

Malvern-Fibre Infrastructure Plan

Project Details

Clients Name	UPD002 Communications		
Project Description	Malvern		
Survey Date:	28/11/2024		
Representative:	Name	Contact	Email
Designed By:	Keith	0795847886	Keith.nhau8@gmail.com
Representative 1:	Lindani Mpofu	0726884513	Lindani@upd002secsolsy.co.za
Representative 2:	Broman Nkosi	0614077653	Broman@upd002secsolsys.co.za



Site Details

Site Name	Malvern		
Site Address	Malvern Primary School, Gauteng		
Suburb	Malvern		
PONs	1-37		
Home Pass	3522		
Region	Gauteng		
Type of Build	Aerial_Midblock Pole/FTTH		
Co-ordinates	Lat: 26°12'5.12"S	Long: 28° 6'26.22"E	
Site ID	MV28112024		
Site Owner	UPD002 Communications		

PROPOSED POP LOCATION

TOPO LOCATION

Contractor deliverables:

Site Planning Approved by Landlord / Client.

Signature:

Name:

Date:

PLANNED BY:

Keith

PROJECT No:

Malvern

PROJECT DESCRIPTION: Provide FTTH fibre Infrastructure To
Malvern

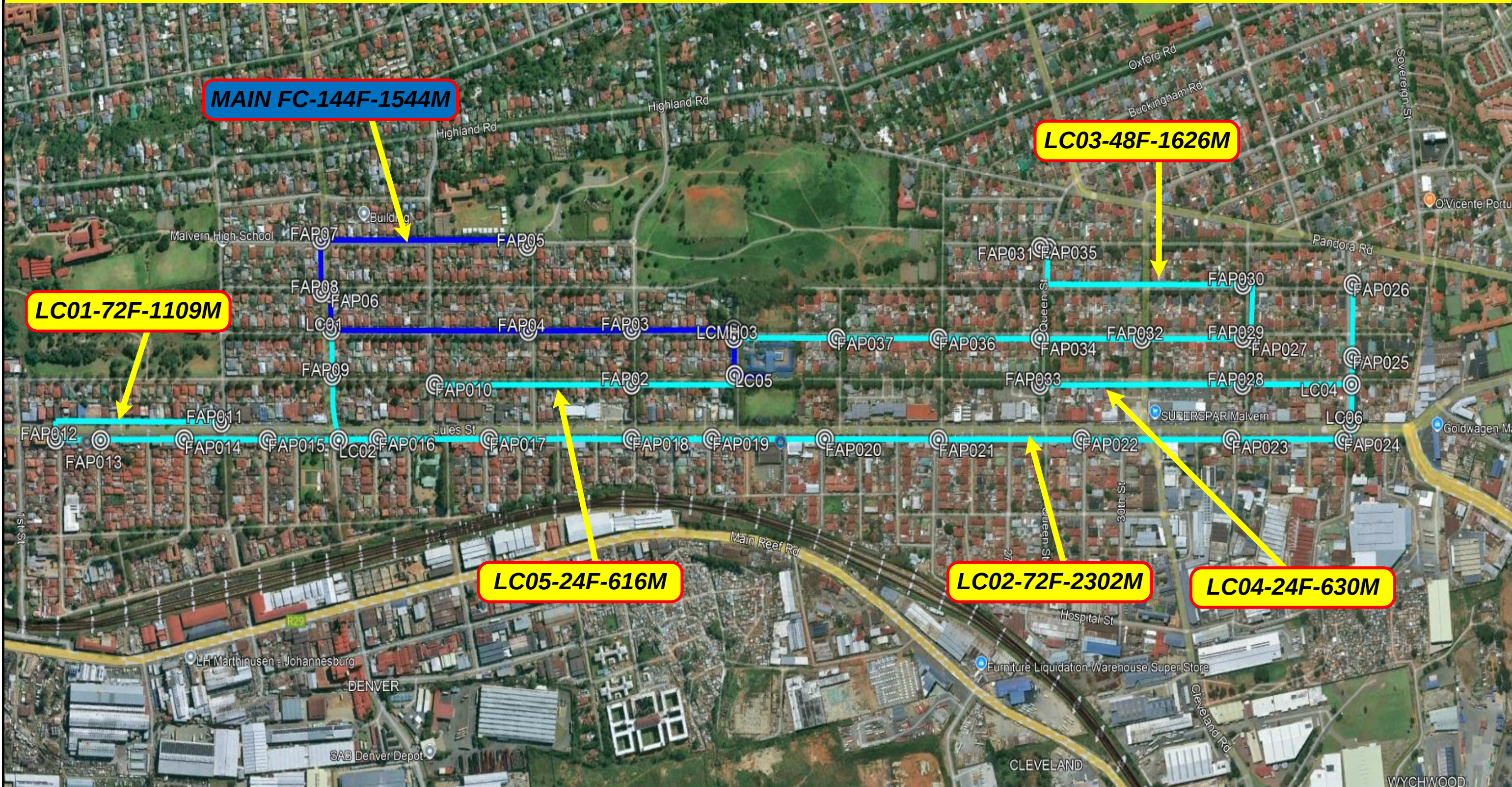


REGION:GP

Drawing: Site Survey
Report
Date: 2024/11/28

Page 1 of 40

Feeder Layout



Color Legend							REVISION						REGION: GP	
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve		No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY		Drawing: FTTH Plan	
	Distribution Route 2		Existing MH		Existing Splitter									
	Main Feeder		New MH Route 1		New Splitter									
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through									
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing									
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints									
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints									
	Existing Draw Box Route		New Local Cross connect (LCC)				SCALE:	PLANNED BY:	PROJECT No:	PROJECT DESCRIPTION:	Date: 2024/11/28			
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)				N.T.S.	Keith	Malvern	Malvern	Page 2 of 40			
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)											

Infrastructure Breakdown



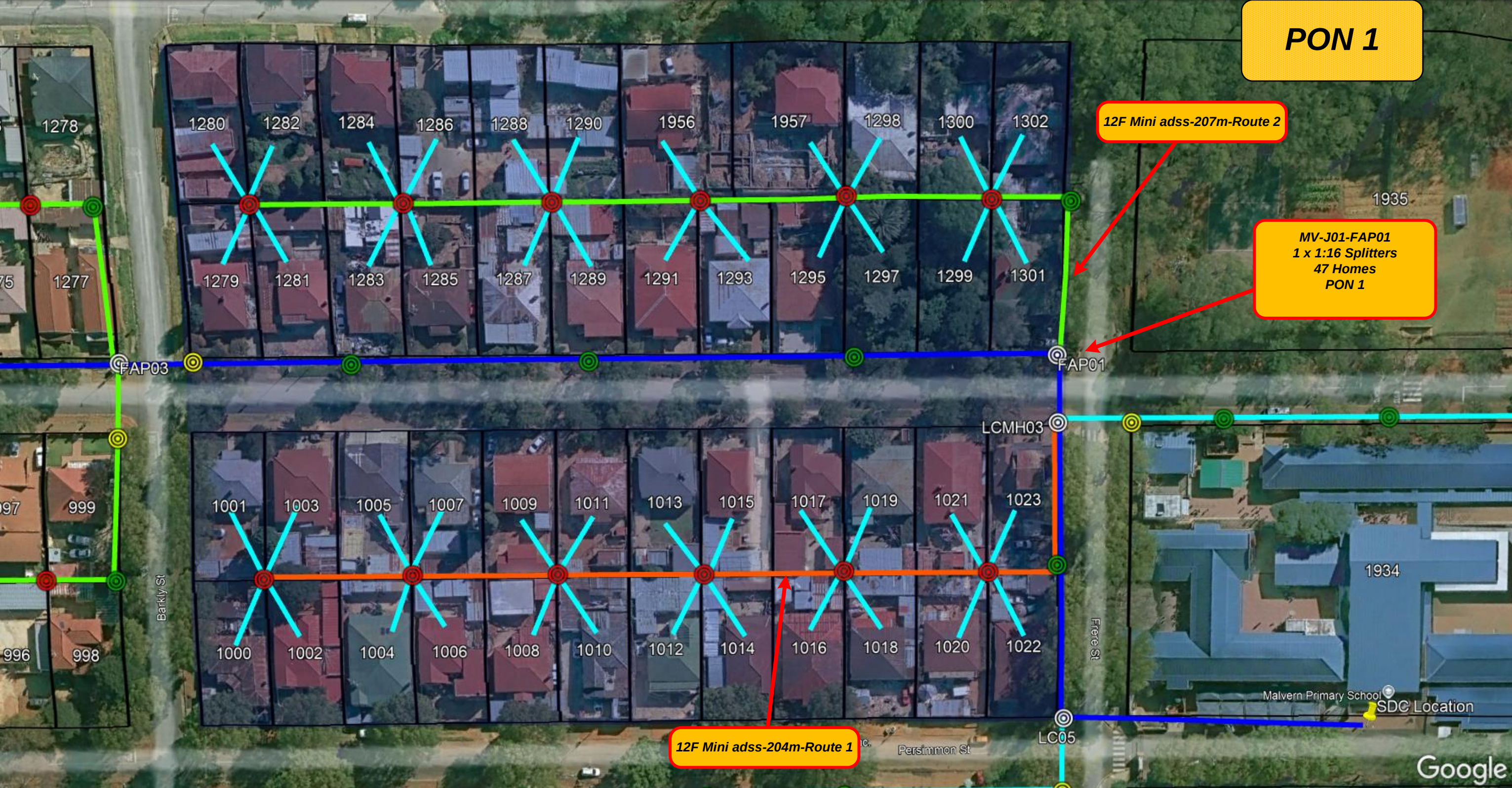
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	Distribution Route 2		Existing MH		Existing Splitter					
	Main Feeder		New MH Route 1		New Splitter					
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through					
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing					
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints					
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints					
	Existing Draw Box Route		New Local Cross connect (LCC)							
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)							
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)							



