

# CENTENNIAL HOUSING PROJECT SURVEY AND ANALYSIS

By

**WHITE HORSE CONSULTANTS**  
**LAWRENCE A. DOBLE, P.E., C.B.O.**  
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DRAFT (January 25, 1999)

## **PURPOSE, SCOPE AND LIMITATIONS:**

The purpose of the survey was to examine and evaluate the visible structural elements of the existing buildings of the "Centennial Project" for conformity with the structural engineering regulations and requirements for material of construction (Volume 2, 1994 UBC).

The purpose of this report was **not** to evaluate the "built in" (as built) aspects of the existing construction.

The scope of this survey was limited to those elements that are visible without removing or otherwise damaging functioning elements of the houses.

This study was conducted in accordance with generally accepted structural engineering principals and standards of practices in this area at this time. We will make no warranty either expressed or implied. The conclusions and recommendations submitted in this report are based upon the data obtained from visual inspections, the existing type of construction, and our experience in this area. Our findings include interpolation and extrapolation of visible conditions identified at the time of the survey.

## **SURVEY:**

**General: (200, 300, 400 Teal Court & 100, 200, 300, 400 Free Silver Court)**

Dates of Inspection:

December 16 & 17, 1998

Type of Construction:

The buildings are three-story wood-framed construction with a concrete stem wall and concrete footing foundation.

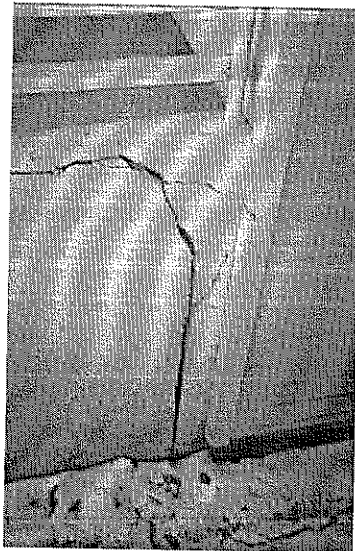
Approximate Age:

The buildings are approximately 14-15 years old.

### **200 Teal Court:**

General Conditions:

The most obvious sign of distress was a major crack in an exterior retaining wall system between units 214 & 215. There also was a portion of the floor that is deflected at an area (the common wall between units 214 & 217). There is a joist that has been cut resulting in the deflection. It appears that a plumber cut the floor joist during construction in order to run the waste pipes associated with the water closets.



*This is a photograph of the cracked exterior retaining wall between units 214 & 215.*

**Recommendations:**

The exterior retaining wall should be rebuilt. The simplest abatement solution for floor deflection at the cut floor joist would be to provide a header (one 2x12 would be adequate) that would effectively "box out" the waste pipe. A licensed contractor should replace the exterior retaining wall. A licensed contractor should repair the floor joist. A licensed contractor should make other repairs, if discovered, during the exterior retaining wall and joist repairs.

**Conclusions:**

The problems listed above should be abated as soon as possible. The exterior retaining wall does not provide an immediate threat to the building structural system. The exterior retaining wall does however provide a walking surface that needs to be maintained for the convenience of the owners of units 214 & 217. Continued deflection of the floor between units 214 & 217 could cause collateral problems (plumbing leaks, etc.) and ultimately could cause structural failure of the floor framing system in this area.

**300 Teal Court:**

**General Conditions:**

There were no visible signs of structural distress.

**Recommendations:**

A licensed contractor should make other repairs, if discovered, during the joist repairs to building 400.

**400 Teal Court:**

**General Conditions:**

The only visible sign of distress was a portion of the floor that was deflected at an area (the common wall between units 410&412). There is a joist that has been cut resulting in the deflection. It appears that a plumber cut the floor joist during construction in order to run the waste pipes associated with the water closets.

**Recommendations:**

The simplest abatement solution for floor deflection at a cut joist would be to provide a header (one 2x12 would be adequate) that would effectively "box out" the waste pipe. A licensed contractor should repair the floor joist. A licensed contractor should make other repairs, if discovered, during the joist repair.

**400 Teal Court: (continued)**

Conclusions:

The problems listed above should be abated as soon as possible. Continued deflection could cause collateral problems (plumbing leaks, etc.) and ultimately could cause structural failure of the floor framing system in this area.

**100 Free Silver Court:**

General Conditions:

There were no visible signs of structural distress.

**200 Free Silver Court:**

General Conditions:

There were no visible signs of structural distress.

**300 Free Silver Court:**

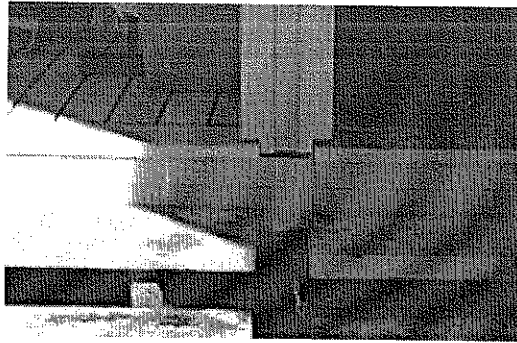
General Conditions:

One visible sign of distress was the deflection of the exterior decks between units 314 & 316 and 317 & 319. It is not immediately obvious what caused the deflection of the exterior deck framing. There is a deck roof framing element at unit ? that has been damaged. It appears that the damage to the deck roof-framing element is the result of sliding snow and ice from above.



