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Sent: Thursday, February 21, 2019 2:11 PM

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**Subject:** Valentin Res. Structural calcs (portion in color)

Hi Paul, thanks for the quick telephone chat regarding the clarity within my structural calculations submitted at the pre-submittal meeting. As just discussed I am scanning a portion of my calculations in color in an attempt to help clarify where the required shear wall information is located in my package and while scanning this key map of the gridlines and shear walls used, I also elected to scan in color the beam numbers used for the gravity framing in hopes of making these easier to read as well. In the attached scanned file, you will notice my page numbers noted in the upper right hand corner of each sheet.

Pages 3-6 are key maps used for the gravity loads (beam numbers, etc)

Pages 7-9 are the key maps for the shear walls, their wall lengths, and gridlines used elsewhere in the calculations.

I think the rest of the original package is clear in black and white.

For the wind loads distributed to each grid line at each level, pages 77-79 were used.

For the seismic, pages 80-84 were used (80 & 81 determine the **Sds** value, 83 & 84 **Cs** and the vertical distribution are calculated)

The seismic loads distributed to each grid line at each level, page 82 was used.

Both the wind loads and seismic loads at each level are input on the spreadsheet of page 89. This is where the shearwall shear and net uplift are calculated for the shearwalls and the shearwall type and hold down size are noted accordingly. I also included this sheet in the attached color scan. The numbers lin blue are input, black are automatically calculated, and red automatically calculated results used for selecting the shear wall type and hold down type.

Please let me know if you have any questions, thanks.

Arnie Forsman, P.E. Forsman Engineering

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