SOLVE FOR X

It's fiber to anywhere.

CLEARFIELD

Building Your Fiber Network

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Beware of the “One Size Fits All” Approach

Each FTTx Build Is Uniquely Different

1. Physical terrain
2. Municipalities easement and code requirements
3. Contract agreements

- Union – Separation of labor/job functions
- Contractor SLA

Choices…Choices…Choices…

Underground plant?

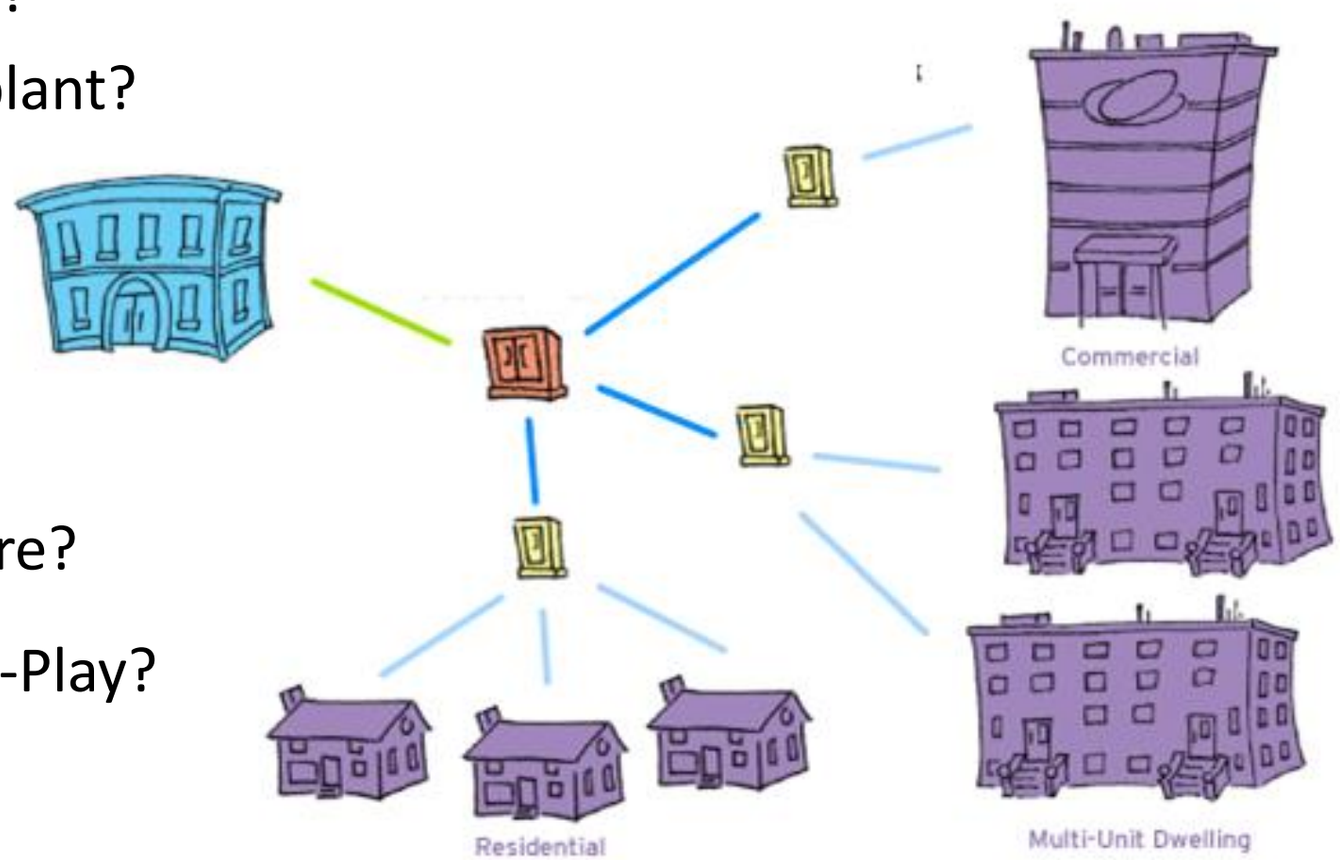
Aerial plant?

Open Architecture?

Plug-and-Play?

Ethernet?

GPON?



Distributed Split?

Centralized Split?

Large Business?

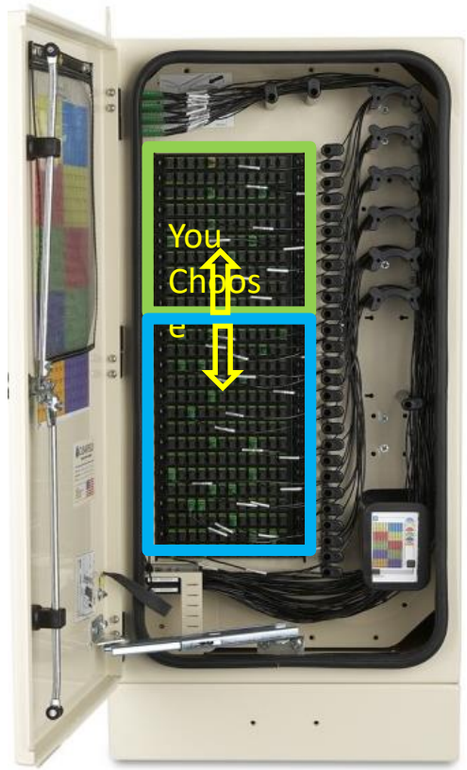
Small Business?

Multi Dwelling?

Single Family?

