

FINAL
State of Oregon

BUILDING CODES STRUCTURES BOARD

Regular Meeting Minutes

May 4, 2005

MEMBERS PRESENT: Ted Argo, Chairman
Martin Brown, Vice-Chairman
Blair Bubenik
Chris Davis
Bruce Dobbs
Lawrence Hite
Michael McBride
Jim Schwager

MEMBERS ABSENT: Michael Steffen

STAFF PRESENT: Mark Long, Administrator of Building Codes Division
Andrea Simmons, Manager of Policy & Technical Services
Twyla Knowles, Assistant Manager
of Policy & Technical Services
Richard Rogers, Structural Program Chief and Board Secretary
Mike Ewert, Mechanical/One- and Two-Family Dwelling
Code Specialist
Shane Sumption, Fire, Life-Safety ADA Program Specialist
Debi Barnes-Woods, Division Boards Coordinator/Recorder

GUESTS PRESENT: Alan Seymour, Oregon Department of Energy
Patrick Bridges, Oregon Home Builders Association
Ronald Larson P.E., HLB & Associates
Dona Lee Larson, HLB & Associates
Roger Severson, Department of Human Services
Ray L'Hommedieu, self
Mrs. L'Hommedieu, self
William Pease P.E., BMGP Engineers
John Gray, G2 Associates
Steve Winstead, Tillamook County
Michael Rosenberg, Oregon Department of Energy
The Cham Family, Appeal
John Caul, Oregon State Fire Marshall

I. BOARD BUSINESS

I.A. Call to Order

Chairman Ted Argo called the Building Codes Structures Board to order at 9:30 a.m. The meeting was held at the Building Codes Division, Conference Room "A," 1535 Edgewater NW, Salem, Oregon.

I.B. Roll Call

Michael Steffen was absent, not excused.

I.C. Approval of Agenda and Order of Business

Chairman Argo **RULED** the agenda approved as mailed.

I.D. Approval of the February 2, 2005, Teleconference board meeting minutes, and the April 1, 2005, Special Teleconference board meeting minutes.

Chairman Argo **RULED** the teleconference board meeting minutes of February 2, 2005 approved as submitted.

Chairman Argo **RULED** the special teleconference board meeting minutes of April 1, 2005 approved as submitted.

I.E. Date of the Next Regularly Scheduled Meeting.

August 3, 2005.

II. PUBLIC COMMENT - None

III. REPORTS

A. Building Code Division Administrator's report.

Mark Long, Administrator of Building Codes Division reported on the construction industry bills with legislation. *Exhibit "A."*

SB 421. The intent of this bill is for the division to provide assistance in three areas. (1) Statewide code interpretation, (2) resolution within jurisdictions, and (3) provide assistants in plan review.

HB 2181. The intent of this bill is to take all the administrative processes for licenses issued at the division out of statute and place them in rule in order to implement consistent processes across all programs.

HB 2872. The intent of this bill is to enhance the work from last session (SB 906), which created a low-rise residential code.

HB 3097. In response to Senate Bill 713, passed by the 2003 Legislature, the division began implementing an electronic permitting system in the tri-county region. Permits may be applied and paid for by a contractor online, from home, the office, or jobsite. House Bill 3097 continues the pilot program, allowing jurisdictions statewide to participate, and authorizes continued planning.

HB 2179. The intent of this bill is to provide a method for fast approval of emerging technologies with a streamlined regulatory process.

HB 3273. The bill would require individuals whose licenses, registrations, or certifications that were revoked wait one year to reapply.

SB 706. This bill would change the role of BOLI related to the complaints concerning architectural barriers for multi-family dwelling as defined under 447.210.

Certification Rule Change. The new process would align with national certification by using the International Code Council certifications and exams in Oregon and grandfather existing State of Oregon structural, mechanical and plans examiner certifications. *Exhibit "B."* The public hearing is scheduled for May 17, 9:30 a.m., in BCD's conference Room "A."

