

# Building Inspection & Analysis

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# PROPERTY CONDITION REPORT



Client(s): Mr. George Sample

**Property:** 8492 CA-116,

Cotati, CA 94931

Realtor: Not Applicable

Date: Tuesday, November 18, 2014

Inspector: Rick DeBoard - Certification #1051

Report #: PCA7185

This report is prepared for the sole and exclusive use of the Client named above. The acceptance and use of this report by any person other than the Client named above shall be deemed to be a retention of this firm for the purpose of providing an evaluation of this property at a fee equal to the original fee.

Although a thorough inspection of the property was made, we wish to CAUTION you that conditions may change and equipment may become defective. The Report should not be construed as a guarantee or warranty of the premises or equipment, or future uses thereof. Our SERVICE AGREEMENT/CONTRACT provides additional details.

PLEASE READ IT CAREFULLY.

The inspection, by definition, deals with an existing structure which may have older types of plumbing or wiring. It is very probable that these systems would not meet present standards, although the system(s) did meet requirements at the time they were installed.

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PERFORMED WITH THEIR PERMISSION.

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PCA GLOSSARY

# **EXECUTIVE SUMMARY**

#### INTRODUCTION

At your request, we have performed a limited visual survey of specific construction components of the property located at 8492 CA-116, Cotati, CA.

This report is an opinion work, reflecting the visual conditions of the property at the time of the assessment. Hidden or concealed defects cannot be included in this report.

In this Executive Summary, we have summarized what we believe to be the most important conditions concerning the subject property as it pertains to our scope of work. However, please read the ENTIRE report, as all property conditions are NOT included in this EXECUTIVE SUMMARY.

#### **GENERAL INFORMATION**

#### General Description

The subject property is a single story, slab-on-grade structure approximately 23 years of age. The property is situated in a retail/commercial area of Cotati, CA.

#### Wall Construction

Exterior walls are constructed of dimensional lumber, wall cladding consists of wood and fiberboard siding.

#### Roof Construction

The roof structure is wood framed with laminated beams and plywood roof sheathing. The low pitch roofing surface is a built-up membrane, with a granulated cap sheet. The high pitch roofing surfaces are Architectural type asphalt impregnated fiberglass shingles.

The subject property has had average maintenance over the years, and all major systems appear to be functioning within typical guidelines considering the age of the structure(s) except for the negative conditions represented in this report. Of those negative conditions, we consider these in this EXECUTIVE SUMMARY to be the most important.

#### **IMMEDIATE REPAIR EXPENSES**

Immediate repairs are described as those repairs which are due to system deficiencies or deferred maintenance and are deemed to be necessary at this time or within the next year. Repairs are deemed to be immediate repairs if one or more of the following conditions exist: (1) existing or potential unsafe conditions, (2) obvious building or fire code violations, (3) conditions which if left unremedied, have the potential to result in or contribute to critical element or system failure within one year or will most probably result in a significant escalation of its remedial cost.

Estimated costs are formulated using the same type and quality components as the existing ones, unless the existing components are considered to be inappropriate according to industry standards.

Repairs are included in this category only if the estimated cost-to-cure is \$1,000 or more for that specific repair or replacement.

Conditions noted in this report which can (in the opinion of the Field Observer) be corrected for less than that amount are

Property Condition Report for the property at 8492 CA-116, Cotati, CA

considered to be a minor cost item.

See the Section below, titled "RECOMMENDATIONS for FURTHER EVALUATION", for those conditions which need further evaluation before a Cost-to-Cure can be established.

The number to the left of the items below refer to the section of the report where you may find a more detailed description of the condition.

#### 4.4 Paving, Curbing and Parking

#### **Corrections Recommended-**

Approximately 1,000 square feet of the parking lot appears to be past the point of repairing by means of an asphalt overlay (mostly at the alleyway to the south of the building). Therefore, at these areas we recommend pulverizing the asphalt, using the resulting granulated product as base rock, and installing new asphalt over the top.

Cost-to-Cure =\$4,000

#### **Corrections Recommended-**

A seal coat is recommended at the remainder of the parking area within the next year to seal cracks and extend the life of the asphalt surface.

Cost-to-Cure =\$26,000 (including re-striping of parking stalls).

#### 5.3 Roof Framing

#### **Corrections Recommended-**

The roof sheathing at the high eave is deteriorated at the south exterior wall of suite E, F & G, from an apparent current roof leak.

Cost-to-Cure is Included in roofing estimate.

#### 6.1 Sidewall Systems

#### **Corrections Recommended-**

- 1. Damage/deterioration noted to most of the wall panels to the southeast side of suites A, B, D & E, due to a lack of paint maintenance.
- 2. Horizontal siding splices have been made without the use of Z-bar flashing at the west wall of suite K. Z-bar flashing is used to eliminate the potential for moisture entry into the wall cavities at horizontal joints. We recommend installing the proper flashings.
- 3. Damage/deterioration noted to siding and trim components at the base of the five large columns to the west and north of the building (the large columns with bricks at the base).
- 4. Damage/deterioration noted at the walk door trim at the southeast of suite D/E.
- 5. Damage/deterioration noted at the trim at nine of the smaller overhand support columns along the east and north sides of the building.

Cost-to-Cure =\$19,000.

#### 6.4 Weatherproofing (Paint/Stain)

#### **Corrections Recommended-**

Checking/cracking of the weatherproofing was noted at the exterior walls which are facing the west, south and southwest of the building. Paint is also needed at 15 of the wood doors on the east and the north facing walls.

Cost-to-Cure =\$7,500.

#### 7.1 Roofing Materials

#### **Corrections Recommended-**

All roofing surfaces appear to be the original and are due for replacement at this time. There are also

some current leaks over suites D, E & F. Low pitch roof surfaces have been patched repeatedly over the last several years.

Cost-to-Cure =\$145,000.

#### 8.4 Plumbing Fixtures

#### **Corrections Recommended-**

- 1. The faucet(s) at the restroom for suite L is in need of replacement.
- 2. The toilets are loose at the connection to the floor in the restrooms of suites A/B, D/F and O. We recommend replacement of the wax ring seal and tightening of the floor bolts at these toilets to prevent leakage and damage to flooring and/or framing components.
- 3. Two toilets are cracked/broken/damaged and in need of replacement in the restrooms for suite L. Cost-to-Cure =\$1,200

#### 8.5 Type of Water Heating Systems

#### **Corrections Recommended-**

Four units are currently leaking, are inoperative, or have been removed, and are in need of replacement.

Cost-to-Cure =\$3,200

#### 9.1 HVAC System

#### **Corrections Recommended-**

Six of the heating units and three of the evaporative coolers did not respond to normal operating controls. Since all of these units are nearing or past the end of their expected useful life we recommend they be replaced.

Cost-to-Cure =\$40,000

#### 10.25 Distribution Conductors

#### **Corrections Recommended-**

#### Safety Concern-

The following potential safety concerns were found that involve the conductors:

- 1. Loose/unsecured conductors or conduit were noted at the attic spaces. All conductors and conduit should be secured to prevent movement.
- 2. Junction or ceiling boxes were noted to be without covers at the attic spaces. Although covers are inexpensive to purchase and install, they are very important because they contain any sparks within the box in the event that wire connections become loose.

Cost-to-Cure =\$15,000 (this is a "best guess" because I am unable to estimate the amount of time it would take for an electrician to properly secure all the romex wiring in the attic. It would have to be done off a ladder at various locations in each suite as there is no walking platform).

IMMEDIATE REPAIR COST-TO-CURE TOTAL = \$260,900.00

#### **MAJOR PROJECTED EXPENSES**

Major Projected Expenses are those which are likely to be needed within the next 5 years and for which replacements or repairs are likely to exceed \$3,000.

#### 4.8 Fencing

Many deteriorated fence boards/rails noted. You should anticipate the need to replace this/these components within the next 5 years.

Projected Expense = \$15,000.

#### 6.2 Fenestration Systems - Walk Doors

The doors at the following locations are in need of replacement within the next 5 years:

The southeast entrance door of suite D/E, the south entrance door of suite F, and the storage entrance door to the west of suite L.

Projected Expense = \$3,500.

#### 6.4 Weatherproofing (Paint/Stain)

You should anticipate the need to repaint the east and north exterior components within the next 5 years.

Projected Expense = \$15,000.

#### 8.5 Water Heating Components

You should anticipate the need for replacement of approximately two of these water heaters within the next five years.

Projected Expense = \$4,000.

#### 9.1 HVAC System Description

Eight of the HVAC heating and cooling units are older and are likely to need replacement with-in the next fives years.

Projected Expense = \$48,000.

#### 11.1 Floors & Floor Coverings

Floor coverings are moisture damaged at suite F in need of replacement.

Projected Expense = \$10,000.

#### MAJOR PROJECTED EXPENSE TOTAL = \$95,500.00

#### **ESTIMATED COSTS ARE PRELIMINARY**

The estimated costs in this report have been determined by the use of cost estimating manuals, third party contractors, our company manuals and/or personal construction experience. Opinions of probable costs should only be construed as preliminary budgets. Actual costs most probably will vary from the consultant's opinions of probable costs depending on such matters as type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing of the work (if applicable), quality of contractor, quality of project management exercised, market conditions, and whether competitive pricing is solicited, etc.

#### RECOMMENDATIONS FOR FURTHER EVALUATION

If there are recommendations below for further evaluation by specialist contractors and/or engineers, we strongly advise that said evaluations be performed BEFORE the end of your due diligence period, so that you are fully aware of all circumstances regarding the subject property before agreeing to the purchase. The eventual cost associated with repair or replacements of the components below have not been provided in this report because it will depend on the findings of the specialists in the field.

We recommend that you consult your real estate professional or attorney in regards to the potential need for a Phase 1 Environmental Assessment to be performed on the subject property. Phase 1 Environmental Assessments establish a baseline for the presence of known hazardous contaminants on the property so that you, your realtor and your lender can qualify for protection against future cleanup costs under the Innocent Landowners Defense Act.

We recommend that mold testing be performed on this/these structure(s) by a qualified mold specialist. There are moisture stains in this/these building(s) which may be an indication of a past or present water leaks, and there may also be visible organic growth in some locations, (if we found any visible growth it will be noted in the body of the report). The words "moisture" and "organic growth" go hand-in-hand with one another. Whenever you see the word "moisture", "water stains", "moisture intrusion", "leakage", etc. in this report, it brings with it the possibility of organic growth which can be mold, mildew, or a number of other substances. Organic growth is everywhere in our environment, outdoors and indoors, and in most cases it is not believed to be harmful, however, some organic growths have been found to be mold, Mold grows in a wide variety of types and species and different molds can be pathogenic, allergenic or even toxic in some cases. It is impossible to determine which category a particular mold falls into without proper testing.

It has been recently discovered that some molds can be a serious health concern for some people, especially some of the molds that grow because of a moisture condition in wall and ceiling cavities. Moisture in these framing cavities can create mold which may not become visible until it has progressed to an advanced stage.

We do not offer mold testing, and comments regarding the diagnosis of mold are not a part of this report.

For additional information on this subject, you may wish to contact the California Department of Health Services at (916) 445-4171, or visit them at <a href="http://www.dhs.ca.gov">http://www.dhs.ca.gov</a> and type in the word "mold" in their search engine.

Reliable sources for locating environmental professionals are the Indoor Air Quality Association (IAQA) at (301) 962-3804 or online at <a href="https://www.iaqa.org">www.iaqa.org</a> and the Indoor Air Quality Council at 800-942-0832 or <a href="https://www.iaqcouncil.org">www.iaqa.org</a> and the Indoor Air Quality Council at 800-942-0832 or <a href="https://www.iaqcouncil.org">www.iaqa.org</a>.

Evidence of wood destroying pests was noted at the floor of the electrical room. We recommend a pest inspection be performed by a properly licensed pest control operator.

