REPORT # YYLGL-MMDDP

DATE OF INSPECTION: MM/DD/YYYY (09:00 AM)

A RESIDENTIAL PATIO HOME LOCATED AT

5678 ANYWHERE, ANY CITY, TX 77123

FOR MR. & MRS. HOMEOWNERS (CLIENTS-OWNERS)

BY

JITENDRA M. VARMA, PE
Licensed Professional Structural Engineer

WE, DO ENVIRONMENTAL (TRANSACTIONAL SCREENING, PHASE I & PHASE II ASSESSMENT) & ALL TYPES OF COMMERCIAL INSPECTIONS (NEW & EXISTING APARTMENT/CONDOMINIUM/TOWNHOUSE COMPLEXES, OFFICE/WAREHOUSE/FREE STANDING/RESTAURANT/CONVENIENT STORE BUILDINGS, STRIP/SHOPPING CENTERS AND INDUSTRIAL BUILDINGS). YES, WE DO, REGULAR HOME (STRUCTURAL & MECHANICAL INSPECTIONS, TERMITE INSPECTIONS, NEW CONSTRUCTION (PHASED), ELECTRO-MAGNETIC FIELD (EMF), EIFS (ARTIFICIAL STUCCO), THERMAL IMAGING (INFRARED), COMMERCIAL, ENVIRONMENTAL, POST-CATASTROPHIC EVALUATIONS, & MANY OTHER INSPECTIONS INCLUDING “NACA” INSPECTIONS. WE PROVIDE MANY OTHER INSPECTIONS & SPECIALIZED SERVICES ON REQUEST.

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LET THIS BE YOUR FIRST & LAST STOP.
REPORT NO: YYLGL-MMDDP

FOUNDATION INVESTIGATIVE REPORT

Inspected for: **Mr. & Mrs. HOMEOWNERS (Client-Home Owners)**

Subject Property: **5678 Anywhere, Any City, TX 77123**

I was requested to visit the subject property on MM DD, YYYY at 09:00 a.m. Here are my observations on the following:

**WEATHER CONDITIONS:**

Partly cloudy at the time of investigation. Temp. 87 F. Site-specific soil data were not available.

**DIRECTION DESIGNATIONS:**

As facing the investigated property from the main driveway: Front Right Rear Left.

For the purpose of discussions and reporting, front was facing West.

**PERSONS PRESENT:**

Mr. Homeowner

**PROPERTY DESCRIPTION:**

The property was located in **the City of Any, TX**. The property comprised of a one & one-half story wood framed patio home with an attached 2-car garage on front right side of the house. This wood-framed property had a grade beam & slab foundation for the garage, and perimeter wall with interior block/beam foundation for the house. It had composition shingled roof. Brick veneer and siding provided cladding for the property. Property was occupied at the time of inspection limiting inspection to some extent. I was given to understand that there were foundation repairs done recently. The purpose of conducted survey was a “Fact finding mission” to investigate if the repair work was properly and adequately performed or not.
FOUNDATION INVESTIGATIVE REPORT (Contd.)

GENERAL & DISCLAIMERS:

In the conduct of this work, Foresight Engineering & Inspections LLC. has acted as an engineering consultant to provide visual observations and opinions with regard to the visible conditions of the structure of this building or any component thereof (as requested & authorized by the Client). Recognizing that latent defects could exist which inherently may not be detected during an inspection of this type, Foresight Engineering & Inspections, LLC. does not represent that the observations described herein and their analysis thereof represent every structural condition that may exist. Any condition not apparent visually at the time of investigation or any component not readily accessible for investigation is not reported. Structural items not specifically noted as investigated in this report are not covered by this report and are not to be assumed good or bad by lack of notation.

No attempt was made for removal of coverings, disassembly, unloading or removal. It is extremely possible that latent defects could be discovered if these structural coverings were to be removed, during remodeling, for example. The purpose of this investigation was to report any conditions which could be an indication that one of those structural components, listed in the inspection Agreement & Contract, was either failing to perform the intended function or was in need of immediate repair. The items described in this report are the author’s opinion of the visible conditions, as they existed at the time of investigation, and nothing more. The Client may rely on these opinions, only to the extent of the limitations used in their formulation. It is entirely possible that another individual inspecting this property might have differing opinions than those cited in this report. Further, it is also the nature of residential construction in the greater Houston area for the condition of the building to change, often over a short period of time. No verbal statements made at the time of the field investigation are to be considered a part of this investigation or this report. The information contained in this report takes precedence over any communications that might have occurred prior to issuing this report.

