Cabling Infrastructure

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ECC Technologies
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ECC TECHNOLOGIES, INC

Communications Cabling; Copper & Fiber Optic.

- Cabling Infrastructure
- Structured Cabling

Common terms used when discussing communication cabling systems.

Structured Cabling

- The term used most often when referring to and discussing "Inside Plant" (ISP) cabling and wiring. These are the devices, support systems, and equipment that are found inside a building environment that facilitate communication and IT systems.

Communication/Equipment Rooms.

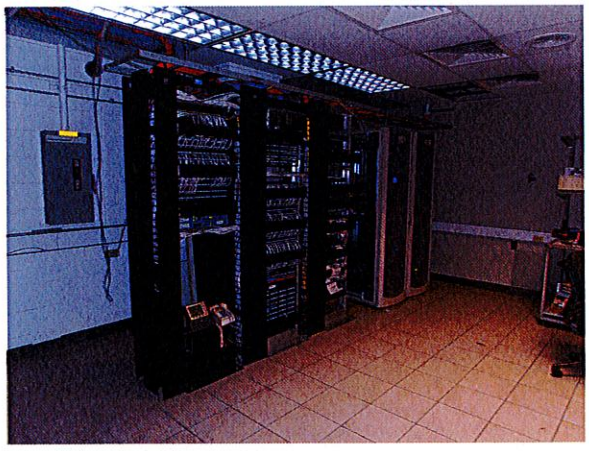
Cable Pathways.

Equipment racks/frames.

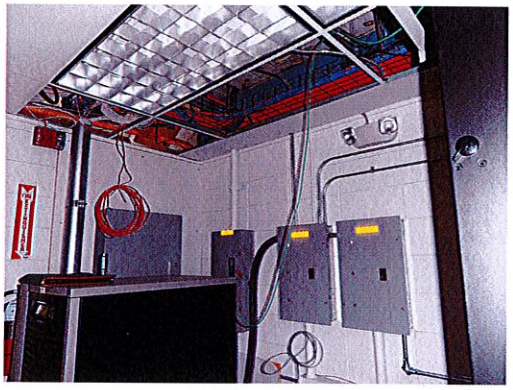
Demarcation point (Demark).

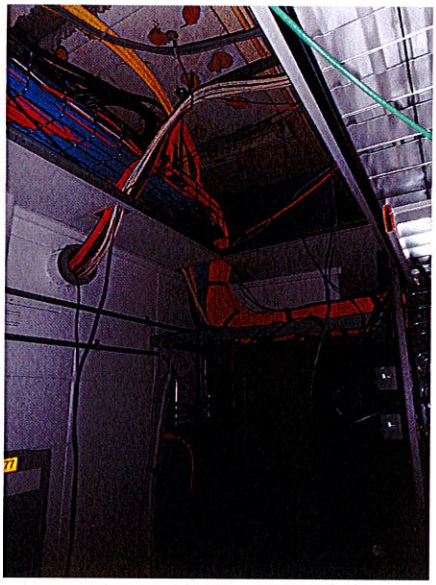
Entrance Facility.

Communication/Equipment Rooms.

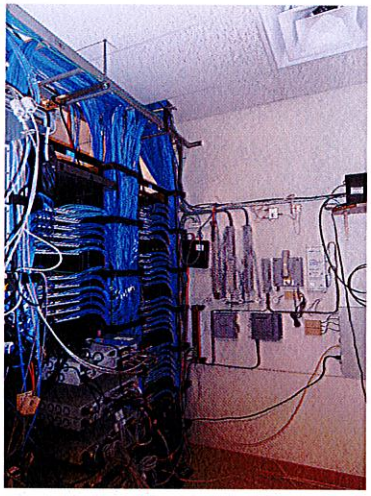


Cable Pathways.



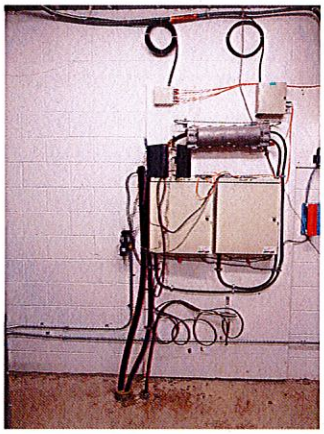


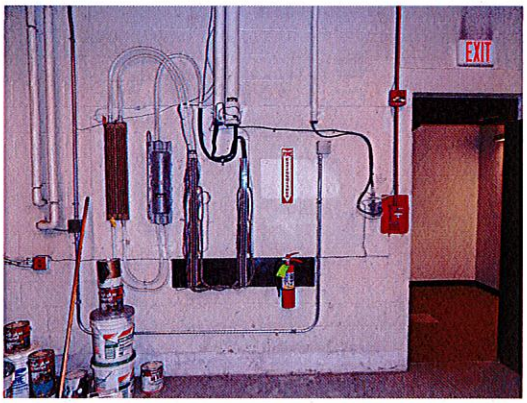
Equipment racks/frames.



