Central Office Cable Runway Erection Methods

Contents

1. General

1.1 Purpose

This practice describes the procedures for assembling AGCS cable runway, optional cable pan, and auxiliary details in central offices (COs) and in PABXs (where applicable).

1.2 Filing Instructions

Remove and discard Issue 4, and file this issue in its place in your GTE Telephone Operations practices set.

1.3 Reason for Reissuing

This practice has been reissued to incorporate multiple changes in the content. Read this entire practice to ensure your familiarity with the new information.

1.4 Supersedures

This practice supersedes:

- Ail local practices, policies, procedures, general instructions, letters, and memoranda which address this subject.
- Any document which provides information contrary to the information contained in this practice.

1.5 Copyright and Responsibility

1.6 Disclaimer

2. Overview

2.1 FCR Drawings

Engineering provides FCR (Floor Plan Cable Runway) drawings to use to locate AGCS cable runway and optional panning.

Exhibits 1 and 2 are examples of typical cable runway drawings.

NOTE: Cable runway having a B deck is indicated by being enclosed in brackets on the drawings.

2.2 Associated Practices

Refer to the following practices for additional information.

For Information About...	See Practice...
Erection Methods - Central Office Cable Grid	237-050-207
Erection Methods - GTD-5 EAX Ground Isolation Procedures	237-224-214 (See note.)
Cabling Methods	256-050 Series
Cabling Method - Switchboard Cables - Running	256-050-203
Cabling Methods - GTD-5 EAX Running, Securing, and Terminating.	256-224-216 (See note.)

NOTE: These practices belong to the AG Communication Systems.

3. Installation Procedures

3.1 General

Install runway and auxiliary details according to the Floor Plan Cable Runway (FCR) job drawing and assembly drawings H-440000-A through K.

- Normal front-to-front frame guardrail dimensions are 2 feet 6 inches.
- Use extra runway slats on the runways to provide additional support to cables when necessary. The extra slats can be removed from unused runway sections_ Do not use cable ties, lacing, or wood blocks to compensate for lack of normal runway support of cables.
- Use two runway brackets and screws (EC-16423) on each runway slat to ensure that cable separation is maintained. Assemble these brackets straight down the runway, not staggered.
- Use ground isolation materials between the cable runway/hardware and frames, per document H-440000-K and AG Communication Systems Practice 237-224-214.

3.2 Non GTD-5 EAX

In Non GTD-5 EAX offices:

- The 1-foot,3-inches wide cable runway will be centered on the 20-inch rear aisles between back-to-back equipment lineups.
- The 2-foot cable runway will be located so the runway side bar (front) will be line with the top front card file guide of each frame in each lineup.

3.3 GTD-5 EAX

In GTD-5 EAX offices, position the cable runway over the frames and 3¾ inches in from the front of the guardrail, according to the FCR site job drawing.

NOTE: Refer to AG Communication Systems Practice 256-224-216 for GTD-5 EAX cable separation zoning information.

4. Cable Runway Panning and Hardware Alignment

4.1 Cable Rack Panning

The optional cable rack panning provides for separating:

- Power.
- Switchboards.
- Signals.
- Supervisory leads in adjacent cable rings/brackets.

The trough concept simplifies installation by eliminating the need for stitching the cable to the runway.

NOTE: Refer to GTE Telephone Operations Practice Series 256-050 for additional information on cabling methods.

4. Cable Runway Panning and Hardware Alignment, continued

4.2 Panning Conversion Considerations

Before converting an existing runway to a cable pan type, consider:

- The quantity of cable already located on the runway.
- The runway location (fear aisle or over).
- The method that was used to secure the cable to the runway.
- Other details pertinent to the conversion.

Close coordination between the equipment engineer and the equipment construction supervisor is required to determine:

- If the conversion of runway to cable is feasible.
- When the conversion in existing offices should be made.

NOTE: Information is provided with cable runway in the H-440000-A through K document series to inform the installer of cable runways and the methods necessary for correct installation.

4.3 Reference

Refer to drawing H-440000, Figures 56 and 57, for a layout of the pan and how it attaches to the cable runway.

4.4 Aluminum Pan

When required, place the H-888363-(10 feet 14¾ inches) or H-888363-2 (10 feet 23¾ inches) aluminum pan on the cable runway prior to installing brackets and rings.

CAUTION: Wear approved gloves when handling aluminum pan.

