Gaudette, Angela

From: Gaudette, Angela
Sent: Friday, November 13, 2020 9:39 AM
To: Gaudette, Angela
Subject: FW: 808 Avondale Rd - Historic Preservation Office
Attachments: 2020.10.26 808 Avondale Rd - Foundation Report by Structural Engineer.pdf

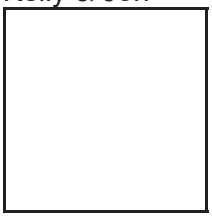
From: [redacted] >
Sent: Monday, November 9, 2020 12:54 PM
To: Sadowsky, Steve <Steve.Sadowsky@austintexas.gov>; Gaudette, Angela <Angela.Gaudette@austintexas.gov>
Cc: [redacted]; Jon Sheller [redacted]
Subject: Re: 808 Avondale Rd - Historic Preservation Office

Hi Steve,

Thanks so much for your response, we very much appreciate it. The additional information you provided is helpful. We've attached the detailed report from the engineer stating severe foundation issues, along with the foundation not being up to code. His conclusion is that the foundation cannot be properly retrofitted without extensive damage and/or demolition of large portions of the house and that any retrofit would permanently compromise the structural integrity of the entire building. We pursued this report in good faith, hoping that we could use the existing structure for some period of time before eventually designing and building a new home.

Please let us know if you have any other questions. We look forward to hearing from you and the Historic Preservation Office upon your further review.

Best wishes,
Kelly & Jon



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Austin 10/26/2020

To: Jon Sheller

Re: Existing Residential Foundation and Superstructure Assessment
808 Avondale Rd, Austin, TX 78704

INTRODUCTION

I have inspected the existing structure at the above referenced address on behalf of *Jon Sheller, Owner*. The inspection was part of a Level B investigation of the foundation structure. The investigation was triggered by concerns about ongoing foundation issues and overall framing issues and to determine the extent of structural repairs needed to retrofit the structure to current building codes. According to the Texas Section of the American Society of Civil Engineers (Guidelines for the Evaluation and Repair of Residential Foundations, 2009), a Level B investigation consists of:

- Interview with homeowner/homeowner's representative or developer to inquire about possible distress signs around the building and the history of the property.
- Visual inspections on the Interior and exterior of the property to search for any visible signs of excessive foundation movement.
- Request from the client and review the provided documents regarding the foundation, such as construction drawings, geotechnical reports, previous testing and inspection reports, and previous repair information.
- Floor levelness: Relative floor elevations were taken to assess flatness of floor structure.
- Make visual observations during a physical walk-through
- Observe factors influencing the performance of the foundation.

The property is located in Austin, Travis County. At the time of preparation of this report, there are no engineering or architectural plans available for review. Additionally, there is no known history of foundation stabilization or retrofitting (e.g. pier stabilization or similar) for this house. Per owner's comments, the intent for this property is to assess the feasibility of using the existing structure as part of a new, one or two-story, single family residence.

Soil Information

The site is located in Austin, Travis County, Texas. The geologic map (Geologic Atlas of Texas, Austin Sheet, Texas, Bureau of Economic Geology, The University of Texas at Austin, 1981) shows the proposed site located in the *Austin Chalk (Kau) Formation.* The Austin Chalk consists of beds of impure chalky limestone, containing 85 percent or more of calcium carbonate, interstratified with beds of softer marl. It is usually of an earthy texture, free from grit, and on fresh exposure softer, so that it can be cut with a handsaw, but on exposure more indurated. A partial geologic map of the location is shown on Figure 1. According

to the USDA Soil Survey website, the house is located in the Per the USDA Soil Survey, the shallow soils at the site are member of the EuC—Eddy soils and Urban land, 0 to 6 percent slopes. The typical Stratigraphy of the EuC is as follows: Eddy: 0 to 3 inches: gravelly loam; 3 to 14 inches: very gravelly loam; 14 to 20 inches: bedrock/ Urban: 0 to 40 inches: variable. Available data from USDA does not indicate high plasticity of underlying soils. The Plasticity Index (PI) of the upper layer of soils is 15[1] (dominant component), what indicates a low risk of soil induced movement of the foundation.

Preliminary geotechnical investigation by SEC Solutions confirms the information above. Two geotechnical borings show 2ft to 4ft of Lean Clay (CL) overlaying limestone bedrock, Kau (Austin Formation). The site also presents ***high topography***, Figure 2.

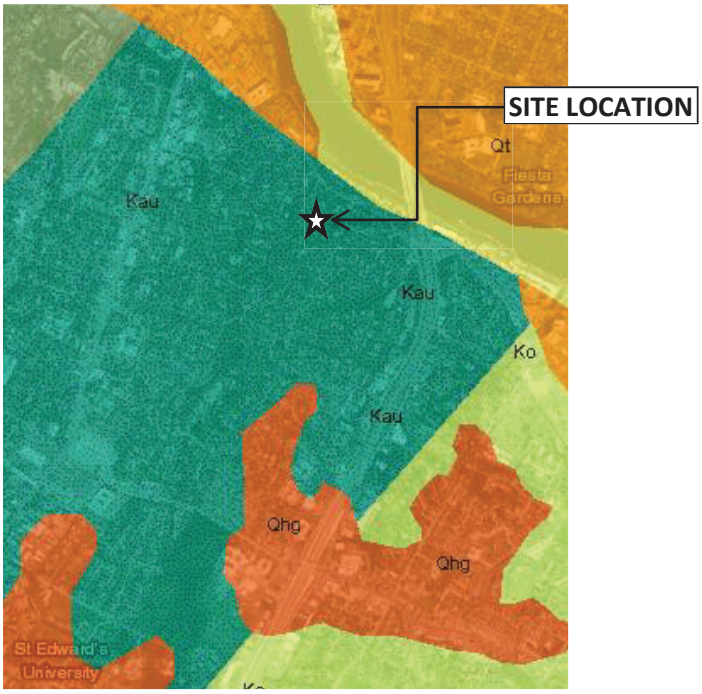

Figure 1. *Site Geology. Source: Geologic Map of Texas, Austin Sheet, Bureau of Economic Geology, The University of Texas at Austin (Reprinted 1981).*

[1] Indicates a PVR of approximately 1".

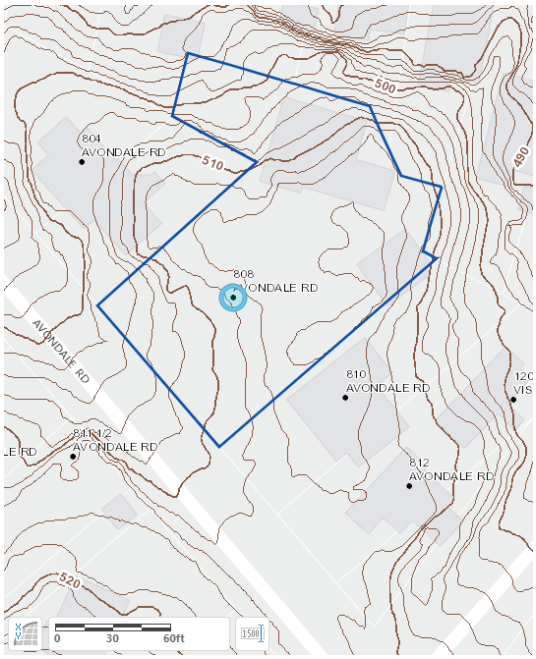

Figure 2. *Site Topographic Map (Source: COA Property Profile). Contour lines: 2ft (light) 10ft (heavy).*

PROPERTY DESCRIPTION

The site is currently place of a single-family residence and a detached garage. Available records indicate that the single-family structure was built in 1945. It consists of a single-story residential building. The main house foundation is a combination of pier-and-beam (most of the foundation footprint) with a partial slab-on-grade and suspended slab. Access to the crawl space is limited and only possible at locations where vents are installed.