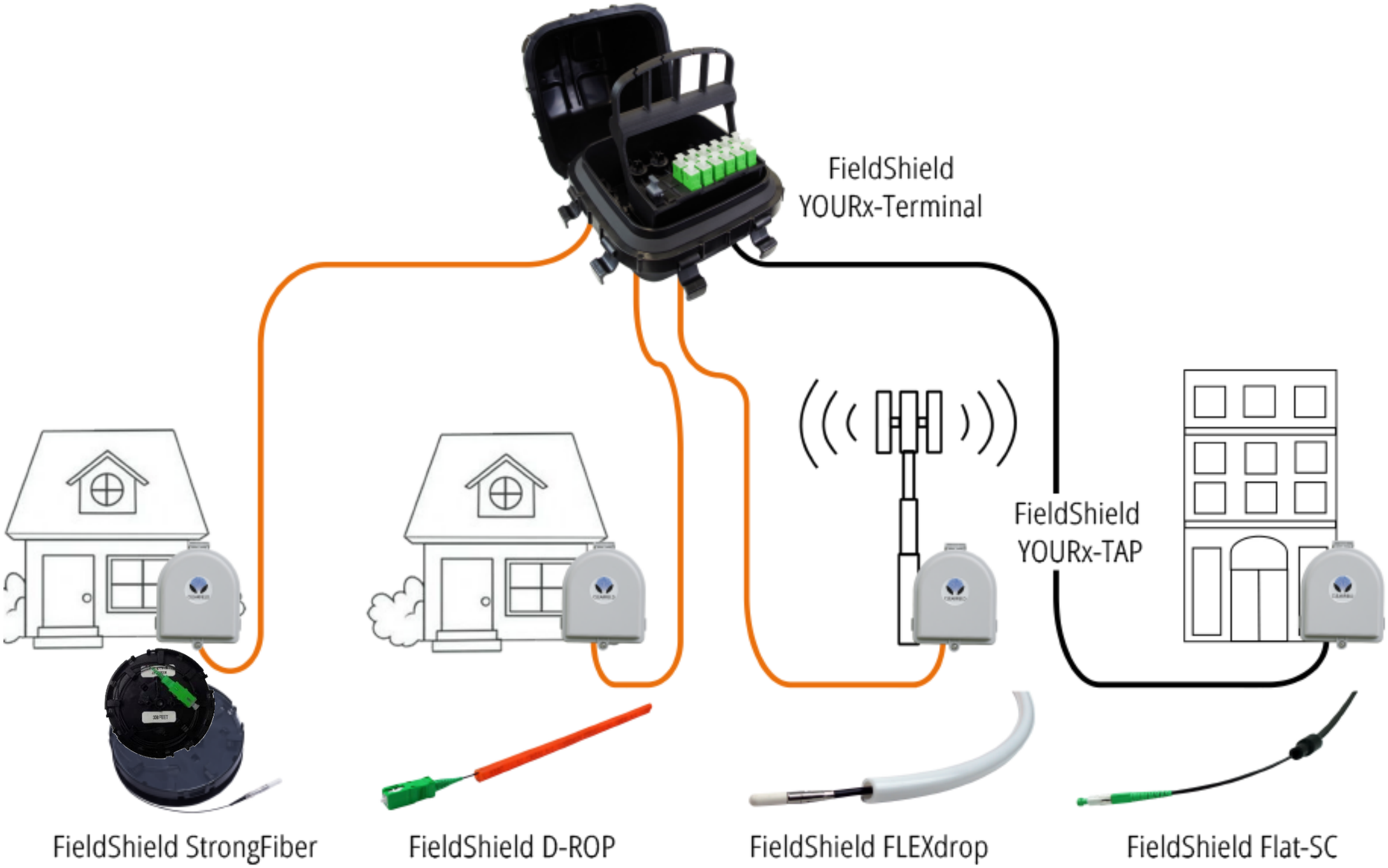
Clearfield® FDH – Fiber Distribution Hub

- Easily Engineered Dynamic Allocation Ratio of Feeder Ports to Distribution Ports in Capacities: 96, 144, 288, 432, 576 and 1,152 Ports
- Allows Multiple Architectures Through One Cabinet, i.e. P2P, AE & PON Planning and Sizing for Feeder & Distribution Growth Minimizing Cable Set-Ups, Splicing and Speeding Up Provisioning.
- Feeder and distribution ratios are user defined. In-Cassette Splicing Allows for “Grow As You Go“ Delivery and Connection of Cables From Additional Premise or Equipment Connections or Feeder Augmentation.
- Simplifies Maintenance & Repair - Accessibility for Isolation, Reducing MTTR
- Mixed Splitter Package Options:
  - Supports one 1 x 32, two 1 x 16 or four 1 x 8 Configurations Without Penalty in Real Estate or Port Counts
  - Provides Greater Customer Data Speed Management and Port Capacity Management



The YOURx™ Platform

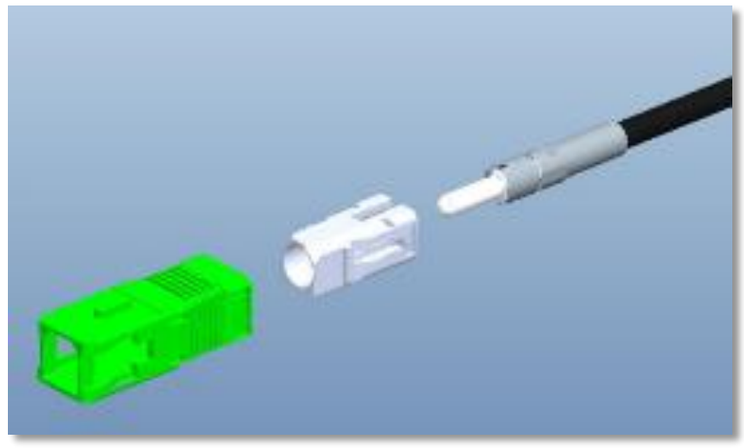
Simplicity in its design + Choices in Drop Cable Options = YOURx