# **GENERAL INFORMATION**

#### IMPORTANT INFORMATION

#### 1.1 Building Orientation

Location descriptions (such as **north**, **south**, **east and west**), will be used to identify where the room is located, or where the condition was found. For purposes of this assessment, north will be as shown on the maps/diagrams in the "MAPS & DIAGRAMS" Section of this report.

#### 1.2 Color Code Definitions

Throughout the body of this report we will use the following colored text to direct your attention:

#### Safety Concern:

The paragraph immediately below "Safety Concern" describe conditions that may pose a safety concern of some kind and warrant corrections by a properly qualified specialist in the appropriate trade.

#### Further Evaluation:

The paragraph immediately below "Further Evaluation" describe conditions that warrant further evaluation by a properly qualified specialist in the appropriate trade before any conclusion can be made regarding their proper function.

#### Corrections Recommended:

The paragraph immediately below "Corrections Recommended" indicate conditions where repair or replacement would improve the integrity and/or functionality of the component. We recommend that all corrections be made by properly qualified specialists in the appropriate trade.

#### Recommended Upgrades:

The paragraph immediately below "Recommended Upgrades" describe systems and/or components where upgrades would significantly improve safety or function, but which may not have been available at the time the building was constructed.

#### **DEVIATIONS from the ASTM E-2018 GUIDE**

#### 1.3 Documentation and Other Information:

None of the documents listed below were reviewed in the process of this PCA:

Appraisals, either current or previously prepared.

Certificates of Occupancy.

Safety inspection records.

Warranty information (roofs, boilers, chillers, cooling towers, etc.)

Records indicating the age of material building systems such as roofing, paving, plumbing, heating, air

conditioning, electrical, etc.

Historical cost records, such as those costs incurred for repairs, improvements, recurring replacements, etc.

Pending proposals or executed contracts for material repairs or improvements, or descriptions of future work planned.

Outstanding citations for building, fire and zoning code violations.

Previously prepared ADA surveys or status of any improvements implemented to effect physical compliance.

Previously prepared property condition reports by other firms or studies pertaining to any aspect of the subject property's physical condition.

Records indicating building occupancy percentages.

Records indicating building turnover percentages.

Building rent rolls.

Leasing literature, listing for sale, marketing/promotional literature such as photographs, descriptive information, reduced floor plans, etc.

Drawings or specifications (as-built or construction).

#### 1.4 Excluded Components

The following components are excluded from this PCA:

Any and all life safety components or equipment.

Any and all fire protection systems or equipment with the following exception:

If you have specifically contracted for us to provide an inspection of the commercial kitchen equipment then we will be assessing the condition of the Fire Suppression Systems which are installed in those kitchens, (Ansul Systems or equivalent). We are not allowed to activate these systems, but will comment on anything that we feel is pertinent to their effectiveness.

NOTE: Even though fire sprinkler systems are beyond the area of our expertise, we will make comments in the report as to their presence and also may indicate in the report when we see conditions that are suspect.

Any and all comments or evaluations regarding the American with Disabilities Act.

# PURPOSE and SCOPE

#### **PURPOSE**

#### 2.1 Visual Survey

To perform a limited, visual survey of specific components on the subject property and list our observations of items and conditions which indicate the need for immediate repair.

## 2.2 Opinions of Probable Costs

If agreed upon in our contract with the user, to provide opinions of probable costs for the repair or replacement of those components which are found to be in need of immediate repair. The opinions of probable costs are intended solely as an indication of the approximate nature and scope of repair and cannot be relied upon as indicating actual nature and scope. Further investigation and solicitation of firm bids by appropriate service companies and contractors is required.

#### 2.3 Projected Major Expenses

If agreed upon in our contract with the user, to ascertain which of the major components are likely to reach the end of their expected lifespan within the next 5 years, and list those components, along with opinions of probable costs for the replacement of those components.

#### 2.4 Intent

Our intent is to appraise you of the general condition of the subject property and to provide information to you which will be helpful in your prepurchase considerations as it relates to the condition of the property.

#### **SCOPE**

#### 2.5 Standards of Practice

The Standards of Practice used for this Property Condition Assessment (PCA) are those of ASTM E 2018, Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process, which has been prepared by the American Society for Testing and Materials. The ASTM E 2018 is upgraded every few years to reflect changes in the industry. To determine which version of the ASTM E 2018 was being used for this PCA, please see your Contract for Services.

Adherence to the *ASTM E 2018 Guide* is entirely voluntary. We have chosen to incorporate these standards as an integral part of our property assessment process to promote uniformity with regards to commercial real estate transactions.

Every commercial property is different, and every client has different needs, expectations and budgets. Our approach to these varying requirements is to custom tailor each of our property assessments individually according to those differences and needs. As a result, some of the *ASTM E 2018* guidelines are not appropriate. Any deviations from the *ASTM Guide* are listed in the EXECUTIVE SUMMARY of the report.

#### 2.6 Inclusions

The scope of our assessment was limited to the following specific visually accessible components: Foundations of the building(s), structural framing (load carrying members only), interior and exterior claddings, roof structure and load carrying members of the roof framing, mechanical systems, electrical systems, and plumbing systems.

#### 2.7 Report is Confidential

Our assessment and this report are intended to be confidential to you, our client, for your exclusive use. They cannot be relied upon by a third party. We make no representation as to the condition of this property other than stated specifically in writing in the text of this narrative report.

Further investigation including acquisition of bids by contractors and service companies in respect to any recommendations within this report are recommended and required.

# MAPS and DIAGRAMS

The following maps and diagrams are not to scale and do not include details. Smaller rooms and/or closets may have been left out for clarity. Maps and diagrams are merely for your use in understanding the comments in this report with respect to component systems and locations.

The top of each page is approximate NORTH, unless otherwise noted.

# SATELITTE VIEW

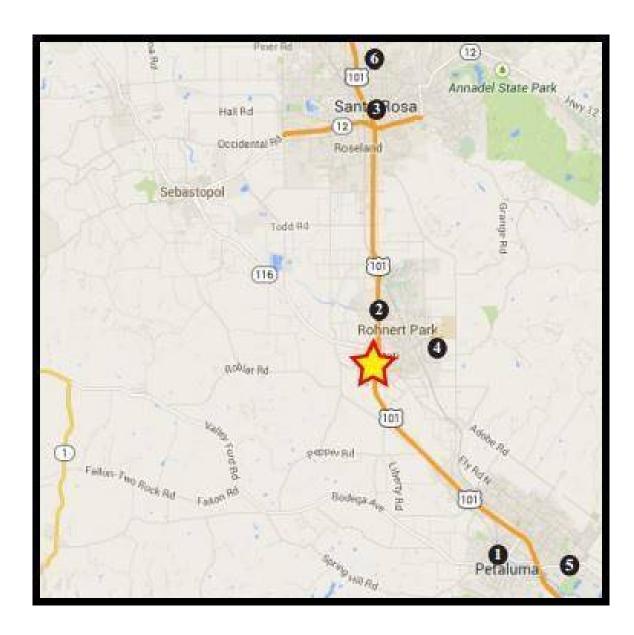
3.1



Copyright: Rick DeBoard

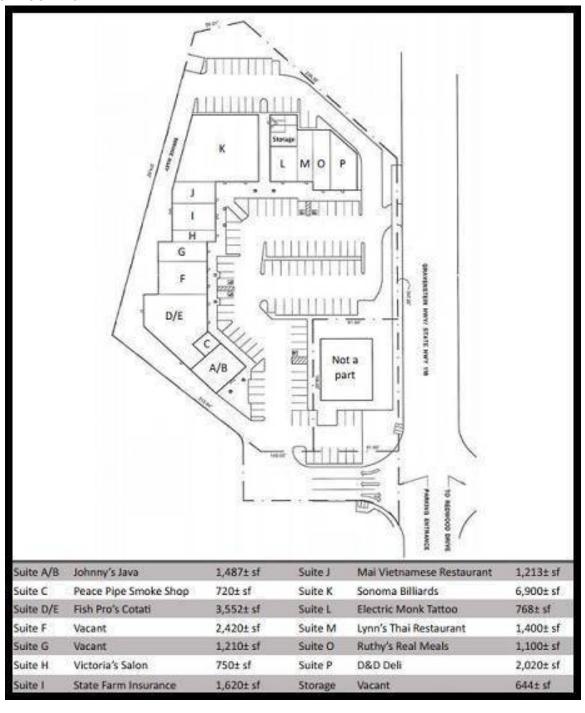
# VICINITY MAP

3.2



# FLOOR PLAN(S)

#### 3.3 Ground Floor Plan



# SITE IMPROVEMENTS

#### **SITEWORK**

#### 4.1 Topography

The site where the structure is built is generally flat, with no discernible slope of the land.

#### 4.2 Storm Water Drainage

Drainage appears adequate, and all indications are that ground water drains away from the structure properly. Drain inlets/outlets were noted which indicate the presence of an underground drainage system. Since most of this system is not visible, THESE COMPONENTS ARE NOT A PART OF THIS ASSESSMENT.

## 4.3 Access and Egress

Access and egress to the subject property are via Redwood Drive to the east and Highway 116 to the north.

Access and egress both appear adequate and no concerns are noted.

#### 4.4 Paving, Curbing and Parking

All parking surfaces on the lot are paved with asphalt.

#### **Corrections Recommended-**

Approximately 1,000 square feet of the parking area appears to be eroded past the point of repairing by means of an asphalt overlay (mostly at the alleyway to the south of the building). Therefore, at these areas we recommend pulverizing the asphalt, using the resulting granulated product as base rock, and installing new asphalt over the top.

Cost-to-Cure =\$4,000



#### **Corrections Recommended-**

A seal coat is recommended at the remainder of the parking area within the next year to seal cracks and extend the life of the asphalt surface. Cost-to-Cure =\$26,000 (including re-striping of parking stalls).

Curbs and bumpers are of concrete, and all appear to be in satisfactory condition.

There are approximately 119 marked parking spaces for the subject property, 5 of which are marked for handicap only, (this total includes the parking at Subway). Additional parking is also available at the public parking lot to the southeast of the subject property.

#### 4.5 Flatwork

All walkways on the site are paved with concrete. Good condition.

#### 4.6 Landscaping

Landscaping appears to have been adequately maintained.

#### 4.7 Landscape Sprinklering

Automatic sprinkler system was noted, however, since sprinkler timers are complicated and time consuming to inspect, and since sprinkler heads are often hidden in areas of dense foliage, these components are NOT A PART OF THIS ASSESSMENT. We recommend that you have the sellers demonstrate this system to you on the final walk-through before the close of escrow.

#### 4.8 Fencing

Fair condition, Fencing on the property is constructed of wood type components. Many deteriorated fence boards/rails noted. You should anticipate the need to replace this/these components within the next 5 years.

Projected Expense = \$15,000.







#### UTILITIES

#### 4.9 Water Service

Potable water is provided by some form of a public water agency. We are unable to determine the size or type of the incoming supply line as it is buried in the soil.

The water shutoffs and meters are located in various underground vaults on the north side of the property.

#### 4.10 Electrical Service

Electrical service enters the property via an underground conduit. Meters are located at the electrical room to the west of the storage room.

#### 4.11 Gas Service

Natural Gas is supplied to the property from a public utility company. The size of the incoming supply line from the utility company appears to be 1 1/4". Gas meters and shutoffs are located at the south exterior wall of suite F.

Dec. 114 D.D. Dec. 1

## 4.12 Sanitary Sewer

The subject property appears to be serviced by the public sewer system, however, these components ARE NOT A PART OF THIS ASSESSMENT.

#### 4.13 Storm Drain System

The subject property appears to be serviced by the public storm drain system, however, these components ARE NOT A PART OF THIS ASSESSMENT.

# STRUCTURAL FRAME

#### FOUNDATION & LOAD BEARING WALLS

#### 5.1 Foundation

This structure is constructed slab-on-grade, there are no raised foundations or underfloor crawlspaces. No readily visible challenges are noted, however, slab is not visible for evaluation where there are floor coverings installed.

