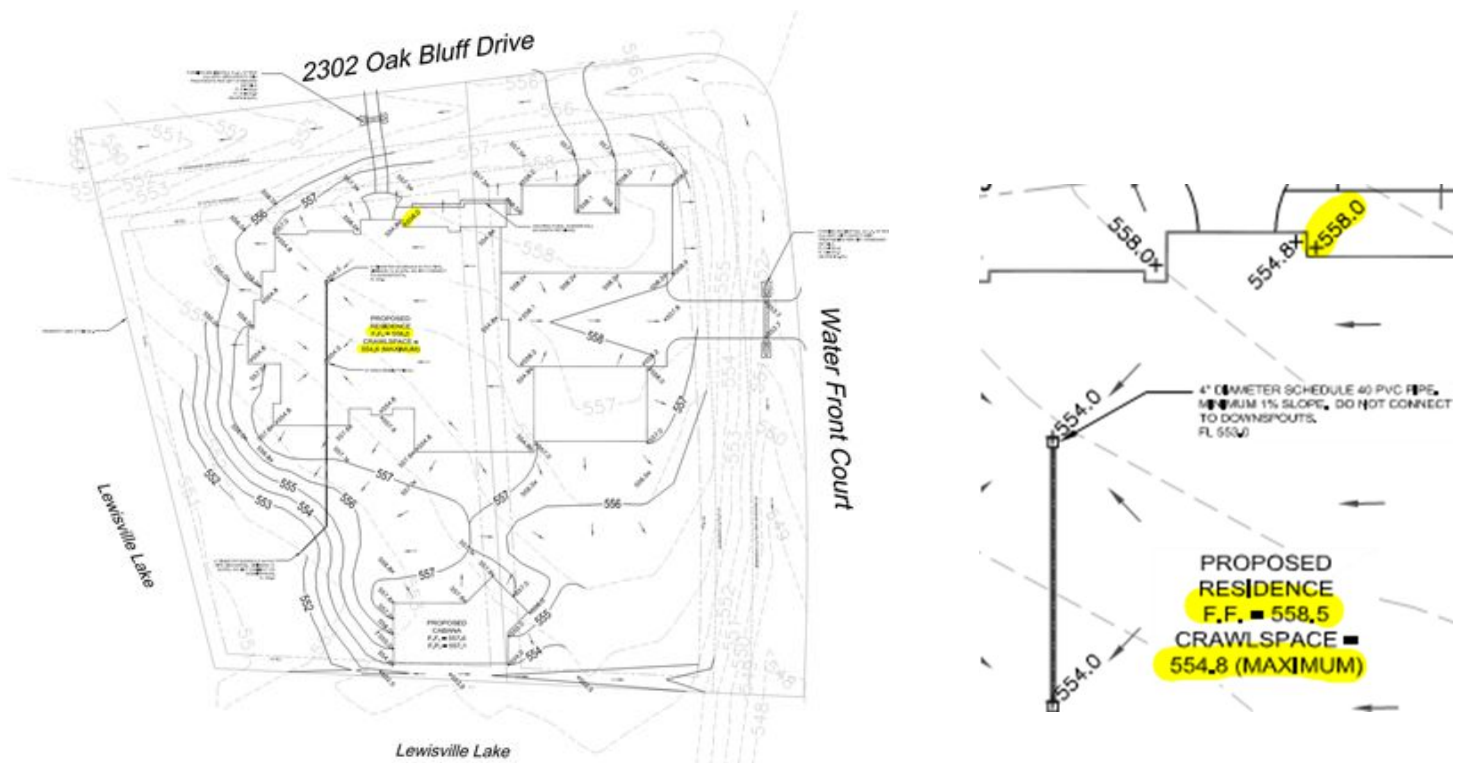


Case Study #2: Site Analysis

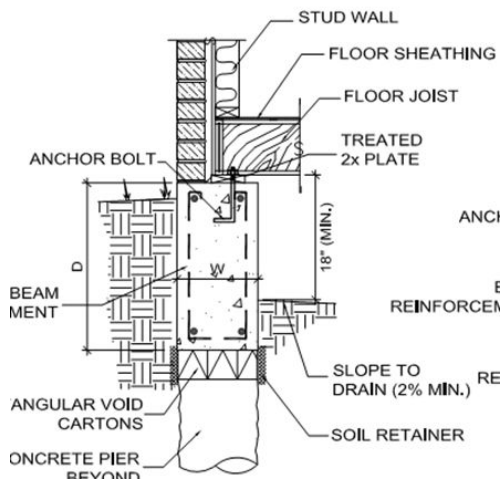
Client: The Victor Myers Companies, Dallas, Texas

Project: Client was provided site plan with existing topos, house location, and proposed contours. Concerned about the foundation type - to be a piling and grade beam foundation vs. normal slab type foundation. Foundation crews were starting soon and needed site analysis prior.

