

The Electric Handyman[®]



EXECUTIVE SUMMARY: SUBARU SITE SURVEY FOR CEL BOOST:



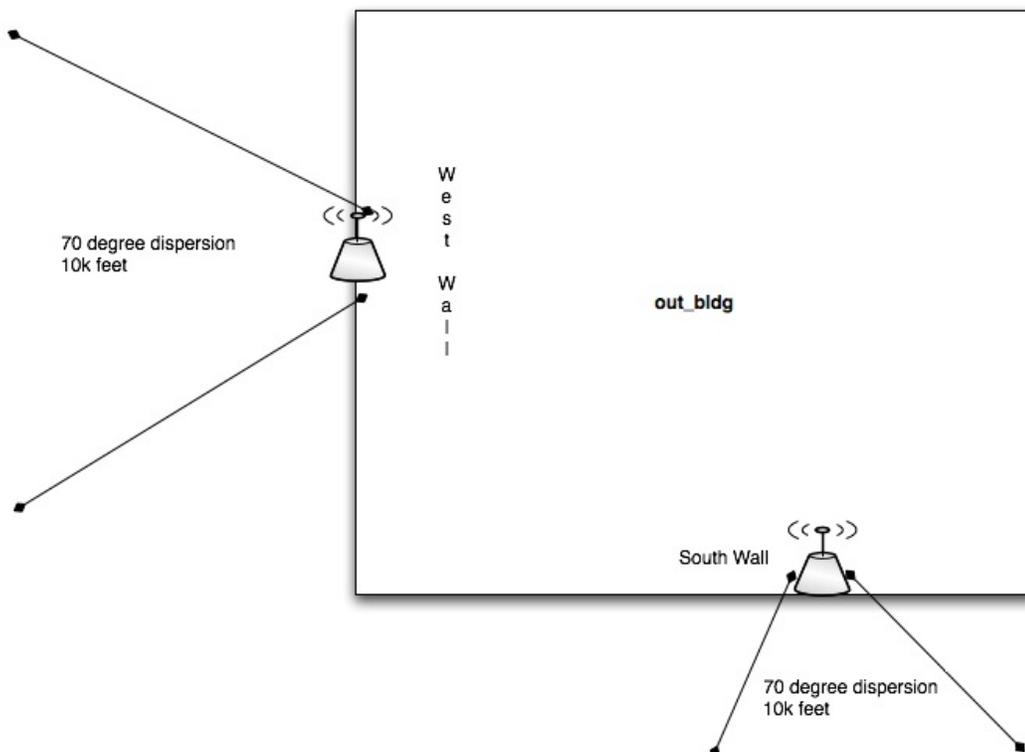
Findings:

- 1) There are plenty of resources at the site to deploy a very cost effective solution to cover the buildings desired, the larger of the two (referred to as in_bldg) and the smaller one's two outside lot areas on the Western and Southern sides (referred to as out_bldg). The needed resources consist of sufficient ambient Cellular signal and easy access for the minor electrical construction needed. This consists of easy roof access, easy physical attachment for antennas both inside and out, easy access to AC power for base stations and easy penetration of building material with signal lines. Also, maximum distance requirements are satisfied (pending limits applicable). There are critical limits that must be observed with the placement of all this equipment. This installation would require RG 11 Coax in order to get the maximum distance to base station from outdoor antennas. Broadcast antennas need to be relatively close to base stations so this job would require mounting of base stations in unobtrusive boxes and possibly on walls or beams in in_bldg due to size of building.
- 2) Installation on out_bldg to require more detail and need custom weather proofing for external broadcast antennas. Not a big deal.

- 3) Estimated costs pending consensus on “my solution” are approximately 4k in hardware (caveat: 4g/lte units shipping in 30-60 days and are more somewhat more expensive (+ 25% figure)) and 1-3k (electrician rate ?))) in electrical construction plus my time for project management. I’m projecting maybe 8 hrs at \$125 / hr maybe less possibly more; most of the expense with my time is in planning / logistics / and / or esthetic-driven time...2-3 visits a couple hrs each? Some light direct work with electrician. Need to do walk through with electrician.
- 4) Complete coverage of out_bldg lot areas and most of in_bldg shop floor possible with non DAS system (**D**istributed **A**ntenna **S**ystem). DAS system requires consent from ALL 5 CEL CARRIERS. Multiple unit implementation of most powerful NON DAS system does not require this additional bureaucratic step.

Recommendations:

**Recommend
install 4
Zboost
systems, 2 per
building.
See attached
floor plan
sketches for
rough info.
Nothing is to**



scale and antenna icons are not accurate shape wise. On out_bldg they would be mounted on exterior wall at gutter line, one on each W and S wall;

in weather proof

In in_bldg they backs to each position could be

Antennas can be mast so one mast on roof of each

Dispersion cones diagram for

But 70 degree

With clever

the in_bldg

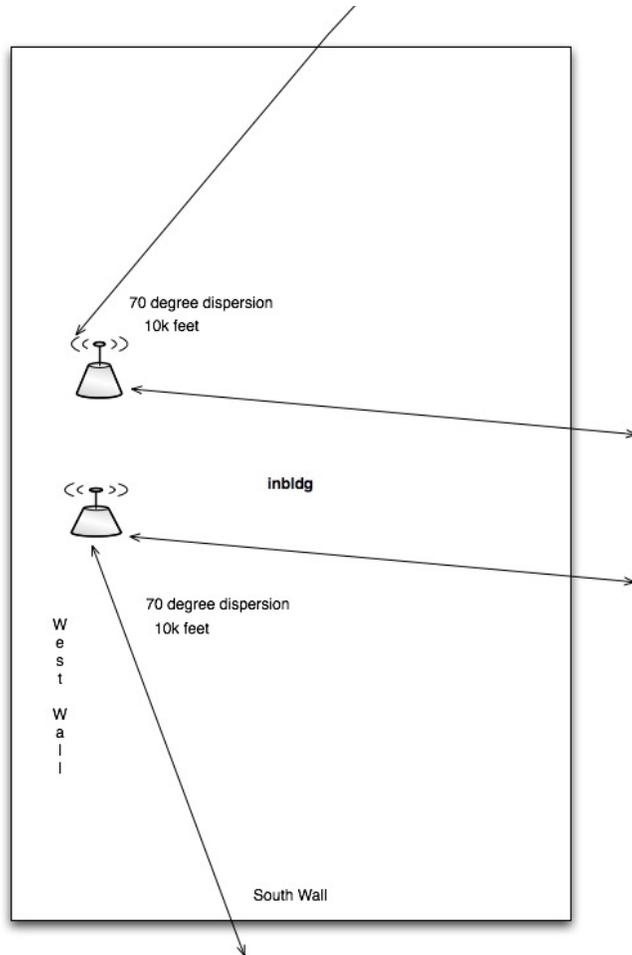
excellent

Could possibly

back to back in middle of space over floor but distance limits would create additional install expense for base units. Est 1-2 hrs max to determine costs. However; this scenario might yield best coverage but my gut feeling is that its not worth additional installation costs which would be significant.

I'm available for questions.

Thanks for choosing The Electric Handyman for this Site Survey



housing.

would be mounted

other and the

fine tuned easily.

ganged up two per

with two antennas

building.

not accurate in

illustration only.

figure is accurate.

positioning most of

should have

coverage.

suspend antennas