STRUCTURAL ENGINEERING

To: Ryan Schultz

From: Ana

Subject: CTR. Precast panel.

Date: May 29, 2019

We are analyzing three possible options for the precast panel laying under the community courtyard (see fig. 1). 3. Since the internal forces in the last layout (figs. 4 and 5) are considerably greater than for the cantilevered solution (figs. 2 and 3), it is likely that options 1 and 2 should be cheaper (apart from structurally more efficient) than the big span proposed in option 3. Anyway, we are awaiting reply from County Materials to get advice and information about capacities of their hollow-core slabs in order to do a better approach to the problem.

We are open to your suggestions.

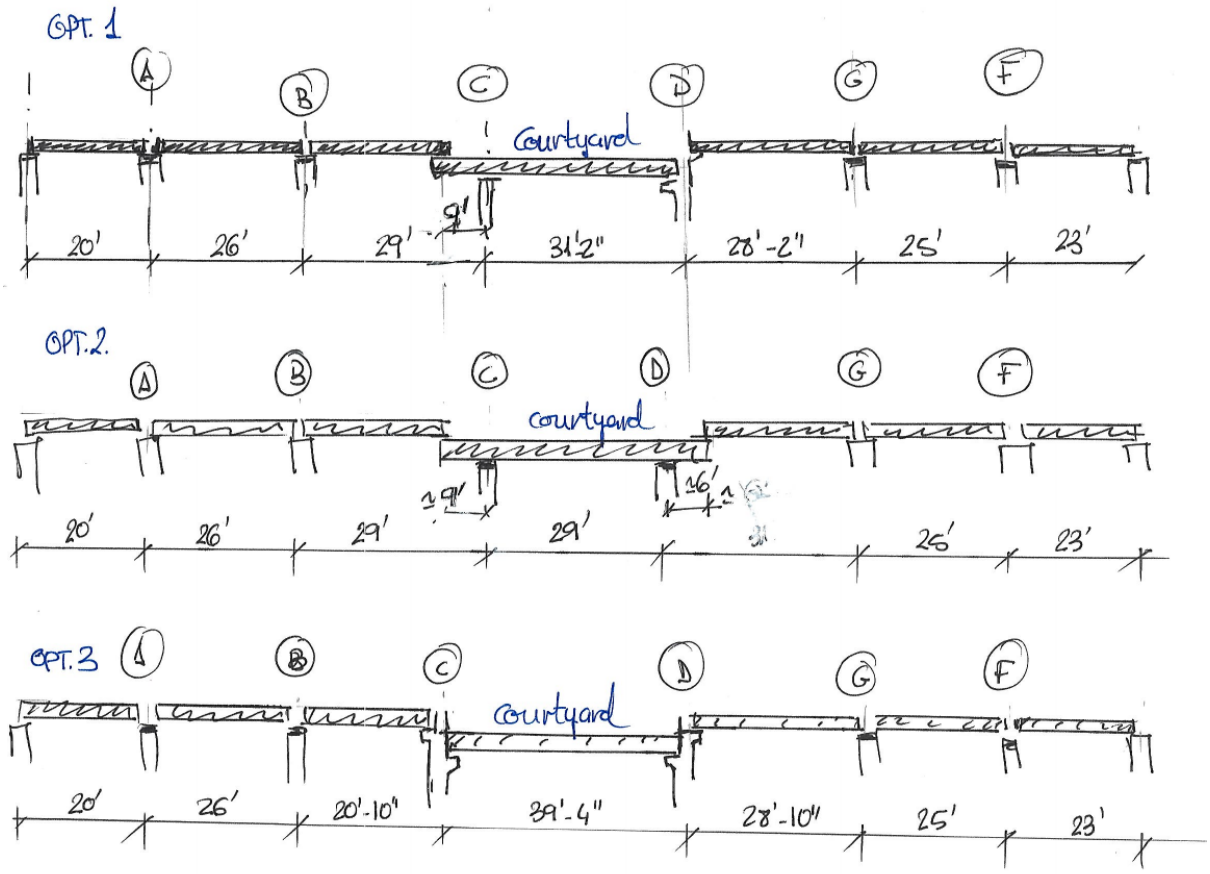

Figure 1: Possible precast panel layouts

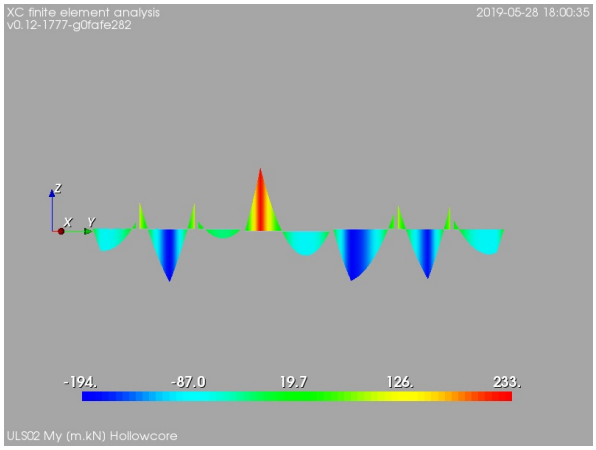

Figure 2: Option 1. Maximum bending moment (ULS: 1.2*D+1.6*Lr+1.6*Lt+0.5*S)

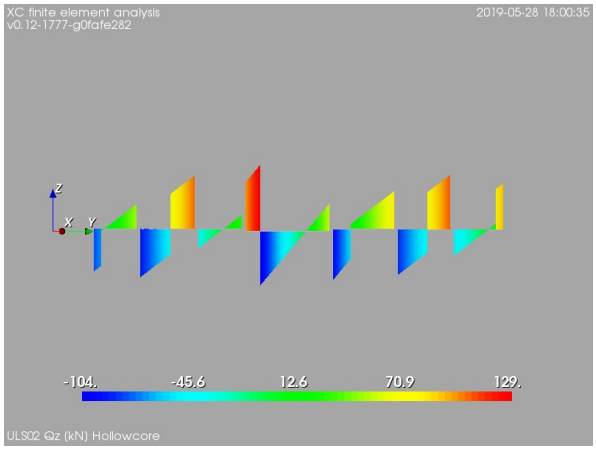

Figure 3: Option 1. Maximum shear force (ULS: 1.2*D+1.6*Lr+1.6*Lt+0.5*S)

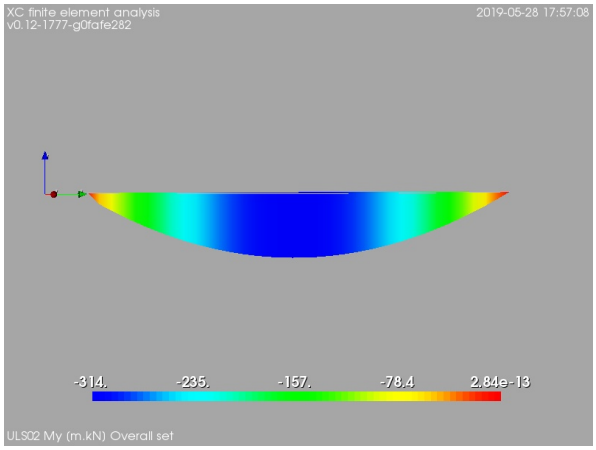

Figure 4: Option 3. Maximum bending moment (ULS: 1.2*D+1.6*Lr+1.6*Lt+0.5*S)

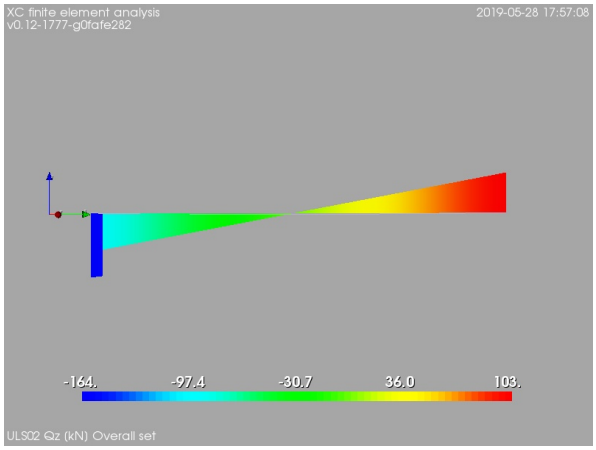

Figure 5: Option 3. Maximum shear force (ULS: 1.2*D+1.6*Lr+1.6*Lt+0.5*S)