

Joe Capowski to the CH Town Council on Duke Power wiring March 25, 2002

ATTACHMENT 2

Intro -- include that I am a practicing EE

History about underground wires at Duke substation near Bypass and S. Columbia St.

Interest piqued as I read this agenda item. Visited Prof. Cattani and site. Studied Gardner letter.

The technical arguments in item 4 (underground lines) are fallacious.

Electricity can be delivered at any voltage and with any number of phases, 1,2 or 3,
though there are tradeoffs that argue for high voltages to serve large regions.

Danger comes from voltage level; number of phases is irrelevant.

Duke shows that the danger in the Carol Woods case does not justify concrete encasement, for they bury the same 3-phase lines without concrete encasement that they say they must encase in concrete off a customers property. -- show photo

Duke will distribute power following path of least resistance -- actually path of least cost.

Not all bad, we all want low electric rates.

Only will do more if a govt requires them, e.g., buries lines at new subdivisions.

Current dev ord: no requirement to bury 3-phase lines.

Result town-wide from years of this practice: Duke is our largest visual polluter.

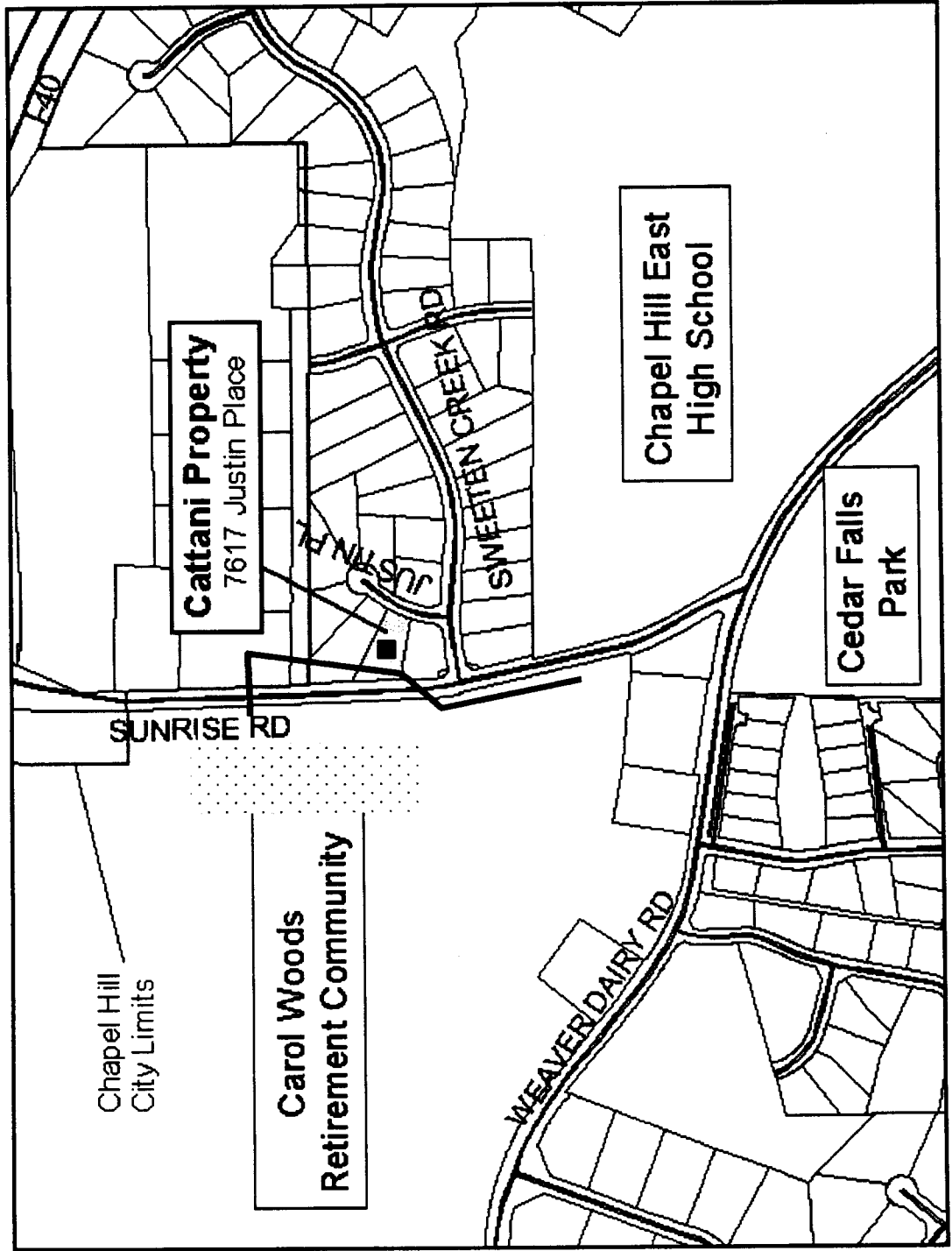
I suggest:

1. Employ (infrequently-contractually) someone with tech competence in elec systems to represent town and citizens in these matters -- accepting word of Duke without review is not enough.
2. Amend wording in new development ordinance to reflect the technical and economic reality of power distribution -- listen to OUR expert; don't simply rely on Duke's language.
3. Send dev ord amendments to technology committee for review and suggestions.

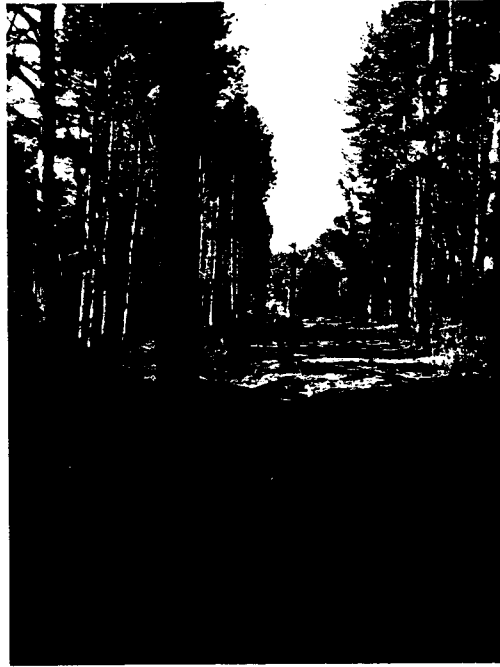
Area Map

Cattani Property

- New Three-Phase Line
- Existing Three-Phase Line
- Location of new development



Cattani's
backyard



Entrance to Carol Woods