Statewide code interpretation rules. "The Life of a Code in Oregon," was distributed. *Exhibit "C."* This process was developed from the meetings with board chairmen and vice-chairmen for the purpose of consistence throughout all division boards. An external advisory committee reviewed draft rules developed from that process. The code interpretation rules are intended to become effective July 1, 2005. The State Building Code Appeal Process draft rules were also reviewed. *Exhibit "D."*

Process for code adoption in Oregon. ORS 455.030 explains the code adoption process. ORS 455.060 is dealing with products not recognized by the code. ORS 455.110 explains the duties of the director. ORS 455.112 Elimination of unclear, duplicative, conflicting or inadequate provisions; rules. This statute was the result of last legislative session. *Exhibit "E."* The Administrator explained that this statute sets the framework for some of today's agenda items for code appeals and alternate methods.

Budget. *Exhibit "F."*

IV. COMMUNICATIONS

Recommendation from the Chief Plumbing Inspector to rescind obsolete interpretive rulings program related.

Obsolete interpretive rulings were noted by board members.

V. APPEALS.

A. Board review Appeal No. 690-05-01, decision by City of Portland Local Appeals Board regarding occupancy classification of a "non-farm" agricultural building and make recommendation. Appeal filed under authority of Ors 455.690.

Jim Schwager said that he is a member of the City of Portland Local Appeals Board. He may participate in discussion, although he would be abstaining from any vote.

William Pease P.E., BMGP Engineers, Representing Bailey Nursery. He said that the building in question is used for nursery operation to store, sort and ship nursery stock. He claims that the proper occupancy is U-1 supported in Appendix Chapter 3, Division II of the 1998 OSSC when the project was first submitted in December 2004.

The City of Portland concluded that this structure should be re-classified from a U-1 Occupancy classification to an S-1 Occupancy. Mr. Pease appealed to the City of Portland, Local Appeals Board which upheld the city's determination of the S-1 Occupancy classification.

Since the building is located on a farm and the intended use is for storage and preparation of bare-root nursery stock for trucking out to market, both the code and statute permit a building to be classified as a Group U-1 under these circumstances. The division is recommending that the Building Codes Structures Board issue a ruling stating the building in question is properly classified as a U-1 Occupancy.

MOTION by Larry Hite to approve division recommendation that the building in question is properly classified as a U-1 Occupancy.

Roll call vote taken:

Aye: McBride, Hite, Dobbs, Davis, Bubenik, Brown, Argo.

Nay: None.

Abstention: Schwager

Absent: Steffen.

MOTION CARRIED.

B. Board review Appeal No. 690-05-02, decision by Tillamook County Local Appeals Board regarding suitability of foundation system regulated under the Oregon Structural Specialty Code and make recommendation. Appeal file under authority of ORS 455.690.

Richard Rogers, Structural Program Chief and Board Secretary, reminded the board that only the technical and scientific facts related to the installation of the foundation system are under the purview of the board for this case.

Jim Schwager asked if the stability of the sand dune, in which the building is built, should not be part of the board's recommendation. Mr. Rogers said that he believes the stability of the adjacent sand dune is a land use issue and is not under the purview of the board. However, the stability of the sand directly impacted by the foundation system piles may be part of the discussion.

Steve Winstead, Winstead and Associates, Third-party contracting firm for the State of Oregon as Building Official of Tillamook County. Mr. Winstead issued a building permit for the foundation system with few conditions. An adjoining neighbor filed with the Tillamook County Board of Appeals. The matter of the appeal pertains to installation of a pile foundation system for a two storied single family home at the "toe" of a sand dune in Tillamook County. Reason cited for filing the appeal were: permit holder is using pull-down anchors where drilled/cased micro-piles are specified, and "conditions of approval" 14 and 15 were said to be not in compliance. Those conditions require through an asterisk that the foundations shall be of drilled/cased micro-piles.

The Tillamook County Board of Appeals has provided a decision in favor of the appellant, which overturned the approval by Building Official, Permit No. 04-4286. Although Mr. Winstead believes he made the right decision in the matter of the property, he has issued a stop work order on the project waiting for board's decision.

Chairman Argo asked how far along was the project. Mr. Winstead said that from the reports received, the majority of the drilling has been completed.

Ron Larson, HLB & Associates, registered and professional engineer, and John Gray G2 Associates, registered geologist, certifying engineering geologist for the State of Oregon were present. Mr. Larson said that the entire foundation system was installed prior to the stop work order. The project is securely anchored into the underlined surface of the ground.

