

# Maxis UMobile 5G Project – Technical Proposal

Company Name	:	MAXIS BROADBAND SDN BHD
Company Address	:	LEVEL 9, MENARA MAXIS, KUALA LUMPUR CITY CENTRE, 50088 KUALA LUMPUR
Date	:	13/11/2025



Project & Site Name	:	UMOBILE KPAO
LRD ID	:	KPAO
Address	:	LORONG 6 S
District	:	NEAR KAMPUNG SENTOSA
Postcode & State	:	34000 SIMPANĀERAK
GPS Coordinate	:	4.8242313, 100.7249847
FTTx LRD	:	N/A
Home pass / Premise pass	:	N/A

UG Build (m)	1255
Aerial Build (m)	151
<b>Total Civil Build (m)</b>	<b>1406</b>

UG Cable (m)	N/A
Aerial Cable (m)	136
Coil at MH (m)	30
<b>Total Cable (m)</b>	<b>1436</b>



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# 1. POC3 Summary & Details

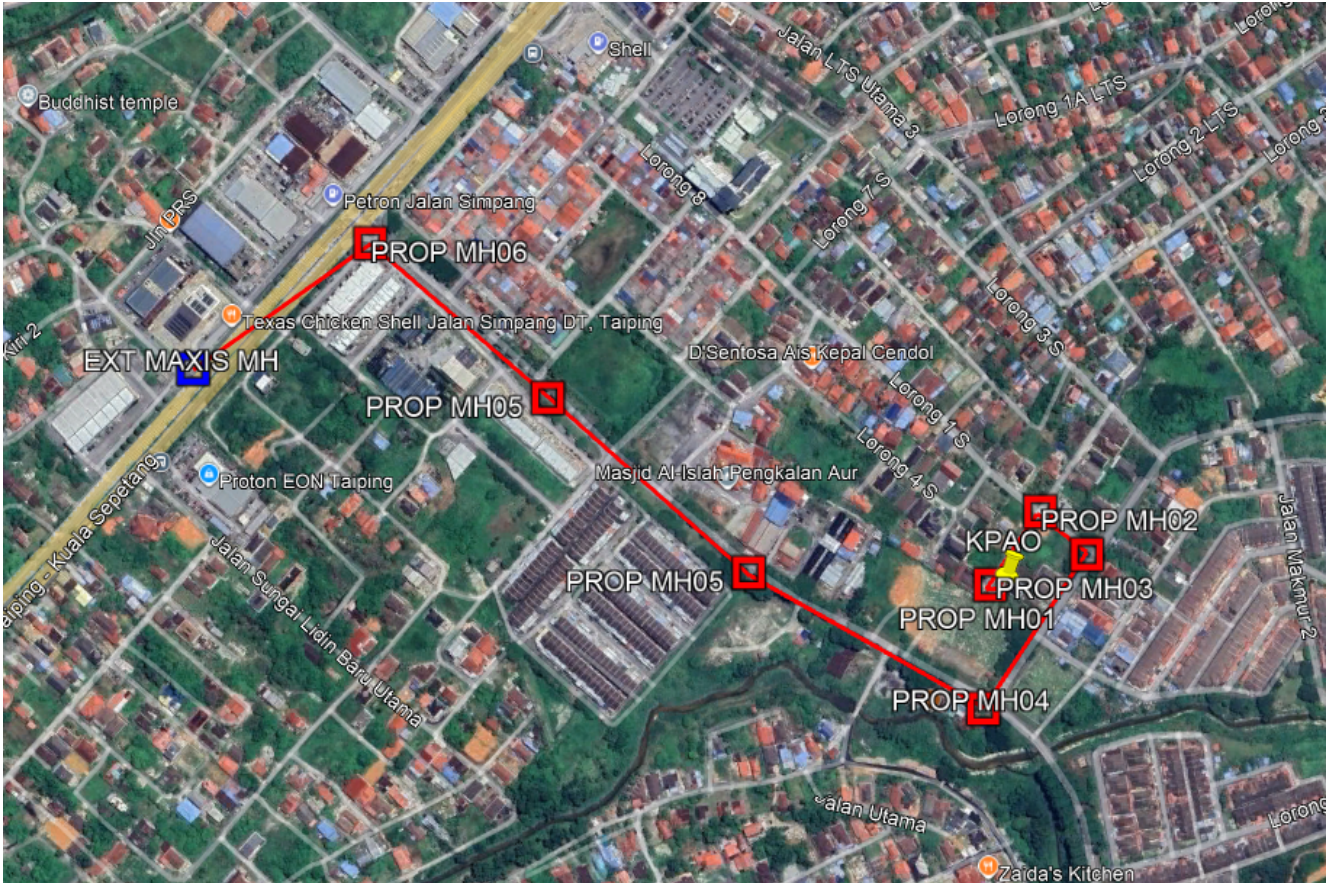
## 1.1. POC3 Summary



Site LRD	:	MEDA
Structure Type	:	Cabin/T5
GPS Coordinate	:	4.8278, 100.7184
Site / Building Name	:	TAIPING POLY (M) SDN BHD
Address	:	LOT 5234-52345, JLN PERUSAHAAN BATU 2 1/2, SIMPANG, 34700 Taiping, Perak
POC3 Model	:	

## 2. OSP / ISP Summary & Details (OSP 2)

### 2.1. Propose Route Details & Site Map



LRD Point A	KPAO	LRD Point B	EXT MH MAXIS
Address	LORONG 6 S, KAMPUNG SENTOSA, 34000 TAIPING, PERAK.	Address	JALAN TAIPING - KUALA SEPETANG, KAMPUNG PENGKALAN AOR, 34000 TAIPING, PERAK
GPS Coordinates	4.899613, 100.718179	GPS Coordinates	4.826874, 100.717682
New Civil Build (M)	1406	Existing Civil Build (M)	N/A
New Build Cable (M)	1436	Existing Cable (M)	N/A

Local Council & Authority approval Requirement : **Majlis Perbandaran Taiping  
JKR Daerah Larut, Matang & Selama**

## 2.2. OSP & ISP BOQ

<b>Overall Proposed OSP Civil Infrastructure Design Distance</b>		<b>Unit</b>	<b>Quantity</b>
1	Horizontal Directional Drilling with 1-way duct	M	1470