#### 5.2 Load Bearing Walls

Framing of the load bearing walls appears to be constructed of dimensional wood (conventional stud type construction). However, since most of these cavities are not available for inspection, we are unable to verify that all walls are of this type. No visible evidence of stress or excessive movement were noted at the load bearing walls.

#### FLOOR & ROOF FRAMING SYSTEMS

#### **5.3 Roof Framing**

Ceiling insulation is placed against the underside of the roof sheathing, which hides the sheathing from view. This practice is common with this type of construction, even by current standards. However, it allows any moisture created at the interior spaces to condensate and get trapped against the framing members. We recommend periodic monitoring of the condition of the roof sheathing and other structural components. The only practical way to monitor this type of damage is by the use of a thermal imaging tool, and special training in the use of these tools is essential in order to get useful readings. This type of evaluation is beyond the scope of a standard property condition assessment, and is typically performed by a MOISTURE INTRUSION EXPERT.

Structural framing of the roof system consists of laminated load carrying beams with dimensional lumber for purlins and plywood for the roof sheathing. All areas which were visible for examination appear to be in good structural condition except for the following:

#### **Corrections Recommended-**

The roof sheathing at the high eave is deteriorated at the south exterior wall of suite E, F & G, from an apparent current roof leak.

Cost-to-Cure is Included in roofing estimate. See below and in roofing report appendix.







# STRUCTURAL CAVITIES

# **5.4 Attic Spaces**

Attic space is limited in most cases to the area above the T-Bar ceilings. Many of these areas are not readily accessible for evaluation due to the lack of a walking platform. Inspection was made at various areas by the use of a ladder and no abnormalities were noted

No discernible inadequacies were found.

## **5.5 Underfloor Crawl Spaces**

This structure is constructed slab-on-grade, there are no raised foundations or underfloor crawlspaces.

# **BUILDING SHELL**

# **BUILDING ENVELOPE**

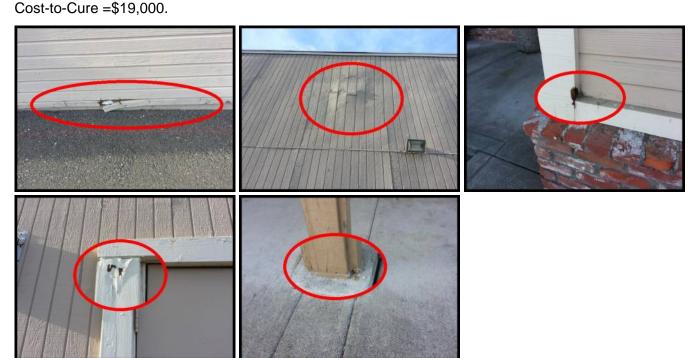
#### 6.1 Sidewall Systems

Sidewall system(s) consists of wood (at the south and west walls) and fiberboard siding at the north and east walls)

NOTE: Fiberboard siding is known to deteriorate faster than other materials when moisture gains access to unpainted areas. We recommend that joints and ends of siding & trim components be adequately painted and caulked at all times.

#### **Corrections Recommended-**

- 1. Damage/deterioration noted to most of the wall panels to the southeast side of suites A, B, D & E, due to a lack of paint maintenance.
- 2. Horizontal siding splices have been made without the use of Z-bar flashing at the west wall of suite K. Z-bar flashing is used to eliminate the potential for moisture entry into the wall cavities at horizontal joints. We recommend installing the proper flashings.
- 3. Damage/deterioration noted to siding and trim components at the base of the five large columns to the west and north of the building (the large columns with bricks at the base).
- 4. Damage/deterioration noted at the walk door trim at the southeast of suite D/E.
- 5. Damage/deterioration noted at the trim at nine of the smaller overhand support columns along the east and north sides of the building.



#### **6.2 Fenestration Systems - Walk Doors**

The exterior walk doors are steel clad and wooden clad type. All appear to be in adequate condition, with the exception of the following:

The doors at the following locations are in need of replacement within the next 5 years:

The southeast entrance door of suite D/E, the south entrance door of suite F, and the storage entrance door to the west of suite L. Projected Expense = \$3,500.



#### 6.3 Fenestration Systems - Windows

Windows in this structure are aluminum framed.

Glazing is dual pane insulated...

Windows are of the storefront and fixed pane type. All appear to be in good condition.

#### 6.4 Weatherproofing (Paint/Stain)

Weatherproofing appears to be in adequate condition at all areas which were visible, with the exception of the following:

#### **Corrections Recommended-**

Checking/cracking of the weatherproofing was noted at the exterior walls which are facing the west, south and southwest of the building. Paint is also needed at 15 of the wood doors on the east and the north facing walls.

Cost-to-Cure =\$7,500.

You should anticipate the need to repaint the remainder of the exterior within the next 5 years. Projected Expense = \$15,000.

#### 6.5 Insulation

Walls:

Exterior walls were found to contain R-19 fiberglass insulation at all areas where we were able to verify. It is assumed, therefore, that all exterior walls are insulated in the same manner.

Attic/Ceilings:

The type of insulation in the attic is fiberglass batts, with an approximate energy rating of R-19. Current standards for new construction in attics and ceilings is R-30 to 38. R-19 is considered typical for older structures.

# **ROOFING SYSTEMS**

#### Roof

#### 7.1 Roofing Materials

The evaluation of the roofing materials was contracted out to a licensed roofing contractor. Their complete report is attached to the rear of this report as an APPENDIX. We have included a general summary of their findings below.

#### **Corrections Recommended-**

All roofing surfaces appear to be the original and are due for replacement at this time. There are also some current leaks over suites D, E & F. Low pitch roof surfaces have been patched repeatedly over the last several years.

Cost-to-Cure =\$145,000.

## 7.2 Number of Roofing Applications

A maximum of three layers are allowed on most commercial roofs, because each layer, (or roofing application), adds weight to the structure. After three roofing applications are placed on the roof, all layers must be stripped off before another application can be installed.

# PLUMBING SYSTEMS

#### PIPING & DISTRIBUTION

#### 8.1 Supply Piping System

The majority of the visible supply line piping is copper. Adequate flow was noted, and no deficiencies were encountered.

#### 8.2 Waste Piping System

The majority of the visible waste line plumbing pipe is ABS plastic. Functional flow was noted at all fixtures which we were able to examine. No deficiencies were noted. Plumbing vents appear serviceable.

#### 8.3 Natural Gas/LPG System

The majority of gas piping at visible areas consist of black iron. Fuel type is natural gas. The gas system for this/these structure(s) appear to be in serviceable condition at all areas which were visible.

#### **8.4 Plumbing Fixtures**

An examination of the observable plumbing fixtures was performed, and no deficiencies were noted. with the exception of the following;

#### **Corrections Recommended-**

- 1. The faucet(s) at the restroom for suite L is in need of replacement.
- 2. The toilets are loose at the connection to the floor in the restrooms of suites A/B, D/F and O. We recommend replacement of the wax ring seal and tightening of the floor bolts at these toilets to prevent leakage and damage to flooring and/or framing components.
- 3. Two toilets are cracked/broken/damaged and in need of replacement in the restrooms for suite L. Cost-to-Cure =\$1,200

#### HOT WATER PRODUCTION

#### 8.5 Type of Water Heating Systems

Hot water for domestic use is supplied by various small, electric, on-demand type water heaters and tank type heaters located throughout the structure(s).

See the Table of Water Heating Components below for details of these components.

We have summarized those comments here for your convenience:

We were unable to properly inspect two of the water heaters because there not was not adequate access. **Corrections Recommended-**

Four units are currently leaking, are inoperative, or have been removed, and are in need of replacement. Cost-to-Cure =\$3,200

#### Safety Concern-

- 1. The incoming gas supply line is not equipped with a flex coupling at one of these units. This can be a POTENTIAL HAZARD in the event of an earthquake!
- 2. Safety Relief Valve drain line is missing or incorrectly installed at approximately one of the units. This can create a SCALDING HAZARD if someone is nearby when SRV activates. We recommend this drain line be correctly installed. The recommended installation is to extend the drainline all the way to the exterior of the structure.
- 3. Three units are lacking proper bracing as per current code requirements regarding earthquake safety. These are minor cost items.

You should anticipate the need for replacement of approximately two of these water heaters within the next five years. Average water heater life in the United States is 8-10 years, although they can exceed this life expectancy by many years if they are drained annually.

Projected Expense = \$4,000.

# Table of Water Heating Components

**8.6**The Comment Codes in the right column are explained directly below the Table.

#	Location	Storage Capacity ( gallons)	Fuel Type	Year	Manufacturer	Comment Codes (see code descriptions below table)
1	Back room of suite A/B.	50.	Elect.	2012.	A.O. Smith.	BS.
2	Suite C restroom.	Less than 10.	Elect.	?	State.	RP.
3	Attic of suite D/E.	10.	Elect.	?	?	TL, RP.
4	Attic of Suite F/G.	?	Gas.	?	?	RP. This unit has been removed.
5	Attic of suite H.	?	?	?	?	DNT. We were unable to get close enough to this water heater to get any information on it.
6	Suite I men's restroom.	N/A.	Elect.	?	Instant-Flow.	No Comments.
7	Suite I women's restroom.	N/A.	Elect.	?	Instant-Flow.	RP.
8	Attic of suite K.	?	?	?	?	DNT. Unable to locate this unit.
9	Backroom of suite L.	Less than 10.	Elect.	?	Ariston.	TD.
10.	Attic over storage room restroom.	Less than 10.	Elect.	?	?	No Comments.
11.	Kitchen of suite M.	75.	Gas.	2004.	Bradford White.	OLD.
12.	Kitchen of suite O.	75.	Gas.	2004.	Bradford White.	OLD, BS, FH.
13.	Backroom of suite P.	75.	Gas.	2006.	Bradford White.	BS.

#### 8.20 Comment Codes for the Table of Water Heating Components

The COMMENTS CODES below are the descriptive text regarding a variety of anomalies which can be found regarding water heating components. If you have any 2 or 3 letter abbreviations in the "Comments" column at the far right hand side of the Table above, then this is where you will find the definition for that abbreviation.

- **BS** = The earthquake strapping restraints are missing or incorrectly installed. We recommend that proper restraints be installed according to the current requirements.
- **DNT** = We were unable to properly evaluate this unit. It was either blocked from view, in a locked closet, or otherwise inaccessible.
- **FH** = The flexible connector at the incoming gas supply pipe is either missing, installed incorrectly or is not the currently approved type. Since this usually results in some type of potential hazard, we recommend that this condition be corrected by a properly qualified plumber.
- **OLD** = This appliance is near/past the end of it's expected useful life, you should anticipate replacement within the next five years.
- **RP** = This appliance appears to at the end of it's useful life, we recommend replacement.
- **TD** = The drain line coming from the safety relief valve (or the temperature & pressure relief valve), is missing, incorrectly installed, sized incorrectly or is made of materials which are not suitable for this use. Since this is a potential hazard, we recommend that this condition be corrected by a properly qualified plumber.
- **TL** = The tank of this water heater is leaking, we recommend replacement of the water heater.

