



## REFERENCE ONLY

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[client's name]  
[address]

[date]

Subject: Property Condition at [property address].

[client's name]:

At your request we conducted a condition survey at the subject property on [date].

### PURPOSE AND SCOPE

The purpose of this report is to observe accessible areas of the property and document visually apparent deficiencies as of the date of survey. The scope of this service is limited to facilities inspection via routine visual means, in accordance with our provided Limited Property Condition Survey Contract. Some systems are not evaluated and some types of obvious damage may not be noted.

### SITE DESCRIPTION

This interior suburban lot is very gradually sloped from front-to-rear. There is minimal fall to the street. Lot perimeter drainage appears adequate.

The building is a single-story single-family residential structure with an integral (two-car) garage. Because of the sloping site, the foundation is built with a shallow (1-2') integral retaining wall at the rear. The foundation is a grade-bearing, monolithic poured concrete slab. Specific design details of the foundation (bearing depths, reinforcements, fill, etc) are unknown. Most foundations in this grade are shallow-bearing and post-tensioned. Walls are conventional wooden stud framing with cementitious brick masonry veneer at all elevations. At the front porch and chimney chase hardboard siding is applied. The hipped gable attic and roof structure is conventional stick framing. Roof decking is composite wood (plywood) with a composition shingle roof covering. There is a metal, insert-type fireplace (with gas) at an interior (framed chase). The house is guttered at the front. There is an automatic lawn sprinkler system.

This is urbanized land in the northwest Austin area and no site-specific geotechnical data are available. However, published reference<sup>1</sup> and personal experience in this area indicates this site overlies the interior highlands of the Jollyville Plateau. The soils here are moderately shallow (1-3') but are very expansive (moisture-reactive). Underlying material is deep limestone and dolomite. Representative horizons are visible at the road projects along Highway 183 and the lime quarries across Parmer Lane.

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<sup>1</sup> University of Texas, Bureau of Economic Geology, "Geology of the Austin Area," issued 1984.

It is typical construction practice to import large amounts of local fill to backfill retaining walls, bed the interior slab and grade lawn areas. Visible perimeter soils were dark, grayish-brown stony clays with some nodular limestone outcrop, typical of the Jollyville Plateau.



Front Elevation



Rear Elevation

### HISTORICAL BACKGROUND

The survey was conducted from 9am to noon. The weather was mild and overcast. Ms. X (agent) was present. Client (Mr. Y) is prospective buyer.

Floors were covered and most interior finishes appeared recent. There is evidence of past masonry repointing. No records are available but the house appears ~ 15 years old.

## SUMMARY OF STRUCTURAL OBSERVATIONS

A COPY OF ON-SITE FIELD NOTES IS ATTACHED. PLEASE REFER TO THESE FOR EXEMPLARS, STANDARD NOTES AND INSPECTOR COMMENTS.

### FOUNDATION (SLAB-ON-GRADE) AND SITE CONDITIONS

- Upper slab (at garage and tiled foyer) shows advanced shrink cracking.
- Foundation exhibits about ½” convex settlement (typical for age and area)
- Progressive perimeter erosion (unguttered eaves) at sides and rear.
- Perimeter ponding at sides and rear.



Slab Shrinkage Crack (at garage)



Reflected Shrinkage Crack (at foyer)

There is evidence of slight differential settlement around the perimeter. Although typical in a shallow slab on expansive soils, this settlement is largely attributable to poor site conditions. Transient saturation can temporarily reduce the bearing capacity of natural soils and/or fill materials. In its current condition this settlement appears very slight and does not affect the structural integrity of the foundation. However, we recommend improvements to perimeter drainage to reduce perimeter settlement. This would include:

1. Guttering all drip edges. Conveying downspouts at least 24” away from the house.
2. Backfilling eroded areas to provide positive slope away from the house (sides and rear).
3. Sealing perimeter slip joints (abutting slabs) with suitable polymeric or asphaltic material.
4. Extending the air conditioning condensate drain away from the house.
5. Repair of leaking sprinkler supply piping / Do not operate sprinkler in wet weather.

The location and morphology of the cracks at the exposed garage surface and at the interior tile locations (foyer) are consistent with excessive cure shrinkage. These cracks tend to form inside transverse sections. As a general rule, 90% of shrinkage cracking typically occurs during the first two years after initial construction. The cracks we observed do not appear structurally significant and, absent other defects, should not worsen. Although the structural function of the slab is not affected, shrink cracks represent a minor breach of the environmental barrier (potentially allowing ingress of moisture, vapor, radon, insects, etc.). For this reason the owner may wish to superficially seal exposed cracks with an appropriate material (e.g., exterior-grade polyurethane caulk).

Shrink cracks also degrade the slab function as a tile substrate. Tile damage due to reflected shrink cracks can be substantially reduced by installing a crack barrier membrane prior to laying tile. Carpet and wood flooring are usually not affected by shrink cracks. However, sheet vinyl flooring typically does not perform well on cracked substrates.