SCALE:	PLANNED BY:	PROJECT No:	PROJECT DESCRIPTION:
N.T.S.	Keith	Malvern	Malvern

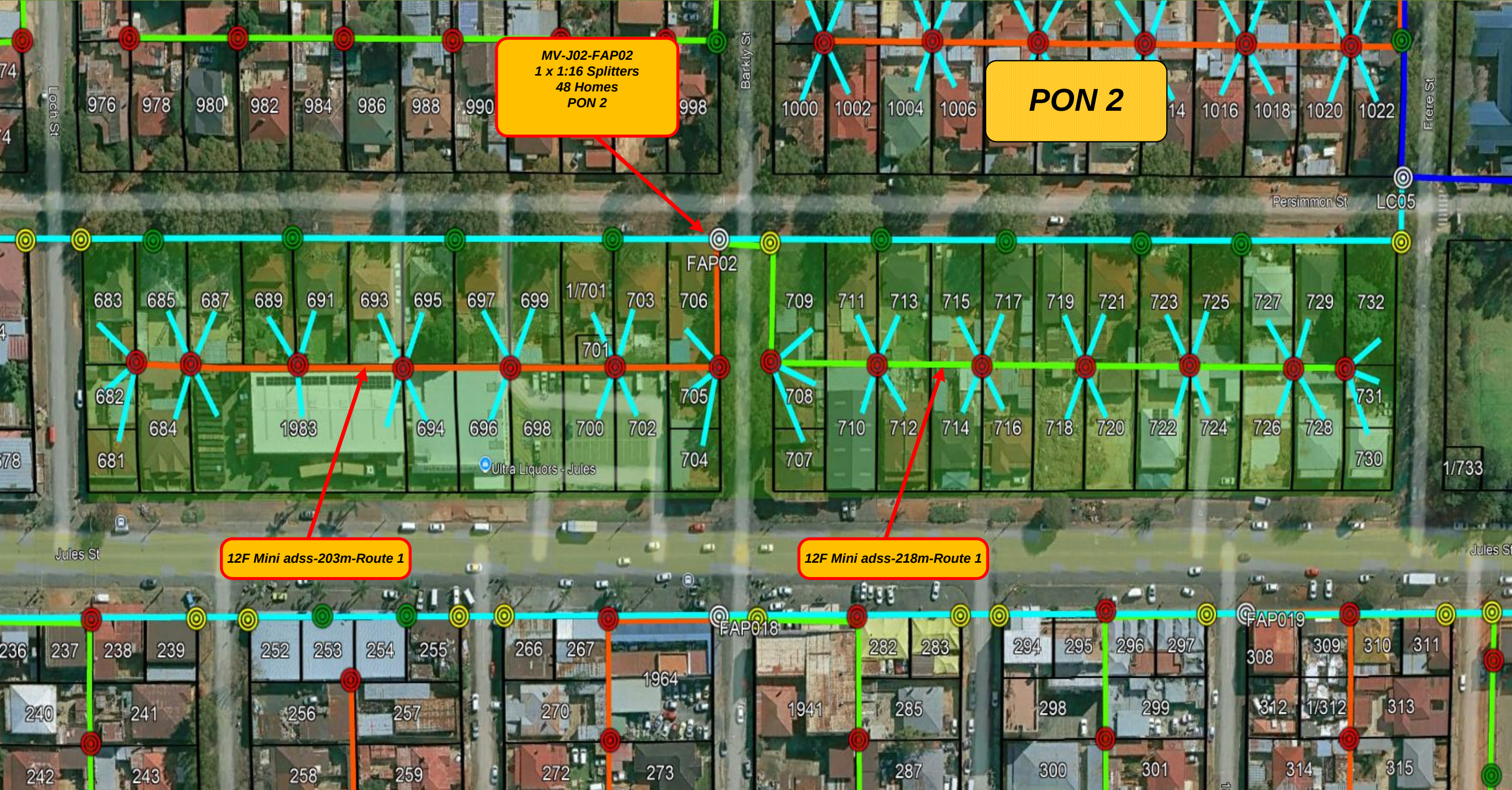
Date: 2024/11/28
Page 3 of 40

PON 1



Color Legend							REVISION						REGION: GP	
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve		No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY		Drawing: FTTH Plan	
	Distribution Route 2		Existing MH		Existing Splitter									
	Main Feeder		New MH Route 1		New Splitter									
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through									
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing									
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints									
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints									
	Existing Draw Box Route		New Local Cross connect (LCC)				SCALE:	PLANNED BY:	PROJECT No:	PROJECT DESCRIPTION:	Date: 2024/11/28			
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)				N.T.S.	Keith	Malvern	Malvern	Page 4 of 40			
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)											

PON 2



Color Legend					REVISION						REGION: GP
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY		Drawing: FTTH Plan
	Distribution Route 2		Existing MH								Date: 2024/11/28
	Main Feeder		New MH Route 1								Page 5 of 40
	Link Feeder		New MH Route 2								
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)								
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)								
	New HH Route 2		Existing Local Cross connect (LCC)								
	Existing Draw Box Route		New Local Cross connect (LCC)								
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)								
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)								

PON 3



Color Legend					
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve
	Distribution Route 2		Existing MH		Existing Splitter
	Main Feeder		New MH Route 1		New Splitter
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints
	Existing Draw Box Route		New Local Cross connect (LCC)		
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)		
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)		