2	Horizontal Directional Drilling with 2-way duct	M	N/A
3	Open trench on grass verge (GV) with 1-way duct	M	N/A
4	Open trench on grass verge (GV) with 2-way duct	M	N/A
5	Open trench on carriage way (CW) with 1-way duct	M	15
6	Open trench on carriage way (CW) with 2-way duct	M	N/A
7	Micro trenching 1-way (3-way x 40 mm HDPE sub-duct)	M	N/A
8	Micro trenching 1-way (2-way x 25 mm GI Pipe for main road crossing)	M	N/A

<b>Overall Propose Manhole / Handhole</b>		<b>Unit</b>	<b>Quantity</b>
1	Manhole JB30	Ea	7
2	Manhole JB30 Modified	Ea	N/A
3	Manhole JRC7	Ea	N/A
4	PIT/Cheezy PIT	Ea	N/A

<b>Overall Propose Pole / Overhead</b>		<b>Unit</b>	<b>Quantity</b>
1	7.5 m Pole – Concrete/Iron	Ea	N/A
2	9 m Pole – Concrete/Iron	Ea	N/A
3	G.I Riser	Ea	N/A
4	Cable Trunking	M	N/A

<b>Overall Cable Infrastructure Design Distance</b>		<b>Unit</b>	<b>Quantity</b>
1	1 Core Optical Fiber Cable	M	N/A
2	48 Core Optical Fiber Cable UG/IB/ID	M	N/A
3	96 Core Optical Fiber Cable UG/IB	M	N/A
4	144 Core Optical Fiber Cable UG/IB/ID	M	<b>1485</b>

<b>Overall Optic Splice Design</b>		<b>Unit</b>	<b>Quantity</b>
1	Total Joint Closure	Ea	1



### 2.3. Civil Work's Detail (Manhole & Pole)

Overall Existing Manhole & Pole		GPS Coordinate		Distance
No.	Manhole & Pole ID	Latitude	Longitude	Meter
1	A-LSIMP-0011-000T	4.826874	100.717682	
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A

Overall Propose Manhole & Pole		GPS Coordinate		Distance
No.	Manhole & Pole ID	Latitude	Longitude	Meter
1	New Manhole 1	4.824299	100.724907	100
2	New Manhole 2	4.8249337	100.7254261	80
3	New Manhole 3	4.824506	100.725825	210
4	New Manhole 4	4.823169	100.724750	270
5	New Manhole 5	4.824586	100.722689	280
6	New Manhole 6	4.826344	100.720953	270
7	New Manhole 7	4.827914	100.719406	260