The high topography of the building site indicates that the original foundation and subsequent additions were likely constructed over non-engineered fill at the time. Foundations constructed over non-engineered fill will experience excessive settlement due to fill consolidation over time. Interior and exterior walls are made of conventional wood framing elements. Numerous signs of foundation movement were identified during visual inspection.

INSPECTION FINDINGS

During my visual assessment, the following items were observed. Photographic evidence is also presented.

- *Several* stair-stepped, vertical and horizontal cracks on interior walls. These cracks are common indicators of foundation movement (Figure 3).

Figure 3. *Cracks in walls and ceiling*

- Dissimilar foundation types: “slab on grade” and “pier-and-beam” and concrete flatwork. The original structure was built on a “pier-and-beam” foundation. The multiple foundation types, when not properly engineered, *are not a good construction practice and most likely contributed to the extensive signs of distress observed*. Flatwork construction is not an engineered slab and has no structural value to support residential structures. Large separations were noticed between slab on grade/pier-and-beam and flatwork areas, Figure 4.

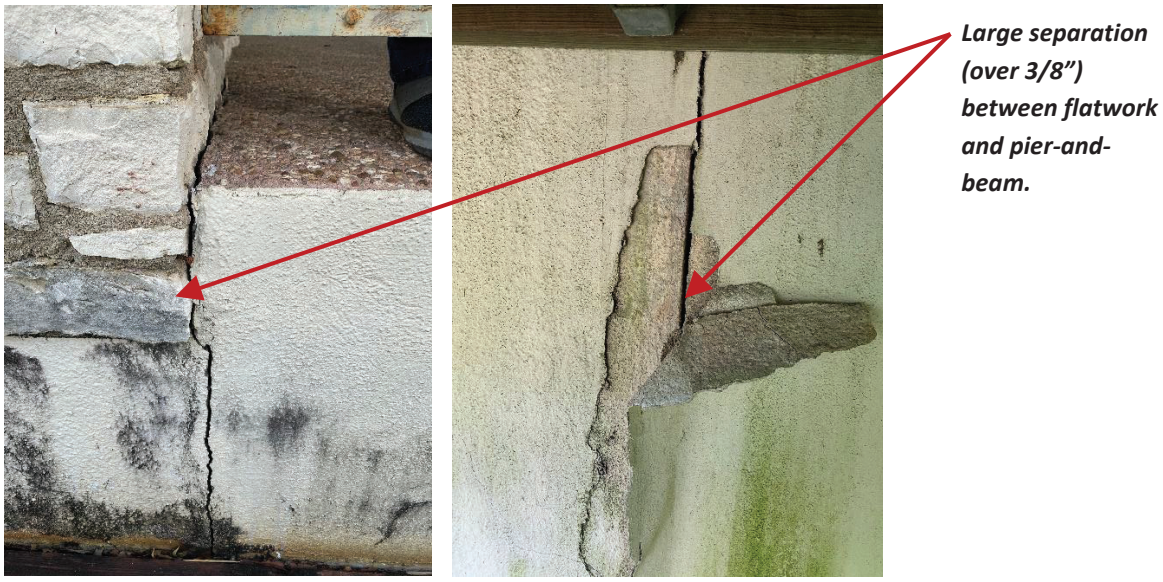

Figure 4. *Dissimilar foundation types*

- Interior Floor elevations indicate that the floor is approximately *3” out of level (pier-and-beam)*. This indicates a high degree of foundation shifting/settlement. Most variations in elevation measurements inside particular rooms are equal or over 2”, pointing to excessive movement.
- Extensive cracking observed in the exterior stone veneer, another indication of an underperforming foundation. Figure 5.

Figure 5. *Cracks in stove veneer.*

- Several cosmetic repairs still visible throughout the house. These repairs were likely necessary to cover extensive cracking on interior walls and ceiling. This reinforces the previous observation about out-of-tolerance foundation movement.
- Excessive deflection of framing members (Figure 6). Some floor and ceiling beams/headers are visibly undersized for the current span.

Figure 6. *Excessive deflection of framing members.*

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CONCLUSIONS AND RECOMMENDATIONS

Based on my visual observation, the numerous signs of distress throughout the building are evidence of underlying serious structural issues related to lack of proper engineering and substandard construction. The extent and nature of the distress will not allow for the strengthening/retrofitting without extensive damage to and/or demolition of large portions of the main house construction.

The multiple foundation types (pier-and beam; slab-on-grade and suspended slab) and wall construction (wood framing) will not allow a proper retrofitting strategy (e.g., drilled piers/steel piles or isolated concrete footings) without *permanently compromising* the structural integrity of the entire building. In addition, the flatwork and pier-and-beam portions of the foundation are not structurally "sound"[2] and must be completely removed and replaced with properly engineered foundation.

In addition to these factors, the lack of information on the existing pier-and-beam "footings" or "piers" (reinforcement, overall depth, material properties) will significantly hinder any attempts to level the structure adequately. Destructive methods can be employed to assess all these items, however the costs involved are appreciably high. Issues involving the superstructure must also be addressed (excessive deflection), with the potential need to replace portions of the wall/ceiling/roof framing structure.

With respect to the economic feasibility of this project, it is anticipated that the total cost of demolition, retrofit and renovation of the existing structure will exceed the cost of a new, "up to Code", construction (foundation elements and adequate drainage). The high degree of settlement due to the original construction on non-engineered fill (i.e., not properly compacted) indicates that this residential structure *was not engineered* to sustain such movement(s) with an acceptable performance level. This conclusion is based on my experience with similar buildings and new residential construction. Therefore, it is my professional opinion that the existing structures should give way to a new construction in order to make the development financially viable.

[2] Not engineered for the anticipated ground movement (settlement).

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Limitations

This is exclusively a visual inspection. This report is not intended to offer any warranty on the future performance of this foundation or framing structure. If you have any questions, please contact us at (512) 215-4364 or by e-mail: *marcos@sectexas.com*.

Sincerely,

Marcos V. Dequeiroga, PE
Principal
SEC Solutions LLC

Gaudette, Angela

From: Gaudette, Angela
Sent: Friday, November 13, 2020 9:36 AM
To: Gaudette, Angela
Subject: FW: 808 Avondale Rd - Historic Preservation Office
Attachments: 2020.11.12 808 Avondale Rd - SUMMARY.docx; 2020.11.12 1961 Sanborn Map - Sheet 225.pdf; 2020.09.29 808 Avondale Buyer Survey - Sep 2020.pdf; 2020.11.12 808 Avondale Rd - StreetView.pdf

From: [redacted] <[redacted]>
Sent: Friday, November 13, 2020 7:04 AM
To: Sadowsky, Steve <Steve.Sadowsky@austintexas.gov>; Gaudette, Angela <Angela.Gaudette@austintexas.gov>
Cc: [redacted] Jon Sheller [redacted]>
Subject: Re: 808 Avondale Rd - Historic Preservation Office

Hi Steve,

We wanted to follow up with some additional pieces of information which we feel may be helpful to your review, and which we would like to request that you take into consideration in the Historic Preservation Office review. We've summarized our observations and research regarding the property's potential architectural significance and historic integrity below, and have attached a summary of information regarding the building's condition and structural integrity in an attached document, to help expedite your review. We will also send the relevant inspection reports and related documents, with the most pertinent information highlighted, separately.