John Gray said that he has been involved in the project since December 2000 when first asked to conduct a preliminary investigation. A thorough investigation was conducted at a later date of the dune top, the sides, the root elevations around the end of the dune and of the lot itself. The finding of the investigation was that construction could occur safely within reason. Because of the County's stringent requirements, options were limited on the type of construction. Mr. Gray said that if this were his house, he would not have constructed it any differently.

Mr. Gray said that steel casings were not used on the outside of the structure because the load bearing was significantly lower than what was indicated in the plans. The capacity for the anchors is 53 thousand pounds, and 39 thousand pounds to 55 thousand pounds is the capacity for the tiebacks. 12 thousand pounds was used. Mr. Gray added that there is no requirement for fixity and he has certified that the installation was done properly.

Mr. Winstead said that once the project is complete, he would be requesting a completion letter to certify all work because of all the concerns.

Ray L'Hommedieu, neighbor of the lot in question, played a video tape of Mr. Larson stating that drilled cased mirco-piles, were used in this project.

Mr. L'Hommedieu said that since the project is a segmented unit shielded on the outside by concrete, the possibility of buckling is increased by the quality of the soil. From the engineering geologic report by HLB & Associates, it indicates clays that are potentially reactive to water that would create poor bearing surfaces, that has been penetrated. It was noted in the report, that there is a possibility of wood debris within deposits beneath the site.

Mr. L'Hommedieu said that there is a design oversight with the walkway added to the backside of the house, which has not been taken in consideration. If a small magnitude was to occur, the soil would give way. Soil samples were taken, although the building official approved the plans on the project before the samples were received. *Exhibit "G."*

Mrs. L'Hommedieu said that from the beginning, the issue has been slope stability of the sand dune, and water drainage. She said that her and her husband have a vested interest in the project because their property sits on the adjacent slope.

Vice-Chair Brown asked if the third-party geologist, Roger Redfern, or the bio-technical engineer, Kevin Foster, who were hired by the L'Hommedieus', are able to testify or provide documentation of their findings. The analysis of the foundation was based on the information that was never submitted or properly cataloged during the installation of the foundation. Although Mrs. L'Hommedieu did not have documentation Vice-Chair Brown asked for, she said that the geologists findings were that the sand dune was marginally stable.

Because data from the geology report is not listed specifically with the placement of the pilings, the L'Hommedieus' felt that the HPM's should be cased in order to meet the requirements that was imposed by one of the hazards reports. Chairman Argo said that when the HPM's are installed, the grout that is installed immediately after the helical plates forms the casing.

Mr. Winstead said that he has not completed his investigation on the project. There are unread reports and letters of certification that will be under review to verify work in accordance with proper specifications and the listing of the materials installed. Because of the sensitivity of the issue, a third-party individual will be reviewing all the documents along with Mr. Winstead.

Ron Larson addressed the issue of the walkway on the backside of the building. A cantilevered walkway was installed to allow for maintenance and construction of the building. If the sand were to move, it would go under the cantilever. The walkway was designed that way to minimize load impact.

Mr. Larson continued to address issues of concern. Each anchor meets and exceeds all the design requirements. Compression tests were completed on the pull down micro piles in accordance with the specifications.

Jim Schwager said that the L'Hommedieus' were concerned and identified that over torquing occurred. Would over torquing compromise the design in load bearing capacity? Mr. Gray said that the design has not been compromised.

Mr. Larson said that he would get the documentation from the licensed certified installer with the patent product used concerning the torquing. Mr. Gray added that if over torquing occurred, it would have shown on the instrumentation used during torquing.

Chairman Argo asked that if the grout were not inspected during the time of installation, would it be too late to make certifications about the strength of the piles. Mr. Gray said that he was present during the time of installation. Chairman Argo asked what assurance is there that the product will perform as per its listing when being installed in soft soil. Mr. Larson said that if there is a concern with the grout installation, testing for stability could be conducted to determine the strength of the grout. Chairman Argo asked if there is a need to load test the lateral supports in a compression mode. Mr. Larson said that the anchors are installed in both directions and are designed to withstand tension numbers because of the wind and the soil.

Mr. L'Hommedieu said that one of the shafts has a visible above ground twist in the material. One of the reports indicated that the contractor said over twisting is typical in all installations. AV Chance said that it is likely, with the soil conditions, that over twisting and over torquing occurred all the way down the shaft. Mr. L'Hommedieu was concerned with safety conditions of that shaft.

