

David Dammon

From: David Dammon [david.dammon@gmail.com]
Sent: Monday, March 25, 2013 1:34 PM
To: 'Michael Rotolo'
Subject: Meeting Notes: SYC Pool
Attachments: Cantilever Beam Calcs0002.pdf

Michael,

Dammon Engineering received a phone call from Jerry Householder, a forensic Engineer who was hired to investigate the pool at Southern Yacht Club. He requested our calculations for the pool floor. The pool floor is a pile supported 8" thick concrete slab with #4 bars 10" O.C. The pilings were placed 6' – 7" from the edge of the sides of the pool creating a cantilever beam. Calculations were generated (see attached) & Pete and I called Mr. Householder on 3-24-2013 to talk about the calculations. Mr. Householder discussed his observations of the pool. He stated that the pool floor had some surface cracks in the shallow end and that the pool wall had several cracks. We reviewed the drawings and the soils analysis. Mr. Householder wanted to evaluate the cantilever using elastic deformation method rather than the design method. The cantilever is 8" thick with #4 bars 10" O.C. and 6' – 7" long. The deepest location was selected for the pool slab to present the location of the maximum loads.

The distributed loads for the cantilever beam from the water @ 6.5 feet deep and the self weight of the beam was estimated @ 420 # per linear foot. The side wall of the pool was considered a point load at the end of the cantilever beam at 809 #.

The soils analysis reported that the soil at 7.5 feet deep could support 1100psf however the soil at 14.5 feet could only support 480 psf, therefore it was agreed that the soil could support a minimum of 600psf.

After analyzing the beam for elastic deformation it was determined that the cantilever beam could support the loads. Mr. Householder then told Pete and I that we could consider this issue closed.

David Dammon
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From: Michael Rotolo [mailto:mrotolo@rotoloconsultants.com]
Sent: Tuesday, March 19, 2013 8:48 PM
To: Pete Dammon; David Dammon
Subject: RE: SYC Pool

Great. See you then.

Michael Rotolo
Rotolo Consultants, Inc.
Office: 985-643-2427
Mobile: 985-201-0441
Fax: 985-643-2691
Email: mrotolo@rotoloconsultants.com

From: Pete Dammon [mailto:petedammon@yahoo.com]
Sent: Tuesday, March 19, 2013 8:28 PM
To: Michael Rotolo; David Dammon
Subject: Re: SYC Pool

Thats Fine

Pete Dammon

From: Michael Rotolo <mrotolo@rotoloconsultants.com>
To: Pete Dammon <petedammon@yahoo.com>
Sent: Tuesday, March 19, 2013 7:26 PM
Subject: RE: SYC Pool
Pete,

Lets plan on Friday morning at 8.

Thanks,

Michael Rotolo

Rotolo Consultants, Inc.

Office: 985-643-2427
Mobile: 985-201-0441
Fax: 985-643-2691
Email: mrotolo@rotoloconsultants.com

From: Pete Dammon [mailto:petedammon@yahoo.com]
Sent: Tuesday, March 19, 2013 8:24 PM
To: Michael Rotolo
Subject: Re: SYC Pool

Micheal

Sorry, but Chuck and I are due in Biloxi tomorrow morning. Can we make it Thursday afternoon or Friday morning.

Pete Dammon

From: Michael Rotolo <mrotolo@rotoloconsultants.com>
To: Pete Dammon <petedammon@yahoo.com>
Sent: Tuesday, March 19, 2013 12:48 PM
Subject: RE: SYC Pool
Pete,

I can be in your office tomorrow morning at 8. Does that work with your schedule? If you could please have David make copies of all of your correspondence on the project so that I can take it with me. I am meeting with the Yatch Club next week and need to catch up on all the conversations.

Thanks,

Michael Rotolo

Rotolo Consultants, Inc.

Office: 985-643-2427
Mobile: 985-201-0441
Fax: 985-643-2691
Email: mrotolo@rotoloconsultants.com

From: Pete Dammon [mailto:petedammon@yahoo.com]
Sent: Monday, March 18, 2013 12:57 PM

To: Michael Rotolo
Subject: Re: SYC Pool

Micheal

I will get David to forward our calcs. Remember that these calcs were made for the deep end of the pool as that would be the area of the most Forces working against the Structure. I don't understand what you are talking about "not designing the foundation or the structure", that isn't what I said, although you did specify that you wanted to pour the walls separately. along with the #4 bars @10" centers,each way.

