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Sum Large Corp. Conduit Fill Calculations

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The following represents the 4 largest cable bundles in the system and their calculated conduit requirements (areas are in square inches);

4C,1D,1K = $4(.025) + (.028) + (.027) = .155$ $.155 / .530 = .292 = 29.2\%$ $29\% < 40\%$, 3/4" conduit is acceptable.

6A,1K = $6(.023) + (.027) = .165$ $.165 / .530 = .311 = 31.1\%$ $31.1\% < 40\%$, 3/4" conduit is acceptable.

8C,1D = $8(.025) + (.028) = .228$ $.228 / .530 = .43 = 43\%$ $43\% > 40\%$, 3/4" conduit fails.

$.228 / .865 = .264 = 26.4\%$ $26.4\% < 40\%$, 1" conduit is acceptable.

1B,8C,1D,1E = $(.023) + 8(.025) + (.028) + (.025) = .276$ $.276 / .530 = .521 = 52.1\%$ $52.1\% > 40\%$, 3/4" conduit fails.

$.276 / .865 = .319 = 31.9\%$ $31.9\% < 40\%$, 1" conduit is acceptable.