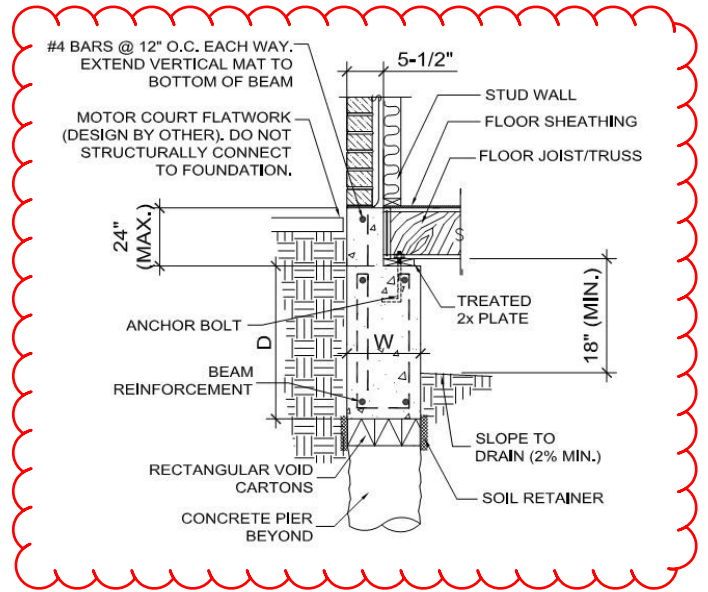
Drawings Provided: Proposed Site Plan containing existing and proposed contours



The immediate observation was that the finished floor elevation of the house was specified as 558.5' and the adjacent grade was 558'. This is a difference of only 6", but the foundation plan specified a stem wall with treated plate, 11-7/8" TJIs and 1-1/8" subflooring. This would mean backfilling ~8" of dirt against the wood band of the house. Obviously not desirable. The structural engineers were contacted immediately and the stem wall was detailed to include an inverted ledge, or ledge in the stem wall to the interior to bear the floor system upon, flushing subfloor with top of stem wall and allowing adjacent grade to be built up as originally specified. The image below shows the original detail for the stem wall.

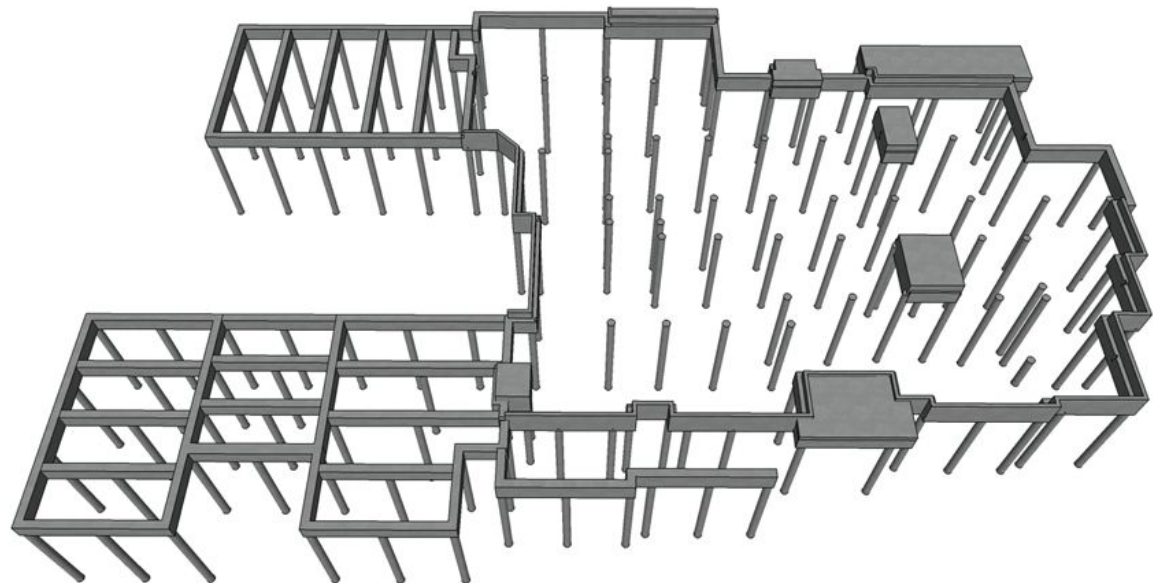
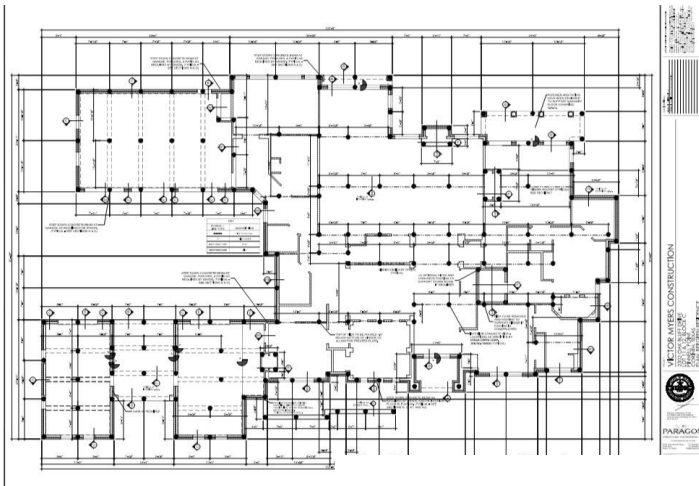


