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SMS Engineering, LLC
P.O. Box 927
Katy, Texas 77492

February 26, 2021

REPORT OF FINDINGS

RESIDENTIAL INSPECTION
23002 GREYSTONE HERITAGE LANE
KATY, TEXAS 77493

Prepared for:
CLIENT: KAREN & DANIEL WILSON
23002 GREYSTONE HERITAGE LANE
KATY, TEXAS 77493

S. M. Schilder, P.E.
Texas Reg. No. 67203

Attn: Karen and Daniel Wilson
23002 Greystone Heritage Lane
Katy, Texas 77493

Re: 23002 Greystone Heritage Lane
Katy, Texas 77493

Subject: Foundation Inspection

Dear Karen and Daniel:

The requested field investigation of the residence located at 23002 Greystone Heritage Lane in Katy, Texas was performed by SMS Engineering (SMSE), on 02-24-2021.

General dimensions, readings and photographs were taken to document my observations. All photographs are available for review. No testing was performed as part of this investigation. This report will not reflect all conditions in and around the residence but will demonstrate typical conditions observed.

The purpose of the inspection was to assess the condition of the foundation.

The opinions contained in this report are based on my onsite observations, my education as an architectural engineer, my analysis of onsite readings, and my experience and training as a licensed structural engineer.

A Residential Appraisal report produced by RLB, real estate appraisers, dated 01-29-2021 was provided for my use.

For the purposes of this report, the residence faces south.

EXECUTIVE SUMMARY

It is my opinion that the structural integrity of this foundation is sound. All elevation survey readings were well within acceptable parameters. No evidence of differential foundation movement was observed anywhere inside the residence.

- Very minor and possible evidence of early differential movement was observed at an expansion joint near the center line at the east brick veneer.
- Very minor and possible evidence of early differential movement was observed at a vertical brick crack below a window opening at the midline of the west brick veneer.
- A vertical crack in the face of the grade beam at the midline of the residence is a common concrete shrinkage crack and is not related to differential movement in the foundation.
- In my opinion this house overall is in excellent condition.

DESCRIPTION

This structure was built in 2014 according to the Harris County Appraisal District (HCAD). The current owner purchased the townhouse in 2014 and has been the sole owner and occupant since that time according to HCAD.

This residence is a one-story structure of wood frame construction. The exterior finish is masonry. Brick expansion joints were observed all around the residence at the masonry veneer. The roof is composition shingle. A two-car attached garage is at the south west corner. The foundation is a post tension slab on grade. A swimming pool is in the back yard to the north east of the residence.

The landscaping is mature and well maintained. An irrigation system was evident and according to the owner, functional. Drainage around the residence appears to be adequate.

The interior walls are sheetrock. The interior floors are a mix of tile and carpet. Both the interior and exterior appear to be very well maintained and in excellent condition for a house of this type, age and location.

OBSERVATIONS

No visual observations indicating differential foundation movement were observed at the interior. All interior finishes were pristine.

At the east exterior brick veneer, an expansion joint near the midline of the residence was showing very minor evidence of foundation movement. The joint had separated fractionally in the upper half causing the caulk to lose its adhesion.

At the west exterior grade beam, a small vertical crack was observed at the face of the grade beam. Due to the type, size and location, this crack is defined as a common shrinkage crack and is not related to differential movement in the foundation.

At the west exterior brick veneer, a small, roughly vertical crack extended from the bottom left hand corner of a window down to the foundation. This crack is near to the midline of the residence. Due to the size, shape and location of this crack, it could not be determined if the crack was related to minor foundation movement or if the crack is a masonry shrinkage crack related to temperature and moisture changes in the brick veneer.

An elevation survey was produced using a Technidea ZipLevel®. No baseline survey was available that would indicate the differential amount of movement over time. For this reason, the cosmetic evidence of movement shall be combined with elevation readings to make final determinations. The elevation survey was produced on 02-24-21 by SMSE and a copy is attached. All elevation survey measurements were well within normal tolerances. The only trend appears to be a slightly elevated area around the midline of the residence and near to the hall bath. Although the elevated readings in this area are minor, this may be an indication of a leak in the sanitary sewer system. Sanitary sewer leaks will add moisture to the soils below the foundation and may result in a lifted or raised area in the foundation.

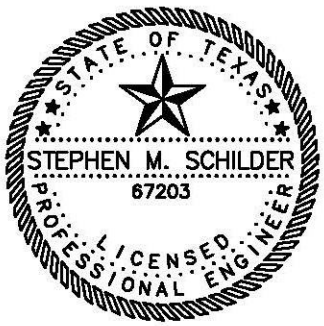
CONCLUSIONS & RECOMMENDATIONS

It is my opinion that this foundation is in very good condition based on the lack of visual evidence of movement combined with a nearly flat and level foundation surface.

As noted above a leak test of the sanitary sewer system may be considered. Although sanitary sewer leaks are fairly rare in relatively new houses such as this one, the tests are fairly inexpensive and may rule out an ongoing issue.

Should you have any questions or need any additional information, please feel free to call.

