



HEDDERMAN ENGINEERING, INC.

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Date

TO: Mr.

REF: CONDITION OF PROPERTY SURVEY - Foundation.

Dear Mr. :

At your request, I made a visual survey of the foundation of the house being constructed at , Houston, Texas.

Transmitted herewith is the inspection report stating my opinions on the quality of original workmanship of the items included in this inspection.

Thank you for asking HEDDERMAN ENGINEERING, INC. to perform this important inspection work for you. If you have any questions after reviewing this report, please feel free to call me at my office.

Sincerely,

HEDDERMAN ENGINEERING, INC.
Tim Hedderman, President



INTRODUCTION

PURPOSE

The purpose of the inspection was to view the components of the foundation before the concrete was placed, with the most significant deficiencies observed being pointed out for your consideration. These observations are made in order to provide a basis for the opinions which will be stated within the body of this report. Also, this report will include digital photographs for your information and records.

SCOPE

The scope of the inspection included limited, visual observations around the perimeter of the foundation, and at the interior of the slab.

Although this report may include observations of some code violations, total compliance with structural codes, specifications, and/or legal requirements are specifically excluded. Although this inspection was made by a Registered Professional Engineer, it cannot be considered to be a formal engineering study since no calculations, structural analysis, or physical material testing were performed. If engineering drawings/specifications have been made available during this inspection and if they have been viewed, it is pointed out that all such viewing is strictly cursory, and in no way should our cursory examination be

construed as providing engineering judgments concerning the adequacy or acceptability of the drawings/specifications.

FOR THE PURPOSES OF THIS INSPECTION, NORTH WILL BE ASSUMED TO BE FROM THE REAR OF THE FOUNDATION TOWARDS THE FRONT.

FOUNDATION

Observations

The foundation was essentially completed, and ready to place the concrete. The reinforcing tendons were installed, with supporting plastic chairs under the tendons.

We observed the following items during the course of our inspection, and it is recommended that you contact your builder to correct these items before the concrete is placed:

1. We observed that the drawings showed that the depth of the grade beams should be 16 inches. We checked the depth of the beam at several locations around the perimeter, and everywhere we checked, the depth was 26 inches.
2. Several of the tendons were not installed straight, but with curves in the tendons. When the tendons are stressed with approximately 33,000 pounds of pulling force, the curves will have a tendency to straighten out, introducing stresses into the slab. It is pointed out that these curves in the tendons are not the normal curves in the tendons for the interior and perimeter grade beams. Rather, these curves are typically from side to side in an "S" shape. The tendons need to be adjusted so that they are essentially in a straight line. (see photos below)





3. The PVC piping has been properly coated with mastic to break the bond between the PVC and the concrete.



4. The rebar was generally installed in a workmanlike manner, with adequate ties and support, and proper clearances to the sides of the forms. One exception to this was observed at the rear beam, where the rebar had only one inch of clearance to the side of the form, rather than the required two inches.



5. The plastic vapor barrier had a gap at the bottom of one of the grade beams, where dirt was visible due to the plastic not being lapped. An additional piece of plastic needs to be installed across the bottom of the beam.



6. The reinforcing steel has been installed in the concrete grade beams and at corners, where bars have been installed at a 45 degree angle to corners. (see photos below)



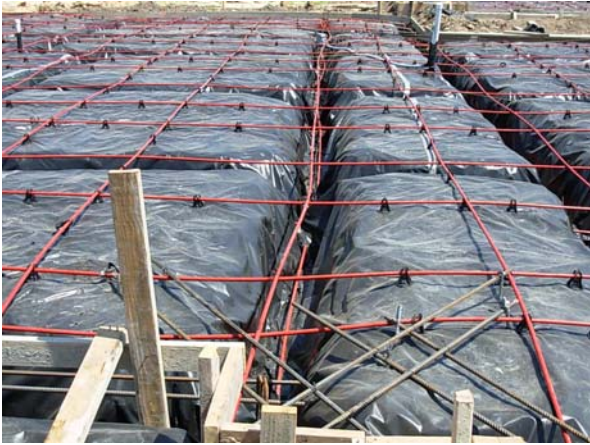
7. We observed a bundle of corner rebar that has apparently not been opened, and obviously not installed. Further investigation with your builder concerning the bars is recommended. (see photo below)



8. The underground sewer piping has been installed.



Additional photos for your information.





CONCLUSIONS

It is our opinion that the quality of workmanship evident in the construction of this foundation is good. The few deficiencies we found at the time of the inspection were minor and easy to correct, and it is recommended that you discuss these with your builder before the concrete is placed.

At your service,



Tim Hedderman
Registered Professional Engineer #51501
Texas Firm Number: 7942

The seal appearing on this document was authorized by Tim Hedderman, P.E. 51501. Alteration of a sealed document without proper notification to the responsible engineer is a violation under the Texas Engineering Practice Act.