The Basics: Connectors

Pre-Terminated MPO Pushable Connector

Pre-Terminated SC Pushable Connector



YOURx™-TAP and FieldShield® StrongFiber

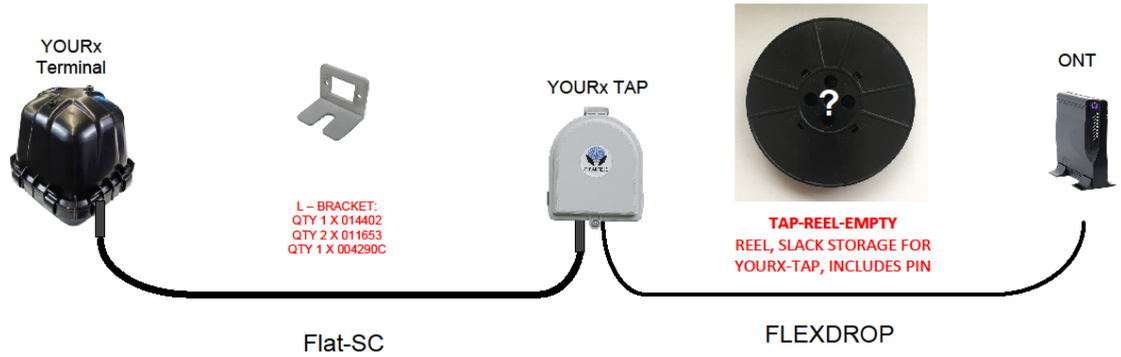
- 900 micron drop cable delivers exceptional pull strength with reduced cable size and material weight. The small size fiber and flexible jacketing allows for shipping on a compact 4” diameter deploy reel that holds up to 300 feet of cable, making precise pre-engineered drop cable lengths a thing of the past.