Jim Schwager felt that all concerns should be addressed before the project was allowed to be completed.

Vice-Chair Brown said that he has not been convinced by a design professional biotech or engineer that there is a problem with the installation.

MOTION by Mike McBride to uphold the February 5, 2005, decision of the building official of Tillamook County.

Roll call vote taken:

Aye: Schwager, McBride, Hite, Dobbs, Davis, Bubenik, Brown, Argo.

Nay: None.

Absent: Steffen.

MOTION CARRIED UNANIMOUSLY.

VI. UNFINISHED BUSINESS – None

VII. NEW BUSINESS

A. Board approval of statewide alternate method regarding construction and tenant improvements of dialysis facilities requested by Oregon Department of Human Services.

Roger Severson, RSA Consulting, spoke in behalf of the Oregon Department of Human Services. He said that DHS was requesting to allow dialysis facilities to exist in "B" occupancy buildings under certain conditions. This would avoid the restrictive requirements of the I-2 Occupancies now required by the International Building Code. Mr. Severson distributed *Exhibit "H,"* request for statewide alternate method dialysis facilities April 28, 2005 amended version. He said that the handout is intended as supplemental fire and life safety requirements proposed as alternative methods for new dialysis facilities in "B" occupancy buildings.

Jim Schwager was concerned with the language referred to in *Exhibit "G" (E)*.

MOTION by Jim Schwager to accept the alternate method for dialysis facilities as provide in *Exhibit "G"* with the modification to paragraph (E), which would read: "For the purposes of fire alarm installation, dialysis facilities shall be provided with smoke detection in patient care areas and throughout the exist path." Fire alarm systems shall conform to NFPA 72 Standards and shall be in accordance with Section 907.2.6 of the OSSC.

MOTION CARRIED UNANIMOUSLY.

B. Board consideration and recommendation of an amendment of OSSC Chapter 13 by administrative rule so that Chapter 13, Lighting Standards, will be consistent with other National Standards.

Shane Sumption, Fire, Life-Safety ADA Program Specialist, briefed the board on the code change proposal related to retail lighting requirements of Chapter 13 that would fall under ORS 455.112. The additional lighting power of retail displays would be 1.75 watts per square foot up to a maximum of 17,500 watts.

A letter received from Bridgeport Centers, LLC, in support of the change was entered into the record as *Exhibit "I."*

MOTION by Mike McBride to approve the amended code change proposal to the Oregon Structural Specialty Code through the expedited rulemaking process, in order to address lighting needs of projects that are unique in type or scope.

MOTION CARRIED UNANIMOUSLY.

C. Board consideration and recommendation of an amendment of OSSC Chapter 11, Division III by administrative rule so that the covered Multi-Family Dwelling provisions will be consistent with the Fair Housing Act.

Shane Sumption, Fire, Life-Safety ADA Program Specialist, said that the division is asking the board to support the proposed code adjustment to assist in bringing the OSSC in line with the federal standards.

MOTION by Chris Davis to approve the proposed code adjustment to assist in bringing the OSSC in line with the federal standards.
MOTION CARRIED UNANIMOUSLY.

IV. ANNOUNCEMENTS

XI. ADJOURNMENT

Chairman Argo adjourned the meeting at 3:45

Respectfully submitted by,

Debi Barnes-Woods
Division Boards Coordinator/Recorder

Exhibits:

- A. Construction industry legislative bills, *Agenda Item III.A.*
- B. Certification rule change, *Agenda Item III.A.*
- C. Statewide code interpretation rules, *Agenda Item III.A.*
- D. Draft rules for code appeal process, *Agenda Item III.A.*
- E. Process for code adoption, *Agenda Item III.A.*
- F. BCD's budget document, *Agenda Item III.A.*
- G. Soil sample document, *Agenda Item V.B.*
- H. Request for alternate method dialysis facilities amended version, *Agenda Item VII.A.*
- I. Letter from Bridgeport Centers, LLC., *Agenda Item VII.B.*

**TO OBTAIN COPIES OF EXHIBITS, A PUBLIC RECORD REQUEST MUST BE COMPLETED BY
CLICKING ON THE LINK PROVIDED.**

<http://www.cbs.state.or.us/external/bcd/pdf/2568.pdf>