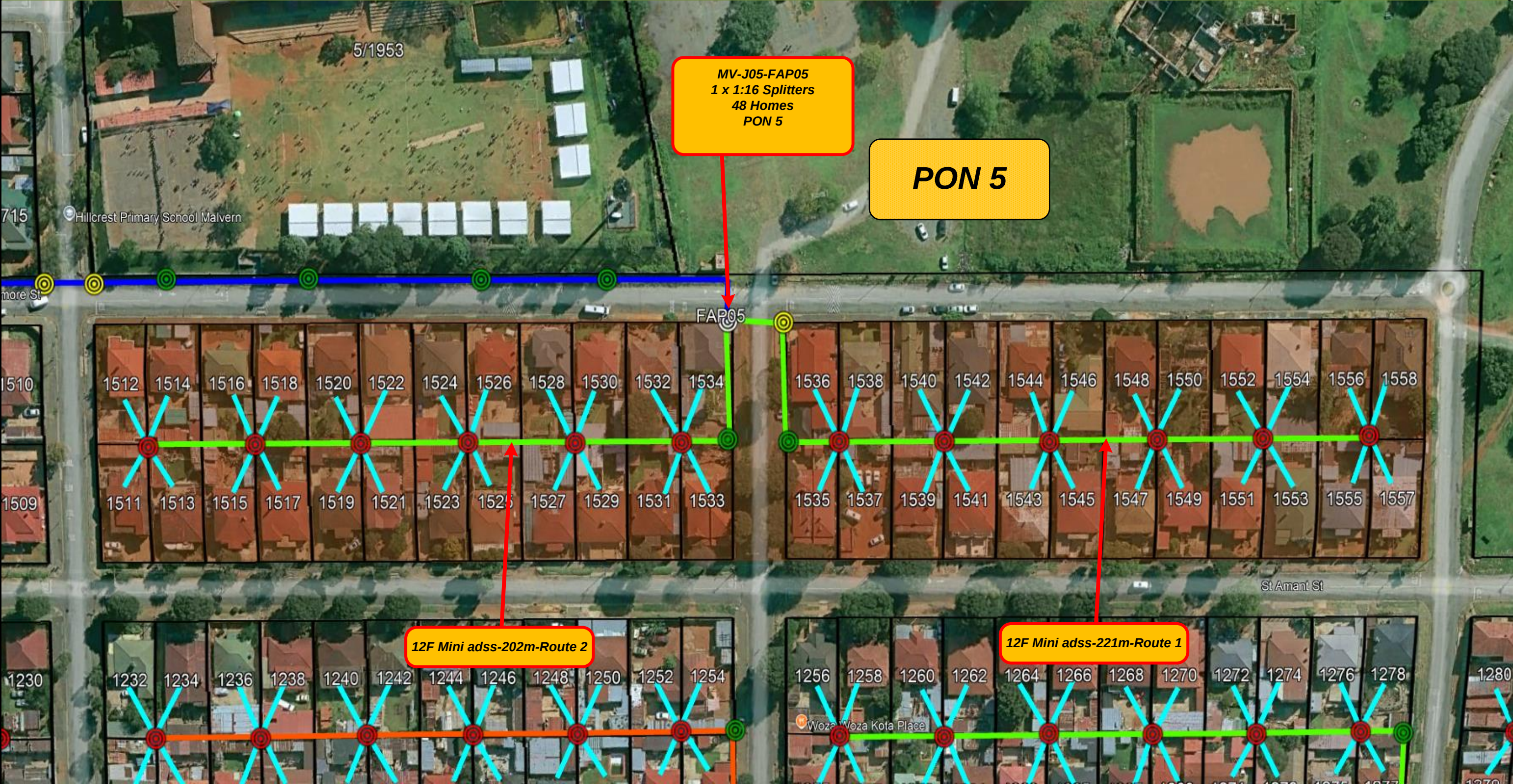
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N.T.S.		Keith		Malvern

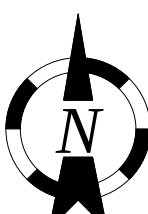
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	Drawing: FTTH Plan
	Date: 2024/11/28
Page 6 of 40	

PROJECT DESCRIPTION:	
Malvern	

Color Legend							REVISION						REGION: GP	
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve		No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY		Drawing: FTTH Plan	
	Distribution Route 2		Existing MH		Existing Splitter									
	Main Feeder		New MH Route 1		New Splitter									
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through									
	Road Crossing		New MH Route 2		9m Wooden Poles for Crossing									
	New HH Route 1		Existing Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints		SCALE:		PLANNED BY:		PROJECT No:		PROJECT DESCRIPTION:	
	New HH Route 2		New Fibre Distribution Point (FPON/FTP)		8m Wooden Poles/Link Joints	N.T.S.		Keith		Malvern		Malvern		
	Existing Draw Box Route		Existing Local Cross connect (LCC)											
	New Draw Box Route 1		New Local Cross connect (LCC)											
	New Draw Box Route 2		Existing Optical Distribution Unit (ODU / NPON)											
			New Optical Distribution Unit (ODU / NPON)											
												Date: 2024/11/28		
												Page 7 of 40		

PON 5



Color Legend							REVISION						REGION: GP		
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve		No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY		Drawing: FTTH Plan		
	Distribution Route 2		Existing MH		Existing Splitter										
	Main Feeder		New MH Route 1		New Splitter										
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through										
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing										
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints										
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints										
	Existing Draw Box Route		New Local Cross connect (LCC)												
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)												
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)												
							SCALE:		PLANNED BY:		PROJECT No:		PROJECT DESCRIPTION:		Date: 2024/11/28
							N.T.S.		Keith		Malvern		Malvern		Page 8 of 40

PON 6



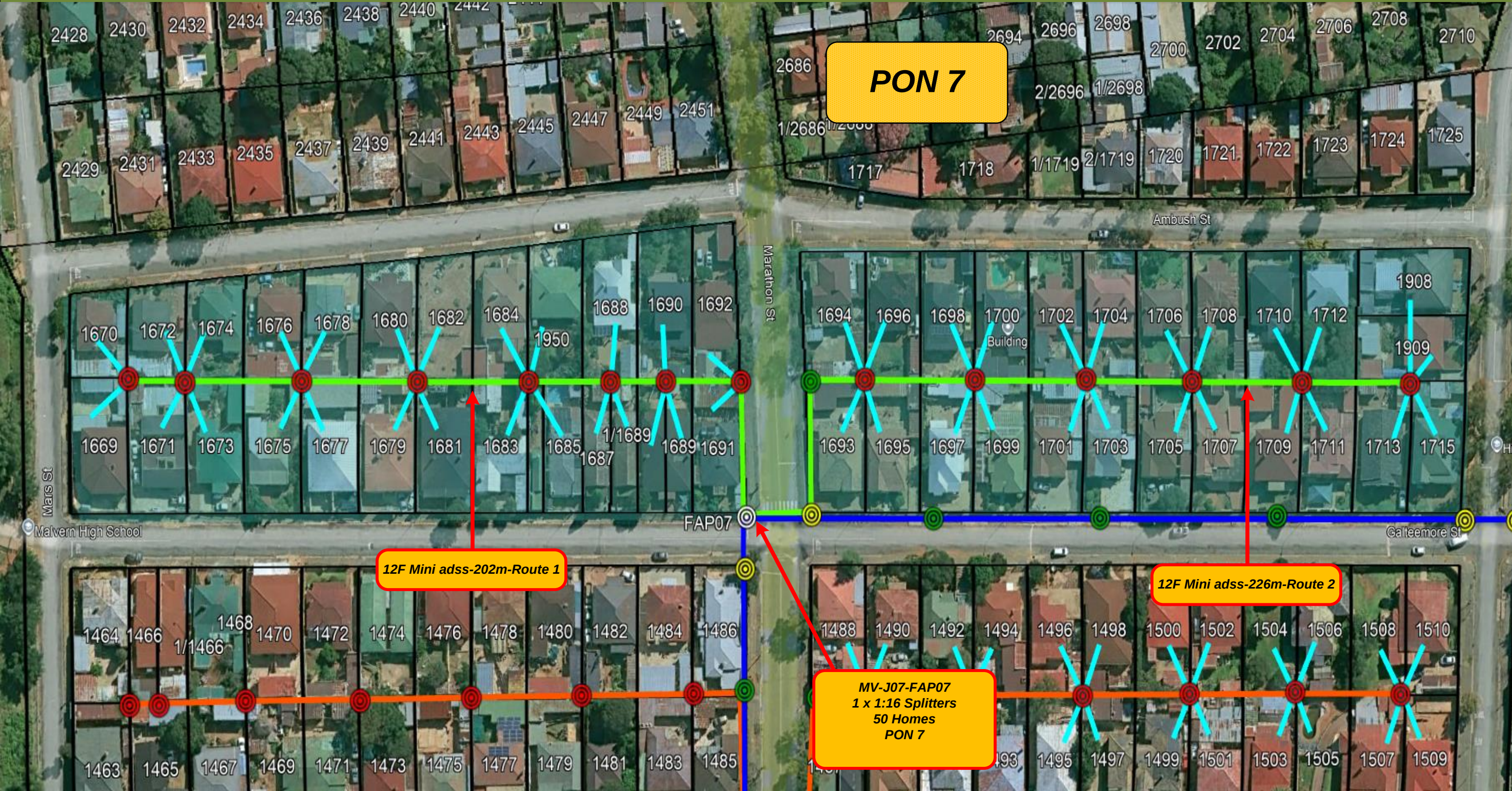
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	Distribution Route 2		Existing MH		Existing Splitter					
	Main Feeder		New MH Route 1		New Splitter					
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through					
	Road Crossing		Existing Fibre Distribution Point (FDPON/FTP)		9m Wooden Poles for Crossing					
	New HH Route 1		New Fibre Distribution Point (FDPON/FTP)		7m Wooden Poles/Main Joints					
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints					
	Existing Draw Box Route		New Local Cross connect (LCC)							
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)							
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)							