Are you available to meet in person or discuss briefly via phone today or Monday? In particular, we'd like to better understand the historical issues you're investigating and the timeline in which you expect to arrive at a conclusion, and to learn a bit more about the processes more generally, as the ~$1K fee and the range of potential timelines/outcomes significantly impact us. We're coming up against both contractual deadlines with the seller and, in the event that we are required to go to the Historic Landmark Commission, we are facing a deadline to be included in their next meeting. We may have a meaningful amount of work to do on our end in short order to sort things out with the seller ahead of our contractual deadline (November 19th), and if we aren't able to accomplish this (and arrange payment, and prepare materials) by November 20th - in time to be included in the December 14th Landmark Commission review, as it appears the next is late January - we are worried that we may not be able to close on the property.

Given that we submitted the application on October 19th, we are hoping to gain clarity on the likely outcome here, or at least better understand the timelines and issues at hand and the thinking of the Historic Preservation Office generally, by the end of this week or early next week at the latest. We had expected a decision, or at least a strong indication and further information (and perhaps availability for a brief phone call or meeting), within 5 business days and we are now at 4 weeks. We first requested a consultation with your office via both voicemail and email, prior to submitting our application, nearly 6 weeks ago on October 6th. Your email on midday Friday indicated we would at least hear more, if not receive a preliminary determination, in a few days - which we interpreted to mean this week, ideally by midweek.

We appreciate the need to do additional research on Ted Wendlandt, but it is our understanding that we need to check at least two of the five criteria *and* have the building retain a high degree of integrity to be referred to the Historic Landmark Commission. It seems that even if Ted is a significant enough historical figure, that would only be one of the five criteria. Further, it seems based on your initial research, our extensive due diligence on the property, and the opinions (in many cases, written) of several certified professionals we worked with during our inspections, which we have provided, that the property quite clearly does not retain

integrity, both due to its current condition (unfortunately, we have learned that virtually everything that could be wrong with it is, including being structurally compromised beyond salvageability) and, separately, due to the several very meaningful additions which have been made since its construction by Ted (we don't believe virtually *any* of the original structure remains visible - see below). It seems that it should be fairly straightforward to determine this, or to communicate for what reasons it isn't, even if the research into Ted takes more time. Do you have a view on the integrity of the structure, and is there a 2nd criteria that you are investigating?

We genuinely understand that things are likely very busy right now, that these things can take time, and that COVID has undoubtedly thrown a wrench in many processes, and our intention is in no way to rush or to pressure you or the Historic Preservation Office. That said, we are first-time homebuyers and we have a lot at stake, and the unexpected uncertainty and unpredictable timelines are making it very challenging (and incredibly stressful) for us to plan accordingly, particularly in coordination with the seller and given the rapidly approaching deadlines we face. For example, even if we receive total clarity this Monday (the 16th), we are now looking at 2-3 days (the 19th) to negotiate material contract modifications with the seller and 3-4 days (the 20th) to gain approval from the seller for, arrange payment for, and prepare a submission for, the December 14th Landmark Committee meeting, in the event that this is required.

Thanks again for your help,
Kelly & Jon

703.338.8282 or 641.420.5991

Summary

- The stucco structure Ted Wendlandt originally built, and in particular what we now consider the front facade, has been *heavily* modified over time.
    - The original facade facing Avondale Rd, which we now consider the front facade, appears to have been nearly completely obscured, with major additions which jut forward from (and largely cover/replace) the original structure on both the left (stone veneer chimney area, including the leftmost door) and on the right (stucco veneer, large bedroom extension to the right of the rightmost door).
    - The original stucco structure facing Avondale Rd appears to, in fact, *only* be visible as the small windowed portion of the front facade located *between* the left and right additions (the inset section roughly in the center of the two front doors).
    - This is true of the entire original structure, on all sides, with other major additions detailed below.
- It is also very likely that what we now consider the front facade, when built by Ted Wendlandt, was in fact the *rear* of the structure. If this is the case, the original front facade, which faced Rutherford Pl and not Avondale Rd, has been *completely* obscured.
    - One, by a major addition (long windowed room, wood panel siding) along the entire north side of the structure facing Rutherford Pl.
    - Two, by *three* two-story homes which are located on Lots 3, 4 and 5 (811, 809, and 807 Rutherford Pl) and which stand between the current structure and Rutherford Pl, in addition to a steep grade and many large trees.
- These conclusions, while not definitive, are backed up by *all* evidence available to us at this time, as outlined in detail below.
- Finally, because of where the structure was and is still located, it is atypically non-visible from Avondale Rd. See attached screenshot from Google StreetView.

    - The structure is located entirely outside of Lots 12 and 13, despite their lengths, which are the Avondale Rd facing Lots. Instead, it was built *behind them* on Lot 4, a Rutherford Pl facing lot, which now contains a 2 story home.
    - Additionally, the steep slope from Avondale Rd to the structure's location also minimizes its visibility.
    - Lots 12 and 13 currently contain virtually no landscaping and minimal trees (and the attached screenshot is during winter, so even the existing deciduous trees lack leaves), and no fencing or structures whatsoever, any of which would almost entirely remove it from the street view. In order to preserve the minimal existing street view, there would need to be a prohibition on virtually any/all Lot 12 and 13 usage, despite their respective sizes.
- Our understanding is that, should a property receive a Historic Landmark designation, it is typically possible to make additions/renovations to the non-visible (typically the rear) portions while maintaining the visible (typically the front) facade. This is genuinely impossible with this property.
    - As mentioned, the property wasn't built on the two Avondale Rd facing lots, and is instead on a portion of what used to be Lot 4, which was and is Rutherford Pl facing.
    - Even following the re-platting of Lots 3, 4, and 5, the current structure is set so far back that it *currently encroaches* on these adjacent lots, violating rear setback lines.

<u>Architectural Significance / Historic Integrity</u>

- In line with the likely addition(s) that you mentioned observing, we've also heard, from numerous professionals, that the house has undergone *multiple major* additions and renovations since its original construction by Ted Wendlandt, as evidenced by:
    - the multiple (4) disjointed foundation systems;
    - multiple (4) separated rooflines;
    - multiple (3) siding types, as the structure was originally entirely stucco, and now contains additions of:
        - stucco, as seen in the major bedroom addition visible (from the front) to the right of the rightmost door,
        - stone, as seen (from the front) as the entire rock fireplace/chimney section containing the leftmost door, and as seen (from the left and rear) as the wall adjoining the large deck and sliding-door area (separating it from the long North-facing windowed room addition), and
        - wood panel, as seen (from the left side) as the entire section adjoining the larger deck area and containing the sliding-door, and as seen (from the rear) as the long North-facing windowed room addition running much of the length of the structure (along the rear deck walkway);
    - multiple non-parallel exterior wall lines and protrusions, as the original structure was nearly perfectly rectangular;
    - multiple front doors (neither of which we believe are original), the leftmost door being added when the stone chimney area addition was constructed, and the rightmost door being added when the bedroom area stucco addition (to the door's right) was constructed;
    - multiple window sizes and types being used, as one would expect on separate additions from different points in time;
    - major increases to the overall size, as the original structure was *much* smaller and very differently shaped (our survey is attached so you can see the current house shape/size/location).
- The 1961 Sanborn map (attached) supports that there were a number of major additions, including significantly impacting what is currently the front facade, since 1961.
    - The home built by Ted Wendlandt was located entirely within Travis Heights Block 2 Lot 4, as of 1961 and likely for some period after. It is shown to be substantially different in shape, size, location, and composition than the current structure. If we superimpose the current expanded 808 Avondale Rd structure and detached garage on the 1961 map, instead of the 1961 structure, it would encroach onto Lots 3, 4, 5, 12 and 13.