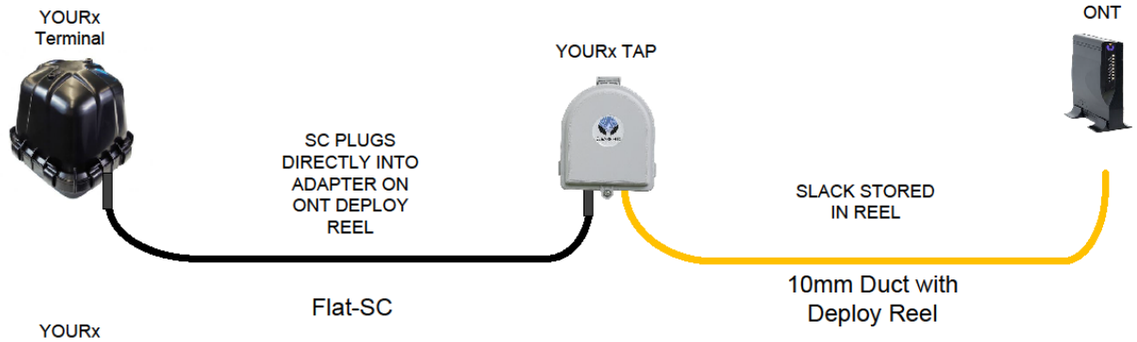
900 micron OSP
Drop Cable

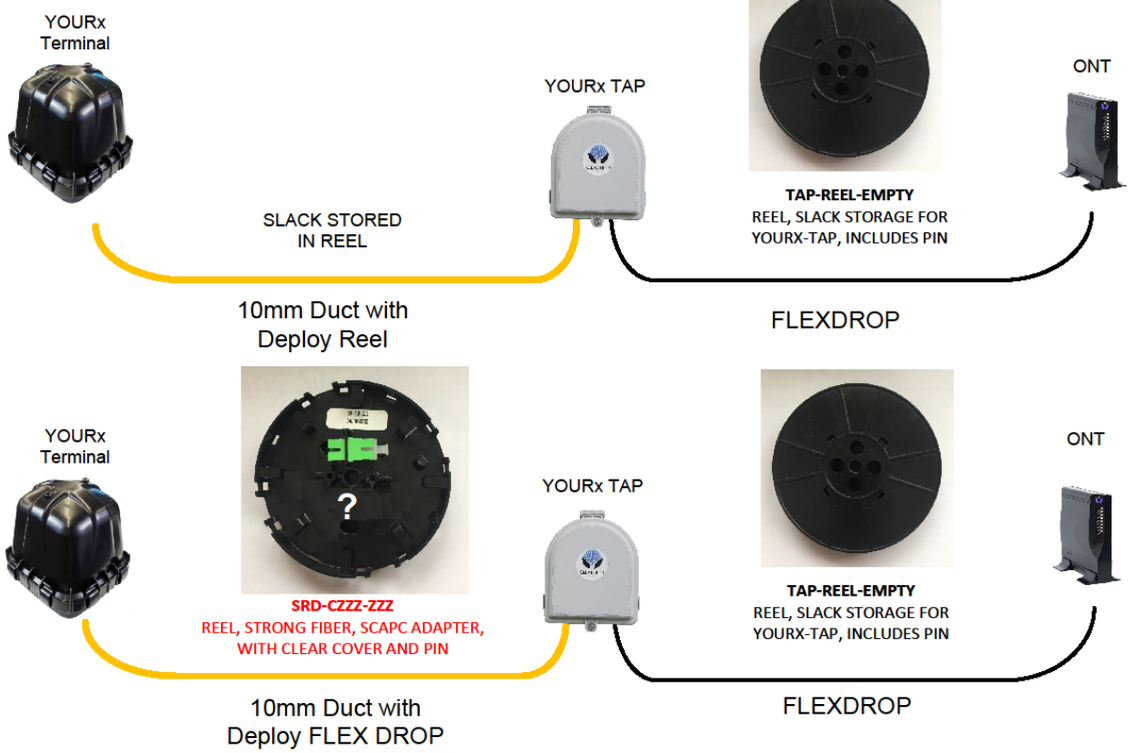
Compact Deploy
Reel 4” diameter

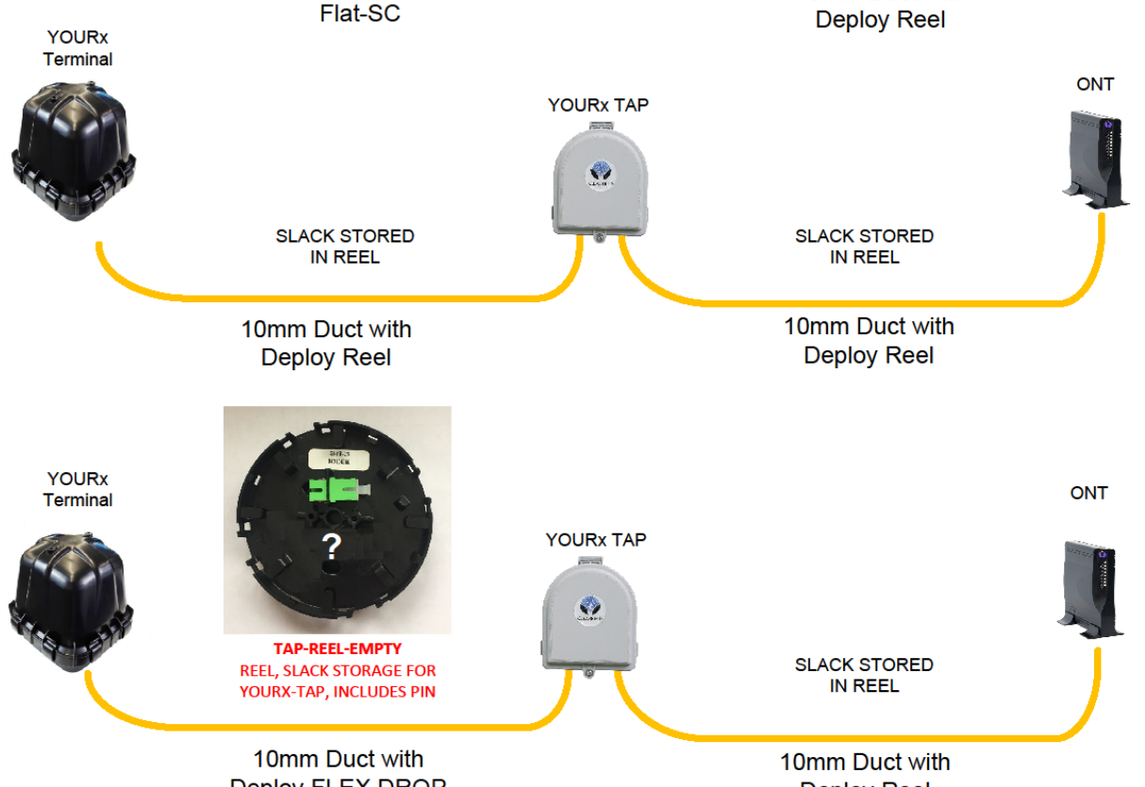
Test Access Point

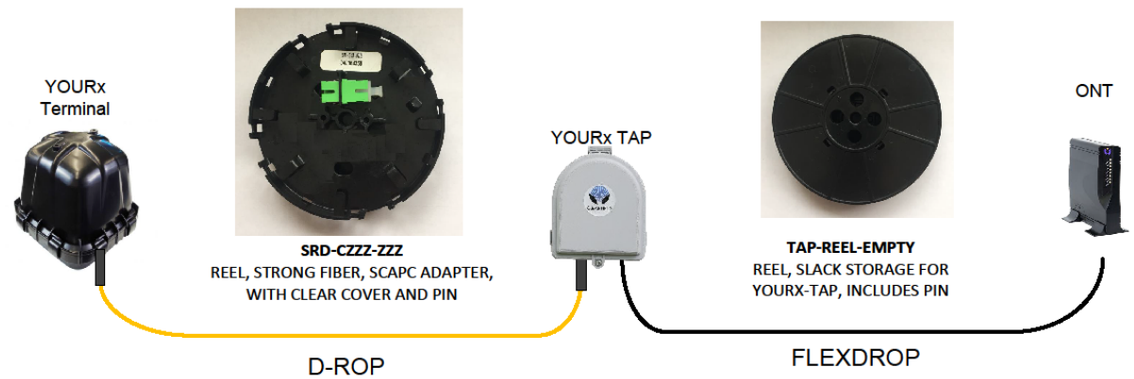
Reel Choices











Types Of FTTH Network Construction

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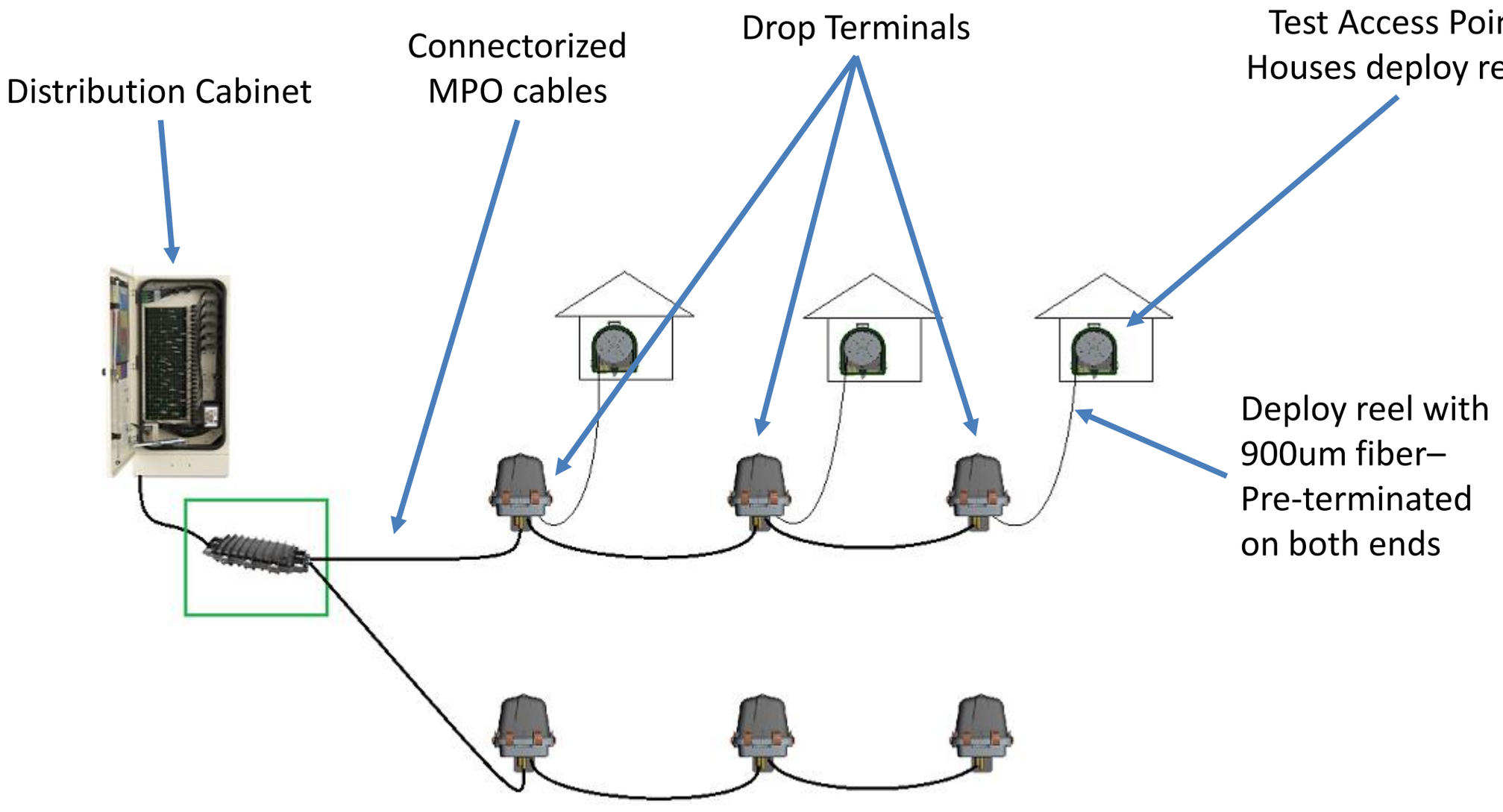
Three Basic Types