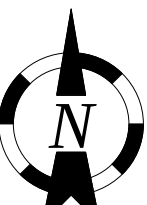


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N.T.S.	Keith	Malvern	Malvern

Date: 2024/11/28
Page 9 of 40

PON 7



Color Legend							REVISION						REGION: GP		
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve		No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY		Drawing: FTTH Plan		
	Distribution Route 2		Existing MH		Existing Splitter										
	Main Feeder		New MH Route 1		New Splitter										
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through										
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing										
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints										
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints										
	Existing Draw Box Route		New Local Cross connect (LCC)												
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)												
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)												
							SCALE:		PLANNED BY:		PROJECT No:		PROJECT DESCRIPTION:		Date: 2024/11/28
							N.T.S.		Keith		Malvern		Malvern		Page 10 of 40

PON 8



Color Legend							REVISION						REGION: GP		
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve		No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY		Drawing: FTTH Plan		
	Distribution Route 2		Existing MH		Existing Splitter										
	Main Feeder		New MH Route 1		New Splitter										
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through										
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing										
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints										
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints										
	Existing Draw Box Route		New Local Cross connect (LCC)												
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)												
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)												
							SCALE:		PLANNED BY:		PROJECT No:		PROJECT DESCRIPTION:		Date: 2024/11/28
							N.T.S.		Keith		Malvern		Malvern		Page 11 of 40

Color Legend							REVISION						REGION: GP		
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve		No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY		Drawing: FTTH Plan		
	Distribution Route 2		Existing MH		Existing Splitter										
	Main Feeder		New MH Route 1		New Splitter										
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through										
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing										
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints		SCALE:		PLANNED BY:		PROJECT No:		PROJECT DESCRIPTION:		Date: 2024/11/28
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints		N.T.S.	Keith		Malvern	Malvern	Page 12 of 40			
	Existing Draw Box Route		New Local Cross connect (LCC)												
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)												
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)												

[illegible]

Color Legend						REVISION						REGION: GP	
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking			Existing Sleeve	No.	NATURE OF REVISION	DATE	SIGNATURE		AUTHORITY	Drawing: FTTH Plan
	Distribution Route 2		Existing MH			Existing Splitter							
	Main Feeder		New MH Route 1			New Splitter							
	Link Feeder		New MH Route 2			7m Wooden Poles Turning/Pass Through							
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)			9m Wooden Poles for Crossing							
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)			7m Wooden Poles/Main Joints	SCALE:		PLANNED BY:			PROJECT No:	
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints	N.T.S.		Keith		Malvern	Malvern	Date: 2024/11/28	
	Existing Draw Box Route		New Local Cross connect (LCC)									Page 13 of 40	
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)										
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)										

PON 11



REVISION					 UPD002 Communications	REGION: GP	
No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY		Drawing: FTTH Plan	
SCALE:		PLANNED BY:	PROJECT No:		PROJECT DESCRIPTION:		Date: 2024/11/28
N.T.S.		Keith	Malvern		Malvern		Page 14 of 40

PON 12



Color Legend							REVISION						REGION: GP	
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve		No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY		Drawing: FTTH Plan	
	Distribution Route 2		Existing MH		Existing Splitter									
	Main Feeder		New MH Route 1		New Splitter									
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through									
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing									
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints		SCALE:		PLANNED BY:		PROJECT No:	PROJECT DESCRIPTION:	Date: 2024/11/28	
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints		N.T.S.	Keith		Malvern	Malvern	Page 15 of 40		
	Existing Draw Box Route		New Local Cross connect (LCC)											
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)											
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)											

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Color Legend							REVISION						REGION: GP	
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve		No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY		Drawing: FTTH Plan	
	Distribution Route 2		Existing MH		Existing Splitter									
	Main Feeder		New MH Route 1		New Splitter									
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through									
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing									
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints		SCALE:		PLANNED BY:		PROJECT No:		PROJECT DESCRIPTION:	Date: 2024/11/28
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints		N.T.S.	Keith		Malvern	Malvern		Page 16 of 40	
	Existing Draw Box Route		New Local Cross connect (LCC)											
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)											
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)											

PON 14

12F Mini adss-174m-Route 2

Mars St

91 93 95 97 99 101 103 105 536

90 92 94 96 98 100 102 104 535

89 88 534

533

5th St

FAP014

75 77 79 81 83 85 87 532

1987 531

74 76 78 80 82 84 86 530

70 529

528

4th St

12F Mini adss-162m-Route 1

1/515

Moire St

494 495 496 493 492 491 489 486 485 482 481 478 477 474

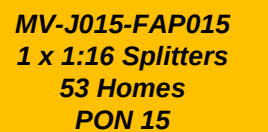
PON 14

MV-J014-FAP014
1 x 1:16 Splitters
42 Homes
PON 14

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Color Legend						REVISION						REGION: GP	
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking			Existing Sleeve	No.	NATURE OF REVISION	DATE	SIGNATURE		AUTHORITY	Drawing: FTTH Plan
	Distribution Route 2		Existing MH			Existing Splitter							
	Main Feeder		New MH Route 1			New Splitter							
	Link Feeder		New MH Route 2			7m Wooden Poles Turning/Pass Through							
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)			9m Wooden Poles for Crossing							
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)			7m Wooden Poles/Main Joints	SCALE:		PLANNED BY:			PROJECT No:	PROJECT DESCRIPTION:
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints	N.T.S.		Keith		Malvern	Malvern	Page 17 of 40	
	Existing Draw Box Route		New Local Cross connect (LCC)										
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)										
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)										

PON 15



	 UPD002 Communications
	PROJECT DESCRIPTION: Malvern

REGION: GP
Drawing: FTTH Plan
Date: 2024/11/28
Page 18 of 40

PON 16

12F Mini adss-267m-Route 1

FAP016

LC02

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	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve
	Distribution Route 2		Existing MH		Existing Splitter
	Main Feeder		New MH Route 1		New Splitter
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints
	Existing Draw Box Route		New Local Cross connect (LCC)		
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)		
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)		



No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY
SCALE:	PLANNED BY:	PROJECT No:		
N.T.S.	Keith	Malvern		



REGION: GP

Drawing: FTTH Plan

Date: 2024/11/28

Page 19 of 40

PON 17

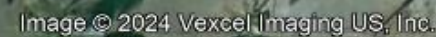


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SCALE:		PLANNED BY:	PROJECT No:		PROJECT DESCRIPTION:		Date: 2024/11/28
N.T.S.		Keith	Malvern		Malvern		Page 20 of 40

PON 18

12F Mini adss-251m-Route 1

1/306 573 2/293 1/293



	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve
	Distribution Route 2		Existing MH		Existing Splitter
	Main Feeder		New MH Route 1		New Splitter
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints
	Existing Draw Box Route		New Local Cross connect (LCC)		
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)		
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)		



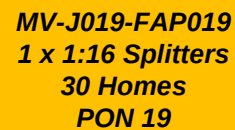
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SCALE:	PLANNED BY:	PROJECT No:	
N.T.S.	Keith	Malvern	