    - A large addition was later added to the right side of the house such that it now spans into what was, in 1961, Lot 3.
    - Another meaningful addition was also added to what is currently the rear of the structure, a long windowed room spanning the length of the deck walkway at the back of the house, as you can see that the structure now juts further out in this northerly direction than the 1961 footprint.
    - Aside from those more obvious additions, the house is also now a different shape in other ways too - most notably, the left side now protrudes forward from the front facade when previously it was flush. It should also be noted that this left protrusion has a rock veneer and wood side paneling while the 1961 Sanborn map details the house was all stucco. This addition also extends the house forward, such that it slightly encroaches on what was, in 1961, Lot 12.
    - These additions are easily observable in that they are entirely consistent with the various different current rooflines, window types, foundation types, siding types, etc., all of which are entirely inconsistent with the 1961 Sanborn map.
    - Importantly, it appears that the only remaining part of the original front facade is the small windowed middle portion (roughly in the center of the two front-facing doors) that is set back from the left and right protrusions/additions.
- Additionally, and perhaps most importantly/interestingly, the 1961 Sanborn map also shows that the address at that time was 809 Rutherford Pl instead of 808 Avondale Rd, indicating that what is now the front of the house was actually at this time the *back* of the original home built by Ted Wendlandt.
    - Where the house sits in the original lot, and the shape of the house in these older maps (it seems there was a Rutherford-facing entryway), appear to further support this.
    - The location of the garage in 1961 also appears to support this.
        - It would be very difficult, for example, to get a car (especially at this time) from Avondale Rd first up the hill and then down the *very* steep grade at what is currently the rear of the home, towards Rutherford Pl, to reach the garage indicated on the 1961 map.
        - It would also make little sense to locate a garage in a location that required you to drive between the structure then located at 804 Avondale Rd, and the structure in question (now 808 Avondale Rd).
        - In fact, a garage in the location indicated, which is further from the home than typical of the time, would make perfect sense (and perhaps only really make sense) in light of the steep grade the home was built up on, which would require a closer location to be built on this steep slope.
    - Aesthetic considerations are also worth thinking through - with how (relatively) undeveloped southern Austin was at the time, why would one of the initial homes face southwards? To the south, which is higher in elevation, you see a hill and perhaps a few other homes (as of 1961, even less earlier). Facing north, looking *down* in elevation, you can see the city of Austin (albeit sans skyscrapers) and perhaps, at the time, the Capitol. It makes more sense that the home would have been built to look out *from* a hillside, rather than *at* said hillside.
    - The sewer line history of the property also supports this - it was originally directed towards Rutherford Pl, not Avondale Rd. Drainage was redirected to Avondale Rd much more recently, requiring a modern grinder pump system, but the original sewer lines were detected by both our home inspector and a sewer professional, much to their confusion at the time.
    - The electrical service history of our property, and now-adjoining properties, also supports this - it originally came from Rutherford Pl, and in fact *still does*, despite a home now being located between our property and Rutherford Pl. In fact, we found that in a recent survey of what is now Lot 4, the city of Austin retains a substantial 5 ft x 85 ft utility easement along the east side of Lot 4 for the provision of electricity and data. It seems all other homes on Avondale Rd now get their electricity/data from Avondale Rd, but what is now 808 Avondale Rd still receives service via a power line coming through and over Lot 4, from Rutherford Pl.
    - This is further supported by observing the Lot boundaries - the 1961 embodiment of the structure Ted Wendlandt built, and its detached garage, were located entirely within Lot 4, which is accessed from Rutherford Pl.

Foundation & Structural Integrity

We've attached the detailed report from our structural engineer (Marcos V. Dequeiroga, P.E., Principal and Lead Structural and Geotechnical Engineer, SEC Solutions) stating severe foundation issues, along with the foundation (actually 3-4 improperly engineered foundation types) not being up to code. His conclusion is that the foundation(s) cannot be properly retrofitted in an economically viable manner, nor without extensive damage and/or demolition of large portions of the existing structure, and that any retrofit would necessarily and permanently compromise the structural and architectural integrity of the entire building.

We hired Marcos after our home inspector, Bob Welborn (see below), identified signs of severe structural distress and strongly recommended that we investigate further. We initially reached out to SEC mid-September, and they visited the property early October.

Direct excerpts from the report (emphasis in original, not added):

- "Per owner's comments, the intent for this property is to assess the feasibility of using the existing structure as part of a new, one or two-story, single family residence."
- "The investigation was triggered by concerns about ongoing foundation issues and overall framing issues and to determine the extent of structural repairs needed to retrofit the structure to current building codes."
- "[T]he numerous signs of distress throughout the building are evidence of underlying serious structural issues related to lack of proper engineering and substandard construction."
- "The extent and nature of the distress will not allow for the strengthening/retrofitting without extensive damage to and/or demolition of large portions of the main house construction."
- "*The original foundation and subsequent additions were likely constructed over non-engineered fill at the time. Foundations constructed over non-engineered fill will experience excessive settlement due to fill consolidation over time.*"
- "The multiple foundation types (pier-and beam; slab-on-grade and suspended slab) and wall construction (wood framing) will not allow a proper retrofitting strategy (e.g., drilled piers/steel piles or isolated concrete footings) without *permanently compromising* the structural integrity of the entire building. In addition, the flatwork and pier-and-beam portions of the foundation are not structurally 'sound' and must be completely removed and replaced with properly engineered foundation."
- "The original structure was built on a 'pier-and-beam' foundation. The multiple foundation types, when not properly engineered, *are not a good construction practice and most likely contributed to the extensive signs of distress observed*. Flatwork construction is not an engineered slab and has no structural value to support residential structures. Large separations were noticed between slab on grade/pier-and-beam and flatwork areas."
- "In addition to these factors, the lack of information on the existing pier-and-beam 'footings' or 'piers' (reinforcement, overall depth, material properties) will significantly hinder any attempts to level the structure adequately. Destructive methods can be employed to assess all these items, however the costs involved are appreciably high."
- "Issues involving the superstructure must also be addressed (excessive deflection), with the potential need to replace portions of the wall/ceiling/roof framing structure."; "Some floor and ceiling beams/headers are visibly undersized for the current span."
- "Therefore, it is my professional opinion that the existing structures should give way to a new construction in order to make the development financially viable."

General Home Inspection

Upon going under contract on 808 Avondale road, we had the property inspected by Bob Welborn, Owner of Texas Home Inspection. Bob has been a property inspector and an expert witness in litigation,

mediation, and arbitration disputes related to residential and commercial property construction and purchases/investments since 1978 (42 years) and is certified both nationally and in the state of Texas.

