



STRUCTURAL ENGINEERING

To: Ryan

From: Luis

Subject: Reply to GC comments and questions

Date: October 22, 2019

Dear Ryan.

We have reviewed the GC's comments and here are our comments.

plan A100: The CMU walls on both sides of the ramp are not designed as retaining walls. We can modify them to work as retaining walls, but they will require a wider foundation and thicker blocks (12").

plan A301: Remark on upper section: see A100 above.

plan A402:

Details 5A and 6A They are right, it's cast in place concrete not precast. We can remove the concrete slab if we choose to use a compacted fill. See A100 above.

plan A403: see A402 above.

plan A410.A: see A100 above.

plan S100:

Ramp foundation: see A100.

Foundation of the south basement facade: currently there are not precast beams being supported on the south basement wall; see plan S400. On the other hand, precast beams are supported by "ad-hoc" pockets in the basement walls.

plan S201:

Details 3/S201 and 5/S201: "extend foundation wall to finish floor topping elevation": if we do that the bars that lie the topping with the wall will pass through the formwork. Is that OK?

Detail 2/S201: this detail correspond to the precast planks that are parallel to ramp wall; what is the mistake?

plan S210:

Detail 3/S210; we want to reduce the eccentricity of the load to avoid introducing an appreciable bending moment on the wall.

Details on how wood framing walls sit on precast: We must define those details, anyway
I think it's better to draw those details over those of the precast structure.

plan S214:

Detail 6/S214; "what is this for?": to resist shear.

Change 6" studs to 8" studs: OK.

plan S215:

Details on how wood framing walls sit on precast: The treated plates are embedded in
the topping? Can we put them on the topping instead?

Change 6" studs to 8" studs: OK.

plan S300:

Detail 1/S300; see 3/S201.

Detail 2/S300; see 3/S201.

Detail 3/S300; see 3/S201.

plan S301:

Detail 1/S301; see A100.

Detail 2/S301; see A100.

plan S400:

Detail 4/S400; see 3/S201.

plan S401:

Detail 1/S401; "possible to precast beam on cast in place piers?": the reinforcement of
the CMU walls must be attached to the foundation and to the lintels. If we use a
precast beam, the attachment becomes impossible.