#### 8.21 Water Heater Identification Photos











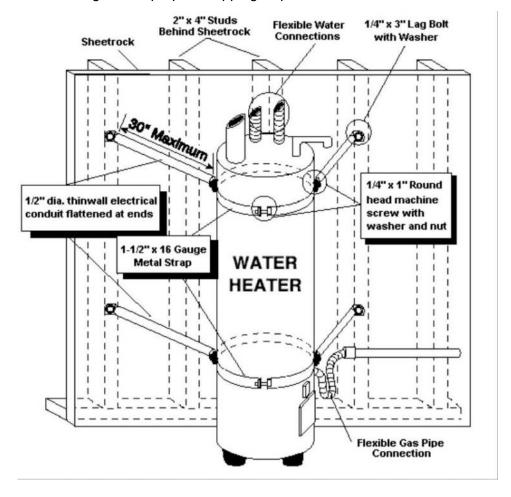
## 8.22 Water Heater Bracing

The minimum standard for SB 304 compliance is the 1994 Uniform Building Code. Section 510.5 of this code states: "...Water heaters shall be anchored or strapped to resist horizontal displacement due to earthquake motion. Strapping shall be at points within the upper one-third (1/3) and the lower one-third (1/3) of the vertical dimensions. At the lower point, a minimum distance of four (4) inches shall be maintained above the controls with the strapping."

Several methods may be used to anchor or strap the water heater. One of the easier and less expensive

methods is to **double** wrap the water heater top and bottom with metal strapping (also known as "plumbers tape", 16 gauge is recommended), and to attach the ends of the straps to wall studs with 1/4" X 3" lag screws with washers. No matter what method is used, it is important to use 1/4" X 3" lag screws into solid wood framing at each attachment. This law applies state wide except where superceded by local codes.

See the diagram for proper strapping requirements.



# HEATING, VENTILATION and AIR CONDITIONING - (HVAC)

#### **HEATING & COOLING SYSTEMS**

#### 9.1 HVAC System Description

Heat and air-conditioning generation for the interior environment is accomplished by means of single package combination heating and air conditioning forced air units located at the rooftop of each respective suite.

For specific notes and comments regarding the heating units, refer to the Table of Heating and Cooling Components below. Summary of information contained in the HVAC table regarding the heating components are as follows:

The outside temperature (at the location of the condenser) did not reach 65 degrees or more for a period of at least 12 hours before the time of the inspection, therefore I was unable to test any of the air conditioning compressors. Operating the air conditioning when the ambient temperature is below 65 degrees can damage some components of the system.

# Condensate drain stains on roofing surface

#### **Corrections Recommended-**

Six of the heating units and three of the evaporative coolers did not respond to normal operating controls. Since all of these units are nearing or past the end of their expected useful life we recommend they be replaced.

Cost-to-Cure =\$40,000

#### **Corrections Recommended-**

Condensate drain lines drain onto the roof at three of the air conditioning condensers, these should be routed to a roof drain. This is a minor cost item.

Eight of the HVAC heating and cooling units are older and are likely to need replacement with-in the next fives years.

Projected Expense = \$48,000.

# Table of Heating and Cooling Components

**9.2**The Comment Codes are explained directly below the Table.

#	Location of Unit	Brand Name	Туре	Year Built	BTU or Tons	Comment Codes (see code descriptions below table)
1	Rooftop Above Suite A/B. Services, Suite A/B.	Lennox.	Combination Heating & Cooling. Heat Pump.	1992.	Unknown.	DNT-1, CM, OLD.
2	Roof Above Suite C. Services, Suite C.	Carrier.	Both Natural Gas/LPG & Electric. Combination Heating/Coo ling.	1993.	Unknown.	DNT-1, CM, OLD.
3	Roof Above Suite D/E. Services, Suite D/E.	Lennox.	Electric, Combination Heating/Coo ling.	1992.	Unknown.	DNT-1, OLD.
4	Int. Suite D/E. Services Suite D/E.	Reznor.	Ceiling Hung Furnace. Natural Gas or LPG.	Unkn own.	120,000.	NS.
5	Roof Above Suite F. Services Suite F.	Carrier.	Both Natural Gas/LPG & Electric, Combination Heating/Coo ling.	1995.	60,000.	NF.
6	Roof Above Suite G. Services Suite G.	Lennox.	Both Natural Gas/LPG & Electric. Combination Heating/Coo ling.	1992.	100,000.	NF, CM, OLD.

7	Roof Above Suite H. Services Suite H.	Carrier.	Both Natural Gas/LPG & Electric. Combination Heating/Coo ling.	1993.	Unknown.	NF, OLD.				
8	Roof Above Suite I. Services Suite I.	Bryant.	Electric, Combination Heating/Coo ling.	2006.	Unknown.	No Comments.				
9	Roof Above Suite J. Services Suite J.	Unknown.	Evaporative Cooler. Electric.	Unkn own.	N/A.	NF, OLD. Heavily rusted.				
10.	Roof Above Suite J. Services Suite J.	Lennox.	Electric. Combination Heating/Coo ling.	1991.	Unknown.	DNT-1.				
11.	Roof Above Suite K. Services Suite K.	Lennox.	Electric. Combination Heating/Coo ling.	1992.	Unknown.	DNT-1, OLD.				
12.	Roof Above Suite K. Services Suite K.	Lennox.	Electric. Combination Heating/Coo ling.	1992.	Unknown.	UN. OLD, DNT-1.				
13.	Roof Above Suite K. Services Suite K.	Lennox.	Electric. Combination Heating/Coo ling.	1992.	Unknown.	DNT-1, OLD.				
14.	Roof Above Suite K. Services Suite K.	Lennox.	Electric. Combination Heating/Coo ling.	1992.	Unknown.	DNT-1, OLD.				
15.	Roof Above Suite L. Services Suite L.	Carrier.	Both Natural Gas/LPG & Electric. Combination Heating/Coo ling.	1994.	Unknown.	DNT-1, OLD.				
16.	Roof Above Suite M. Services Suite M.	International Comfort.	Both Natural Gas/LPG & Electric. Combination Heating/Coo ling.	2008.	Unknown.	DNT-1.				

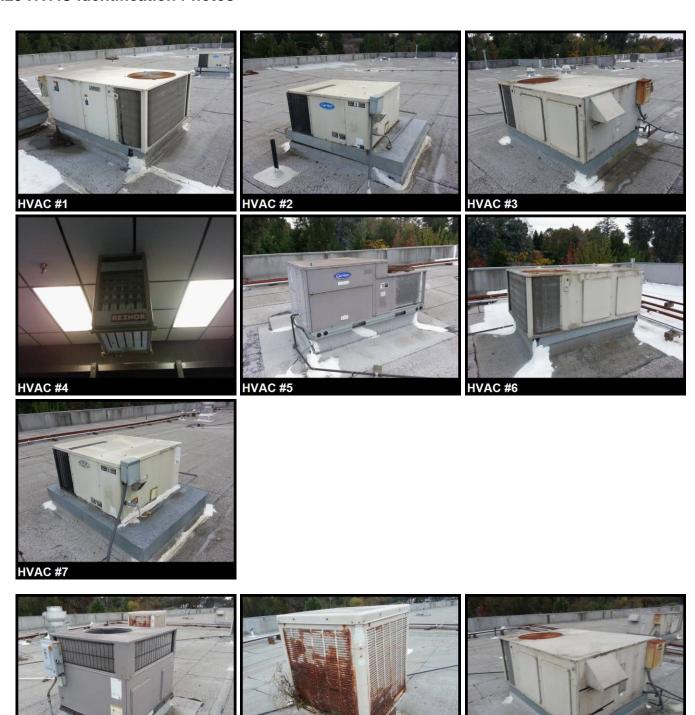
17.	Roof Above Suite M. Services Suite M.	Unknown.	Evaporative Cooler.	Unkn own.		NF, OLD. Heavily rusted.
18.	Roof Above Suite O. Services Suite O.		Both Natural Gas/LPG & Electric. Combination Heating/Coo ling.	1995.	100,000.	DNT-1.
19.	Roof Above Suite O. Services Suite O.	Unknown.	Evaporative Cooler.	Unkn own.	N/A.	NF, OLD. Heavily rusted.
20.	Roof Above Suite P. Services Suite P.		Electric. Combination Heating/Coo ling.	1992.	Unknown.	DNT-1, OLD.

## 9.22 Comment Codes for the Table of Heating & Cooling Components

The COMMENTS CODES below are the descriptive text regarding a variety of anomalies which can be found regarding heating and cooling systems. If you have any 2 or 3 letter abbreviations in the "Comments" column at the far right hand side of the Table above, then this is where you will find the definition for that abbreviation.

- **CM** = There are anomalies concerning the primary or secondary condensate drain lines or drain pans.
- **DNT-1** = We were unable to properly test as the ambient temperature was too low to test the cooling cycle. Turning the air conditioning on when the ambient temperature has been below 65 degrees within the last 24 hours can cause damage to cooling components.
- **NF** = This unit did not respond to normal operating controls.
- **NS** = There are indications that this system has NOT been serviced within the last year. We recommend servicing of all HVAC components at least once a year for the purposes of improved performance and longevity.
- **OLD** = This component is past (or near) the end of its expected useful life. You may wish to budget funds for replacement at some time within the next five years.
- **UN** = This components makes unusual noises during operation.

# 9.23 HVAC Identification Photos



HVAC #8

HVAC #9

**HVAC #10** 



#### **HEAT & AIR DISTRIBUTION**

#### 9.24 Distribution Systems

Air is distributed to the various interior rooms by means of flexible insulated ducts. All visible components of this system are in adequate condition. You should be aware that according to the new California Title 24 requirements, a "tight duct" test must be performed upon replacement of the heating/cooling units. It is likely that older ducts such as these would not pass this test and therefore they may need replacement.

#### 9.25 Heat & Air Control Systems

The various interior zones are controlled by programmable thermostats.

Thermostats appear to be properly functioning.

#### **VENTILATION**

#### 9.26 Bathroom/Restroom Ventilation

Good condition except for below:

**Corrections Recommended-**

Exhaust fan(s) at suite A/B is not functioning or in need of repair. This is a minor cost item.

# **ELECTRICAL SYSTEMS**

A random testing was performed on the various outlets and switches, but NOT all were tested. During a typical inspection there are many that are not accessible due to furniture, storage, etc. Light switches which do not appear to function are deemed to have a burned out bulb, unless other anomalies are noticed. We examined all service panels and subpanels which were found on the property, however, other panels and subpanels may exist which we did not find during our visit to the property as they are sometimes hidden in closets or behind wall hangings and/or furniture. We recommend that all electrical hazards be corrected by a licensed electrical contractor. If we have recommended that a licensed electrical contractor examine this entire system, it is because; 1) there was aluminum wiring noted at the minor circuits of the structure, or 2) there were a significant number of electrical hazards found to indicate that someone other than a competent electrician has been working on the system. In either event, there are likely to be additional hazards found by the electrician which this limited inspection did not locate.

#### **INCOMING SERVICE**

#### 10.1 Service Conductors

Electrical service to the property is via an underground conduit from the utility company. Unable to determine whether entrance cables are copper or aluminum, as these components are not available for viewing.

#### **10.2 Service Disconnect**

The main disconnects are located at the electrical room of the structure (just west of the storage room). Short Circuit Current Rating is 100,000 amps.

See additional comments regarding this main disconnect panel in the Table of Electrical Panels later in this report.

#### PANELS & SWITCHBOARDS

## 10.3 Panel Types

Overload protection inside service panels is provided by breakers.

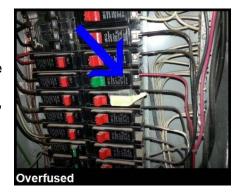
#### 10.4 Overall Condition of Electrical Panels

For specific notes and comments regarding the switchboards and subpanels, see the "Table of Electrical Panels and Switchboards" later in this section.

For your convenience, we have summarized the conditions found in the Table of Electrical Panels and Switchboards immediately below: We were unable to inspect inside the dead cover at three of the panels, (either because there was not adequate access or some other type of restriction).

#### **Corrections Recommended-**

Six of the panels have the space immediately in front of them restricted by furniture or some other type of permanent obstruction, which is a violation of the required 36" dedicated free space in front of all electrical equipment. This requirement is for the safety of electrical



technicians and maintenance personnel.

#### Safety Concern-

We found the following safety concerns regarding the panels: Over fusing was noted at one or more circuits, (fuse or breaker size too large for wire size). As a result, the fuse/breaker is not capable of detecting excessive heat in the circuit and it may allow the wires to get too hot, resulting in a potential fire hazard. We encountered this condition at two of the panels.