Demarcation point (Demark).

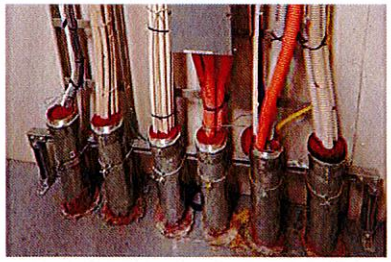
The point of interface between service providers and customer facilities.





Entrance Facility.

- An entrance to a building for both public and private network service cables. The point of emergence for communication cabling through an exterior wall, a floor, or from a conduit pathway.



Cabling Infrastructure

The term used most often when referring to and discussing "Outside Plant" (OSP) cabling. These are the components, excluding electronic equipment, that together provide the basic support structure for the distribution of communication and IT systems, across a campus, metro, and global network.

CABLING INFRASTRUCTURE

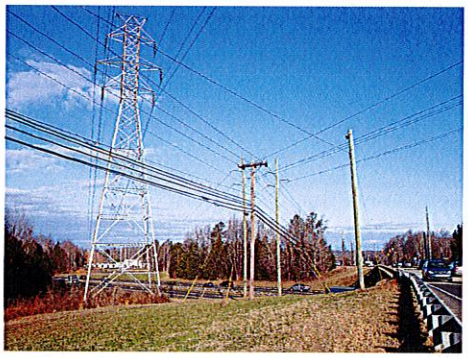
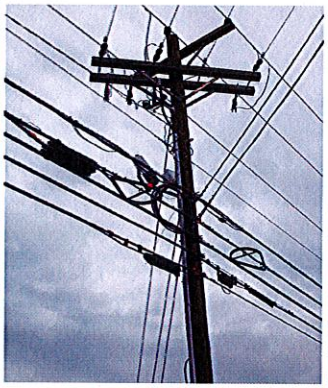
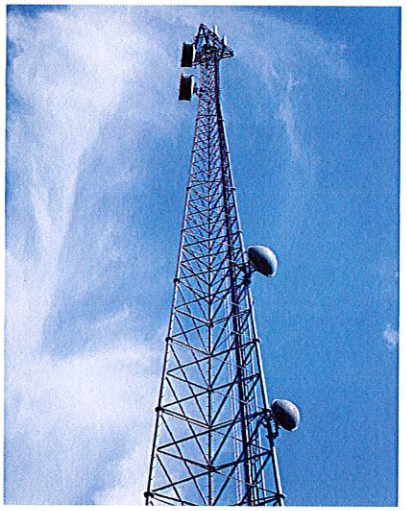
Cabling Infrastructure

AERAIL

UNDERGROUND

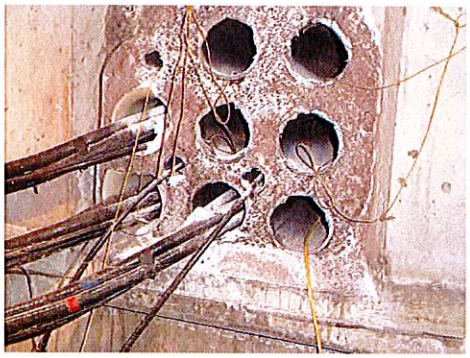
BURIED

AERAIL: Involves the use of utility poles, either sole owned power, or communication poles, and or joint use poles (multiple owners), along with communication towers.

UNDERGROUND:

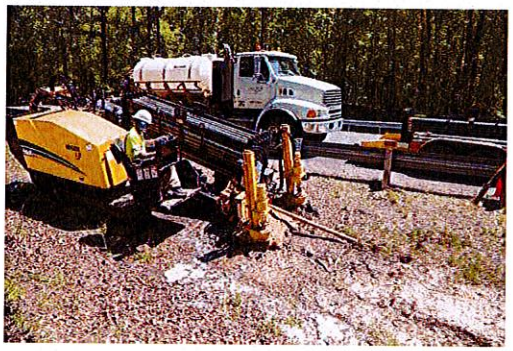
Involves the use of a series of conduits, manholes (MH), and vaults as a pathway between access points and building entrances to facilitate the installation and maintenance of communication systems cabling.




BURIED:

The installation of a specific type of cable, or duct designed for a direct buried application used in the communication industry.