2.4. OSP/ISP Photo Illustration.



PICTURE 1 : T5 UM



Picture 2 – PROPOSE NEW MH01



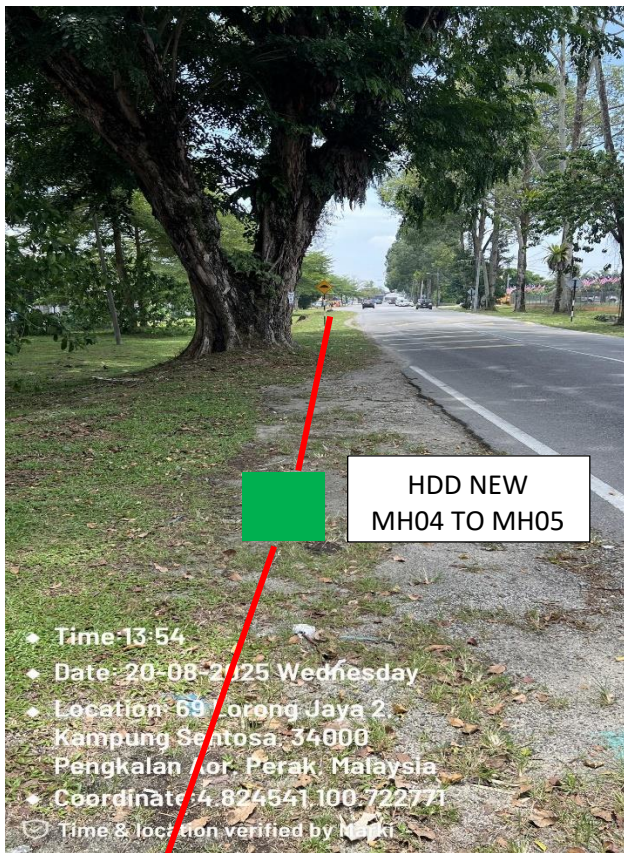
PICTURE 3: PROPOSE NEW MH02



PICTURE 4: PROPOSE NEW MH03



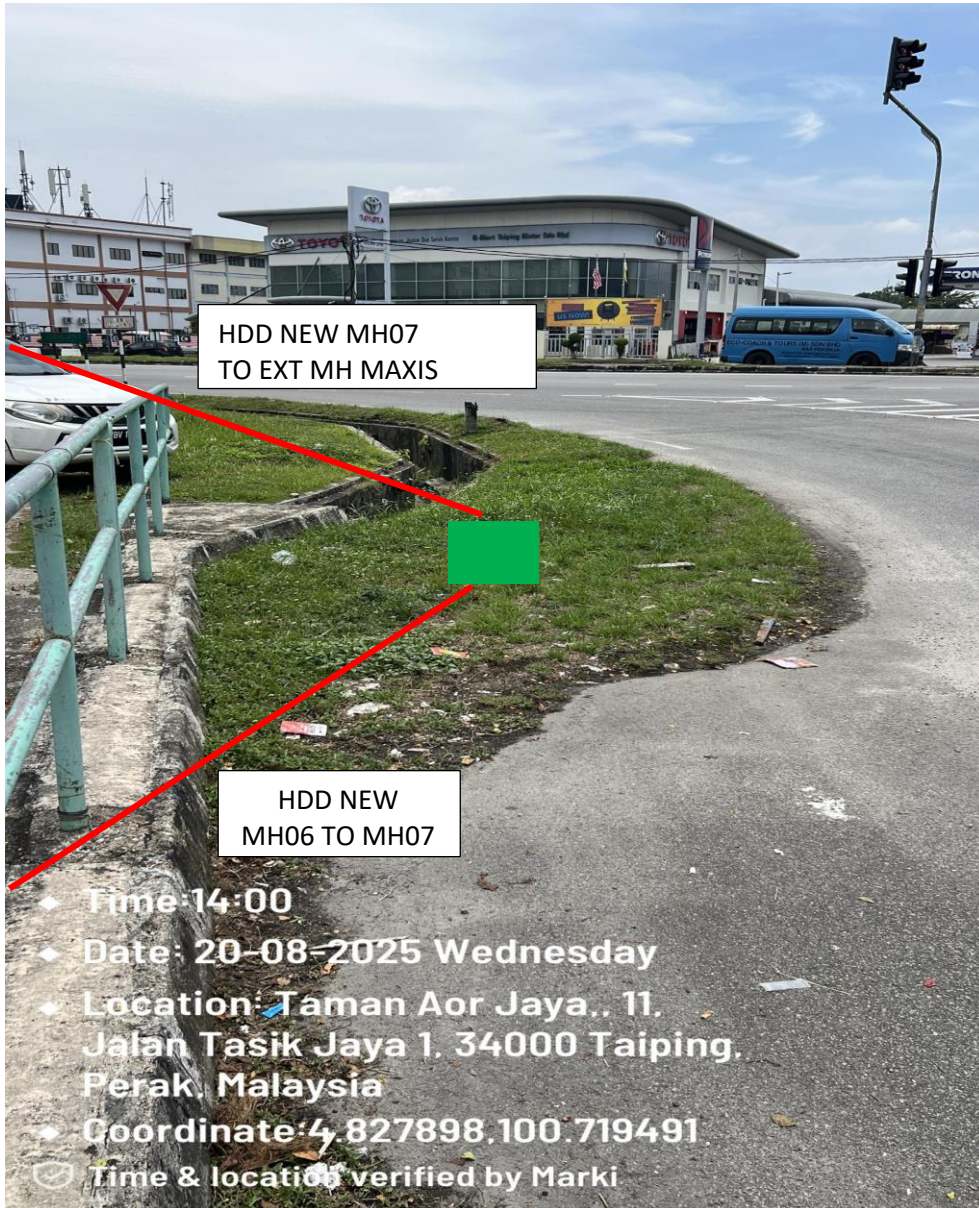
PICTURE 5: PROPOSE NEW MH04



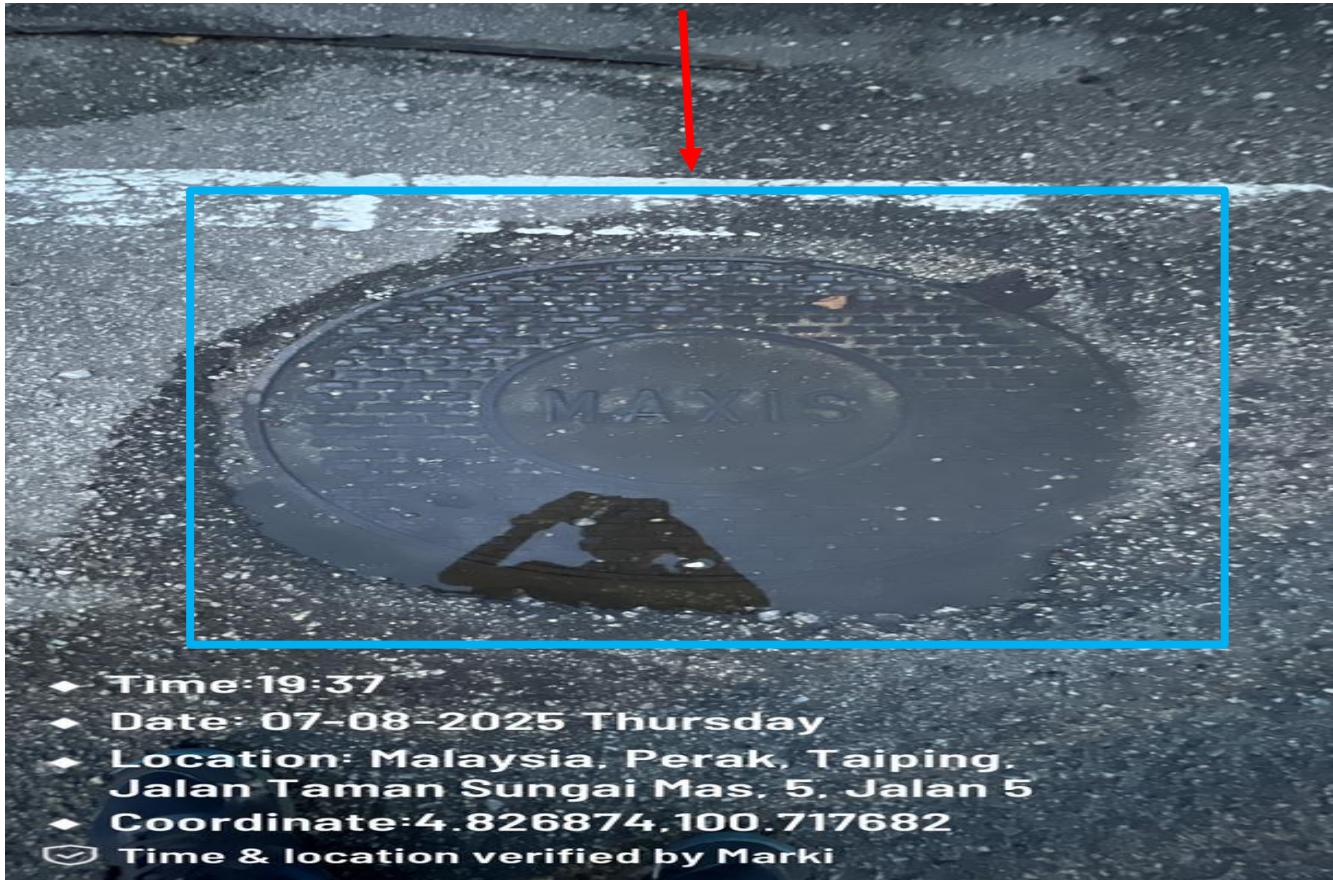
PICTURE 8 : PROPOSE NEW MH05



PICTURE 9 : PROPOSE NEW MH06



PICTURE 10: PROPOSE NEW MH07



PICTURE 11: PROPOSE HDD TO EXT MAXIS MH.



### 3. Link Attenuation Calculation Reference

S = Total splice count in a single link

L = Total length of cable in a single link

C = Total connector count in a single link.