Original Stem Wall Detail

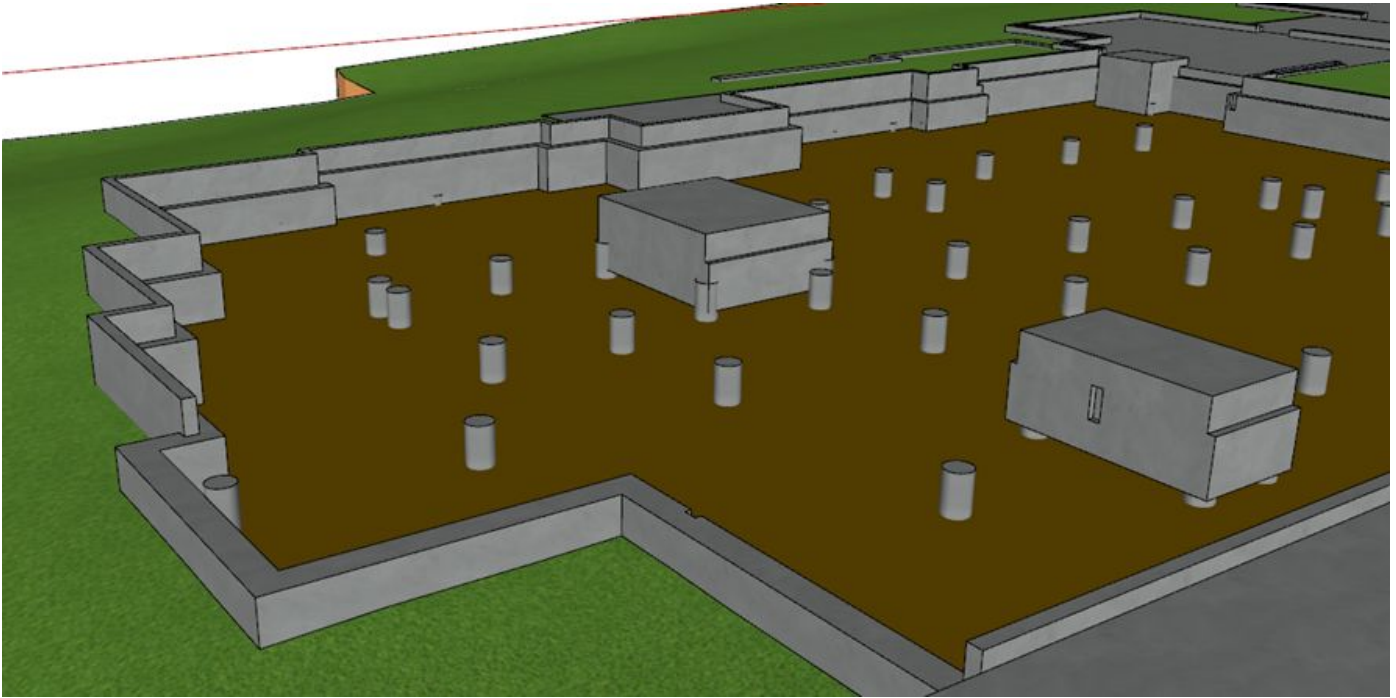


Revised Stem Wall Detail

Next: A 3D model of the pilings and stem walls was generated using the 2D drawings provided by the structural engineer.



The 3D model of the new foundation along with the proposed grading is shown below and was a valuable visual aid for the builder and the foundation crew.



The above-provided information saved this builder CONSIDERABLE MONEY and prevented a rather large mistake from occurring right from the start!