These are minor cost items.

#### TABLE of ELECTRICAL PANELS and SUBPANELS

**10.5**Explanation of the Comment Codes appear directly below the Table.

#	Location of Panel	Volts	<b>Brand Name</b>	AMPS	Phases / Wires	Room for Expansion	Comment Codes (see code descriptions below table)
1	Electrical Room.	208/120.	Cutler Hammer.	2000.	3/4.	Yes.	See comments concerning "Service Disconnect" earlier in this Report.
2	Electrical Room.	120/240.	Westing- house.	200.	3/4.	Yes.	OF. This is the house panel.
3	Interior of Suite A/B.	120/240.	Westing- house.	200.	3/4.	No.	OF.
4	Interior of Suite C.	120/240.	Challenger.	125.	3/4.	Yes.	VDS, DNT.
5	Interior of Suite D/E.	120/240.	Westingho use.	125.	3/4.	Yes.	VDS.
6	Interior of Suite F.	120/240.	Challenger.	200.	3/4.	Yes.	No Comments.
7	Interior of Suite G.	120/240.	Challenger.	150.	3/4.	Yes.	No Comments.
8	Interior of Suite H.	?	Unknown.	?	?	Unknown.	VDS, DNT.
9	Interior of Suite I.	120/240.	Square D.	?	3/4.	Yes.	No Comments.
10.	Interior of Suite J.	120/240.	Westing- house.	125.	3/4.	Yes.	No Comments.
11.	Interior of Suite K.	120/240.	Westing- house.	?	3/4.	Yes.	VDS.
12.	Interior of Suite K.	120/240.	Cutler Hammer.	?	3/4.	Yes.	VDS.
13.	Interior of Storage room to the west of Suite L. Serves Suite L.	120/240.	Challenger.	125.	3/4.	Yes.	No Comments.

14.	Interior of Suite M.	?	Unknown.	?	Unkno wn.	?	VDS, DNT.
15.	Interior of Suite O.		Cutler Hammer.	150.	3/4.	Yes.	No Comments.
16.	Interior Restroom of Suite P.	120/240.	Westing- house.	200.	3/4.	Yes.	No Comments.
17.	Interior Restroom of Suite P.		Westing- house.	125.	3/4.	Yes.	No Comments.

#### 10.23 Comment Codes For the Table of Electrical Panels & Switchboards

The COMMENTS CODES below are the descriptive text regarding a variety of anomalies which can be found at electrical panels. If you have any 2 or 3 letter abbreviations in the "Comments" column at the far right hand side of the Table above, then this is where you will find the definition for that abbreviation.

**DNT** = Unable to properly evaluate this panel, access is blocked by owners/tenants belongings.

**OF** = Over fusing was noted at one or more circuits, (fuse or breaker size too large for wire size). As a result, the fuse/breaker is not capable of detecting excessive heat in the circuit and it may allow the wires to get too hot, resulting in a potential fire hazard.

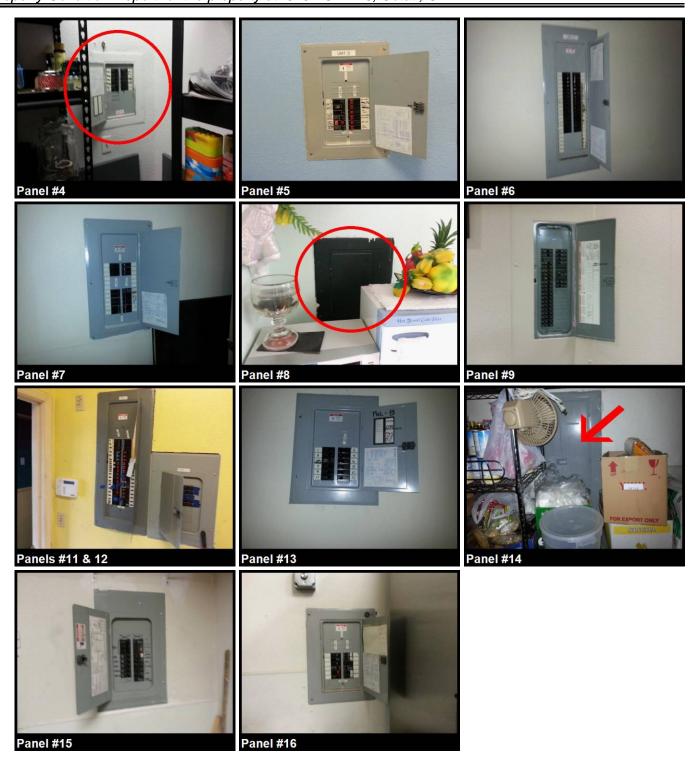
**VDS** = There is some type of permanent obstruction within the dedicated space immediately in front of this panel, typically there is a dedicated space of 36" required in front of all electrical equipment.

#### 10.24 Electrical Panel Identification Photos









#### **DISTRIBUTIONS SYSTEMS**

#### 10.25 Distribution Conductors

The type of wiring used is a three conductor, grounded system (or two conductors with metal conduit acting as the equipment grounding conductor). The type of sheathing used is nonmetallic cable (NM) and, electrical metallic tubing (EMT).

Branch conductors are copper where visible.

This structure has a significant amount of nonmetallic cable (NM), this type sheathing is not approved for installation in commercial buildings in some jurisdictions. According to our telephone interviews with the local jurisdiction, this was apparently allowed at the time of construction.

#### **Corrections Recommended-**

#### Safety Concern-

The following potential safety concerns were found that involve the conductors:

- 1. Loose/unsecured conductors or conduit were noted at the attic spaces. All conductors and conduit should be secured to prevent movement.
- 2. Junction or ceiling boxes were noted to be without covers at the attic spaces. Although covers are inexpensive to purchase and install, they are very important because they contain any sparks within the box in the event that wire connections become loose.

Cost-to-Cure =\$15,000 (this is a "best guess" because I am unable to estimate the amount of time it would take for an electrician to properly secure all the romex wiring in the attic. It would have to be done off a ladder at various locations in each suite as there is no walking platform).







#### 10.26 Switches and Outlets

A random testing was performed on the various outlets and switches, but NOT all were tested. During a typical inspection there are many that are not accessible due to tenant's furnishings, storage, etc. Light switches which do not appear to function are deemed to have a burned out bulb, unless other anomalies are noticed.

Ground Fault Circuit Interrupters (GFCI's) have been provided at appropriate areas for the era in which this building was constructed/remodeled.



### OTHER SYSTEMS & COMPONENTS

#### INTERIOR SPACES

### 11.1 Floors & Floor Coverings

The majority of floor coverings are vinyl and carpet, Floors and floor coverings appear to be in serviceable condition with the following exceptions:

Floor coverings are moisture damaged at suite F in need of replacement.

Projected Expense = \$10,000.



#### 11.2 Walls and Wall Coverings

The majority of wall coverings are Drywall.

Walls and wall coverings appear to be in serviceable condition with the following exceptions:

#### **Corrections Recommended-**

The walls are damaged and in need of repair at the east wall of suite F, apparently from a former leaking water heater in the attic.

#### **Further Evaluation-**

Organic growth type substance was noted at the base of this wall, see the recommendations regarding a MOLD inspection in the EXECUTIVE SUMMARY section of this report.

It is a minor cost item to repair the wall (after the potential mold has been resolved)

Organic growth type substance was noted at the walls of suite G in both restrooms, see the recommendations regarding a MOLD inspection in the EXECUTIVE SUMMARY section of this report.









### 11.3 Ceilings

The majority of the ceilings are Drywall and dropped down T-Bar type panels.

Ceilings are in serviceable condition with the exception of the following:

#### **Corrections Recommended-**

Moisture stains were noted at almost every suite. These stains APPEAR to be the result of past, rather than current roof leakage. However it is not possible to be absolutely certain.

This is a minor cost item to replace ceiling tile, see roofing section for costs associated with repairing roof.

#### **Further Evaluation-**

Organic growth type substance was noted at the sheetrock on the attic side above the restroom in suite F, apparently from a former water heater leak. See the recommendations in the SUMMARY section of this report.









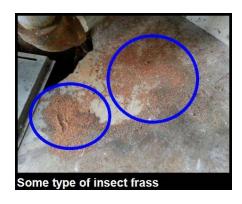
#### **11.4 Interior Doors**

Interior doors are wood, with wood frames. All accessible doors were examined all are operating adequately.

#### 11.5 Other Components

**Further Evaluation-**

Evidence of wood destroying pests was noted at the floor of the electrical room. We recommend a pest inspection be performed by a properly licensed pest control operator.



#### FIRE PROTECTION

#### 11.6 Sprinklers and Standpipes

A fire sprinkler system is installed for this structure, but inspection of these components is beyond the scope of this assessment. Records on site state that periodic inspections by a fire sprinkler company have been made at the required intervals.

The main riser for the sprinkler system is located at the electrical room.



#### 11.7 Fire Extinguishers

There appear to be an adequate number of fire extinguishers installed for this facility, however, the inspection tags reveal they have not all been recharged within the last year (as typically required). We recommend that you consider entering into a contract with a fire protection supply company to inspect and recharge all extinguishers on a regular basis.

### 11.8 Fire Hydrants

Fire hydrants were noted at the west, east, and southeast corners of the subject property.

### COMMERCIAL KITCHEN COMPONENTS

### 11.9 Appliances

Commercial kitchen components are NOT A PART OF THIS ASSESSMENT.

### **OUT of SCOPE CONSIDERATIONS**

#### **ACTIVITY EXCLUSIONS**

#### 12.1

The activities listed below generally are excluded from or otherwise represent limitations to the scope of a PCA prepared in accordance with the *ASTM E 2018-08 Guide*. These should not be construed as all-inclusive or imply that any exclusion not specifically identified is a PCA requirement under the *ASTM Guide*:

Identifying capital improvements, enhancements, or upgrades to building components, systems, or finishes. The consultant must be aware of the distinction between repair and replacement activities that maintain the property in its intended design condition, versus actions that improve or reposition the property.

Removing, relocating, or repositioning of materials, ceiling, wall, or equipment panels, furniture, storage containers, personal effects, debris material or finishes; conducting exploratory probing or testing; dismantling or operating of equipment or appliances; or disturbing personal items or property, that obstructs access or visibility.

#### 12.2.

Preparing engineering calculations (civil, structural, mechanical, electrical, etc.) to determine any systems, components, or equipments adequacy or compliance with any specific or commonly accepted design requirements or building codes, or preparing designs or specifications to remedy any physical deficiency.

#### 12.3

Taking measurements or quantities to establish or confirm any information or representations provided by the owner or user, such as size and dimensions of the subject property or subject building; any legal encumbrances, such as easements; dwelling unit count and mix; building property line setbacks or elevations; number and size of parking spaces; etc.

Reporting on the presence or absence of pests such as wood damaging organisms, rodents, or insects unless evidence of such presence is readily apparent and material during the course of the field observers walk-through survey or such information is provided to the consultant by the owner, user, property manager, etc. The consultant is not required to provide a suggested remedy for treatment or remediation, determine the extent of infestation, nor provide opinions of probable costs for treatment or remediation of any deterioration that may have resulted. This exclusion does not apply if we have agreed to provide a pest & dry-rot inspection report as a part of our written contract, is such is the case then their report will be attached to the end of this report as an appendix.

Reporting on the condition of subterranean conditions, such as soil types and conditions, underground utilities, separate sewage disposal systems, wells; systems that are either considered process-related or peculiar to a specific tenancy or use; or items or systems that are not permanently installed.

Entering or accessing any area of the premises deemed to potentially pose a threat of dangerous or adverse conditions with respect to the field observers health or safety, or to perform any procedure, that may damage or impair the physical integrity of the property, any system, or component.