It is emphasized that the purpose of this report is to better inform you, as a client on the subject property, of conditions existing at the time of the investigation as I observed them, with no representation or warranty as to the efficiency or future life of the structure, foundation or any component thereof. Opinions relating to compliance with specifications, legal, and/or Code requirements and/or restrictions of any kind are specifically excluded by this investigation.

Foresight Engineering & Inspections, LLC. does not assume any responsibility whatsoever for any action(s) that may or may not be done as a result of information provided during the investigation, and for the existence of any latent defects that were not amenable to visual detection during this investigation, for items not specifically identified in this report as having been investigated, for changes that occur in items subsequent to this investigation, for the structure that has deteriorated because of wood destroying insects &/or organisms, or opinions expressed by others that may differ from those expressed in this report. Finally, this report is written to satisfy the objectives of you, as our Client. **No warranty, either expressed or implied, is hereby made and the Client waves all warranties, except for such waivers or disclaimers that may be prohibited by law. Every user of this report is bound by this understanding of “No warranty &/or liability”.**

In using this report, the Client further agrees, except as may be limited by law, that there are no other agreements or understandings concerning the standard, grade quality, or amount of services provided by Foresight Engineering & Inspections, LLC., other than what is contained in this report or the inspection Agreement & Contract. Finally, no other representations &/or statements have been made that this report and the inspection Agreement & Contract include rights, remedies or obligations which are not contained in these instruments. Neither the author of this report nor Foresight Engineering & Inspections, LLC. jointly or severely assumes any responsibility whatsoever for the use of this report, or the information contained herein, by any third party person.
FOUNDATION INVESTIGATIVE REPORT (Contd.)

SCOPE OF WORK & LIMITATIONS:

I was given to understand that original foundation repair was done by ABC Foundation repair in late MM YYYY or thereabouts and additional work in MM of YYYY.

Mrs. Homeowner was unhappy with the work and retained the services of Foresight Engineering & Inspections, LLC to conduct a survey to assess if the performed foundation repairs were adequately and properly conducted or not.

I would like to further state that my investigation was strictly limited to the foundation repairs.

To that end, Foresight Engineering & inspections, LLC &/ or inspector(s) &/or the author of this report jointly or severely carry or assume no responsibility &/or liability of any kind. No warranty, either expressed or implied, is hereby made. Every user of this report is bound by this understanding & agreement of “NO WARRANTY &/OR NO LIABILITY”.

FOUNDATION INVESTIGATIVE REPORT (Contd.)

INTERVIEW WITH THE CLIENT

I interviewed the client (Mrs. Homeowner) on the phone and following information was released by her, by email to me. She informed me the following:

1. The clients signed a contract with the contractor ABC Foundation Repair, on MM DD, YYYY.
   See Exhibit A.
2. On or around MM DD, YYYY, client was provided with a house footprint showing pier layout with installed piers 1 through 19. See Exhibit B.
3. On MM DD, YYYY, additional 6 piers were installed in addition to 3 floor joists (Exhibit C).
4. The client indicated that there were floor slopes and soft areas below flooring.

EXHIBITS:

Following exhibits are included at the tail end of the report and become a part of this report by reference:

Exhibit "A"       ABC Foundation Repair’s contract dated MM DD, YYYY.
Exhibit "B"       ABC Foundation Repair’s foundation footprint dated MM DD, YYYY.
Exhibit "C"       ABC Foundation Repair contract dated MM DD, YYYY.
Exhibit “D”       Photos by the Author of the Report
Exhibit "E"       Inspector’s Profile.
FOUNDATION INVESTIGATIVE REPORT (Contd.)

OBSERVATIONS

A photo of condition basically communicates that similar issue may be present in nearby areas and were cited in this report but photos not included to keep this report concise and easy to less complicated.

I will break down my observations as exterior, interior and crawl space of the house.