Bob arrived at the property for a full home inspection on September 16, 2020, which typically takes him a couple hours on-site. Upon initial walkthrough he informed us, in no uncertain terms, that the house was compromised - structurally, mechanically, electrically, cosmetically, and in terms of major plumbing and sewer infrastructure - to such an obvious extent that he felt he should discontinue the inspection and we should save our money. Based on just these initial issues, he could conclude that it was unsalvageable, and that it would likely take him most of a full day to complete a standard inspection. Hoping to salvage the structure in some way, or find an alternate use for it for at least a few years (i.e. home-office, as we live just down the street on Alameda Dr) while we designed a home for ourselves, we asked him to stay and continue.

He was on-site for 6 hours, and indicated at the end of the day that it would likely take at least another full day to complete an inspection/diagnosis of standard detail, having found additional major (and countless minor) issues and numerous safety and building code violations. He again suggested that we stop here, with his overview report on the major issues, as there was simply no way he could imagine it being economically feasible, or even possible, to make even just the changes necessary to bring the current structure up to compliance with bare minimum building and safety codes (electrical, mechanical, plumbing/sewer, structural, hazardous conditions) which would be legally required to use it in virtually any fashion, even temporarily, let alone use it in the longer-term or as the basis for an expanded structure at a future point in time. We asked him to detail his findings, which we've attached and summarized in part below.

Inspection summary, with direct excerpts in quotes:

- Overview: Bob found the structure(s) deficient in *literally* every single category on his inspection report, in both major and minor ways (he primarily detailed the most major), with the partial exception of those areas he either was unable to, or chose not to, investigate/diagnose in detail - many of which we have subsequently investigated via other professionals (e.g. structural, sewers, plumbing), and found to be grossly deficient.
- Architectural: Bob noted that the home was originally built in 1945, but had been remodeled extensively and experienced multiple major additions since then, as evidenced by the 4 competing, poorly integrated, and distressed foundation systems, multiple (4) rooflines, and many non-parallel and/or disjointed exterior wall lines. Workmanship in most or all cases seemed poor and unprofessional, likely DIY, as few items met professional standards and there were numerous, severe, building and safety code violations.
- Structural Systems
    - Foundations: Numerous major distress cracks throughout the building on both interior and exterior facings indicated major foundation movement. Bob suggested we speak to a structural engineer to further understand the severity of these issues, prompting us to hire Marcos from SEC Solutions to investigate. His detailed findings are summarized above and in the foundation report we provided.
        - "Noted material distress crack and floor surface sloping conditions indicate an apparent history of foundation and superstructure movement."
        - "Major wall sheetrock distress cracks and floor sloping in the back lower right bedroom indicates major area foundation and superstructure movement. Patched ceiling sheetrock cracks were also noted in the same room."
        - "Stucco and rock veneer siding distress cracks were noted at several locations around the house."
        - "There are large horizontal cracks running through the lower left side Portland cement plaster coating where the foundation skirt wall ties into the cast-in-place concrete beam structure."

        - "The interior 4x4 beam members are undersized by current minimum building code standards due to general lack of stiffness characteristics to support overhead house loads without deflecting."
        - "The piers under the house are a mix of substandard original cedar wood posts and newer stacked concrete block type. Current minimum building code standards require concrete block piers to be mortar filled with steel reinforcement."
    - Roof: Poor workmanship on multiple major additions, structural deficiencies leading to major sagging, rot damage, insufficient waterproofing, varmint infestation and attic HVAC ductwork in complete disarray.
        - "Major sag in roof and ridge surfaces at upper left ridge area indicates underlying rafter and ridge framing defect conditions."
        - "No required collar tie framing between rafters or purlin bracing to ensure rafter framing not overspanned."
        - "Varmint dropping in attic and damaged HVAC ducting indicate history of major critter infestation to attic area."
        - "Widespread and substantial exterior rafter tail, barge rafter and gable end support bracket wood rot damage noted."
    - Walls (Interior and Exterior): Major cracks noted, improper waterproofing, rot damage, stucco substantially degraded in some areas, dissimilar siding types indicate multiple major additions.
        - "Wood siding rot damage noted at gable ends over lower roof sections and at back middle deck areas."
        - "No required weep screed details installed at the base of the stucco siding around the house."
    - Ceilings, Floors, Doors, Windows, Stairways: Substantial rot damage, visually deflecting doorways/framing/windows, visually unlevel floors, holes in floors, deficient window and frame workmanship and weather-sealing, safety code violations.
        - "See Foundation section comments regarding floor sloping conditions."
        - "The wood flooring is damaged at several locations around the house. There is also a large hole in the wood flooring in the kitchen area."
        - "Several interior and exterior doors are rot damaged."
        - "Extensive exterior window trim and frame rot damage noted at several locations around house. Water stains and beginning rot damage also noted at a few interior window sill locations indicating water penetration through and/or around the window units."
    - Decks: Built from substandard and undersized materials, poor structural integrity and numerous building/safety code violations create potential for catastrophic failure, substantial rot damage, toxicity concerns (chemically treated wood contains carcinogens unsuitable for barefoot use).
        - "Noted conditions create the potential for catastrophic deck failure under certain conditions."
        - "The wood decking, guardrail, built-in seating and deck stair step components are substantially rot damaged."
        - "Major deck support structure defect conditions were also noted, e.g., the 4x4 posts are undersized and spliced together at several locations, the posts are missing critical diagonal bracing support, the deck beams are improperly secured to the sides of the undersized posts (beams are required to rest on top of beam members), joist hangers support missing under some joist ends, etc., etc."
- Electrical Systems: Old wiring with evidence of extensive DIY modifications violates numerous building/safety codes and creates material safety hazard. After being unable to diagnose even some of the more major/severe issues, Bob recommended we hire a certified electrician, but suggested that if/when we did we'd likely be legally prevented from turning the electricity on until the many safety code violations a professional would immediately identify were fully resolved.

Poor/no grounding, improper/no GFCI protection, hand-made high-voltage wire splices without weatherproofing and safety coverings, no arc fault protection, *active* GFCI tripping conditions indicated by *then-disabled* GFCI safety devices upon their re-enablement.

- "No grounding cable or clamp seen at the gas meter. Current National Electric Code standards require all gas pipe systems to be bonded and grounded. Also, I could not locate where main electrical system grounded?"
- "Arc Fault Circuit Interrupters (AFCI) WERE NOT installed in the breaker panel of this home."
- "Numerous ungrounded/ open ground 3 prong receptacle outlets located throughout the house indicating older wiring, that does not have equipment ground, was probably not replaced when house partially rewired. All three prong outlets are required to be grounded."
- "GFCI tripping indicates active ground fault conditions. *Ground fault circuit interrupters are safety devices that provide protection against the hazards of ground fault currents that can cause electrical shock."
- "No required smoke alarms in bedrooms. No required smoke and carbon monoxide detection equipment immediate to bedrooms."

