



48 (a) Overview of building: the concrete awning in the back part of the building has been removed



48 (b) Shear failure of the 1st-story column

Fig. 48 PHOTOS ILLUSTRATING DAMAGE TO THE CPM BUILDING IN MEXICO CITY DURING THE 1985 MEXICO EQ

Of all of the schemes considered, it was found that the elastic solution based on the use of high-strength post-tensioned steel cables seems to be the most economical. From the standpoint of safety, the use of steel bracing members incorporating energy dissipation devices appeared to be the most promising.

CONCLUDING REMARKS. From the studies conducted to date by the lecturer and his research associates, the following can be concluded.

- Proper upgrading requires (1) reliable evaluation of the seismic activity at the facility site and its surroundings; (2) identification, by evaluation of both the seismic activity and the built environment around the facility, of the sources of seismic hazards to the facility; and (3) reliable assessment of the vulnerability of the whole facility system (soil-foundation-superstructure and nonstructural components) to the identified sources of seismic hazards, expressed as a fraction of its value.
- Present seismic codes do not properly identify seismic activity and sources of seismic hazards at a facility site. Their methodology and procedures for evaluating the dynamic characteristics, particularly the