Page 21 of 40

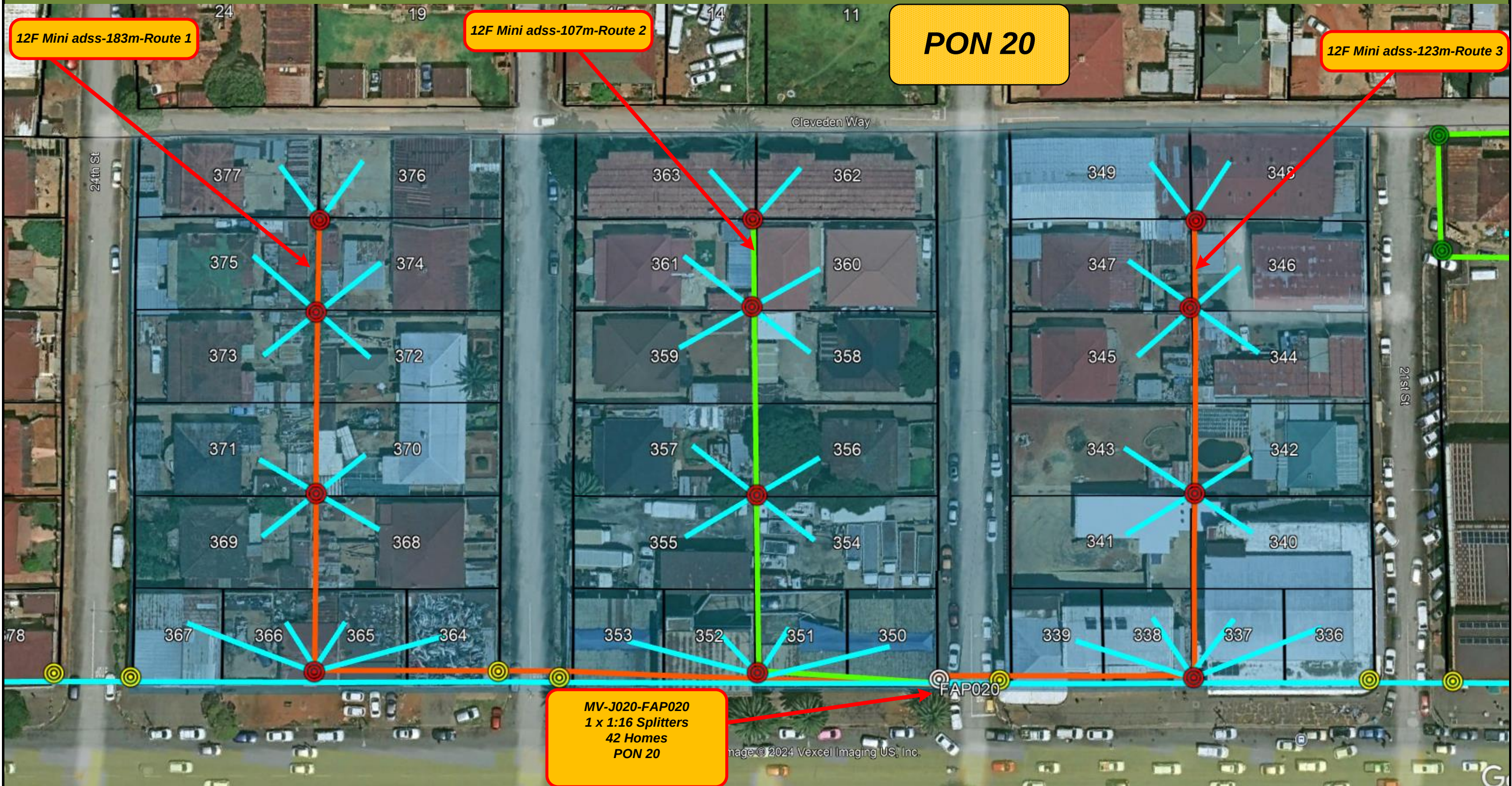
PON 19



	 UPD002 Communications
PROJECT DESCRIPTION:	
Malvern	

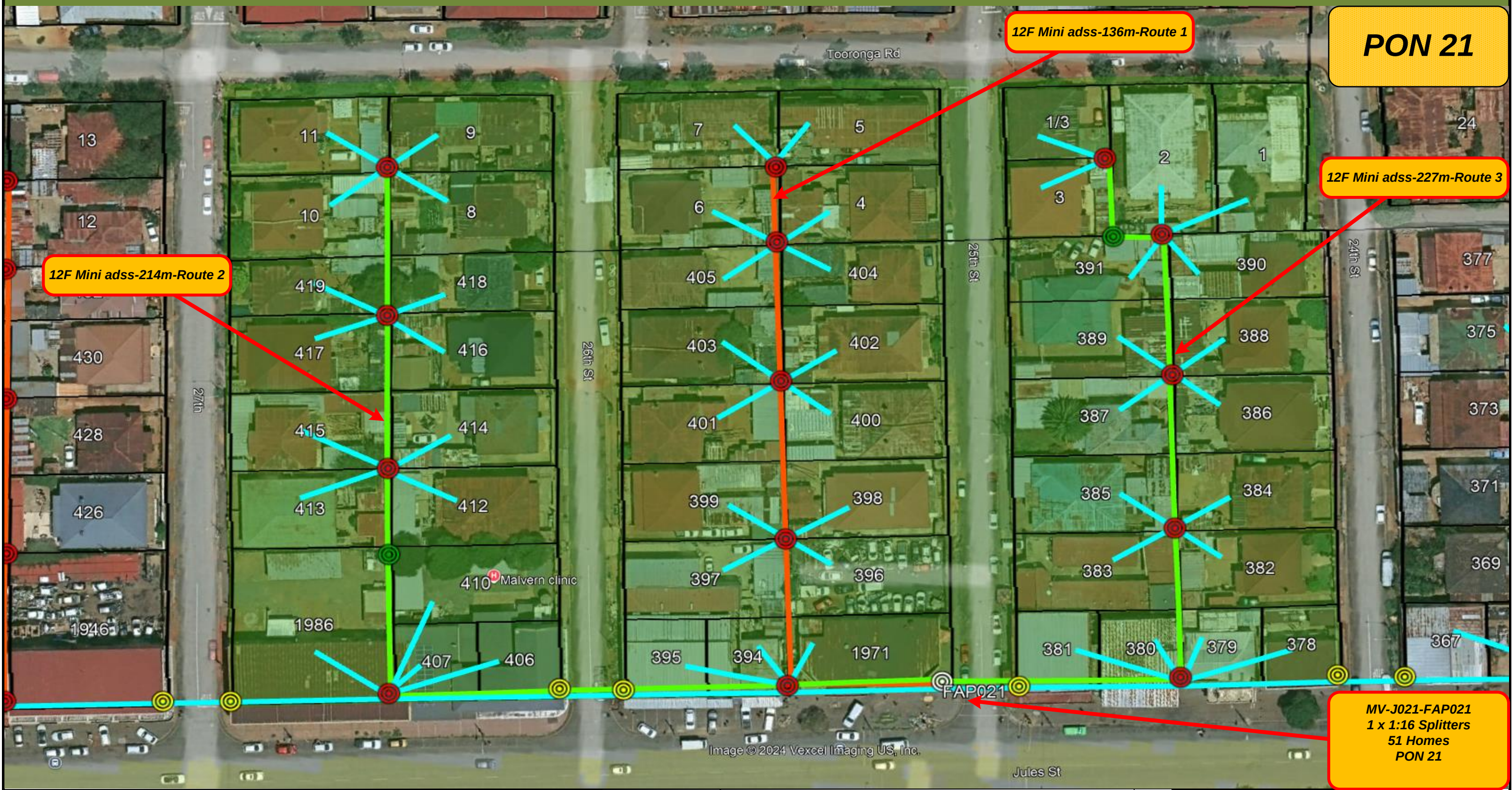
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Date: 2024/11/28
Page 22 of 40