#### A) FIBER LOSS FOR 1310 nm WAVELENGTH

$$\text{TOTAL LOSS} = 0.15 (S) + 0.35 (L) + (C)$$

#### B) FIBER LOSS FOR 1550 nm WAVELENGTH

$$\text{TOTAL LOSS} = 0.10 (S) + 0.25 (L) + 0.5 (C)$$

MAXIMUM END TO END VALUE FOR 1310 nm = \*\*\*\* dBm

MAXIMUM END TO END VALUE FOR 1550 nm = \*\*\*\* dBm

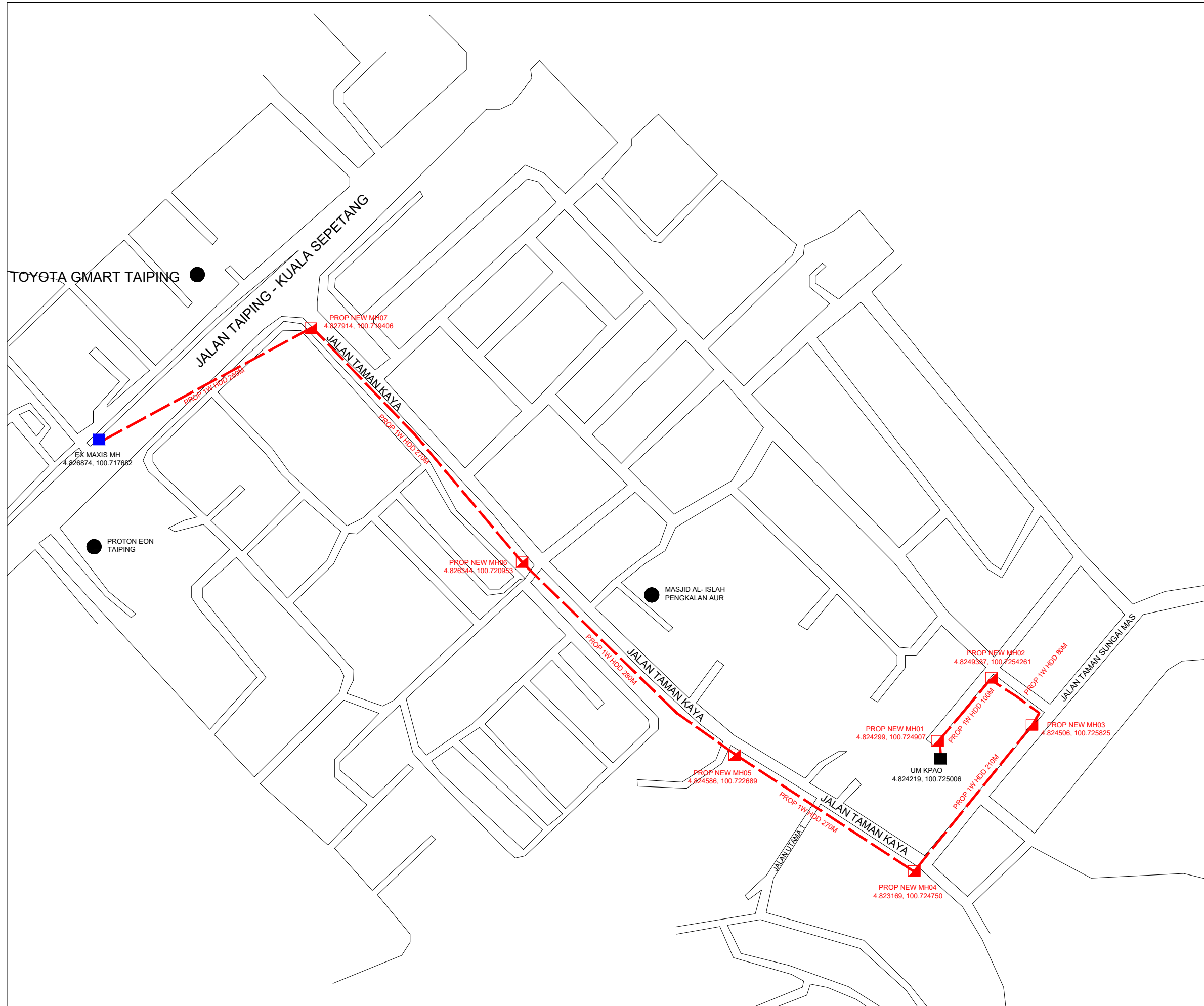


#### **4. Appendices**

4.1. OSP Civil Design

4.2. OSP SLD Design

4.3. Costing BOQ



SITE MAPS DESIGN	
SITE NAME:	KPAO
PROJECT TITLE:	UM 5G - KPAO
DWG ID:	UM5G/KPAO/01
DATE:	11/09/2025
SHEET :	01/01
SUMMARY NOTES	
TOTAL CUSTOMER :	1
TOTAL FDC :	N/A
TOTAL FDP:	N/A
TOTAL PROPOSED JOINT:	N/A
TOTAL PROPOSED MH:	7
TOTAL PROPOSED POLE:	N/A
TOTAL PROPOSED UG CABLE (m):	1485
TOTAL PROPOSED OH CABLE (m):	N/A
LEGENDS	
EXISTING FDC	
PROPOSED FDP	
EXISTING FDP	
PROPOSED MANHOLE	
EXISTING MANHOLE	
PROPOSED PIT/HANDHOLE	
EXISTING PIT/HANDHOLE	
PROPOSED G.i / DUCT RISER	
EXISTING G.i / DUCT RISER	
PROPOSED POLE	
EXISTING POLE	
