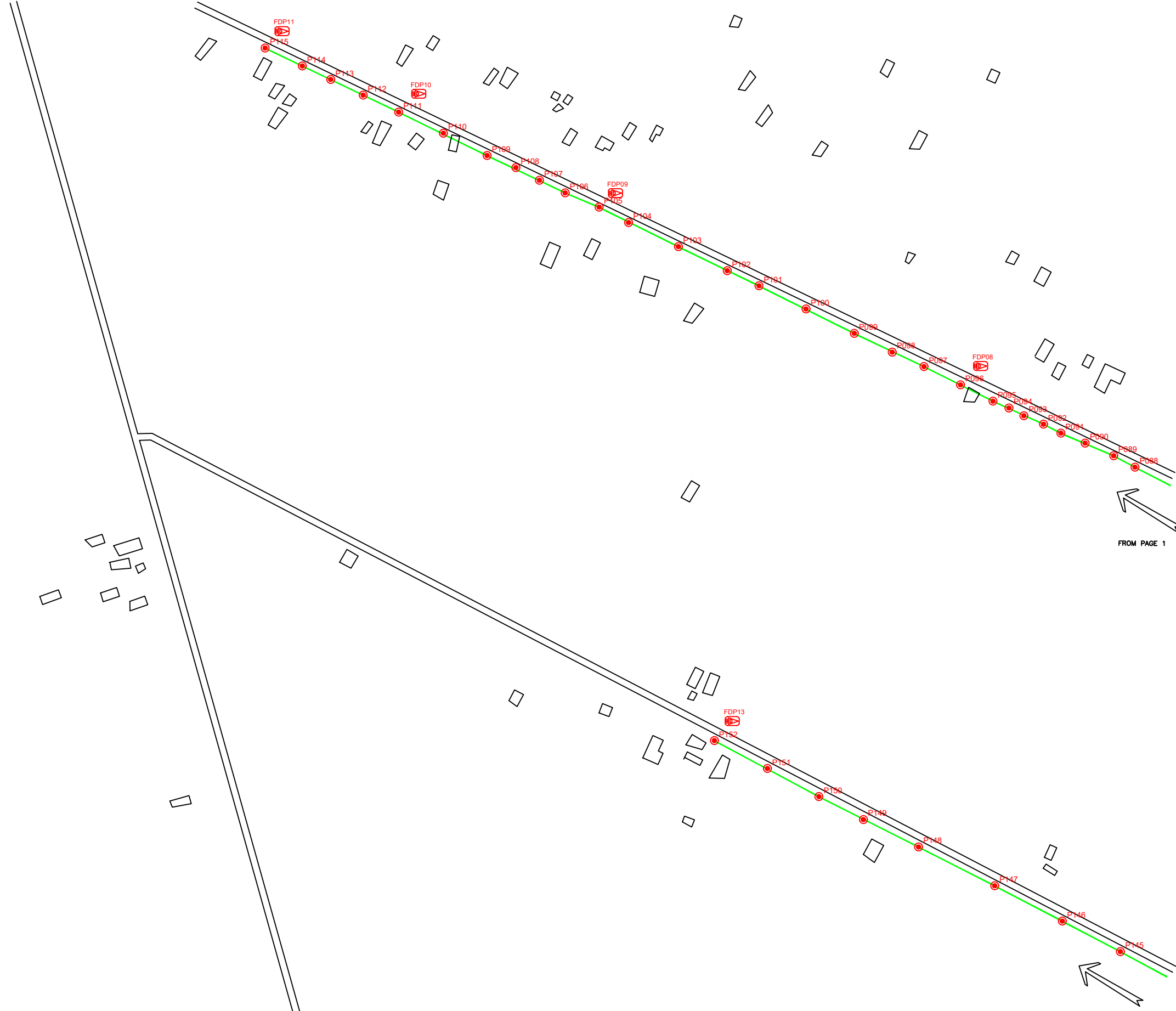
DRAWING TITLE

TP DRAWING POP 2 AT SEKOLAH MENENGAH KEBANGSAAN SUNGAI MANIK

PROJECT PHASE

PROJECT PHASE 2

DESIGN BY	NABIL	DATE	19/12/2024
DRAWN BY	NABIL	SCALE	NOT TO SCALE
CHECKED BY	AZHAN HARIS	JOB NUMBER	AEA5072
DRAWING NUMBER		AEA5072	
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LEGEND

	12C FOC		Installed 1:4 splitter in FDC		INSTALLED POLE (9M)		NEW MANHOLE		TS / TB TENSION SMALL / TENSION BIG		MH NO.
	24C FOC		FDP		INSTALLED RISER		HOUSE NUMBER		EXISTING MANHOLE		EXISTING TNB POLE NO.
	48C FOC		CLOSURE		SUSPENSION BIG		EXISTING ALLO POLE		CLOSURE NO.		NEW POLE NO.
	90C FOC		NEW MANHOLE (PIT)		SUSPENSION SMALL		LOOP		FDP NO.		SEE SHEET XXXX
	144C FOC		INSTALLED POLE		FDC		FDP BOUNDARY		FDC NO.		SEE SHEET XXXX

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 MENENGAH KEBANGSAAN SUNGAI MANIK