EXTERIOR:

1. Trees were observed too close to foundation on backside with roots under the foundation.

2. There was a ¼” crack stepped crack in brick veneer under the back bedroom window. See photo #01.

3. Photo #02 showed access opening to crawl space which measured 18”X18”, which could not be entered as the access opening in floor or perimeter wall was not sufficient to safely enter the crawl space. Common industry practice (and also current IRC Code References: 408.4 Access) recommends a minimum size of 18” high X 24” wide.

4. Perimeter wall was present on all 4 sides of the house supporting the structure. See photo #03.

5. Storage and decking prevented survey of the foundation in some areas, however, exposed areas were discovered to be in fairly good condition.
FOUNDATION INVESTIGATIVE REPORT (Contd.)

INTERIOR:

1. Front door was binding and was hard to open and close.

2. Passenger door to garage was ghosting.

3. Drywall cracks around door openings and vertical tape warping were observed in front bedroom. See photo # 04.

4. Flooring appeared be spongy soft under the front bedroom door. See photo #5.

Condition of slab could not be ascertained due to presence of flooring materials in the house except in front bedroom where subfloor was removed in front bedroom where a new floor joist was installed butting up against the existing floor joists (photo #6), and the garage slab which appeared to be in good condition with only star like non-structural cracks in the slab.

Compulevel (an electronic digital level) was set near front left corner of the family room on wooden floor. This location was used as a reference point for taking relative micro elevations of the first floor at selected locations in different areas of the first floor. No elevations were observed in the garage as its floor is poured to slope to the exterior for drainage purposes. The Compulevel was set at zero at this location. Accuracy of Compulevel was verified by checking elevations of the reference point several times during the elevation survey and observed to be 0". Micro elevations were adjusted for different flooring materials.

The relative micro-elevations vary from a high of +1.7” near front right inside corner of house (washing machine) to -0.7” near front left inside corner and exterior back left corner of the front bedroom. Other salient elevations were -0.3” near back left corner of back bedroom, +1.0” & +1.6” near back & front right corners of family room, +0.8” near front left corner of kitchen, and -0.5” between commode & tub in hall bathroom.
FOUNDATION INVESTIGATIVE REPORT (Contd.)

CRAWL SPACE:

Lack of sufficient access to crawl space limited survey of the crawl space area, and hence, it was observed by sticking head into the access opening and shining a flash light. Following observations were made:

1. No signs of foundation repairs, such as disturbed soil or humped fill, were observed along outside or inside of back wall of the house. See photo #s 7 and 8. There should be at least 5 such locations along this wall.

2. Improper supporting material used for the blocks. See photo #09. 6”X12” cylinders used with arrows pointing to them, instead of conventional 8”X16” solid concrete blocks in other areas.

3. Beam joint was not properly braced from the sides with like size short pieces to prevent from getting separated and twisted. See photo #10.

4. End of the beam was overhanging the support on the side. See photo #11.

5. No signs of foundation repairs, such as disturbed soil or humped fill, were observed along outside right & left walls of the house. See photo # 12 along left wall. There should be at least 5 such exterior locations along the left wall and 2 along right wall.

6. No signs of foundation repairs, such as disturbed soil or humped fill, were observed along inside of right wall of the house. See photo # 13. There should be at least 2 such locations along interior this wall.
FOUNDATION INVESTIGATIVE REPORT (Contd.)

CONCLUSIONS

Following conclusions are drawn from above observations:

1. Exhibit “B” indicated that piers 1 through 19 were installed on MM DD, YYYY, however, upon inspection there were no signs of such repairs were observed on the exterior or interior.

2. The quality of workmanship was poor.

3. Use of improper materials was observed.

4. The brick/mortar rack on the backside did not close as it should have by proper leveling work.

5. Improper leveling (if it was ever done), also, indicated by micro-elevation survey. See page 7.

6. Improper leveling (if it was ever done), also, indicated by sticking and ghosting doors. See page 7.

In my professional opinion, the workmanship was substandard and of poor quality. It further appeared that the contracted work was not adequately and fully performed by the by the contractor agreed to.
FOUNDATION INVESTIGATIVE REPORT (Contd.)