PROPOSED CLOSURE / JOINT	
EXISTING PEDESTAL	
EXISTING UG DUCTWAY	
PROPOSED UG TRENCHING	
EXISTING AERIALCABLE	
PROPOSED AERIAL CABLE	
JKR BOUNDARY	
LOCAL COUNCIL BOUNDARY	
DESIGN BY: BINASAT SDN BHD	
MAXIS BROADBAND SDN BHD	
CHECKED BY :	
CHECKED DATE :	
APPROVED/REJECTED BY :	
APPROVED/REJECTED BY :	

SITE MAPS DESIGN	
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TOTAL PROPOSED MH:	7
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PROPOSED FDP	
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PROPOSED MANHOLE	
EXISTING MANHOLE	
PROPOSED PIT/HANDHOLE	
EXISTING PIT/HANDHOLE	
PROPOSED G.i / DUCT RISER	
EXISTING G.i / DUCT RISER	
PROPOSED POLE	
EXISTING POLE	
PROPOSED CLOSURE / JOINT	
EXISTING PEDESTAL	
EXISTING UG DUCTWAY	
PROPOSED UG TRENCHING	
EXISTING AERIALCABLE	
PROPOSED AERIAL CABLE	
JKR BOUNDARY	
LOCAL COUNCIL BOUNDARY	
DESIGN BY: BINASAT SDN BHD	
MAXIS BROADBAND SDN BHD	
CHECKED BY :	
CHECKED DATE :	
APPROVED/REJECTED BY :	
APPROVED/REJECTED BY :	