- Modular = plug-and-play
- Open = fusion splicing
- Combination = plug-and-play and fusion splicing

Modular Technology/Plug-and-Play

- OSP Terminals are deployed to provide quick connections between distribution cabinet and final drop points. Rather than splicing, pre-connectorized MPO cables can be deployed to connect to the terminal. On the drop side, deploy reels with 900um fiber plug into the terminal on one end and terminate at the TAP demarc point on the other end.

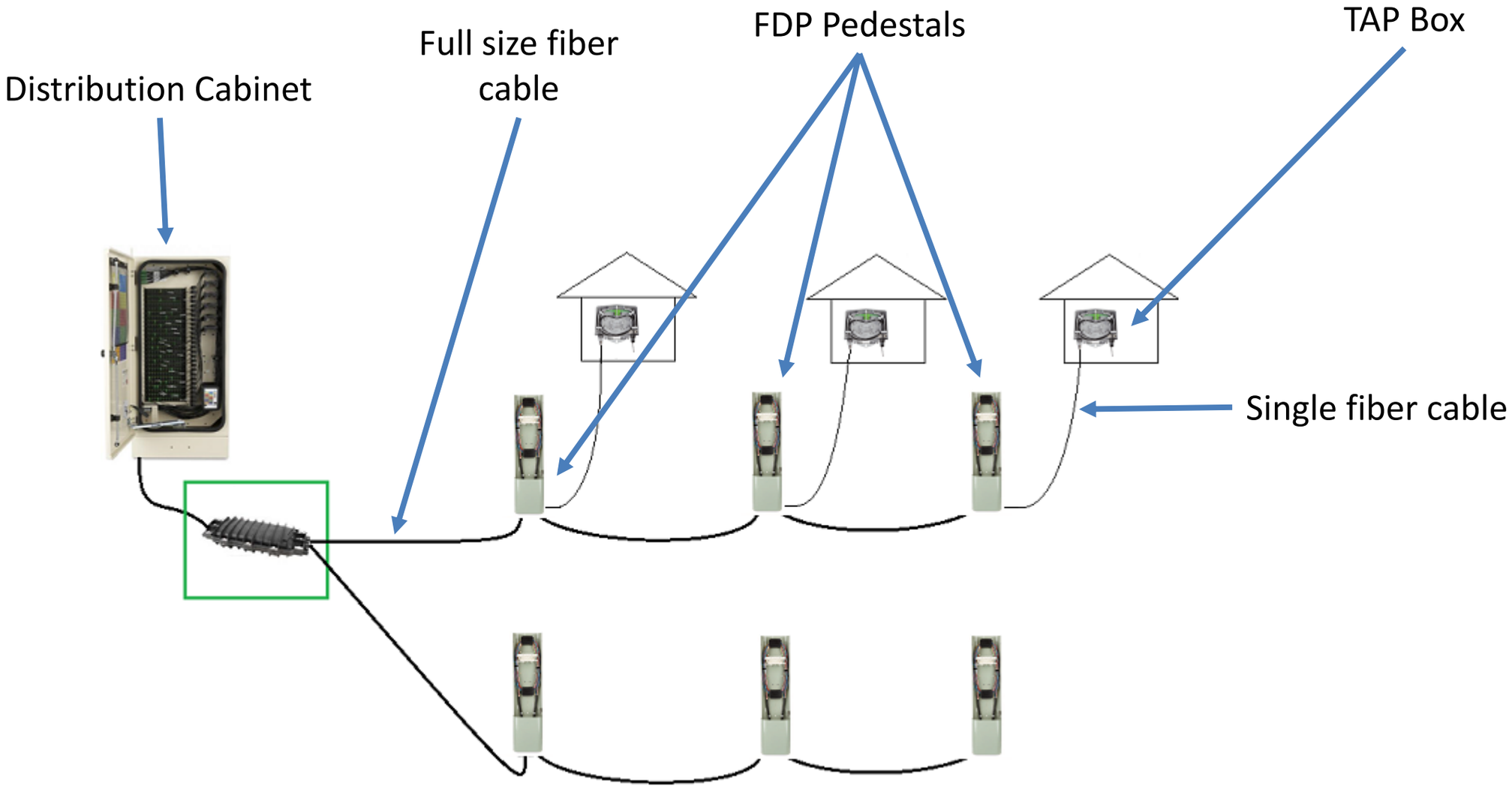


Open Technology

- FieldSmart® Splice-Only Pedestal Inserts provide splice or interconnect connectivity at the access point for the last mile drop.
- Splice Only Pedestal Inserts incorporate field-tested designs to provide a solution that is easily installed and modified. Pedestal products can be configured to support any access point configuration for multi-fiber, ring cut and drop cable solutions.