Providing an opinion on the condition of any system or component, that is shutdown. However, consultant is to provide an opinion of its physical condition to the extent reasonably possible considering its age, obvious condition, manufacturer, etc.

Evaluating acoustical or insulating characteristics of systems or components.

Providing an opinion on matters regarding security of the subject property and protection of its occupants or users from unauthorized access.

Operating or witnessing the operation of lighting, lawn irrigation, or other systems typically controlled by time clocks or that are normally operated by the buildings operation staff or service companies.

Providing an environmental assessment or opinion on the presence of any environmental issues such as potable water quality, asbestos, hazardous wastes, toxic materials, the location or presence of designated wetlands, mold, fungus, IAQ, etc.

#### WARRANTY, GUARANTEE, and CODE COMPLIANCE EXCLUSIONS

#### 12.4

By conducting a PCA and preparing a PCR, the consultant merely is providing an opinion and does not warrant or guarantee the present or future condition of the subject property, nor may the PCA be construed as either a warranty or guarantee of any of the following:

Any systems or components physical condition or use, nor is a PCA to be construed as substituting for any systems or equipments warranty transfer inspection;

Compliance with any federal, state, or local statute, ordinance, rule or regulation including, but not limited to, fire and building codes, life safety codes, environmental regulations, health codes, zoning ordinances, compliance with trade/ design standards, or standards developed by the insurance industry. However, should there be any conspicuous material present violations observed or reported based upon actual knowledge of the field observer or the PCR reviewer, they should be identified in the PCR;

Compliance of any material, equipment, or system with any certification or actuation rate program, vendors or manufacturers warranty provisions, or provisions established by any standards that are related to insurance industry acceptance/approval, such as FM, State Board of Fire Underwriters, etc.

#### ADDITIONAL/GENERAL CONSIDERATIONS

#### 12.5

There may be physical condition issues or certain physical improvements at the subject property that the parties may wish to assess in connection with a

commercial real estate transaction that are outside the scope of this guide. Such issues are referred to as non-scope considerations, and if included in the PCR, are identified in the "ADDITIONAL CONSIDERATIONS" Section of this report.

Whether or not the client has elected to contract with us regarding non-scope considerations in connection with the *ASTM Guide was* a decision which was made by the client. No assessment of such non-scope considerations is required for a PCA to be conducted in compliance with the ASTM Guide.

### **QUALIFICATIONS**

#### PCA FIELD OBSERVER

#### 13.1 Definition

The PCA Field Observer is the individual designated by Pre-Spect Building Inspection & Analysis who conducts the walk-through survey at the subject property.

#### 13.2 Identification

The field observer for this property condition assessment was Mr. Rick DeBoard, whose qualifications are as follows:

#### **Employment History**;

1968 to 1972 - Employed as a framing crew foreman in the construction of industrial and farm structures.

1972 to 1979 - Employed as a working jobsite superintendent in the construction of industrial buildings.

1979 to 1990 - Owner and manager of construction firm specializing in commercial, industrial buildings, new construction and residential remodeling.

1990 to Present- Self-employed Inspector, performing residential prepurchase inspections, commercial due diligence property assessments and insurance inspections.

#### Credentials;

Licensed California General Contractor Since 1979, License # B-374548

Certified Member of the American Institute of Inspectors, (A.I.I.), Certification # 1051

Member of the California Coalition of Home Inspectors

Member of the National Association of Real Estate Professionals

Certified Indoor Air Quality Consultant, by the Environment Solutions Association

International Association of Certified Indoor Air Consultants. (IAC2)

1994, 1995 President of A.I.I. Sacramento Valley Chapter

1999, 2000, 2001, 2006 Member of the Board of Directors of A.I.I. National

2008 through 2009 Chairman of the Board for A.I.I. National

#### Continuing Education;

Home Inspection Certification Training through A.I.I. in 1990

Phase 1 Environmental Assessment Training through A.I.I. in 1993

Commercial Inspection Training through Inspection Training Associates in 2000

Certified Indoor Air Quality Training through Environmental Solutions Association in 2008

### PCR REVIEWER

#### 13.3 Definition

The PCR Reviewer is the individual who is designated by Pre-Spect Building Inspection & Analysis to exercise reasonable control over the field observer and to review the report.

#### 13.4 Identification

The PCR Reviewer for this assessment was also Mr. Rick DeBoard.

### **CLOSING COMMENTS**

#### 14.1

We have attempted to be very thorough in our assessment of this property, and have strived to convey the findings to you in a way that is useful and easy to understand. We wish to thank you for your trust in regards to this very important part of your decision making process.

In addition to the summary and main body of this report, please be sure to review the supporting documentation, (if any), and photographs.

Please feel free to call us if you have questions.

Sincerely,

Rick DeBoard, Principal.

# APPENDIX A

Following this page is the Report from the independent specialty consultants,
Norman Evind, regarding the roofing materials.
If you have questions concerning their report, contact them directly at 707-972-1287.

115 Elm St., Cloverdale Ca. (707) 972-1287 Lic. 973333

### Pre-Spect, Incorporated.

25840 Aspen Court Volcano, CA 95689 rick@pre-spect.com 209-304-7573

Re: 8492 Gravenstein Hwy Cotati, Ca



On November 12, 2014, a roof inspection was performed on the above mentioned property. Following are the findings:

### **GENERAL CONDITION**: Existing roof includes:

• A low slope built up asphalt roof system, a steep slope composition shingle system and eave gutters. The low slope system appears to be a mechanically fastened base sheet with a mid ply of fiberglas ply sheet and a modified asphalt cap sheet with a mineral surface.

The steep slope system is a laminated fiberglas and asphalt composition shingle, over an asphalt saturated underlayment sheet.





#### Low slope system:

A visual inspection of the surface shows the membrane to be aging rapidly as it begins to fail. The mineral surface of the modified cap sheet is failing as the mineral alligators or pulls apart. Several issues of concern were found and are noted individually below.

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**A.** Wall Cap Metal: It was noted that the wall cap metal flashing was generally in good condition and fastened correctly. It was noted that the seams in the cap metal have been sealed with compression tape. Many of the fasteners are exposed and the sealant has failed.





**B.** Compression style sump drains and overflow drains: The main low slope roof area drains to six internal drains. Almost no ponding is evident on the roof, though a small amount was noted at three of the drain sites. (not dispose to under one of roof noted below)

of the drain sites. (ponding at upper area of roof noted below)



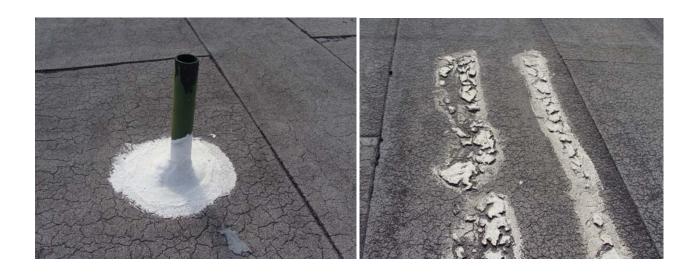




Condensation lines from A/C units at drain

**C. Details and Repairs to the Low Slope system:** Numerous repairs to the roof system were noted. Every roof penetration has been coated with an elastomeric coating, and several areas have been repaired using asphalt mastic. One area has been torn out and replaced with a new section of membrane.

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Poorly installed mechanical unit with elastomeric coating at the curb. Numerous details of this quality were noted.

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This photo shows an improperly flashed mechanical unit as well as the cracking or aligatoring of the mineral surfaced cap sheet.

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More repairs using elastomeric paint or coating at the seams in the cap sheet.

### D. Serious failure of the membrane and the plywood roof sheathing at the rear wall.





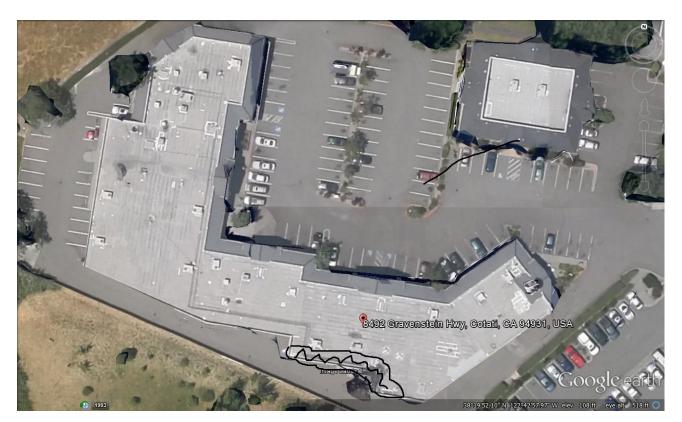
These photos show water ponding at the top of the slope! This is of major concern as the rot is spreading into the 2x6 framing members and larger beams at the rear wall. (specifically at the rear of the fish store and the empty unit to the west)

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The photo on the left is above the fish store at the rear wall. This area will not support the weight of an adult person. It is very dangerous. The photo on the right is what appears to be repairs made to a similar situation more to the east of the fish store.



This satellite shot shows the area of failure over the fish store marked in black scribbles.

**E. Debris and abandoned units :** Very little debris was noted, though several old units and satelite dishes were apparently abandoned.

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Improperly fastened satelite units

**Steep Slope Shingle system and gutters:** The shingle roof is showing signs of failure in the shingles, although the detail work appears to be functioning well to keep the run off away from the walls.

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This photo shows the

cracking of the composition shingle.



**More crack in the Composition shingle roof.** 

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Several areas of the Composition Shingle roof show signs of buckling at the gutter. This is due to the starter shingle being improperly installed over 25 years ago.



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The gutters appear to be in good condition and some minor cleaning required.



The roof to wall flashing at the shingle roof is in good condition with some of the fasteners coming loose as noted below.



Loose fasteners at the roof to wall flashing.

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#### **RECOMMENDATIONS AND COMMENTS:**

The roof systems installed on this building are at the end of their functional service. The gutters are the exception and can be retained through the next roofing cycle.

#### I recommend:

- 1) Immediate replacement of the low slope roof system and repairs to the areas of dry rot.
- 2) The composition shingle roof should be replaced as soon as possible although it is not as pressing as the low slope area. The composition shingles could be expected to last several more years, primarily due too the steep slope and the fact that the wall flashings and the gutters at in good shape.

Cost to overlay the low slope roof with a Thermoplastic single ply membrane TPO. \$100,000

Cost to repair low slope and coat with a maintenance coating (not recommended) \$90,000 (a maintenance coating *may* be tax deductible all in the first year)

Cost to tear off and replace the steep slope roof with a laminated shingle. \$35,000

Cost to repair low slope dry rot is not known without removal of the roof in those areas. It should be reasonable to expect these repairs to run into the \$10,000 range.

These prices are for budgetary purposes and should not be considered contractual.

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In creating this report, it is my intention to inform the owners of the state of the roof and roof related details. Due to the age and condition of the low slope roof, the only reasonable recommendation is to replace the roof as soon as possible. A roof top safety barrier should be placed around the area of dry rot at the back of the fish store immediately.

Respectfully, Norman Evind

(707)-972-1287

This report is at the request of the above party and is a statement of professional opinion based on a visual surface inspection. No warranties or guarantees are expressed or implied nor assumption of liability for errors or omissions assumed. Use of this inspection constitutes acceptance of the above conditions.

Contractors are required by law to be licensed and regulated by the Contractor's State License Board. Any questions concerning a contractor may be referred to the Registrar, Contractors State License Board, 9835 Goethe Road, Sacramento, CA (Mailing address: P. O. Box 26800, Sacramento, CA 95827)

# **GLOSSARY**

OF

**TERMS** 

ADA The Americans with Disabilities Act.

**A.I.I.** American Institute of Inspectors, a national association of building inspectors.

Phone 800-877-4770, Website: http://www.inspection.org.