CERTIFICATION

I certify that I personally performed a limited visual, minor intrusive and non-destructive investigation for foundation at the subject property on the stated dates. I have properly reported our findings and conclusions based on my observations and experience. I further certify that the information contained in this report is based solely on evidence and that no attempt was made to investigate any latent defects not readily detectable from limited visual, minor intrusive and non-destructive survey. Foresight Engineering and Inspections, LLC. &/or the investigating engineer assume no responsibility &/or liability for events that occur subsequent to the date and time of inspection &/or submission of this report. No warranty, either expressed or implied, is hereby made. Every user of this report is bound by this understanding & agreement of “NO WARRANTY &/OR NO LIABILITY”.

Thank you for choosing Foresight Engineering on this important assignment. We appreciate your business and look forward to working for you in future.

Digitally signed by Jitendra M. Varma

MSC & UE, CPI, GQMI, CFIP, EAC, PE/CEL, ESC, CMII, LRA, PE.
Licensed Professional Structural Engineer

Dated MM DD, YYYY

IMPORTANT NOTE: The seal appearing above was authorized by Jitendra M. Varma, P.E. 38703 on August 31, 2016. Alteration of a sealed document without written approval of the responsible engineer is a criminal offence under the Texas Engineering Practice Act. The signature on this document & this document can be validated by contacting Foresight Engineering & Inspections, LLC. The signature and subsequently this document are no longer valid if any unauthorized modifications are made to it.

The receipt, use a/er dissemination of this report, any copies or portions thereof, or use of any information contained in this report binds Customer(s) &/or User(s) to this report to the terms & conditions of the “Real Estate Inspection Agreement & Contract” whether signed or not. Usage of this report in any form or fashion shall indicate the Customer(s) &/or User(s)’s acceptance to the terms & conditions of the “Real Estate Inspection Agreement & Contract” and shall be treated the same as though the Agreement & Contract was in fact signed by the Customer(s), their representative(s) or User(s). A copy of “Real Estate Inspection Agreement & Contract” can be furnished on request.

“DO NOT USE THIS REPORT IF YOU DO NOT AGREE TO THE ABOVE CONDITION”
EXHIBITS
EXHIBIT "A"

CLIENT FURNISHED CINFORMATION
FOUNDATION REPAIR

PROPOSAL/CONTRACT

DATE: __________

SUBMITTED TO: ______________________________

NAME: ___________________________ Address: ___________________________

CITY/STATE: ___________________________ ZIP: ___________________________

PHONE#: ___________________________

LENGTH OF TIME TO COMPLETE WORK: WITHIN 2 WEEKS FROM START DATE.

WE PROPOSE TO FURNISH THE FOLLOWING MATERIALS AND EQUIPMENT TO PERFORM ALL LABOR NECESSARY TO COMPLETE THE FOLLOWING WORK:
- Install 10 piers, level house, add 48” x 48” of oak beam with pads,
- and replace 8- 2x12x10 floor joist.
- Not responsible for any plumbing.
- Includes 15yr warranty on pier installed, transferrable

ALL MATERIAL IS GUARANTEED TO BE AS SPECIFIED. THE ABOVE WORK IS TO BE PERFORMED IN ACCORDANCE WITH SPECIFICATIONS SUBMITTED AND COMPLETED IN A SUBSTANTIAL WORKMANLIKE MANNER FOR SUM OF:

$5845.00

WITH PAYMENTS MADE AS FOLLOWED:

Total Due: $5845.60
Deposit: $200.00 - Paid cash
Balance: $5645.00 (Due upon completion of work)

Respectfully Submitted By,
Contractor: ___________________________ Phone: ___________________________

Acceptance:
Foundation repair are hereby authorized to furnish all materials, equipment and labor required to complete the work described and discussed in the above proposal, for which the undersigned agrees to pay the total amount stated in said proposal and according to the terms thereof.

Customer Date Representative Date

0

(permit)
EXHIBIT "B"

CLIENT FURNISHED INFORMATION
Piers #1-19 installed 3/16/16

New work done 4/29/16
Added 5 piers and 4x6 beam (Highlighted)

Exhibit B
EXHIBIT "C"

CLIENT FURNISHED
CINFORMATION
FOUNDATION REPAIR

PROPOSAL/CONTRACT

DATE:

SUBMITTED TO:
NAME: __________________ Address: __________________

CITY/STATE: _______________ ZIP: _______________

PHONE#: __________________

LENGTH OF TIME TO COMPLETE WORK: 2 days

WE PROPOSE TO FURNISH THE FOLLOWING MATERIALS AND EQUIPMENT TO PERFORM ALL LABOR NECESSARY TO COMPLETE THE FOLLOWING WORK:
- Foundation & new pier and 3 flour jack.