Open Technology/Fusion Splice Terminations

- FieldSmart® FDP Pedestals are deployed to provide the connections between distribution cabinet and final drop points. Fiber cable is accessed in FDP Pedestal to terminate the fibers assigned to that location. On the drop side, single fiber cable is run to a tap box where a splice on connector or pig tail is fused on.



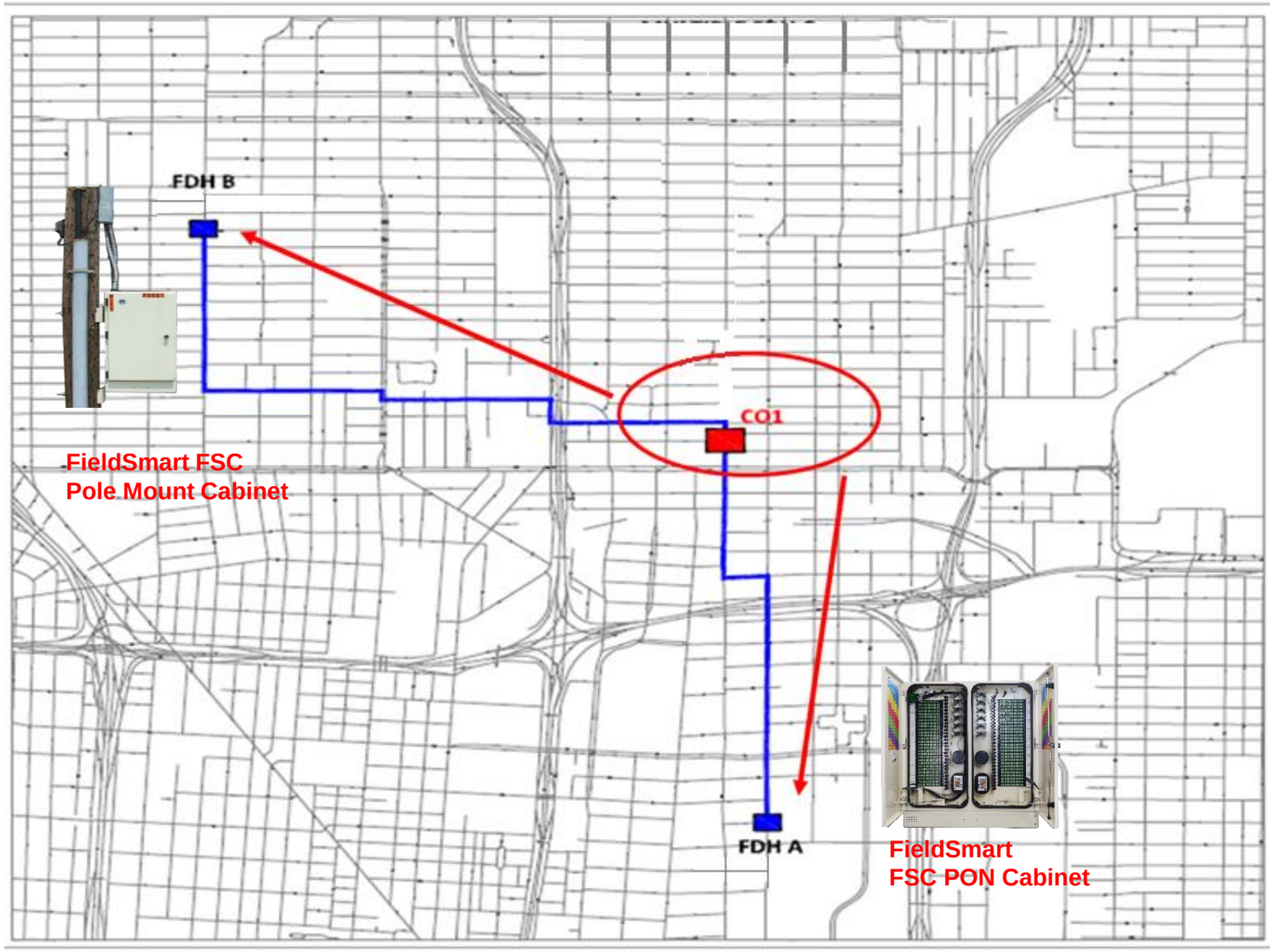
Types of FSA (Fiber Serving Areas)

- Distributed split = Optical splitters are housed in the network access points (terminals). Access points are distributed throughout the FTTH network.

- Centralized split = Optical splitters are housed in a cabinet in the outside plant. Cabinet in centrally located in the FTTH network.

- Home run = Optical splitters are housed in the C.O./Head end and a dedicated fiber is run to each home.