PON 20



Color Legend							REVISION						REGION: GP	
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve		No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY		Drawing: FTTH Plan	
	Distribution Route 2		Existing MH		Existing Splitter									
	Main Feeder		New MH Route 1		New Splitter									
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through									
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing									
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints		SCALE:	PLANNED BY:	PROJECT No:	PROJECT DESCRIPTION:	Date: 2024/11/28			
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints		N.T.S.	Keith	Malvern	Malvern	Page 23 of 40			
	Existing Draw Box Route		New Local Cross connect (LCC)											
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)											
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)											

PON 21

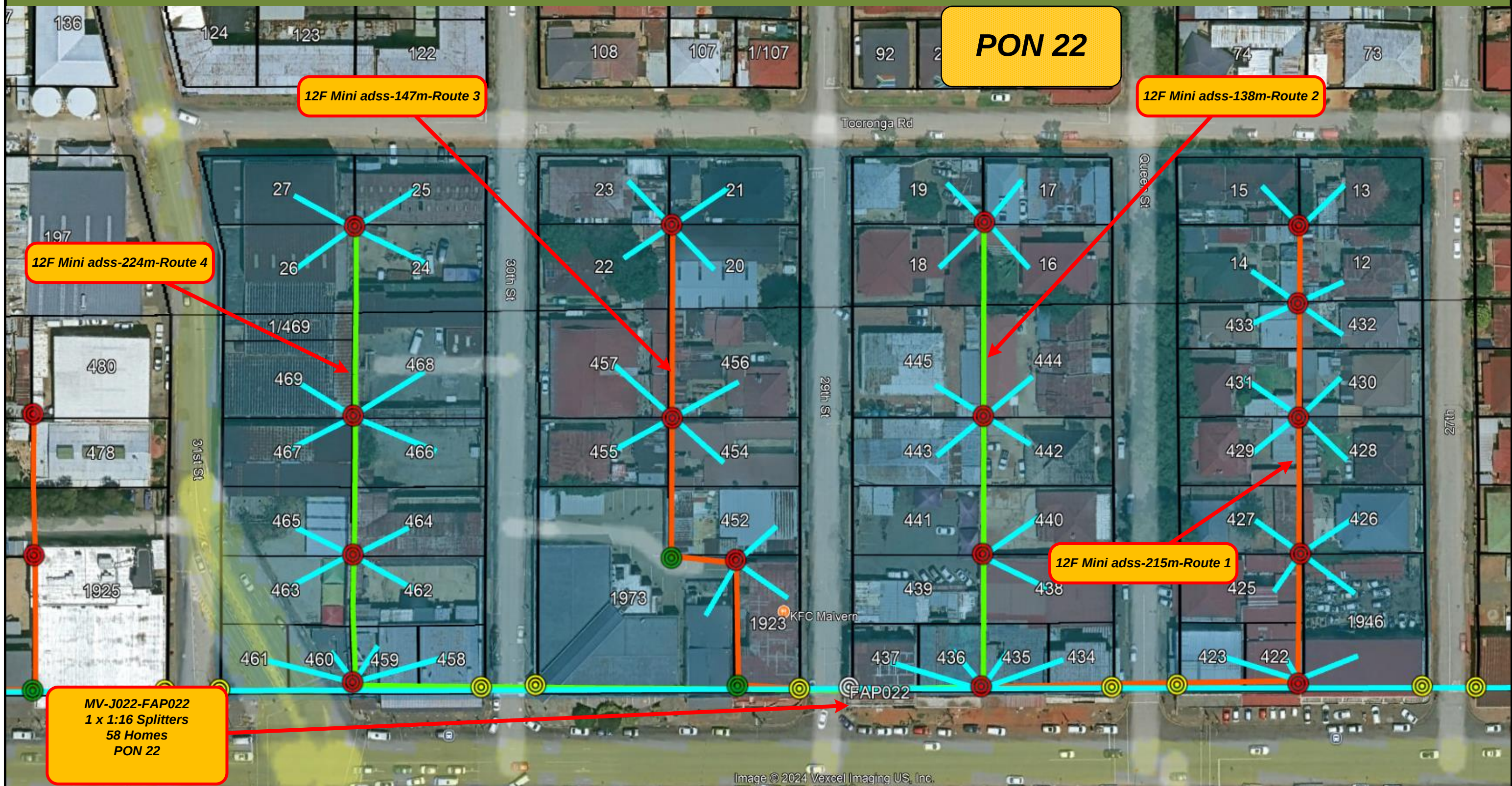


Color Legend					
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve
	Distribution Route 2		Existing MH		Existing Splitter
	Main Feeder		New MH Route 1		New Splitter
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints
	Existing Draw Box Route		New Local Cross connect (LCC)		
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)		
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)		



REVISION					 UPD002 Communications	REGION: GP
No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY		Drawing: FTTH Plan
SCALE:		PLANNED BY:	PROJECT No:		PROJECT DESCRIPTION:	Date: 2024/11/28
N.T.S.	Keith	Malvern		Malvern		Page 24 of 40

PON 22

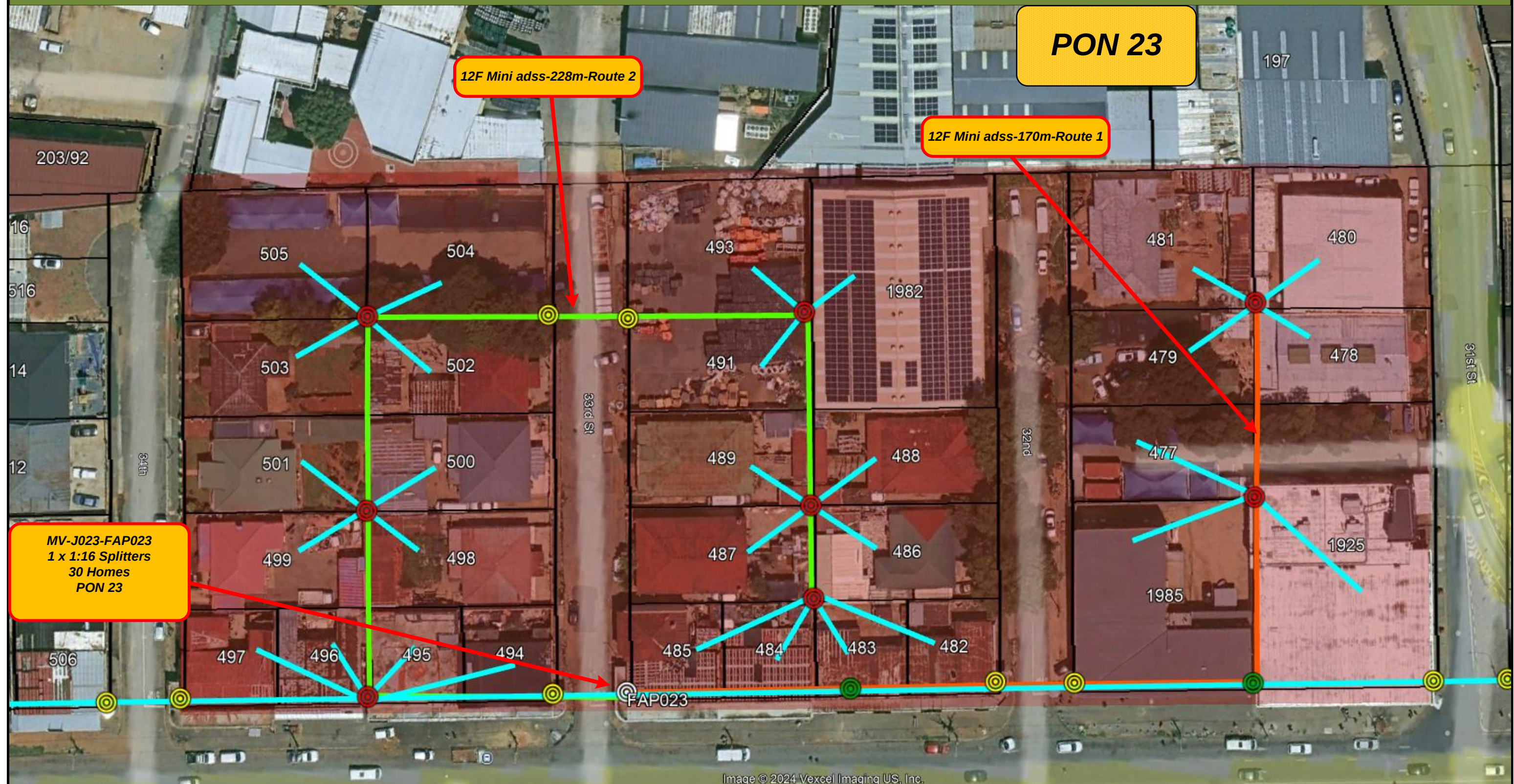


Color Legend					
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve
	Distribution Route 2		Existing MH		Existing Splitter
	Main Feeder		New MH Route 1		New Splitter
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints
	Existing Draw Box Route		New Local Cross connect (LCC)		
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)		
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)		