- HVAC: Two furnaces, two A/C units, one of each apparently obsoleted. Remaining units insufficient to heat/cool space. Multiple fire safety and fire code violations. Ductwork completely destroyed by critter infestation in home and attic. Functioning A/C unit past service life, uses now-prohibited freon refrigerant.
    - "Gas connector improperly run into furnace cavity space."
    - "[D]amage to the attic supply ducting prevents supply air from reaching supply registers throughout the house."
    - "The furnace vent pipe is improperly contacting wood and spray foam insulation at ceiling and roof levels over entry foyer closet unit."
    - "Racoons have destroyed the attic located ducting preventing air from reaching supply registers. All new ducting will be needed to correct noted problem."
    - "No required ceiling/ firestopping installed over entry foyer furnace closet. Heating unit closets with gas appliances are now required to have sealed ceilings with two combustion air sources taken from the attic or exterior (not the inside living space)."
    - "The gas-fired furnace vent pipe cap (over the roof) is not rated for gas-fired equipment."
- Plumbing, Water Heater: Pressure issues (too high at some places, nonexistent in others) indicate major pipe corrosion and obstruction, poor plumbing workmanship, and major unidentified leaks. Entire galvanized main line, and likely all internal lines, need to be replaced. Kitchen sink non-functional, toilets non-functional, water most likely unsafe to drink due to non-code-compliant piping type & age/condition. Unidentified *major plumbing leaks* led to *13,700 gallons* of water being used during our short inspection period, per the attached water bill, during which only a few toilets were flushed for testing prior to all sinks/faucets/toilets being returned to shut-off positions. Water heater non-functional and improperly installed with multiple fire and ventilation safety code violations i.e. venting ductwork creates major CO2 poisoning safety hazard and needs to be completely replaced.
    - "100 psi at exterior faucet. Pressure regulator required for water supply systems that exceed 80 psi."
    - "No water to front right bathroom sink faucet. Low water flow to back right bathroom sink faucet. Both toilet refill functions not working properly."
    - "The vent pipe is contacting combustible material in the attic space."; "The vent cap over the roof is also not rated for gas-fired equipment use."
    - "A plumber will need to make needed venting repairs prior to water heater use to eliminate potential unsafe fire safety and combustion gas conditions to occupants of the house."
    - "A water pressure test could not be performed due to multiple leaking fixtures."

    - "It appears that the water main from the meter to house (150'+) is galvanized piping that will likely need to be replaced."
        - Quote to replace: $14K (see attached proposal from Accurate Leak & Line) - this is for the *main line only*, not any internal lines, and would restore water use to only 1 fixture i.e. kitchen sink or a single bathroom.
- Sewers: Cast iron piping (non-code-compliant) is so fully corroded and obstructed that it must be replaced (much of main line, all internal lines), requiring significant excavation through & under foundation due to foundation type(s) i.e. concrete slab. Grinder/sewage pump (a major appliance) non-functional, as evidenced by the re-enablement of the then-disconnected alarm function, leading to likely sewage back-up into house upon use, and must (urgently) be replaced and re-integrated into a new sewer system.
    - "Older cast iron sewer piping in crawl space under house showing old age rust/corrosion deterioration. Plumber doing sewer line camera testing during my site visit stated that the old cast iron sewer piping under the house is heavy corrosion damaged and should be replaced."
        - Quote to replace: $20K (see attached proposal from Accurate Leak & Line) - this is to restore *minimal* sewer service to a single fixture, i.e. the single bathroom closest to the existing sewer main line.
    - "The grinder/sump pump unit under the back right deck is inoperable."
- Gas Lines: Gas service hasn't been able to be turned on due to multiple unidentified leaks in the line, among other code violations, despite having both our home inspector and then a plumber try to find them. The plumber we hired following our home inspection located (and repaired) a few leaks, but still could not pressurize the lines, and ultimately advised us it likely wasn't worth our money to pay him to identify any/all remaining leaks as the remaining leaks would likely require extensive time to locate and repair, including major exterior excavation work and destructive interior access methods, and the overall system would likely remain highly prone to future failure which is a major safety hazard.
    - Prior to Bob coming for inspections, we tried to have the gas turned on. Texas Gas was unable to turn it on due to 5+ safety violations (see attached warning tag forms). They indicated that there were likely more fire safety code violations, but that they weren't in the business of identifying or repairing the causes for grossly unsafe gas line conditions.
    - We had a gas-certified plumbing professional attempt to resolve these violations. After some time, and multiple attempted fixes, he indicated that it was a much deeper problem that would require major effort to fully diagnose and fix, with no guarantees and a suboptimal end result.
    - Given the countless other issues we identified in our general and foundation inspections, we decided it wasn't worth it at this time.

225


E. RIVERSIDE DR
EDGECLIFF TER. (ST.)
PARK PL.
ACADEMY DR
RUTHERFORD PL.
HARWOOD PL.
ALAMEDA DR.
AVONDALE RD.
BLVD.
BICKLER RD.
PECAN GROVE RD.
Blumo Creek
ALTA VISTA AV
TRAVIS HEIGHTS
MILAM PL.
NEWNING AV
SUNSET LANE
PARK
LOUISE
EAST SIDE DR.
PARK LA
BONHAM TER.
E. MONROE
222
224
226
229
SCALE 100 FT. TO ONE INCH
Copyright 1935 by the Sanborn Map Co.

SURVEY MAP OF
LOT 12, AMENDED PLAT OF LOTS 3, 4, 5, 12, AND 13, BLOCK 2, TRAVIS HEIGHTS, A SUBDIVISION IN TRAVIS COUNTY, TEXAS, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN VOLUME 84 PAGE 68B OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS. LOCATED AT 808 AVONDALE ROAD.

