



Innovative Advancements in Fiber Deployment

**Crown Castle in Partnership with:
City of Los Angeles: Nazila Cruz
City of Elk Grove: Shoaib Ahrary**

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The pathway to possible.

Agenda

1. Rapid Overview
2. Rapid vs Boring
3. City of Elk Grove
4. City of Los Angeles
5. Questions and Answers

We've built on our network deployment experience to create added benefits.



Safer



No risk of utility strikes



Simpler



No need to plan for road, lane or sidewalk closures with a smaller crew and equipment



Faster



One-pass process enables simultaneous start and restoration



Greener



Fully-recyclable waste and reduced noise pollution

We partnered with Corning on a new process that makes network expansion less disruptive.

- Meet the highest standards of safety
- Use a simplified process
- Minimize disruption
- Blend into the existing streetscape



Corning, a Fortune 500 company, is one of the world's leading fiber manufacturers.

Introducing a better way to deploy fiber.

Rapid Connect uses a small moving crew and safety vehicles to simultaneously cut, place and seal underground fiber—without shutting down traffic.

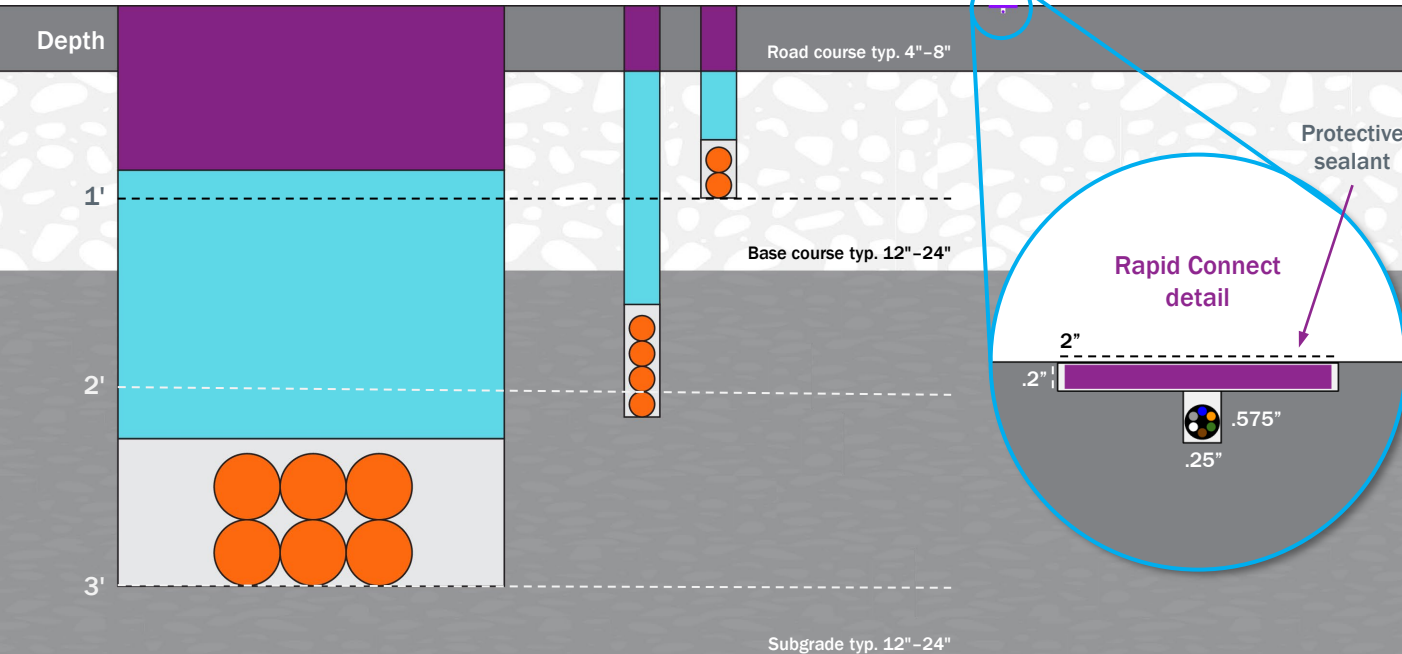


Rapid Connect is less invasive.

Traditional trenching
2' wide x 3' deep

Microtrenching
2" wide x 12"-26" deep

Rapid Connect
2" x .2" grind & .25" x .575" slot



Narrow width means tires won't disrupt sealant.

Shallow depth eliminates risk of accidental utility strike.

Produces minimal waste which is easily captured and recycled.

Subgrade typ. 12"-24"

Scaled Comparison of UG Models

Rapid vs. Boring





Key Rapid Milestones



2022	6 Completed Permits	530'	0.60 Miles
2023	38 Completed Permits	15,760'	2.98 Miles
2024	5 Completed Permits	6,188'	1.17 Miles



2024 Pipeline	74 Permits	31,056'	5.88 Miles
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- **Rapid Internally Approved Construction Standard for Crown Castle.**



Experience with Rapid in Los Angeles

- **Fast & Efficient installation**
 - Immediate restoration compared to Micro/open- Trench.
 - Less impact to community and traffic.
- **Minimal and shallow surface disruption with no subsurface disruption.**
 - Less structural damage to AC and Concrete surfaces.
 - Increased longevity of streets over other methodologies.
- **Less overall construction and Street Damage Restoration fees (SDRF) .**
 - Allows telecommunications companies to provide additional services .
- **Minimal to zero waste with recyclable spoils.**
- **No surface limitations Rapid can be installed on concrete and AC surfaces.**
- **Faster and more efficient coordination with any conflicting excavation.**



“The lower installation cost and time makes it easier to get connectivity to underserved communities, which is even more important in today’s virtual work and services.” – Ted Allen, Los Angeles City Engineer & Deputy Director BOE



City of Elk Grove



Key Rapid Milestones



2022	1 Completed Permits	2,553'	0.48 Miles
2023	4 Completed Permits	50,454'	9.56 Miles



- Speed – 10 miles in less than 3 months



2024 Pipeline	1 Permit	4,700'+/-	0.89 Miles
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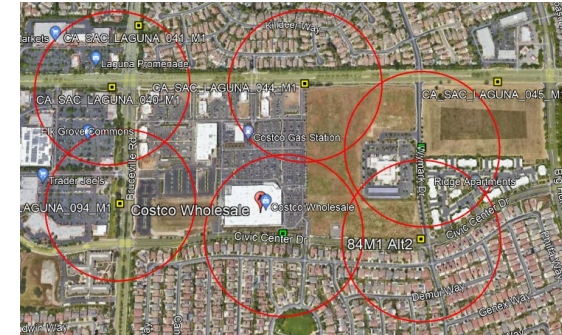


- Additional client investment into Elk Grove



Experience with Rapid in Elk Grove

- Opportunity for Elk Grove to partner with **Crown Castle** for its own connectivity goals
- Little to no Dust and noise pollution
 - Clean and Quick operation
 - Reduction in residential complaints 0 from Rapid connect.
- Enhanced connectivity around populated areas.
- Crown castles responsiveness to issues and oversight on Contractors.
 - Aided with the city inspection staff.



Question & Answers



Thank you

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