*This is a photograph of the cracked exterior deck roof beam at unit ?.*

### 300 Free Silver Court: (continued)



*This is a photograph of the exterior deck deflection between units 314 & 316 ?.*

#### Recommendations:

An easy solution to the deflection of the exterior decks between units would be to prop them up with a footing placed at the outside end of each cantilevered beam. The solution to the damaged deck roof-framing element involves some form of protection from sliding snow and ice. The homeowners association should evaluate any potential solutions to the problem of sliding snow and ice with regard to architecture, etc. A licensed contractor should repair the exterior deck framing. A licensed contractor should make other repairs, if discovered, during the repair.

#### Conclusions:

The problems listed above should be abated as soon as possible. Continued deflection could cause structural failure of the floor framing system in these areas. Sliding snow and ice could cause failure of the cracked beam and similar damage to deck roof framing in other areas.

### 400 Free Silver Court:

#### General Conditions:

There were no visible signs of structural distress.

**SUMMARY:**

In general the buildings surveyed for this report were in good condition, with some noted exceptions. Considering their ages, they have “stood the test of time” very well. Implementation of the recommendations included in this report and those associated with the report by Wilson Building Consultants should place them in a stable category for years to come.

**Respectively Submitted,**

**Lawrence A. Doble, C.B.O., P.E.  
President  
White Horse Consultants, Ltd.**

Attention: Seymour Sievert

Date: 12/9/98

Company: First Choice Property & Management

Number of Pages: 4

Fax Number: 927-1035

Voice Number:

From: Larry Doble

Company: White Horse Consultants

Fax Number: 970-704-1906

Voice Number: 970-704-1907

Subject: Centennial Proposal

Comments:

Seymour,  
 This is it. I made some changes after we spoke on the phone  
 yesterday. I think they speak for them selves. Please call with any  
 questions.  
 Larry.

FIRST CHOICE PROPERTIES & MANAGEMENT, INC.  
BASALT OFFICE  
Mid-Valley Business Center  
402 Park Avenue, Suite E  
970-927-1400  
970-927-1035 (Fax)

FACSIMILE COVER SHEET

Please deliver the following pages to:

NAME LARRY DOBLE

COMPANY \_\_\_\_\_

SENT BY SEYMOUR SIEVERT

TRANSMISSION DATE/TIME 12/10/98 904-1906

COMMENTS LARRY -

• SIGNED CONTRACT FOR CENTENNIAL

• BERT PRZYBYLSKI OF THE BOARD WOULD  
LIKE TO ACCOMPANY YOU. 925-1876.

• ALSO, LET'S TRY TO COORDINATE YOUR  
SURVEY & FINDINGS WITH JIM WILSON,  
BUILDING ENGINEER. 927-9845

• LET ME KNOW WHEN YOU PLAN TO  
DO THE STUDY I WILL BE OUT OF THE  
OFFICE UNTIL TUE, 12/15, BUT YOU  
CAN LEAVE A VOICE MAIL. THANKS.

Aug  
• P.S. CHECK FOR \$1000 IS ON ITS WAY.

You will receive 2 pages including this cover sheet.  
If you do not receive all pages, please call.



WHITE HORSE CONSULTANTS  
LAWRENCE A. DOBLE, P.E., C.B.O.  
Box 3042, Aspen, CO 81612  
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970-925-8796 (fax)

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December 9, 1998

The Centennial Owners' Association  
C/o Mr. Seymour Sievert  
President  
First Choice Property Management

Project:  
Centennial Housing Project  
Survey and Analysis

VIA FACSIMILE

Dear Mr. Sievert


This is my proposal for a survey and analysis of the structural conditions for the above project for conformity with the structural engineering regulations and requirements for material of construction (Volume 2, 1994 UBC). The purpose, scope, and limitations of this survey and analysis are attached to and part of this proposal.

My fee for the survey and analysis is \$2,000.00. I require a retainer of \$1,000.00 with the balance due at the submission of the written report. Changes from the original scope of work will be billed at \$100.00 per hour.

I have attached a copy of my insurance certificate. Additional coverage is available, billable to the association.

Thank you for the opportunity to submit this proposal.

Sincerely,



Lawrence A. Doble, P.E., C.B.O.  
President

## CENTENNIAL HOUSING PROJECT SURVEY AND ANALYSIS

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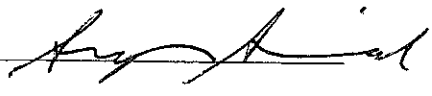
### PURPOSE, SCOPE AND LIMITATIONS:

The purpose of the survey will be to examine and evaluate the visible structural elements of the existing buildings of the "Centennial Project" for conformity with the structural engineering regulations and requirements for material of construction (Volume 2, 1994 UBC).

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The scope of this survey is limited to those elements that are visible without removing or otherwise damaging functioning elements of the houses.

This study will be conducted in accordance with generally accepted structural engineering principals and standards of practices in this area at this time. We will make no warranty either expressed or implied. The conclusions and recommendations submitted in this report will be based upon the data obtained from visual inspections, the existing type of construction, and our experience in this area. Our findings will include interpolation and extrapolation of visible conditions identified at the time of the survey. If conditions warrant, we will require the inclusion of an opinion from a geotechnical engineer at no charge to us.

Contract and Conditions Accepted by: 

Date: 12/10/98