REVISION							REGION: GP
No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY			Drawing: FTTH Plan
SCALE:		PLANNED BY:		PROJECT No:		PROJECT DESCRIPTION:	Date: 2024/11/28
N.T.S.		Keith		Malvern		Malvern	Page 25 of 40

PON 23



Color Legend					
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve
	Distribution Route 2		Existing MH		Existing Splitter
	Main Feeder		New MH Route 1		New Splitter
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints
	Existing Draw Box Route		New Local Cross connect (LCC)		
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)		
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)		



REVISION							REGION: GP
No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY			Drawing: FTTH Plan
SCALE:		PLANNED BY:		PROJECT No:		PROJECT DESCRIPTION:	Date: 2024/11/28
N.T.S.		Keith		Malvern		Malvern	Page 26 of 40

PON 24

12F Mini adss-259m-Route 2

12F Mini adss-224m-Route 1

	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve
	Distribution Route 2		Existing MH		Existing Splitter
	Main Feeder		New MH Route 1		New Splitter
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints
	Existing Draw Box Route		New Local Cross connect (LCC)		
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)		
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)		



No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY
SCALE:		PLANNED BY:	PROJECT No:	
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REGION: GP

Drawing: FTTH Plan

Date: 2024/11/28

Page 27 of 40

PON 25

12F Mini adss-186m-Route 1

12F Mini adss-298m-Route 1

	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve
	Distribution Route 2		Existing MH		Existing Splitter
	Main Feeder		New MH Route 1		New Splitter
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints
	Existing Draw Box Route		New Local Cross connect (LCC)		
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)		
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)		



REVISION				
No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY

SCALE:	PLANNED BY:	PROJECT No:	
N.T.S.	Keith	Malvern	



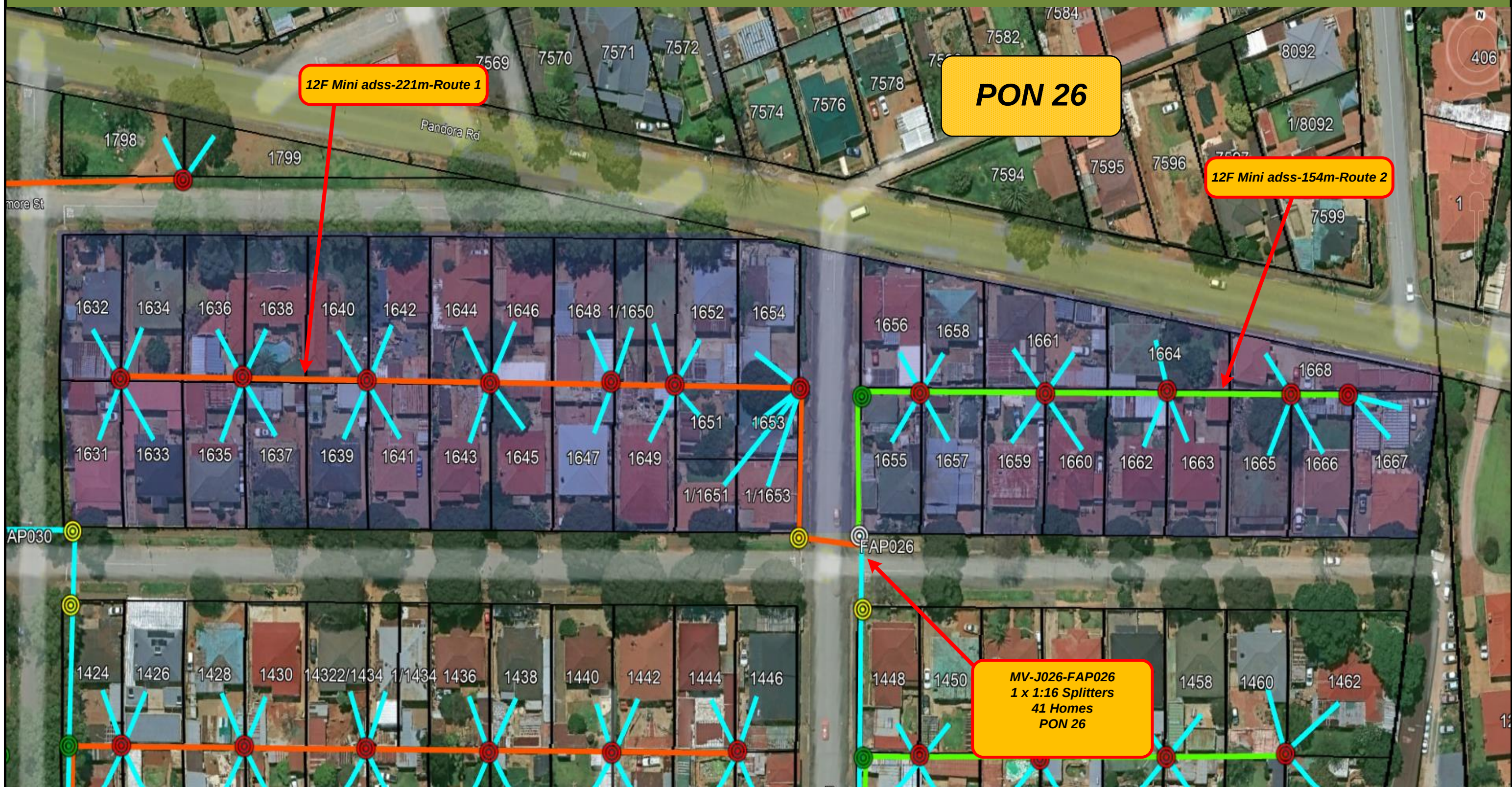
REGION: GP

Drawing: FTTH Plan

Date: 2024/11/28

Page 28 of 40

PON 26



Color Legend					
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve
	Distribution Route 2		Existing MH		Existing Splitter
	Main Feeder		New MH Route 1		New Splitter
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints
	Existing Draw Box Route		New Local Cross connect (LCC)		
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)		
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)		



REVISION							REGION: GP	
No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY			Drawing: FTTH Plan	
SCALE:		PLANNED BY:		PROJECT No:		PROJECT DESCRIPTION:		Date: 2024/11/28
N.T.S.		Keith		Malvern		Malvern		Page 29 of 40

PON 27



Distribution Route 1

Distribution Route 2

Main Feeder

Link Feeder

Road Crossing

New HH Route 1

New HH Route 2

Existing Draw Box Route

New Draw Box Route 1

New Draw Box Route 2

Bosal Pipe/ PVC Pipe / Trunking

Existing MH

New MH Route 1

New MH Route 2

Existing Fibre Distribution Point (FPON/FTP)

New Fibre Distribution Point (FPON/FTP)

Existing Local Cross connect (LCC)

New Local Cross connect (LCC)

Existing Optical Distribution Unit (ODU / NPON)

New Optical Distribution Unit (ODU / NPON)