CO Drill Down to FDHs in Fiber Serving Areas A/B

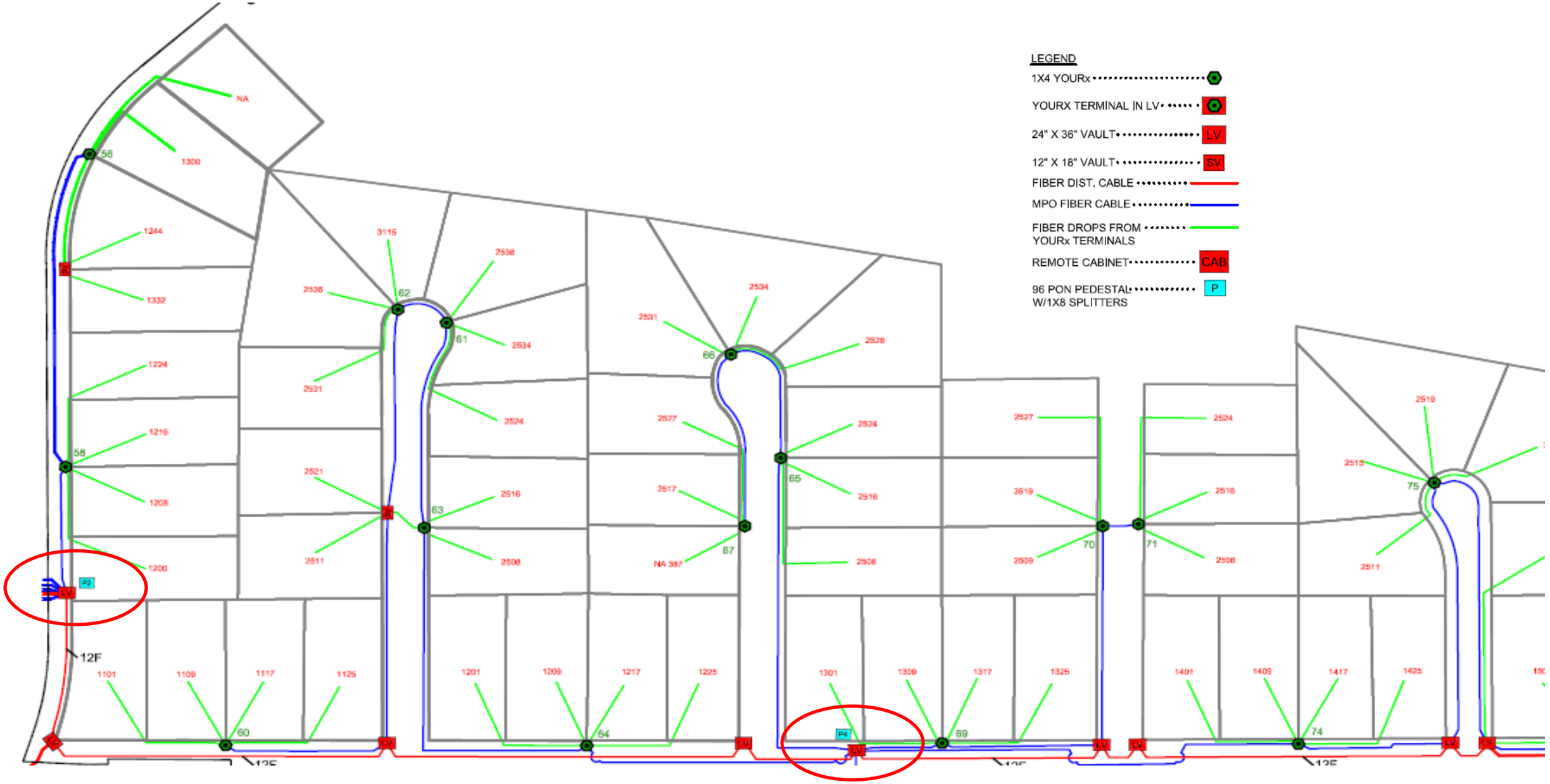


- ✓ **The FieldSmart® FSC Passive Optical Network (PON) Cabinet** is the complete solution for managing up to 1152 distribution fibers for an OSP FTTx application.

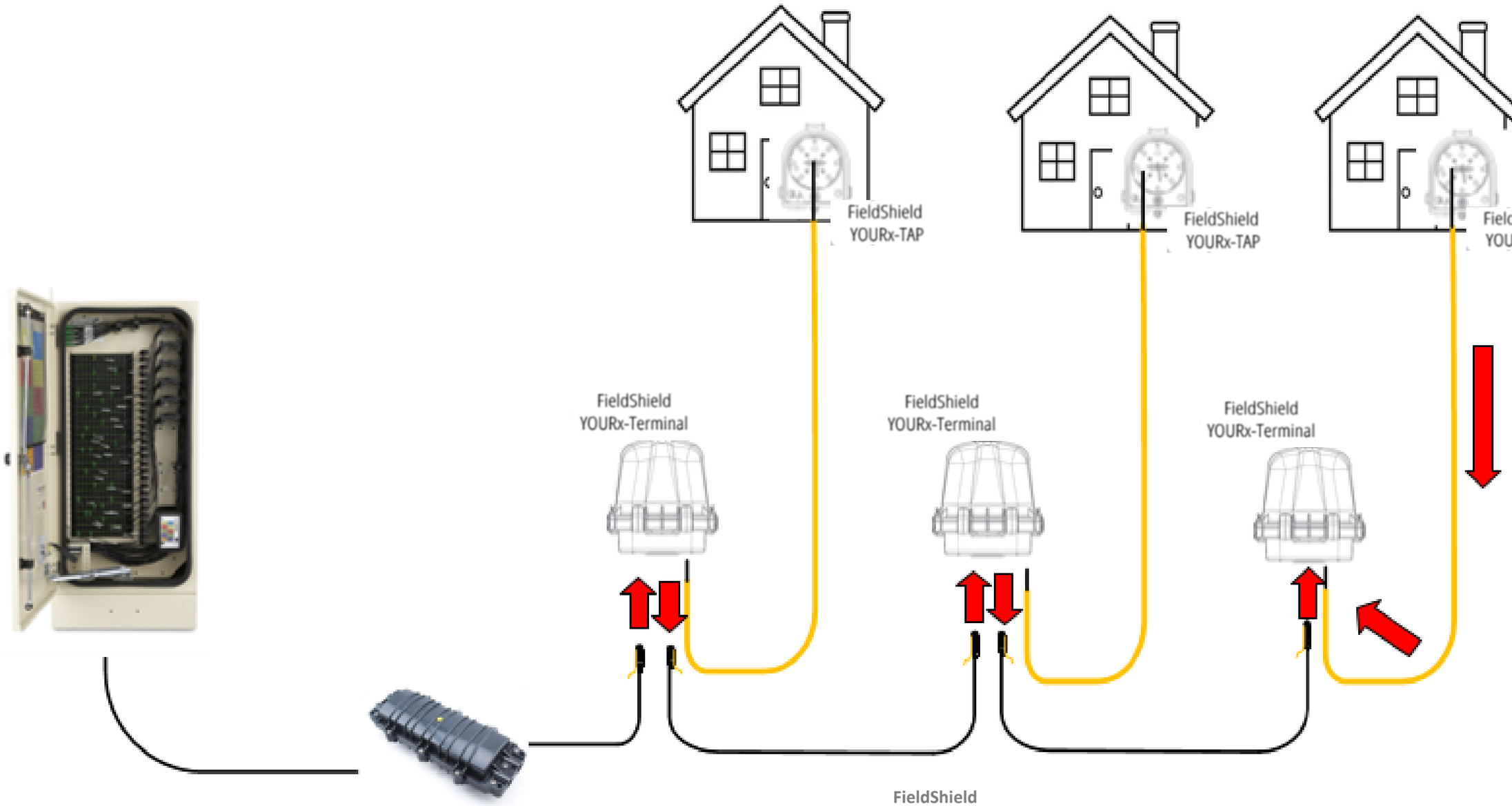
- ✓ Through the incremental design of the Clearview® Cassette, user capacity can be scaled from as few as 12 ports to the maximum configuration of the cabinet, allowing the service provider to align the investment in capital equipment to the turn-up of revenue-generating circuits.