Sincerely



Steve Schilder, PE

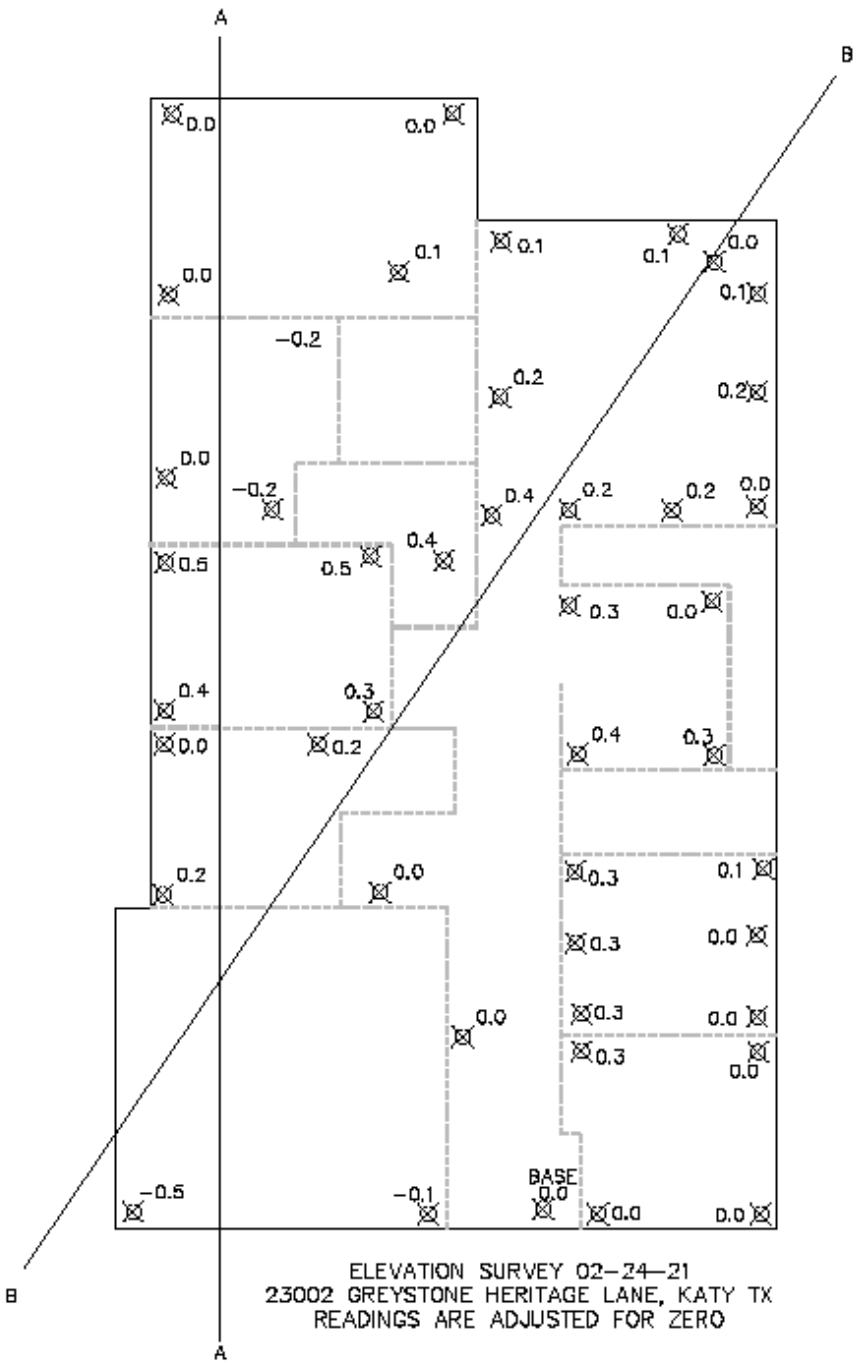
DISCLAIMER

The above-submitted analysis and opinions are based on information provided by others, our visual observations, applicable scientific criteria, generally accepted engineering principles, and the personal and professional knowledge and experience of the engineer in the forensic analysis of foundations, building components, and systems of residential structures. Such an inspection cannot detect all existing or potential defects and it should therefore be understood that future conditions affecting items discussed in this report cannot be predicted since they are all subject to change. Testing would be required to determine if other factors play a role in the movement below this foundation. The scope of this report extends only to items related to the foundation of the residence. Further, this engineering report should not be considered a warranty or guarantee of any kind.

This inspection was performed following generally accepted engineering principles, practices and guidelines. Conclusions presented in this report are based on information provided by the client, by visual observations, and by other sources. Because of the limited nature of this inspection, SMS Engineering can make no representation regarding the possibility of concealed defects. This report is based upon information available to us at this time. Should additional information be presented or discovered, we reserve the right to review, and, if necessary, revise this report and our conclusions in light of the new information. No testing has been performed as a part of this inspection. Only visual observations have been made at this time.

General dimensions and photographs were taken to document our observations. All photographs are available for review. Access to certain features was limited.

This report was prepared for the exclusive use of the client and is not intended for any other purpose. SMS Engineering assumes no responsibility whatsoever for the unauthorized use of this report by a third party.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ELEVATION SURVEY 02-24-21
23002 GREYSTONE HERITAGE LANE, KATY TX
READINGS ARE ADJUSTED FOR ZERO