Micheal, can you stop by the office and talk about this, I think that would be better than Faxes.

Pete Dammon

From: Michael Rotolo <mrotolo@rotoloconsultants.com>

To: Pete Dammon <petedammon@yahoo.com>

Sent: Monday, March 18, 2013 10:22 AM

Subject: Re: SYC Pool

Pete,

Please forward me all of your correspondence with the engineer. As stated previously it was always RCI's intention to have Dammon engineer both the pool foundation and structure. They are both tied together and I don't understand how you can design one without the other.

The club is claiming that the walls need to be replaced which differs from your email below which states that the design is 'ok'. Please send me everything you have on the project so I can understand all the different perspectives on the project.

Thanks,

Mike

Sent from my iPhone

On Mar 18, 2013, at 10:36 AM, "Pete Dammon" <petedammon@yahoo.com> wrote:

Micheal

Sorry that it took this long to get back to you, but we wanted to have the correct information to give you.

We were called by the Attorney that represents the Yacht Club. He had hired a Forensic Engineer Investigator to check out the problems with the pool and calculate the pool Reactions to our design and asked that we contact the Engineer, which we did.

David and I talked with the Engineer at length, discussing all the parameters of the calculations that were used to design the floors and walls. (We made the calculations at the deep end, so as to use the worst case)

As it turns out, the placing of the piles, the cantilever of the Pool floor and the size and spacing of the bars used, where it supports the walls is "OK" I'm sure their Attorney will provide this information to you.

When we were told by you on (SYC) to use the #4 bar at that spacing and to keep the piles away from the walls, I assumed you had an experience factor in that.

The design we sent you recently, reflected a worst case factor for the soils abutting the pool. Also, in many cases we designed Beams that went out to support the walls.

Please keep me posted on this

Pete Dammon

From: Michael Rotolo <mrotolo@rotoloconsultants.com>

To: Pete Dammon <petedammon@yahoo.com>

Cc: David Dammon <david.dammon@gmail.com>

Sent: Tuesday, February 5, 2013 5:09 PM

Subject: RE: SYC Pool

Pete,

Thank you for the updated calculations. A quick question. Why does this pool call for a double mat of steel while all of the other pools that you have designed for us (pool structure and foundations as opposed to just foundations) call for a single mat of steel? Port Sulphur, Buras, Belle Chase, and Boothville all call for single steel mats. I am trying to understand where RCI should draw the line in the future.

Thanks,

Michael Rotolo

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Email: mrotolo@rotoloconsultants.com

From: Pete Dammon [<mailto:petedammon@yahoo.com>]

Sent: Monday, February 04, 2013 2:17 PM

To: Michael Rotolo

Cc: David Dammon

Subject: SYC Pool

02/04/13 TO: Michael Rotolo RE: Southern Yacht Club Pool Dear Mike, You recently asked that we (Dammon Engineering) calculate the size & location of the re-bar that should have been installed in the concrete walls and Bottom for the pool at the Southern Yacht Club in New Orleans, The side walls were calculated at one foot in thickness, although I think you shot against the dirt wall which turned out to make the walls of the pool thicker. We calculated that when using the #4 bar, the horizontal bars should be 6" O.C. both ways, but that there should be two rows on each side of the wall 1 1/2" in from the outside edge of the wall. I suppose that the bars were only in the middle of the wall (1 layer both ways). You could have spaced #6 bars at 12" O.C. both ways, but still need the two layers to counter act the pressure on the wall both when filled with water, and when the pool is dry. The pool floor was calculated at 8" thickness. If using #4 bars, the bars would need to be at 8" O.C. both ways; if using #5 bars they would need to be 12" O.C. both ways. Again, 1 layer of steel at 1 1/2" from top & 1 layer at 1 1/2" from bottom. All of these calculations are based on worst case scenario. The outside layer of steel supports the concrete assuming the pool is full of water and there is no support from the soil. The layer of steel on the inside supports the pool when it is empty and the soil exerts pressure on the concrete. The Southern Yaght Club Pool is fairly deep and pressures are significant in the Walls and Bottom during different kinds of loading, as noted above. Please contact us if you have more questions.*Pete Dammon*

Tracking:

Recipient

'Michael Rotolo'

Read

Read: 3/25/2013 1:45 PM