ALL MATERIAL IS GUARANTEED TO BE AS SPECIFIED. THE ABOVE WORK IS TO BE PERFORMED IN ACCORDANCE WITH SPECIFICATIONS SUBMITTED AND COMPLETED IN A SUBSTANTIAL WORKMANLIKE MANNER FOR SUM OF: $1550.00.

WITH PAYMENTS MADE AS FOLLOWS:

Total Due: $1550.00

Deposit: $0

Balance: $1550.00 (Due upon completion of work)

Respectfully Submitted by,
Contractor: __________________ Phone: __________________

Acceptance:
Foundation repair are hereby authorized to furnish all materials, equipment and labor required to complete the work described and discussed in the above proposal, for which the undersigned agrees to pay the total amount stated in said proposal and according to the terms thereof.

Customer __________________ Date __________________

Representative __________________ Date __________________

EXHIBIT "C"
EXHIBIT "D"
SITE PHOTOS
(TAKEN ON MM DD, YYYY)
BY THE AUTHOR OF THE REPORT
PHOTO 07

PHOTO 08
PHOTO 11

PHOTO 12
EXHIBIT "E"
INVESTIGATING CONSULTANT’S QUALIFICATIONS
PROFILE

JITENDRA (VICTOR) M. VARMA

MSC & UE, PI, EAC, LREB, CRT, EIFSIP, LRA, ESC, EIFSII, CRMI, CPI, PE

LICENSES & CERTIFICATIONS

- Licensed Professional Structural Engineer
- Licensed Wood Destroying Insects Inspector
- Licensed Environmental Lead Risk Assessor (exp.)
- Licensed Real Estate Broker
- Certified Home Buyers Warranty Inspector (New Homes)
- Certified Environmental Assessment Consultant
- Certified EIFS (Synthetic Stucco) Industry Professional
- Certified Residential Mold Inspector (IESO)
- Third Party Structural Inspector (TRCC)
- Appointed Wind Code Engineer (Texas Dept. of Insurance)
- Certified Residential Thermographer
- Licensed Professional Real Estate Inspector (# 3864)
- Licensed Environmental Lead Risk Inspector (exp.)
- Certified Home Buyers Warranty Engineer (New Homes)
- Certified Air Conditioning & Heating Rep. Contractor (exp.)
- Certified Max Worldwide Home Assistance Program
- Certified Environmental Screening Consultant
- Certified EIFS (Synthetic Stucco) Independent Inspector
- Certified Mold & Healthy Home Inspector (Home Test Labs)
- Appointed Wind Code Inspector (Texas Dept. of Insurance) (exp.)
- Level 1 inspector (Post Tensioning Institute)

EDUCATION

- Masters of Science, Civil & Urban Engineering-University of Pennsylvania (Ivy League School)
- Bachelor of Science, Civil Engineering (India)

EXPERIENCE

- Over 35 Years Engineering and Inspection Experience in Commercial, Residential & Industrial Construction; Forensic Studies & Engineering; Construction Issues and Expert Testimony Work

AFFILIATIONS

(Past & Present)

- Secretary & Director of Houston Association Real Estate Inspectors (H.A.R.E.I.)
- American Institute of Steel Construction
- Foundation Performance Association
- American Concrete Institute
- Texas Association of Real Estate Inspectors
- National Association of Realtors
- Southern Council of Prof. Building Inspectors
- National Society of Environmental Consultants
- Indoor Environmental Standards Organization
- Southern Building Code Congress International
- Texas Professional Real Estate Inspectors Association
- American Society of Civil Engineers
- American Society of Construction Analysts
- Structural Engineers Organization of Texas
- Houston Inventors Association
- Texas Association of Realtors
- Houston Association of Realtors
- Better Business Bureau
- Environmental Solutions Association
- International Code Council
- Board Member of Foundation Performance Association

ALL OF OUR INSPECTORS ARE ENGINEERS

EXPERIENCE THE DIFFERENCE 😊 😊 😊 😊 😊 WE GO THE EXTRA MILE