Direct buried – by means of trenching, plowing, or directional boring.



OSP Design considerations:

When planning and selecting a cable route factors to be considered;

- The client's needs/requirements.
- The type of cabling Topology.
- Safety.
- Cost.
- Terrain.
- Local restrictions.
- Existing infrastructure.
- Future (proposed) development.

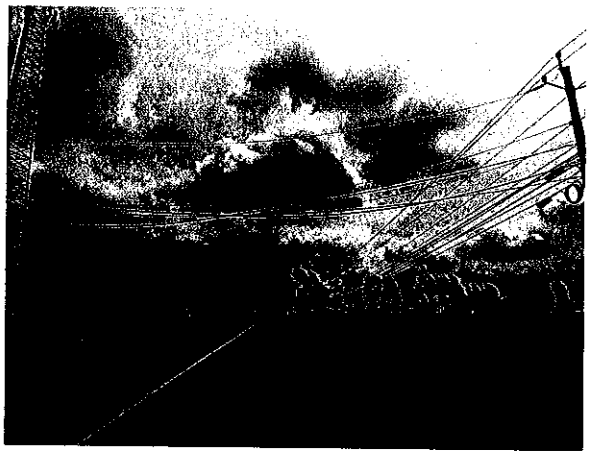
Preliminary Investigation & Survey is highly recommended.

Before beginning construction, one should consult available records and contact other utilities. Plus, conduct a field survey to determine the following:

- Safety conditions.
- Road & Traffic conditions.
- Environmental conditions.
- Special conditions & permits.

Safety conditions.

- ❑Electrical clearances & separation.
- ❑DOT clearances & traffic control.
- ❑Work site access & protection.
  - ❑Special factors; i.e. natural gas/petroleum pipelines.



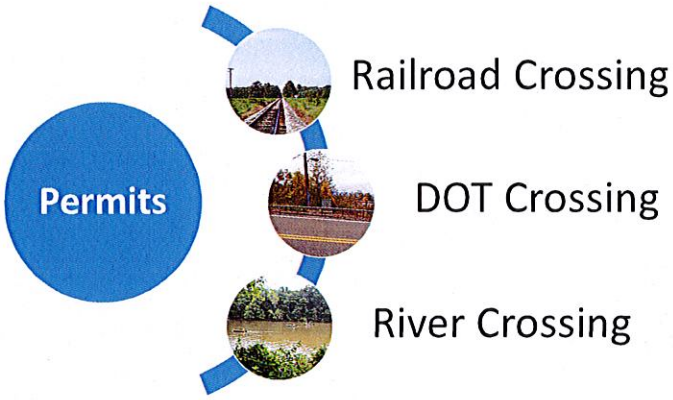
Road & Traffic conditions.

- Heavy traffic areas.
- Identify road crossings existing or new.
- Determine type of crossing to be made; aerial or underground. Along with maintaining required DOT road clearances.
- Observe required work area protection, i.e. traffic cones, signage, & flagging.

Environmental conditions.

- Terrain.
- Storm water culverts and catch basins.
- Existing underground utilities.
- Aboveground structures and obstacles.
- Required make ready work by other utilities.
- Adverse soil conditions, i.e. swamp or rock.
- Access and easements.
- Environmentally sensitive areas –
  - Wetlands, tidal restrictions, species habitat, and protected areas.

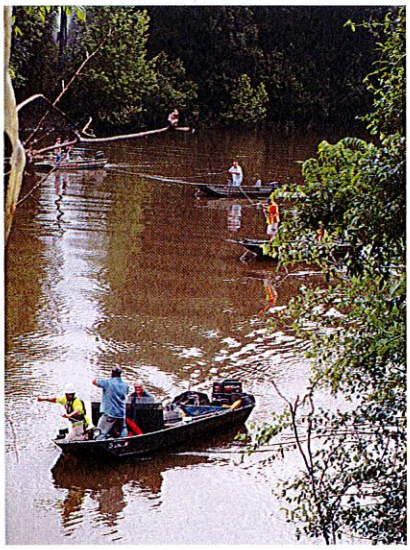
Special conditions & permits.

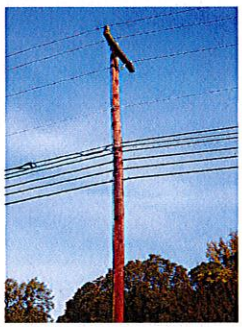


RAILROAD CROSSINGS.

ROAD & INTERSTATE CROSSINGS.

WATER WAY CROSSINGS.





Q & A

For questions please contact:

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Thank you !

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