

MINUTES OF THE REGULAR MEETING OF THE CONSTRUCTION BOARD
OF ADJUSTMENTS AND APPEALS HELD ON NOVEMBER 17, 2009 IN
THE BUILDING INSPECTION CONFERENCE ROOM

MEMBERS PRESENT: Andrew Corriveau, Chairman; Don Dean, John Catoe, Herbert Brown, and Dan'l Moulton were present. Bruce Kline and John Tuckwiller were absent.

STAFF PRESENT: Edward Nelson, Clyde Long, Abdulhakim Bayyoud and Marjorie Arnold were present.

1. JUSTIN & KAREN NEUMANN – APPEAL OF DECISION OF BUILDING INSPECTIONS DEPARTMENT REGARDING INTERNATIONAL RESIDENTIAL CODE AND STRUCTURAL DESIGN: Edward Nelson stated the footing of the structure is about 6 inches in thickness, it is a monolithic slab and the code requires 20 inches making it 14 inches shy on the concrete of the footing. He also stated that the structure is in a flood zone and there are no hydrostatic vents in the exterior wall and appears to be untreated framing on the first floor. He said the code requires pressure treated lumber on the first floor below the base flood elevation.

Justin Neumann stated that approximately 2 ½ years ago he put in an area where he would be storing tractors and in 2008 he decided to pour a slab. He met with an architect as he had decided to put a barn on the property. He stated that he went to Beaufort County and went through the processes and explained what he would be doing and that there was a preexisting area with a concrete pad where he requested a permit for a barn.

Mr. Neumann stated that he was not aware that he was in a flood zone when he purchased the home nor when he got the permit for the barn. He said this came up after the framing inspection. He said prior to building he had put treated plywood along the bottom four feet of the exterior of the building.

The Chairman indicated that the request in front of the board is whether the concrete slab is in compliance and nothing for discussion regarding the flood issue. He said he would like to defer any additional conversation for request on the flood until that issue can be better resolved.

Mr. Neumann stated that he built a pad, 6x6 treated lumber four rows interlocking stack in a section of the slab. He presented two drawings explaining what he had done when he poured the

slab. He said this is one continuous piece with 6x6's tied into the slab with ½ inch rebar and wire that is attached. He said on the side he did a waterfall down back into the slab. He had pictures which showed where he dug down in the stack of 6x6's treated all the way down and all of the 6x6's are tied in with ½ in rebar with the first two courses that interlock is ½ inch rebar down into the ground two to four feet all the way around. He said the top two courses that are interlocked have ½ inch rebar going down through those and then took rebar up through the side on the inside and tied it into the 6x6's at an angle to tie the slab into that. He said that keeps everything as one piece. Mr. Neumann said that what they did around the whole thing was put a three inch base around the initial structure. He said he is not saying that this meets what the code is but he is not asking the county to take the responsibility. He stated that at every corner of the building there is a 3-4" wide strap down into the concrete that comes to the exterior of the building and that is tied in. He said on the back side every corner of the interior is drilled down into the slab, epoxyed and all four corners are strapped in. He said he took rebar, drilled it in and epoxyed it in and every four feet along the wall is tied in up through the second floor and bolted down.

The Chairman stated that all these comments relate to the construction of the framing and not the construction of the slab itself.

Mr. Nelson stated that Leonard Bebow was the Engineer of record on the plans and he made a note that states "it is the owners responsibility to show that the existing slab and footing conform or they shall be altered to conform to the dimensions and reinforcement shown on the typical concrete slab wall section all thread rod detail on this plan." He stated that the typical detail shown 20 inches of concrete and 12 inches width with two #5 rebars all the way around. He said this is the plan that Mr. Neumann was given stamped and sealed by the department with the flood zone and everything else on it. He stated that Mr. Neumann's engineer gave specific instructions how to correct before he began.

Mr. Neumann stated that he went back to the engineer and asked him to remove that statement and draw a barn. He said that the engineer put that statement on the plans in order to protect himself.

Hakim Bayyoud stated that he got involved in the project at the request of Arthur Cummings, Director and met with Clyde Long and Mr. Neumann on the job site. He said he went there with intention that there was going to be a horse barn and when he got there it did not look like a horse barn and that Mr. Neumann would have to go back to the Zoning Department and obtain the proper permit. He stated that the Department is asking for clarification for the slab structure and not questioning the strapping and framing. He said Mr. Neumann was asked to go back to the design professional and provide calculation or opinion that this structure is adequate for load and engineering standpoint and he said he was told that the Engineer is not going to provide this. He said we discovered that this is not going to be a horse barn but instead a garage with guest

house, which is story and half or two stories. He said the slab has to hold the uplift, not crack or fall down and all the load bearing is transferred to the 6 inch slab.