Existing Sleeve

Existing Splitter

New Splitter

7m Wooden Poles Turning/Pass Through

9m Wooden Poles for Crossing

7m Wooden Poles/Main Joints

8m Wooden Poles/Link Joints

N

REVISION				
No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY

SCALE:	PLANNED BY:	PROJECT No:	PROJECT DESCRIPTION:
N.T.S.	Keith	Malvern	Malvern

REGION: GP

Drawing: FTTH Plan

Date: 2024/11/28

Page 30 of 40

PON 28



Color Legend					
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve
	Distribution Route 2		Existing MH		Existing Splitter
	Main Feeder		New MH Route 1		New Splitter
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints
	Existing Draw Box Route		New Local Cross connect (LCC)		
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)		
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)		



REVISION						REGION: GP
No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY		Drawing: FTTH Plan
SCALE:		PLANNED BY:		PROJECT No:	PROJECT DESCRIPTION:	Date: 2024/11/28
N.T.S.		Keith		Malvern	Malvern	Page 31 of 40

PON 29



Color Legend				REVISION						REGION: GP
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve	No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY
	Distribution Route 2		Existing MH		Existing Splitter					
	Main Feeder		New MH Route 1		New Splitter					
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through					
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing					
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints					
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints					
	Existing Draw Box Route		New Local Cross connect (LCC)							
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)							
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)							



SCALE:	PLANNED BY:	PROJECT No:	PROJECT DESCRIPTION:
N.T.S.	Keith	Malvern	Malvern

Date: 2024/11/28

Page 32 of 40

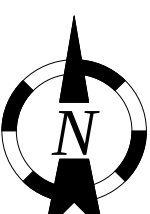
PON 30



12F Mini adss-119m-Route 1

MV-J030-FAP030
1 x 1:16 Splitters
39 Homes
PON 30

12F Mini adss-203m-Route 3

Color Legend							REVISION						REGION: GP	
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve		No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY		Drawing: FTTH Plan	
	Distribution Route 2		Existing MH		Existing Splitter									
	Main Feeder		New MH Route 1		New Splitter									
	Link Feeder		New MH Route 2		7m Wooden Poles									
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		Turning/Pass Through 9m Wooden Poles for Crossing									
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints		SCALE:		PLANNED BY:		PROJECT No:		PROJECT DESCRIPTION:	Date: 2024/11/28
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints		N.T.S.	Keith	Malvern	Malvern			Page 33 of 40	
	Existing Draw Box Route		New Local Cross connect (LCC)											
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)											
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)											

PON 31



Color Legend					
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve
	Distribution Route 2		Existing MH		Existing Splitter
	Main Feeder		New MH Route 1		New Splitter
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints
	Existing Draw Box Route		New Local Cross connect (LCC)		
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)		
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)		

REVISION							REGION: GP	
No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY			Drawing: FTTH Plan	
SCALE:		PLANNED BY:		PROJECT No:		PROJECT DESCRIPTION:		Date: 2024/11/28
N.T.S.		Keith		Malvern		Malvern		Page 34 of 40

PON 32

PON 32

12F Mini adss-223m-Route 1

MV-J032-FAP032
1 x 1:16 Splitters
39 Homes
PON 32



Color Legend				REVISION						REGION: GP	
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve	No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY	Drawing: FTTH Plan
	Distribution Route 2		Existing MH		Existing Splitter						
	Main Feeder		New MH Route 1		New Splitter						
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through						Date: 2024/11/28
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing						
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints						Page 35 of 40
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints						
	Existing Draw Box Route		New Local Cross connect (LCC)								
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)								
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)								



SCALE: N.T.S.

PLANNED BY: Keith

PROJECT No: Malvern

PROJECT DESCRIPTION: Malvern

Imagery Date: 2/17/2024 26°11'57.86" S 151°11'57.86" E

PON 33

MV-J033-FAP033
1 x 1:16 Splitters
40 Homes
PON 33

12F Mini adss-205m-Route 2

12F Mini adss-216m-Route 1

King St

1072 1074 1076 1078 1080 1082 1084 1092 1094 1096 1098 1100 1102 1104 1106 1108 1110 1112 1114 1116 1118

787 789 791 793 795 797 799 801 803 809 808 813 815 817 819 821 823 825 827 829 831 1/833 833 836 835 834 812 814 816 818 820 822 824 826 828 830 1/832 832

394 395 396 397 406 407 1986 410 1946 422 423 425 434 435 436 437 438 439 1923 1973 458 459 460 462 463

Malvern clinic

KFC Malvern

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Google Earth

Color Legend						REVISION						REGION: GP	
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking			Existing Sleeve	No.	NATURE OF REVISION	DATE	SIGNATURE		AUTHORITY	Drawing: FTTH Plan
	Distribution Route 2		Existing MH			Existing Splitter							
	Main Feeder		New MH Route 1			New Splitter							
	Link Feeder		New MH Route 2			7m Wooden Poles Turning/Pass Through							
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)			9m Wooden Poles for Crossing							
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)			7m Wooden Poles/Main Joints	SCALE:		PLANNED BY:			PROJECT No:	PROJECT DESCRIPTION:
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints	N.T.S.		Keith		Malvern	Malvern	Page 36 of 40	
	Existing Draw Box Route		New Local Cross connect (LCC)										
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)										
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)										

PON 34

MV-J034-FAP034
1 x 1:16 Splitters
47 Homes
PON 34

Imagery Date: 2/17/2024

Color Legend					
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve
	Distribution Route 2		Existing MH		Existing Splitter
	Main Feeder		New MH Route 1		New Splitter
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints
	Existing Draw Box Route		New Local Cross connect (LCC)		
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)		
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)		



REVISION							REGION: GP	
No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY			Drawing: FTTH Plan	
SCALE:		PLANNED BY:		PROJECT No:		PROJECT DESCRIPTION:		Date: 2024/11/28
N.T.S.		Keith		Malvern		Malvern		Page 37 of 40

PON 35



	 UPD002 Communications
PROJECT DESCRIPTION:	
Malvern	

REGION: GP
Drawing: FTTH Plan
Date: 2024/11/28
Page 38 of 40

PON 36

PON 36

MV-J036-FAP036
1 x 1:16 Splitters
53 Homes
PON 36

12F Mini adss-220m-Route 1

12F Mini adss-203m-Route 2

12F Mini adss-245m-Route 3

Color Legend

	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking		Existing Sleeve
	Distribution Route 2		Existing MH		Existing Splitter
	Main Feeder		New MH Route 1		New Splitter
	Link Feeder		New MH Route 2		7m Wooden Poles Turning/Pass Through
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)		9m Wooden Poles for Crossing
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)		7m Wooden Poles/Main Joints
	New HH Route 2		Existing Local Cross connect (LCC)		8m Wooden Poles/Link Joints
	Existing Draw Box Route		New Local Cross connect (LCC)		
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)		
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)		



REVISION

No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY
SCALE:		PLANNED BY:	PROJECT No:	
N.T.S.	Keith		Malvern	



REGION: GP

Drawing: FTTH Plan

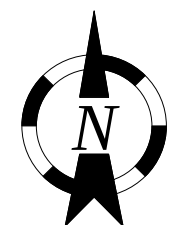
Date: 2024/11/28

Page 39 of 40

PON 37



Color Legend			
	Distribution Route 1		Bosal Pipe/ PVC Pipe / Trunking
	Distribution Route 2		Existing MH
	Main Feeder		New MH Route 1
	Link Feeder		New MH Route 2
	Road Crossing		Existing Fibre Distribution Point (FPON/FTP)
	New HH Route 1		New Fibre Distribution Point (FPON/FTP)
	New HH Route 2		Existing Local Cross connect (LCC)
	Existing Draw Box Route		New Local Cross connect (LCC)
	New Draw Box Route 1		Existing Optical Distribution Unit (ODU / NPON)
	New Draw Box Route 2		New Optical Distribution Unit (ODU / NPON)



REVISION						REGION: GP
No.	NATURE OF REVISION	DATE	SIGNATURE	AUTHORITY		Drawing: FTTH Plan
SCALE:		PLANNED BY:		PROJECT No:	PROJECT DESCRIPTION:	Date: 2024/11/28
N.T.S.		Keith		Malvern	Malvern	Page 40 of 40