- ✓ Labor and other field costs are minimized through its craft-friendly layout.

FDH A/FSA Drill Down – Distributed Split



YOURx™-Terminal Run MPO Connections in FSA A

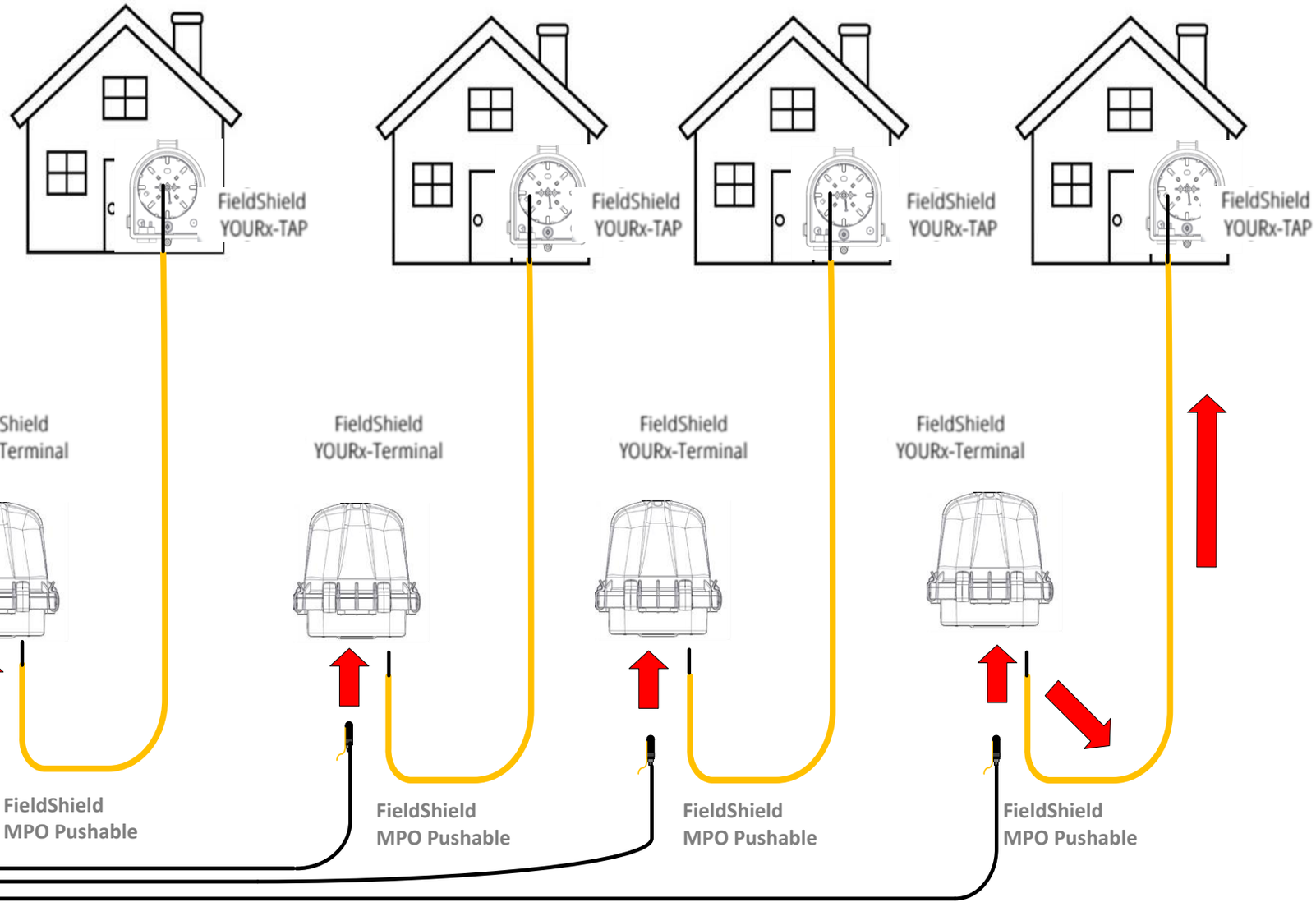


FSA/FDH B Drill Down – Centralized Split

Rear Lot Right-of-Way
With Home-Run
YOURx™ MPO Tails to
Central Splices

LEGEND
SPLITTER CABINET
AERIAL YOURX TERMINALS
FIBER DIST. CABLE
FIBER MPO
FIBER DROPS FROM TERMINALS
SPLICE POINT

FSA/FDH B Home-Run YOURx™ MPO Tails to Central Splices



T FieldSmart FSC PON Cabinets

Blended Network

- Blending of the modular/plug-and-play and open architecture technologies.
- Best combination is what works best for your TCO (Total Cost of Ownership).

Thank You

Questions?