View of Right Yard (progressive erosion beneath eave)

No further action is indicated beyond ordinary homeowner maintenance and monitoring. Any evidence of additional floor settlement, growth of existing cracks or occurrence of new cracks should be evaluated by a licensed Professional Engineer. We also recommend evaluation in the event removal of any floor covering reveals any cracks extended 1/16" or more across.

#### INTERIOR SURFACES - RECENT FINISHES

- Cracks at foyer terrazzo tile (discussed above).
- Severe water penetration at front and master bedroom sashes (overspray from sprinkler).
- Minor water penetration at other sashes (typical for single glazing).
- Coffin and blocking cracks at living room drywall (typical, expect recurrence).
- Sliding doors (bedroom closets) drag carpeting.
- Open hole (electrical workbox cutout?) at garage ceiling.

#### EXTERIOR SURFACES (BRICK VENEER / HARDBOARD SIDING)

- Evidence of past repointing (crack repair as foundation settles).
- Front veneer is placed over flatwork slip joints (see WDI).
- Weathered siding and trim at chimney chase.
- Mildew on siding at entryway.
- Gross peeling of exterior paint (all around) / Immediate repainting indicated.
- Damaged rear entry door and weatherstripping (pet damage).
- Some window retainers were not functional.
- Some window glazing beads are deteriorated.
- Minor (cosmetic) screen damage (pets).



View of Chimney Crown (from roof)

FIREPLACE (INSERT W/GAS)

- Log lighter nozzle not supported.
- Advanced rust at metal chimney crown.

We recommend gas logs for this type of installation.



Detail of Surface (tabs abraded)



Missing Ridge Tab (front left hip)

ROOF (COMPOSITION SHINGLE)

- Not recent roofing / Brittle / Aggregate roll-off / Spalls and abrasion (ice and hail damage).
- Loose roll flashing (left front gable) / No valley flashings / Roof jacks (vinyl) are weathered.
- Missing shingle at left hip ridge cap.
- Progressive rot at fascia and trim (esp. front and right).

The expected useful life of the roofing has been consumed. It is an imminent replacement item.



Deteriorated Fascia & Eave Trim (front)



Deteriorated Fascia and Drip Mold (right)



Fallen Batting at Attic (raised ceiling walls)

#### ATTIC (STICK FRAMING)

- No upper attic ventilation (holes cut in wrong location, covered with shingles at rear slope).
- No draftstopping (open ceiling) at furnace mechanical closet.
- Loose and fallen insulation batting at attic headwalls.
- Marginal ceiling insulation (12” recommended).

#### PORCHES AND FLATWORK

- Rear flatwork porch has settled about 1-1/2”.

### **SUMMARY OF MECHANICAL SYSTEMS OBSERVATIONS**

#### DISHWASHER

- Inadequate (visible) backflow prevention / Loop drain line to underside of countertop.
- Cabinet valance (covers gap at top) is missing.

#### RANGE & OVEN (GAS)

- No tip bracket installed.

#### CEILING FANS

- Minor imbalances (wobbles), particularly at master.

#### BATH VENTILATION

- Exhaust fans terminate in attic, just above ceiling.

#### DETECTORS

- No smoke detectors inside bedrooms.
- Recommend a carbon monoxide detector (older gas furnace).

**HAZARD**

#### WATER HEATER (40 GAL GAS IN GARAGE MECHANICAL CLOSET)

- Visible hot piping not insulated (very minor).

### OVERHEAD DOOR OPERATOR

- No bulb protection at opener (lens missing).
- Operable bar lock on door.
- Attachment bracket torn loose at door.



Exterior Cooling Equipment (left side)



Furnace-Fan-Coil (at foyer mechanical closet)

### COOLING SYSTEM (3½ TONS)

- Not recent equipment / Advanced weathering at condenser unit / Coil damage.
- Exposed (repair wiring) to condenser fan / Some vapor line insulation is missing.
- Condensate drain needs to be extended to an area that does not pond next to house.

### HEATING SYSTEM (GAS FURNACE)

- Not recent equipment / Rust at heat exchanger / Keep serviced and install CO detector.
- Inadequate combustion air provisions (no attic ducting, see enclosure).

### VENTILATION SYSTEMS

- Loose tape connection (slight leakage) at supply plenum.

## **SUMMARY OF UTILITY SYSTEMS OBSERVATIONS**

### GAS LINES & CONNECTIONS

- No galvanic wrap at masonry penetration (inlet nipple by meter).
- Laundry service tap is inadequate supported / Service tap is not capped.

### PLUMBING (MUNICIPAL SUPPLY)

- Owner shut-off (normally by meter) was not located.
- No vacuum breakers at right hose bib.
- Leaky valve at 'hot' washer hook-up (cold water bib used).
- Leaky valve at icemaker hook-up / Cap if not used.