Accessible See "Readily Accessible"

**Addition** Any construction which adds to the building or original structure.

**Air Conditioning** The process of treating air so as to control simultaneously its temperature,

humidity, cleanliness, and distribution to meet the comfort requirements of the occupants of the conditioned space. The system may be designed for summer air

conditioning or for winter air conditioning or for both.

Aldehydes Odor, like the inside of a new structure, that is created with incomplete natural gas

combustion. An indicator for the building inspector of the need for a licensed

technician to evaluate the heating device.

Alligatoring A defect consisting of intersecting cracks and ridges in the surface.

**Angle of Repose** The maximum angle of slope at which any loose earth will stand without sliding.

ASHI The American Society of Home Inspectors, Inc. A national association of

home/building inspectors.

Phone number 1-800-743-ASHI (2744), or on the web at http://ashi.com.

ASTM American Society for Testing and Materials. Website: www.astm.org.E

ASTM Guide The Standards of Practice used for a PCA. Specifically ASTM E 2018-XX,

Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process, (where "xx" equals the year that the Guide was enacted).

**Attic** Accessible space between top of uppermost ceiling and underside of roof.

Inaccessible spaces are considered "structural cavities."

Automatic (System) Safety Controls.

Devices designed and installed to protect systems and components from

excessively high or low pressures and temperatures, excessive electrical current, loss of water, loss of ignition, fuel leaks, fire, freezing, or other unsafe conditions.

**Backfill** Loose earth placed outside foundation walls for filling and grading.

Baluster An upright support for a handrail.

**Balustrade** A protective or decorating railing consisting of a row of balusters topped by a rail.

Barometric Damper A damper on the exhaust vent of an oil fired heater that acts as a draft regulator (or

atmospheric damper). As a chimney flue heats up, a weighted damper opens to allow cool air from the living space to enter. Without a barometric damper to cool the hot exhaust gases, an overheated chimney flue can cause too much draft, adversely affecting the burner's efficiency by changing the fuel/air ratio. (Some old oil burners, and some new "positive-pressure" burners that rely upon a fan instead of a natural draft, cannot accommodate barometric dampers, but these types are

rare).

Base Building The core (common areas) and shell of the building and its systems that typically

are not subject to improvements to suit tenant requirements.

**Basement** A space of full story height below finish grade below the first floor, or a story

partially underground.

**Bearing Wall** A wall which supports any vertical load in addition to its own weight.

Bearing That portion of a beam, truss, or other structural member that rests on the

supports.

Bldg. Building.

**Bonding** Joining of metallic parts to form a conductive path that has the ability to safely

conduct electrical loads.

**Bridging** A system of bracing between floor joists or ceiling joists to distribute the floor load

or keep the joists from twisting.

BTU or btu British thermal unit.

**Building Department** 

Records

Records maintained by or in possession of the local government authority with jurisdiction over the construction, alteration, use, or demolition of improvements on the subject property, and that are readily available for use by the consultant within the time frame required for production of the PCR and are practically reviewable by exercising appropriate inquiry. Building department records also may include building code violation notices. Often, building department records are located in the building department of a municipality or county.

**Building Envelope** The enclosure of the building that protects the building's interior from outside

elements, namely the exterior walls, roof and soffit areas.

**Bullnose** A stair step with rounded end used as a starting step.

**BX** Armored Flexible cable.

**Cantilever** A projecting beam or member supported at only one end.

**Carport** A roofed space having at least one side open to the weather, primarily designed

for motor vehicles.

Casement Windows Window sash which opens on hinges secured to the side of the window opening.

**Cavitation** A phenomenon in the flow of water consisting in the formation and the collapse of

cavities in water. Pump sound varies as it alternates between pumping air and

water.

Central Air Conditioning

A system which uses ducts to distribute cooled and/or dehumidified air to more

than one room at a time and which is not plugged into an electrical convenience

outlet.

Clearance to Combustibles

The distance between a heat producing appliance, chimney, chimney connector,

vent, vent connector, or plenum and other surfaces. Also, in garages, the

distance between the floor and an installed source of ignition.

**Cold Joint** A joint formed when a concrete surface hardens before the next batch of concrete

is placed against it.

**Component** A fully functional portion of a building system, piece of equipment, or building

element.

**Conductors** Electrical: A wire or cable offering low resistance to the flow of electric current.

**Consultant** The entity or individual that prepares the PCR and that is responsible for the

observance of and reporting on the physical condition of commercial real estate in accordance with the ASTM guide. The consultant generally is an independent contractor; however, the consultant may be an employee of the user. The consultant may be an individual that is both the field observer and PCR reviewer.

**Cost-to-Cure** The estimated cost to perform the required repairs necessary to restore proper

function to the system or component.

**Counter-flashing** A strip of sheet metal in the form of an inverted L built into a wall to overlap the

flashing and make the roof water-tight.

**CPVC** Chlorinated polyvinyl chloride.

Crawlspace An unfinished accessible space below the first floor in a building with no cellar, a

shallow space between the first tier of beams and the ground.

CREIA California Real Estate Inspectors Association. An association of professional

building inspectors.

Phone: 800-848-7342. Website: www.creia.com.

Cricket A small false roof to throw off or shed water from behind an obstacle, (often a

gabled roof behind a chimney).

**Cross Connections**Any physical connection or arrangement between potable water and any source of

contamination.

**Cut and Fill**The process of cutting into a hillside and using the material removed to fill a

downslope portion of the site. Structures constructed across the "cut and fill" line

are often cracked or distorted at that location.

Dangerous or

Adverse Situations Situations which pose a threat of injury to the inspector, and those situations with

require use of special protective clothing or safety equipment.

**Deferred Maintenance** Physical deficiencies that cannot be remedied with routine maintenance, normal

operating maintenance, etc., excluding de minimus conditions that generally do not

present a material physical deficiency to the subject property.

**Differential Settlement** Settling of a dwelling or surface that causes one or more components to settle

unevenly.

**Dismantle**To take apart or remove any component, device or piece of equipment that is

bolted, screwed, or (fastened by other means), that would not be removed by a

layperson in the course of normal maintenance.

**Dormer Window** An extension from a sloped roof with a vertical window.

**Double Hung Window** A window consisting of two sashes which slide vertically in adjoining grooves.

**Drip Edge** A projecting horizontal band or course sloped outward to throw water away from

the building.

**Drywell** A covered pit with open-jointed lining or a covered pit filled with coarse aggregate

through with drainage from roofs, basement floors, foundation drain tile, or

areaways may seep or leach into the surrounding soil.

**Due Diligence** The process of conducting a walk-through survey and appropriate inquiries into the

physical condition of a commercial real estate's improvements, usually in connection with a commercial real estate transaction. The degree and type of such survey or other inquiry may vary for different properties and different

purposes.

**Dwelling** A building designed as living quarters for one or more families.

Easily Visible Describes items, components and systems that are conspicuous, patent, and

which may be observed visually during the walk-through survey without intrusion, removal of materials, exploratory probing, use of special protective clothing, or use

of special equipment.

Efflorescence A blemish on masonry walls consisting of a white surface crust formed from the

crystallizing of soluble salts in the mortar.

**EIFS** Exterior Insulation and Finish System.

**EMF** Electro Magnetic Fields.

**Engineering** Analysis or design work requiring extensive preparation and experience in the use

of mathematics, chemistry, physics, and the engineering sciences.

**Exotic Materials** Any building material that has only the manufacturer's claims or guarantees of its

performance and no empirical evidence regarding life expectancy.

**Expansion Joint** A joint between two adjoining concrete members arranged to permit expansion

and contraction with changes in temperature.

**Expansive Soil** Soil, that when wet or dry, expands or contracts.

**Expected Useful Life** 

**(EUL)** The average amount of time in years that an item, component, or system is

estimated to function when installed new and assuming routine maintenance is

practiced.

**Extrapolate** To infer or estimate by extending or projecting known information.

**Fenestration** The arrangement and design of windows and doors in a building.

Field Observer The individual that conducts the walk-through survey, in the process of performing

a commercial property condition assessment.

Fire Department

**Records** Records maintained by or in the possession of the local fire department in the area

in which the subject property is located. These records should be practically reviewable and readily accessible for use by the consultant by exercising an appropriate inquiry within the time frame required for production of the PCR.

Fire Rated Doors Doors manufactured under supervision, designed to resist standard fire tests and

labeled for identification.

Firebrick Brick made to withstand high temperatures for lining chimneys, incinerators and

similar structures.

Firewall A wall with qualities of fire resistance and structural stability which subdivides a

building into fire areas, and which resists the spread of fire.

Flashing Sheet metal or other impervious material used in roof and wall construction to

protect building from seepage of water.

**Footing** A structural unit used to distribute loads to the bearing soil materials.

**Footing and Stem** 

Wall A concrete footing poured into a trench excavated below the frost line on which a

vertical stem wall is constructed of concrete or concrete block.

Foundation Wall A wall, below or partly below grade, providing support for the exterior or other

structural parts of a building.

**Foundation** Construction, (below or partly below grade), which provides support for exterior

walls or other structural parts of the building.

**French Door** A wood door paneled with lights of glass.

Frost Line The depth below finish grade where frost action on footings or foundations is

improbable.

**Functional Drainage** A drain is functional when it empties in a reasonable amount of time and does not

overflow when another fixture is drained simultaneously.

**Functional Flow** A reasonable flow at the highest fixture in a dwelling when another fixture is

operated simultaneously.

**Gambrel Roof** A roof having its slope broken by an obtuse angle.

**Garage** A building or enclosure primarily designed or used for motor vehicles.

Grade Beam A horizontal member (generally a reinforced concrete beam) between two

supporting piers at or below ground supporting a wall or structure above. (See also

pier and grade beam foundation).

Grade Finish: The surface elevation of lawns, walls, drives or other improved surfaces

after completion of construction or grading operations.

Natural: The elevation of the original or undisturbed natural surface of the ground.

Ground Intentional or accidental connection (bonding) between a circuit or equipment and

the earth or other conducting member.

**Grounded Conductor** Electrical wires which are intentionally grounded. Often called the "neutral wires".

In residential wiring, usually white insulation.

**Grounding Conductor** A wire used to connect electrical equipment to a grounding electrode. Often called

the "ground wire". In residential wiring usually a bare wire or green insulation.

**Ground Wire or Grounding Wire** 

Electrical: see "Conductors" = in residential wiring usually a bare wire or a wire

with green insulation.

Habitable Room A space used for living, sleeping, eating or cooking, (or combinations thereof), but

not including bathrooms, toilet compartments, closets, halls, storage rooms, laundry and utility rooms, unfinished basement recreation rooms and similar

spaces.

**Hot Wire** Electrical: see "Conductors" = wires having black or red insulation, (usually).

**HVAC** Heating, Ventilating and Air Conditioning.

Immediate Costs Opinions of probable costs that require immediate action as a result of any of the

following; (1) material existing or potential unsafe conditions, (2) material building or fire code violations, or (3) conditions that if left unremedied, have the potential to result in or contribute to critical element or system failure within one year or will

result most probably in a significant escalation of its remedial cost.

**Imminent Hazard** A hazard that requires immediate attention by a licensed technician.

Inspector Any person who examines any component of a building, through visual means and

through normal user controls, without the use of mathematical sciences.

**Interviews** Discussions with those knowledgeable about the subject property.

Installed Attached (connected) to the structural, mechanical, plumbing or electrical system

of the building such that the item installed cannot be removed without the use of

tools.

**Lights** The individual panes of glass in a door or window.

Lintel A horizontal steel member spanning an opening to support the load above, (as at

the top of a firebox opening).

Live Load All loads on structures other than dead loads; this includes the weight of the

persons occupying the building and free standing material; snow and wind.

**Loads** Design: Total load which a structure is designed to sustain safely.

<u>Dead</u>: The weight of all permanent construction in a building.

**Loamy Soil** Soil that contains organic matter.

Material Having significant importance or great consequence to the subject property's

intended use or physical condition.