PAGE 1 OF 3

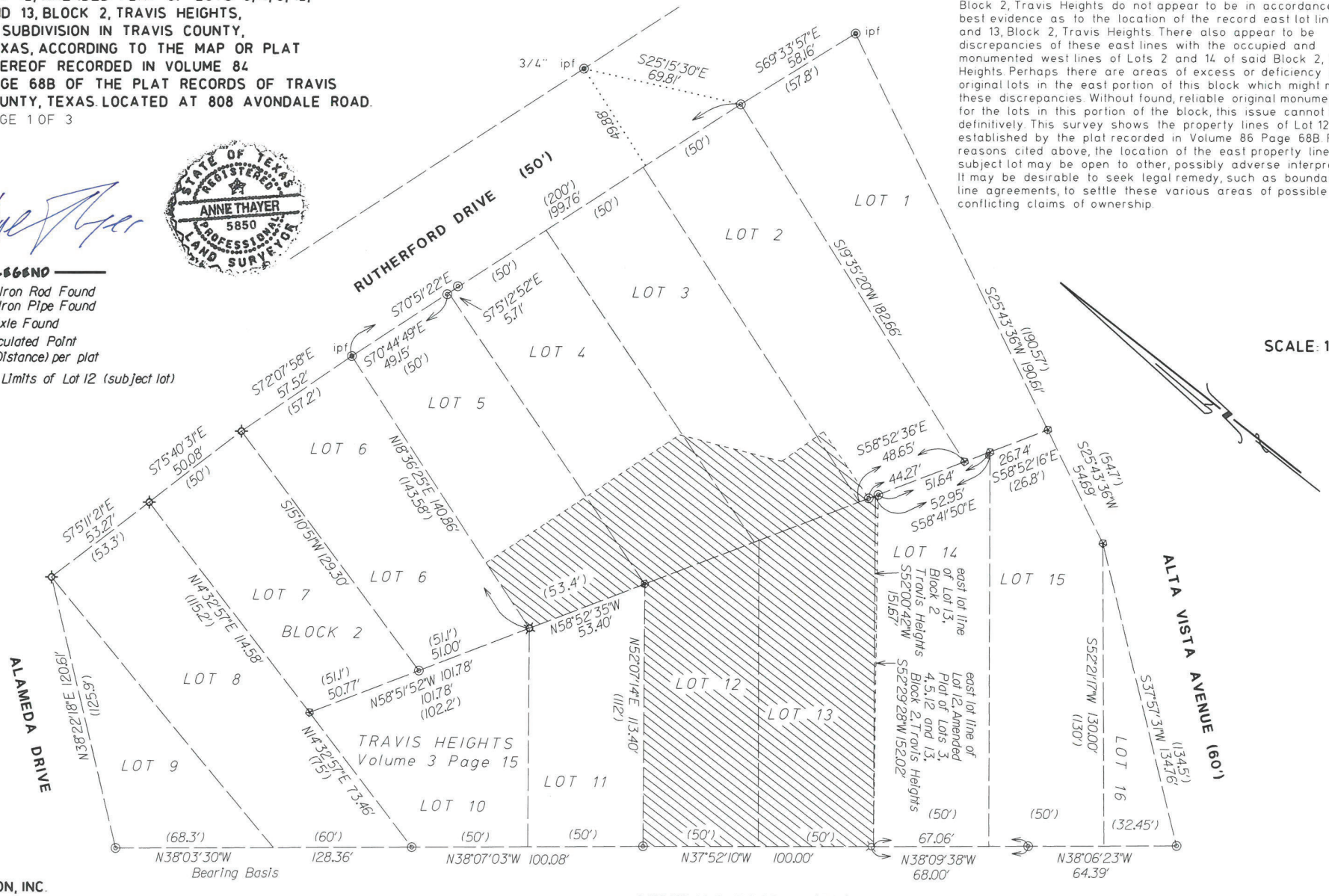
STATE OF TEXAS
REGISTERED
ANNE THAYER
5850
PROFESSIONAL
LAND SURVEYOR

SURVEYOR'S NOTE

The east lot lines of Lot 12, Amended Plat of Lots 3, 4, 5, 12, and 13, Block 2, Travis Heights do not appear to be in accordance with the best evidence as to the location of the record east lot lines of Lots 3 and 13, Block 2, Travis Heights. There also appear to be discrepancies of these east lines with the occupied and monumented west lines of Lots 2 and 14 of said Block 2, Travis Heights. Perhaps there are areas of excess or deficiency in the original lots in the east portion of this block which might may explain these discrepancies. Without found, reliable original monumentation for the lots in this portion of the block, this issue cannot be solved definitively. This survey shows the property lines of Lot 12 as established by the plat recorded in Volume 86 Page 68B. For the reasons cited above, the location of the east property line of the subject lot may be open to other, possibly adverse interpretation. It may be desirable to seek legal remedy, such as boundary line agreements, to settle these various areas of possible conflicting claims of ownership.

LEGEND

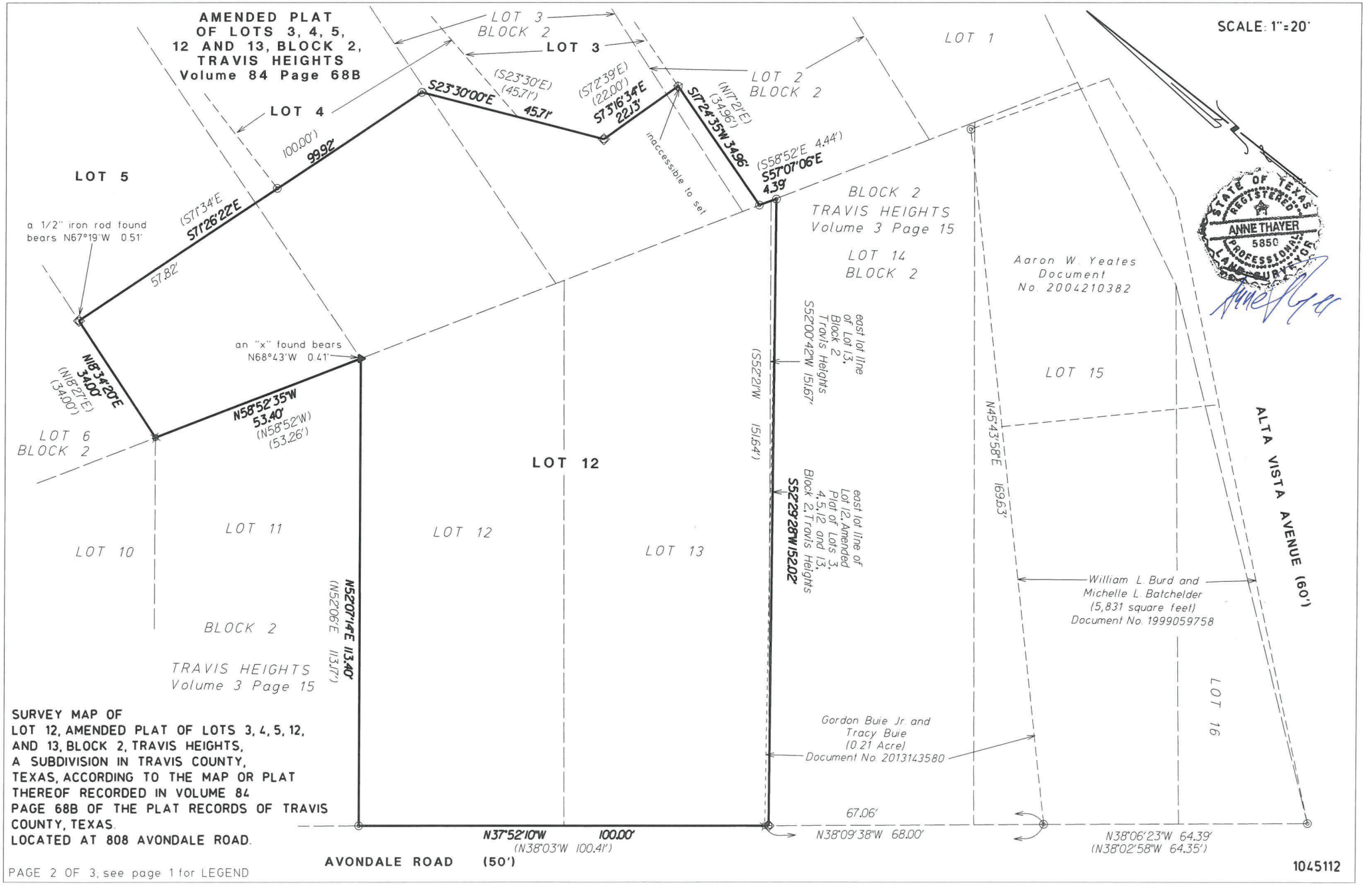
- ◎ ½" Iron Rod Found
- ipf ◉ ½" Iron Pipe Found
- ⊹ Axle Found
- ⊛ Calculated Point
- (Record Distance) per plat
- Limits of Lot 12 (subject lot)