Mr. Neumann stated that he went back to the Zoning Department and changed the zoning to a barn instead of a garage.

Mr. Neumann presented pictures to show the placement of the 6x6's in the foundation, how the slab comes down on the waterfall. He said he contends that what he did on the sides in running the rebar into it at an angle and tying it off on the wire mesh, the whole system of 6x6 slab has become one big unit and the bottom two rows of the 6x6's every four feet is ½ inch rebar pounded down into the ground through the 6x6's. He said he went to Architects and Engineers and asked to go to assist and has been unable to do so at this time. He said he is coming to the Board as he is fully responsible for the structure and the slab and don't want to put the burden on anyone else. He said he doesn't hold the county responsible nor if he ever chooses to sell the property it would be part of the sell that Beaufort County Codes Department is not held responsible for anything other than the framing structure of the barn.

Don Dean asked if the building that is on the slab is what was permitted and Mr. Nelson stated that this is what was permitted.

Mr. Dean asked if the 6x6's were in when the slab was poured. Mr. Neumann stated that all the 6x6's were in and then came back and put the barn up later. He said his intention originally when he poured the slab was to put tractors, etc. on it and have a shed and built it so no matter what it wouldn't move and never have to worry about the four rows of 6x6's moving. He said that was the purpose of the interlocking and each row besides having rebar going down through into the ground also has large nails about eight inches long pounded down through so they connected.

The chairman stated that the rules the Board is governed by and must follow in order to grant a variance financial hardship is not a consideration. He said a consideration is whether or not what you are attempting to do or have done in some way meets the intent of the code. He said he believes in order for the Board to give a variance and engineering report would need to be provided from a third party who can testify after some inspection and calculations that what he has done meets the intent of the code.

Don Dean stated that if Mr. Neumann gets an engineer to sign off on the slab he won't need a variance; however, the main issue is if the slab was built to code and not inspected there would be an issue in itself and might require a variance. He said if he thinks the Board is being asked to approve something that an Engineer or someone with more structural engineering feels comfortable with it then the Board might could approve without an inspection.

Herbert Brown asked if the slab was there prior to the permit being issued. Mr. Neumann stated that this was a pre-existing slab.

Mr. Brown asked if anyone brought up the issue as to whether the slab would be sufficient to build the building on. Mr. Neumann stated that he told the county that he had a pre-existing slab and were going to build a barn permit. He said when he called for the framing and strapping inspection was when the building was completely framed up was when the question came up.

Mr. Brown stated that if you are in a flood zone the county normally requires an elevation certification before going forward.

Mr. Nelson stated that on a garage an elevation certificate wouldn't be required until rough in.

Clyde Long stated that he was the building inspector who did the strap and nail inspection and when going out on the job and taking a look at the plans he noticed the statement that it is the owners responsibility to show or verify that there is a footer.

John Catoe stated that the appeal application made it sound like the permit was issued to go on the existing slab without any stipulations and that is not what is on the set of drawings.

Dan'l Moulton stated that what the engineer put on the structural drawings where it shows a 20 inch deep x 12 inch wide turndown footing. He said that is not what was there and he is indicating that is what is required to resist the uplift load which he calculated in the structural panels. He said the engineer would have to verify that. Mr. Moulton stated that the drawings provided don't seem to initially match the statement in the report because the drawings call for a thickened concrete footing with #5 rebar around three sides, but in the report he stated that it is a flat slab with four 6x6's on the edge. He said Mr. Neumann stated that he had highlighted in his report that he did not install two #5 bars that installed the diagonal bars instead. Mr. Moulton stated that the diagonal rebar through the slab into the 6x 6 would require to have an engineer approval because that is a nonprescriptive method of construction per the code. He stated that he is concerned on the front of the building where two garage doors and a personnel door from a lateral standpoint there would be enormous uplift loads and downloads at the sheer panels.

MOTION: Andrew Corriveau made a motion to not entertain a variance as this does not appear that the construction meets the intent of the code. John Catoe seconded the motion. FOR: Andrew Corriveau, Herbert Brown, Don Dean, Dan'l Moulton and John Catoe. The motion was passed.

2. **MINUTES:** The minutes for the October 21, 2008 meeting were approved as presented.

There being no further business the meeting adjourned.

Andrew Corriveau, Chairman