Install the aluminum pan, where engineered, in the full IO-foot lengths and overlapped a minimum of ⅝ inch (end to end). Overlapping in excess of ⅝ inch is preferable to cutting. Use two U-type speed clips per lo-foot section to secure panning, per instructions in drawing H-440000-A, Figure 57.

NOTE: The following are not equipped with aluminum pan.

- **Runway dedicated to a power cable.**
- **All vertically installed runway.**
- **Runway installed over equipment bays not arranged for rear aisle application.**

4.5 Cable Brackets/Rings

Install cable separation brackets, cable rings, goalposts and cable retaining rods with protective top caps (H-440000-A, Figure 14), every 12 to 18 inches straight down the runway in a uniform manner. Adjust goalposts and cable rings support clip spring tension to ensure the post lock notches are tightly engaged in the support clip. (Refer to GTE Telephone Operations Practice 256-050-203.)

To facilitate cabling at break-offs and bends, place brackets and rings as close to the inside center of the turn as possible while still maintaining the proper cable radius.

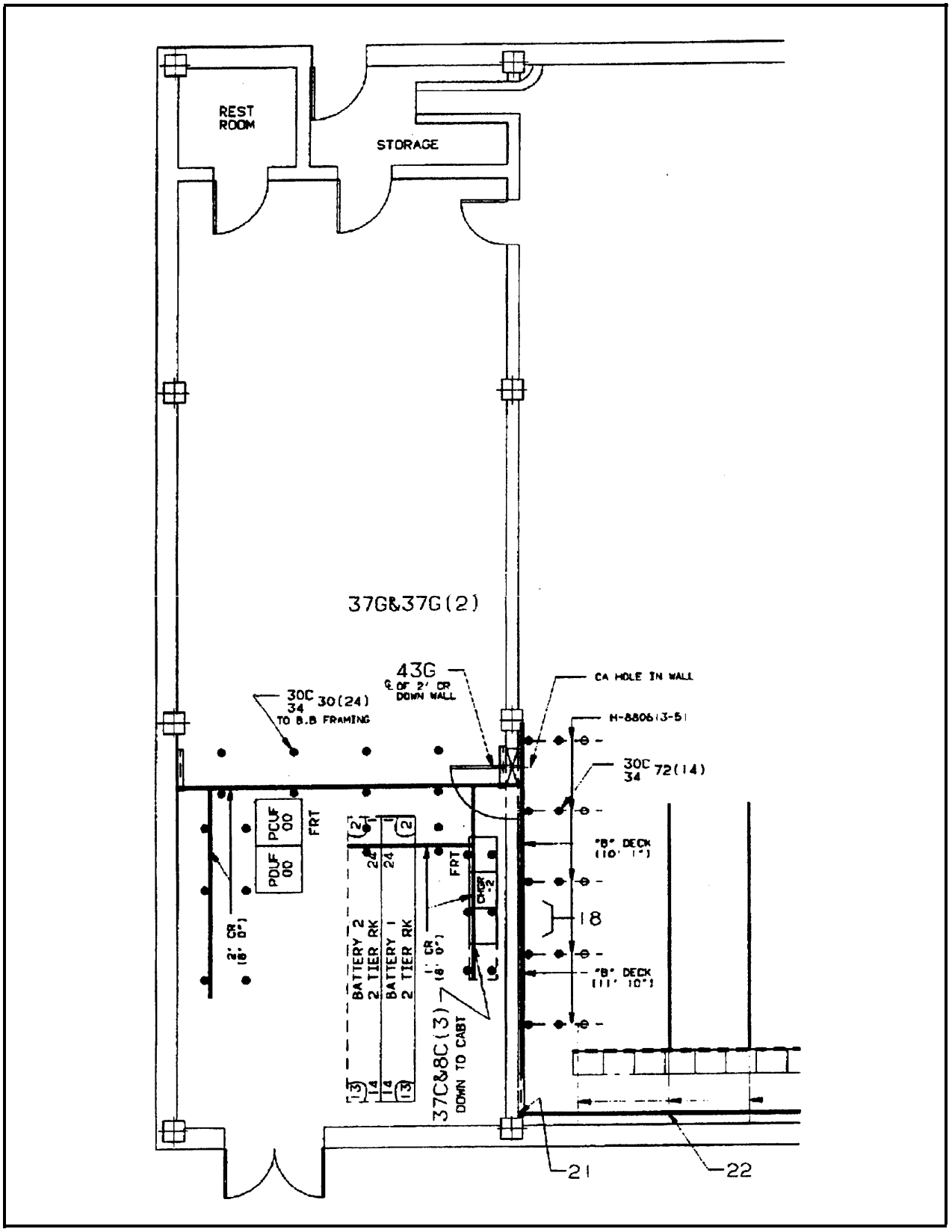
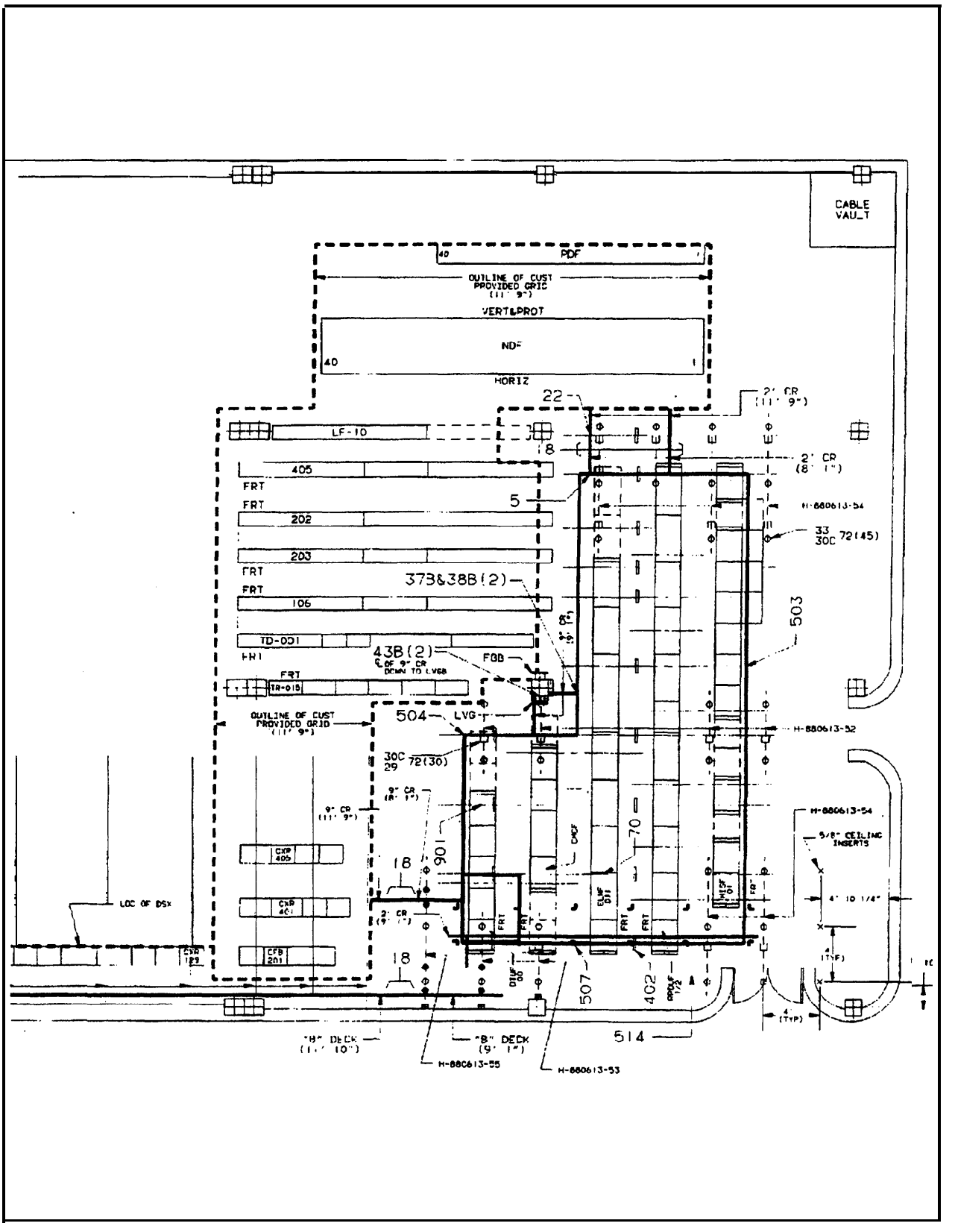


Exhibit 1 - Typical Cable Runway Drawing - Power



Exhlbit 2 Typical Cable Runway Drawing