HOLT CARSON, INC.
1904 FORTVIEW ROAD
AUSTIN, TX 78704
(512) 442-0990

1045112

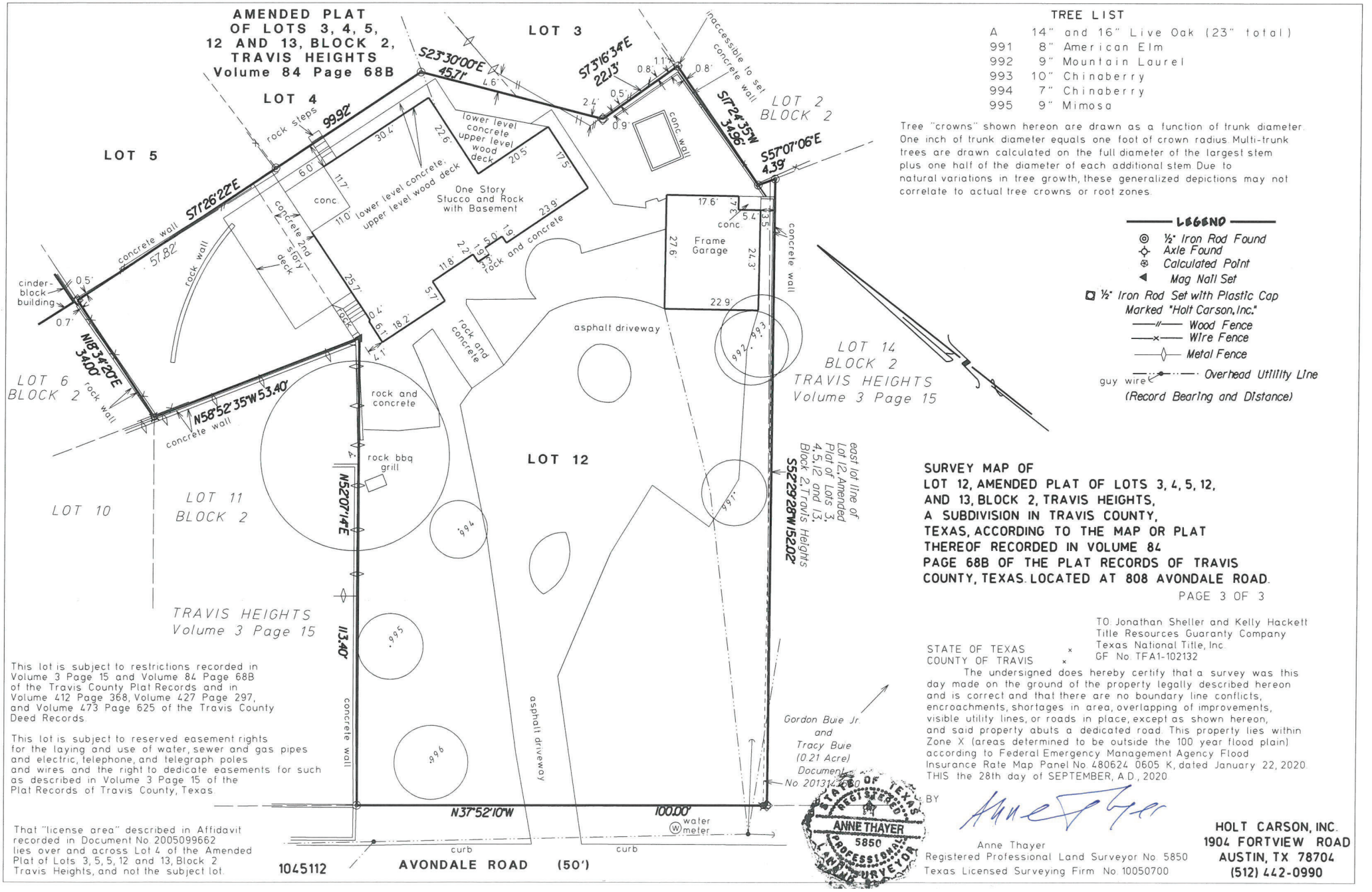
Texas Licensed Surveying Firm No. 10050700



SURVEY MAP OF
LOT 12, AMENDED PLAT OF LOTS 3, 4, 5, 12,
AND 13, BLOCK 2, TRAVIS HEIGHTS,
A SUBDIVISION IN TRAVIS COUNTY,
TEXAS, ACCORDING TO THE MAP OR PLAT
THEREOF RECORDED IN VOLUME 84
PAGE 68B OF THE PLAT RECORDS OF TRAVIS
COUNTY, TEXAS.
LOCATED AT 808 AVONDALE ROAD.

PAGE 2 OF 3, see page 1 for LEGEND

1045112



TREE LIST

A	14" and 16" Live Oak (23" total)
991	8" American Elm
992	9" Mountain Laurel
993	10" Chinaberry
994	7" Chinaberry
995	9" Mimosa

Tree "crowns" shown hereon are drawn as a function of trunk diameter. One inch of trunk diameter equals one foot of crown radius. Multi-trunk trees are drawn calculated on the full diameter of the largest stem plus one half of the diameter of each additional stem. Due to natural variations in tree growth, these generalized depictions may not correlate to actual tree crowns or root zones.

LEGEND

- ½" Iron Rod Found
- Axle Found
- Calculated Point
- Mag Nail Set
- ½" Iron Rod Set with Plastic Cap Marked "Holt Carson, Inc."
- Wood Fence
- Wire Fence
- Metal Fence
- Overhead Utility Line
- guy wire
- (Record Bearing and Distance)

This lot is subject to restrictions recorded in Volume 3 Page 15 and Volume 84 Page 68B of the Travis County Plat Records and in Volume 412 Page 368, Volume 427 Page 297, and Volume 473 Page 625 of the Travis County Deed Records.

This lot is subject to reserved easement rights for the laying and use of water, sewer and gas pipes and electric, telephone, and telegraph poles and wires and the right to dedicate easements for such as described in Volume 3 Page 15 of the Plat Records of Travis County, Texas.

That "license area" described in Affidavit recorded in Document No. 2005099662 lies over and across Lot 4 of the Amended Plat of Lots 3, 5, 5, 12 and 13, Block 2 Travis Heights, and not the subject lot.

SURVEY MAP OF LOT 12, AMENDED PLAT OF LOTS 3, 4, 5, 12, AND 13, BLOCK 2, TRAVIS HEIGHTS, A SUBDIVISION IN TRAVIS COUNTY, TEXAS, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN VOLUME 84 PAGE 68B OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS. LOCATED AT 808 AVONDALE ROAD.

TO: Jonathan Sheller and Kelly Hackett
Title Resources Guaranty Company
Texas National Title, Inc.
GF No. TFA1-102132

STATE OF TEXAS ×
COUNTY OF TRAVIS ×

The undersigned does hereby certify that a survey was this day made on the ground of the property legally described hereon and is correct and that there are no boundary line conflicts, encroachments, shortages in area, overlapping of improvements, visible utility lines, or roads in place, except as shown hereon, and said property abuts a dedicated road. This property lies within Zone X (areas determined to be outside the 100 year flood plain) according to Federal Emergency Management Agency Flood Insurance Rate Map Panel No. 480624 0605 K, dated January 22, 2020. THIS the 28th day of SEPTEMBER, A.D., 2020.

BY

STATE OF TEXAS REGISTERED ANNE THAYER 5850 PROFESSIONAL LAND SURVEYOR

Anne Thayer
Registered Professional Land Surveyor No. 5850
Texas Licensed Surveying Firm No. 10050700

HOLT CARSON, INC.
1904 FORTVIEW ROAD
AUSTIN, TX 78704
(512) 442-0990


808 Avondale Rd
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VER CITY
Norw
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