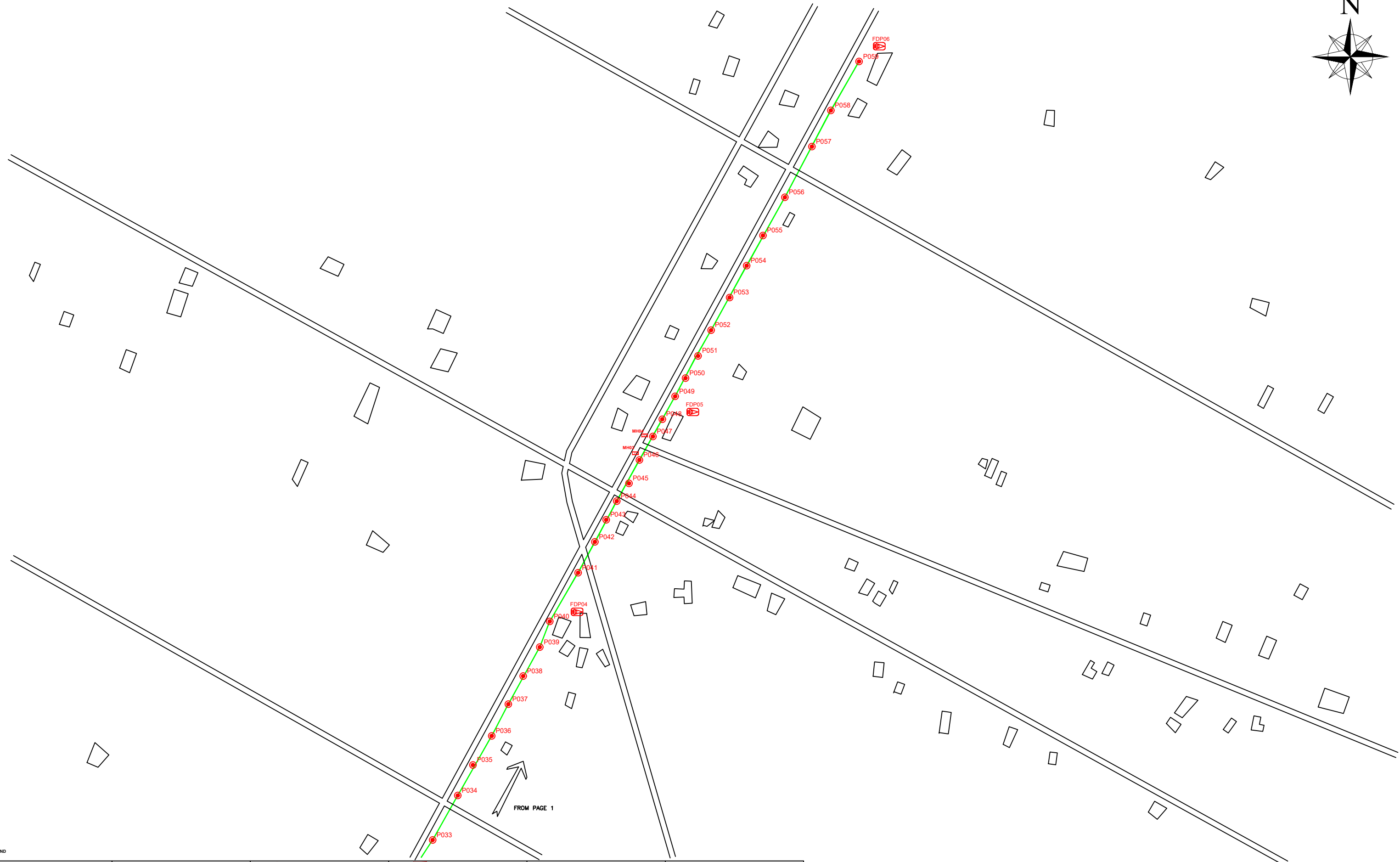
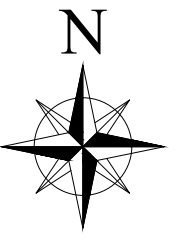
DRAWING TITLE

TP DRAWING POP 2 AT SEKOLAH MENENGAH KEBANGSAAN SUNGAI MANIK

PROJECT PHASE

PROJECT PHASE 2

DESIGN BY	NABIL	DATE	19/12/2024
DRAWN BY	NABIL	SCALE	NOT TO SCALE
CHECKED BY	AZHAN HARIS	JOB NUMBER	AEA5072
DRAWING NUMBER		AEA5072	
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FROM PAGE 1

LEGEND

	12C FOC		Installed 1:4 splitter in FDC		INSTALLED POLE (9M)		NEW MANHOLE		TENSION SMALL / TENSION BIG		MH NO.
	24C FOC		FDP		INSTALLED RISER		HOUSE NUMBER		EXISTING MANHOLE		EXISTING TNB POLE NO.
	48C FOC		CLOSURE		SUSPENSION BIG		EXISTING ALLO POLE		CLOSURE NO.		NEW POLE NO.
	90C FOC		NEW MANHOLE (PIT)		SUSPENSION SMALL		LOOP		FDP NO.		FDC NO.
	144C FOC		INSTALLED POLE		FDC		FDP BOUNDARY				

KEY PLAN

PROJECT OWNER



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 MENENGAH KEBANGSAAN SUNGAI MANIK

DRAWING TITLE

TP DRAWING POP 2 AT SEKOLAH MENENGAH KEBANGSAAN SUNGAI MANIK

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