### HALL BATH

- Window in shower surround / Tub surround needs minor caulk and/or grout.
- No tub drainstop.

## MASTER BATH

- Leaky fixture at lavatory (front sink) / Cosmetic sink damage (front sink).
- Damaged surround tile, notably at divider between shower and tub.
- No tub drainstop.
- Shower valve hook-up is reversed (hot on right).
- Commode runs continuously.
- Commode is leaking at tank seal (turned commode supply off).
- Cosmetic scaling at sinks.



Exterior Service Entrance and Distribution Panel (right side)

## ELECTRICAL ENTRANCE & PANEL (100A)

- Marginal labeling at branches (minor).

## GROUND-FAULT CIRCUIT INTERRUPTERS

- No GFCI protection at countertop service outlets (all <6' from counters). HAZARD
- Some remote protection locations not labeled (very minor).

Note: The sprinkler system uses the garage convenience outlet. This is a GFCI-protected location.

## BRANCH WIRING & FIXTURES

- Rear porch light improperly mounted and was not functional (no bulb).
- Lighting dimmers not functional at informal dining and at master bedroom.
- No bulb cages at garage and master closet (keyless fixtures).

## SPRINKLER SYSTEM (MECHANICAL CONTROLLER IN GARAGE)

- Zones poorly labeled at controller / Yard (zone) valves not located.
- Anti-siphon valve (adjacent right garage) leaked continuously.
- Extremely low flow at zone 1 (apparent debris in system).
- Low flow at zone 2 / Zone 5 operated continuously (would not shut off).
- Zone 6 did not operate.
- Overspray (hitting house) at zone 4 and zone 7 (front planters, causing interior damage).

We recommend further evaluation and repair of the sprinkler system by a qualified specialist.



Sprinkler Anti-Siphon Valve (leaking)



Front Planter Spray Heads (extreme overspray)

### **RECOMMENDED REPAIR PRIORITY**

REPAIRS ARE CLIENT PREROGATIVE AND RESPONSIBILITY. WE RECOMMEND THAT REPAIRS BE PRIORITIZED TO MITIGATE RECOGNIZED AND/OR POTENTIAL HAZARDS FIRST, LOSS PREVENTION SECOND, HEAVY MAINTENANCE THIRD, THEN ADDRESS ITEMS WHICH AFFECT OCCUPANT COMFORT.

FOR THIS INSPECTION REPORT INDICATED REPAIRS INCLUDE, BUT ARE NOT LIMITED TO:

1. Identified Hazards (smoke detectors, GFCI's).
2. Heavy Maintenance (sprinkler system).
3. Imminent Replacements (roof covering).



Front Masonry Veneer over Flatwork Slip Joints

### **SUMMARY OF WOOD DESTROYING INSECT REPORT (WDI)**

No evidence of wood-destroying insect activity was noted. However, the masonry veneer is placed over the front flatwork slip joint, forming a concealed path for termite foraging. This is a recognized termite conducive condition and we recommend preventive treatment and/or mechanical correction of this condition. Other noted conducive conditions (foliage, fascia rot, etc.) are within the purview of owner maintenance.

Refer to your WDI report for more details, a site diagram and specific scope of inspection.

## CERTIFICATION

I hereby certify that I am a Professional Engineer, Professional Real Estate Inspector and Certified Applicator licensed in the State of Texas, that I have no personal interest in the inspected property nor anyone involved with the property, and that this inspection was performed in a diligent manner to accurately represent conditions on the date of survey.

Stone Creek Engineering Services, Inc. is a registered engineering service provider in Texas.

Stone Creek Engineering Services is a licensed Pest Control Business in Texas.

## LIMITATIONS

The facilities inspected are not recent construction and have been partially refinished. Various coverages prevent observation of many surfaces. Concealed discrepancies will limit the accuracy of this report. There were no geotechnical soil analysis or construction drawings available for review.

Neither Stone Creek Engineering Services, Inc. nor its associates have any control regarding conditions in which these facilities were built and do not accept responsibility for future structural damage as a result of selections made by the builder and/or designer. Stone Creek Engineering Services, Inc. disclaims any control regarding site work practices and does not accept responsibility for future damage or injury as a result of actions taken by other parties. Any recommendations are made to improve conditions. This report does not represent any warranty, express or implied, and this company is not licensed to insure, warranty, or guaranty against future changing conditions. Stone Creek Engineering Services, Inc. and its employees and representatives do not have and disclaim any contractual relationship with, or any obligation to, any party other than the addressee of this report.

Please contact us if additional information becomes available for analysis, or if you have any questions.

Russell D. Strahan, P.E.  
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Stone Creek Engineering Services, Inc.

cc: [realtor], chrono  
attachment and enclosures