Material Deterioration Material that has been, (or is being), destroyed by rot, pests, age, or structural

failure.

**Mitered Joint** A joint consisting of two pieces matched and joined at an angle.

Mudsill A flat timber placed on the ground or foundation to distribute the concentrated load

of an upright member.

**Muntin** A narrow bar separating window lights of a sash.

**Neutral Wire** Electrical: see "Conductors" = in residential wiring usually white insulation.

**Newel Post** A stairway post to which the handrail is secured.

**Non-Bearing Wall** A wall which supports no vertical load other than its own weight.

Non-Combustible Material or combination of materials which will not ignite or support combustion at

a temperature of 1,200 degrees F. during a 5 minute exposure.

**Normal Operating** 

**Controls** Owner/tenant operated devices such as a thermostat, wall switch or safety

switch.

**Observe** The act of making a visual examination.

**Observation** The visual survey of items, systems, conditions, or components that are readily

accessible and easily visible during a walk-through survey of the subject property.

**Obvious** Plain, evident and readily accessible; a condition or fact not likely to be ignored or

overlooked by a field observer when conducting a walk-through survey or that which is practically reviewable and would be understood easily by a person

conducting the PCA.

**Operate** To cause systems or equipment to function.

**Opinions of Probable** 

**Costs** Determination of probable costs, a preliminary budget, for a suggested remedy.

Owner The entity holding the title to the commercial real estate that is the subject of the

PCA.

P-trap A waste line water trap with a vertical inlet and a horizontal outlet, to prevent

noxious fumes from entering the occupied space from the sewer/septic system.

Parging Rough plastering with mortar coating the face of brick or concrete, such as at the

smoke shelf of a fireplace.

PCA, Property Condition Assessment

The process by which a person or entity observes a property, interviews sources, and reviews available documentation for the purpose of developing an opinion and preparing a PCR of a commercial real estate's current physical condition. At the option of the user, a PCA may include a higher level of inquiry and due diligence than the baseline scope described within the ASTM guide or, at the user's option, it may include a lower level of inquiry or due diligence than the baseline scope described in the guide. Such deviations from the ASTM guide's scope should be disclosed in the PCR's executive summary.

PCR, Property Condition Report

A written report, prepared in accordance with the recommendations contained in the ASTM guide, that outlines the consultant's observations, opinions as to the subject property's condition, and opinions of probable cost to remedy any material

physical deficiencies observed.

**PCR Reviewer** The individual that both exercises responsible control over the field observer and

who reviews the PCR prior to delivery to the user.

#### **Physical Deficiency**

Conspicuous defects or significant deferred maintenance of a subjects property's material systems, components, or equipment as observed during the field observer's walk-through survey. Included within this definition are material life-safety/building code violations and, material systems, components, or equipment that are approaching, have reached, or have exceeded their typical EUL or whose RUL should not be relied upon in view of actual or effective age, abuse, excessive wear and tear, exposure to the elements, lack of proper of routine maintenance, etc. This definition specifically excludes deficiencies that may be remedied with routine maintenance, miscellaneous minor repairs, normal operating maintenance, etc., and excludes de minimus conditions that generally do not constitute a material physical deficiency of the subject property.

Pier

A masonry or concrete column supporting foundations or the floor structure in basementless spaces. Pier may be free-standing or bonded at its sides to other masonry or concrete.

### Pier and Grade Beam Foundation

A reinforced concrete beam supporting the exterior wall construction, in contact with the earth, but supported by piers most often, the piers are bored into the earth because the soil will not support a typical footing and stem wall.

**Piles** 

Long, slender members of wood, steel or reinforced concrete driven into the ground to carry a vertical load.

## Practically Reviewable

Describes information that is provided by the source in a manner and form that, upon review, yields information relevant to the subject property without the need for significant analysis or calculations. Records or information that feasibility cannot be retrieved by reference to the location of the subject property are not generally considered practically reviewable.

**Precast Concrete** 

Concrete units (such as piles or vaults) cast off the construction site and set in place.

**Prestressed Concrete** 

A system for utilizing fully the compressive strength of concrete by bonding it with highly stressed tensile steel.

**Property** 

The site improvements, which are inclusive of both site work and buildings.

**Publicly Available** 

The source of the information allows access to the information by anyone upon request.

**Purlin** 

An intermediate supporting member at right angles to rafter or truss framing.

**PVC** 

Polyvinyl chloride.

Rafters A series of roof framing members, spaced not more than 30 inches o.c. in roofs

having slopes over 3 in 12. Members supporting roofs having slopes 3 in 12 or

less are defined as roof joists.

Random See "Representative Number"

**Readily Accessible**Components that are accessible without moving furniture or other items and

without the use of tools or a ladder that exceeds 12'-0" in length or a 6'-0" step ladder. Also describes areas of the subject property that are promptly made available for observation by the field observer at the time of the walk-through survey and do not require the removal of materials or personal property, such as

furniture, and that are safely accessible in the opinion of the field observer.

Describes information or records that are easily and promptly provided to the consultant upon making a request in compliance with an appropriate inquiry and

without the need for the consultant to research archive files.

Readily Openable Access Panel

**Readily Available** 

A panel provided for a layperson for inspection and maintenance which has removable or operable fasteners or latch devices in order to be lifted off, swung open, or otherwise removed by one person (without the use of tools) and its edges and fasteners are not painted in place. Limited to those panels within normal reach or from a 4-foot stepladder, and which are not blocked by stored items,

furniture, or building components.

Reasonably Ascertainable

Describes information that is publicly available, as well as readily available, provided to the consultant's offices from wither its source or an information research/retrieval service within reasonable time, practically reviewable, and available at a nominal cost for either retrieval, reproduction or forwarding.

**Rebar** Reinforcing steel bars with projections to promote the bond to the concrete.

Relief Valve A safety device to permit the escape of steam or hot water subjected to excessive

pressures or temperatures. See SRV.

Representative Number

For multiple identical components such as windows and electric outlets - one such

component per room. For multiple identical exterior components - one such

component on each side of the building.

Representative Observations

Observations of a reasonable number of samples of repetitive systems, components, areas, etc., which are conducted by the field observer during the walk-through survey. The concept of representative observations extends to all conditions, areas, equipment, components, systems, buildings, etc., to the extent

that they are similar and representative of one another.

**Riser** The upright member of a stair extending from tread to tread.

**Romex** Brand name commonly in use for "nonmetallic electrical cable".

Roof Drainage Systems

Gutters, downspouts, leaders, splashblocks, and similar components used to carry

water off a roof and away from a building.

RUL, Remaining Useful Life

A subjective estimate based upon observations, or average estimates of similar items, components, or systems, or a combination thereof, of the number of remaining years that an item, component, or system is estimated to be able to function in accordance with its intended purpose before warranting replacement. Such period of time is affected by the initial quality of an item, components, or system, the quality of the initial installation, the quality and amount of preventive maintenance exercised, climatic conditions, extent of use, etc.

**Scupper** An opening in a parapet wall or gutter, for drainage of rain water.

Septic Tank A covered watertight sewage settling tank intended to retain the solids in the

sewage flowing through the tank long enough for satisfactory decomposition of

settled solids by bacterial action to take place.

Short Cycling Equipment that turns on and off in rapid succession instead of normal operating

cycles.

**Shut Down** A piece of equipment or system is shut down when it cannot be operated by the

device or control which a layperson would use to normally operate the equipment or system. Also, equipment, components or systems that are not operating at the time of the field observer's walk-through survey. For instance, equipment, components, and systems that may be shutdown as a result of seasonal

temperatures.

Siding The first covering of boards or paneling nailed to the outside of the wood studs of a

frame building.

Site Visit The visit to the subject property during which observations are made pursuant to

the walk-through survey section of the ASTM guide.

Slab-on-Grade See Thickened Edge Slab.

**Soffit** The underside of a stair, arch, cornice, or overhang.

Solid Fuel Heating Device

Any wood, coal, or other similar organic fuel burning device, including but not limited to fireplaces whether masonry or factory built, fireplace inserts and stoves,

wood stoves (room heaters), central furnaces, and combinations of these

devices.

Specialty Consultants Individuals or entities either in the fields of engineering or in any particular building

component, equipment, or system that have acquired detailed, specialized knowledge and experience in the design, evaluation, operation, repair, or

installation of same.

**SRV** A Safety Relief Valve installed on a hot water heating system or storage tank to

limit temperature and pressure of the water.

**Stanchion** An upright guard, usually as a part of a window or door. Sometimes used

generically as any upright guard or protection.

**Story** That part of a building between the level of one finished floor and the level of the

next higher finished floor.

**Structural Component** A building components, which supports interior or exterior finish materials or other

building components.

Structural Frame The components or building system that supports the building's nonvariable forces

or weights (dead loads) and variable forces or weights (live loads).

**Subject Building** Referring to the primary building or buildings on the subject property, and that are

within the scope of PCA.

Subject Property The commercial real estate consisting of the site and primary real estate

improvements that are the subject of the PCA described by the ASTM guide.

Suggested Remedy An opinion as to a course of action to remedy or repair a physical deficiency. Such

an opinion may also be to conduct further research or testing for the purposes of discovery to gain a better understanding of the cause or extent of a physical deficiency (whether observed or highly probable) and the appropriate remedial or reparatory response. A suggested remedy may be preliminary and does not preclude alternate methods or schemes that might be more appropriate to remedy

the physical deficiency or that may be more commensurate with the user's

requirements.

**Survey** Observations made by the field observer during a walk-through survey to obtain

information concerning the subject property's readily accessible and easily visible

components or systems.

**Swale** A drainage channel formed by the convergence of intersection slopes.

System A combination of interacting or interdependent components assembled to carry out

one or more functions.

## Technically Exhaustive

An inspection is technically exhaustive when it involves the extensive use of measurements, instruments, testing, calculations, and other means to develop scientific or engineering findings, conclusions, recommendations, or combination thereof.

## Thickened Edge Slab or Turned Down Slab

A type of concrete floor slat foundation where the slab is constructed integrally with the foundation wall.

#### **Timely Access**

Entry provided to the consultant at the time of the site visit.

**Truss** 

A structural framework composed of a series of members so arranged and fastened together that external loads applied at the joints will cause only direct stress in the members.

#### Under-floor Crawlspace

The area within the confines of the foundation and between the ground and the underside of the lowest floor structural component.

#### **Underpinning**

- (1) The construction of supports introduced beneath a wall.
- (2) The material used in such additional supports.

## Ungrounded Conductor

The energized wires in residential wiring, (two 110v legs comprise a 220 volt circuit). Often called the "hot wire". In residential wiring usually red or black insulation.

#### User

The party that retains the consultant for the preparation of a baseline PCA of the subject property in accordance with the ASTM guide. A user may include, without limitation, a purchaser, potential tenant, owner, existing or potential mortgagee, lender, or property manager of the subject property.

#### Vent Stack

Pipes supplying a drainage system with air to prevent siphonage of water from the traps.

#### Vermiculite

Lightweight inert material made of steam exploded mica used as an aggregate in plaster. Also used as ceiling insulation in some older structures.

#### Walk-through Survey

Conducted during the field observer's site visit of the subject property, that consists of nonintrusive visual observations, survey of readily accessible, easily visible components and systems of the subject property. Concealed physical deficiencies are excluded. Such a survey should not be considered technically exhaustive. It excludes the operation of equipment by the field observer and is to be conducted without the aid of special protective clothing, exploratory probing, removal of materials, testing, or the use of equipment, such as scaffolding, metering/testing equipment, or devices of any kind, etc. It is literally the field observer's visual observations while walking through the subject property.

Water Hammer The concussion of water in enclosed pipes caused by a sudden stoppage of flow.

**Waterproofing** A treatment of a surface or structure, which prevents the passage of water.

**Weep Hole** A hole formed in a retaining wall or screed to release water from behind the wall.