

Titan Hill Block Length Justification

There are several site constraints that make placing a roadway through the site to meet block length unfeasible.

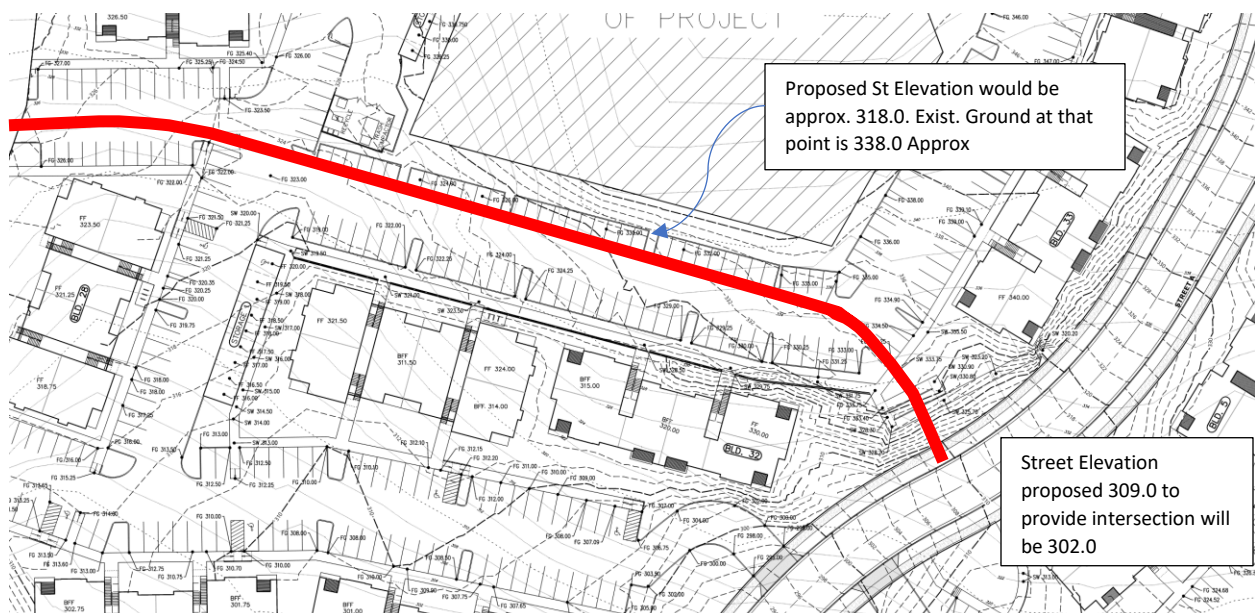
Topography

There is significant topography on this site. The elevation difference between Doaks Ferry and the location where the roadway would go is over 50 feet. Given the grade requirements of intersections as well as the maximum allowable street grade, the maximum elevation the proposed Street “A” would be 302.2, approximately 24 feet below the existing ground in this location.

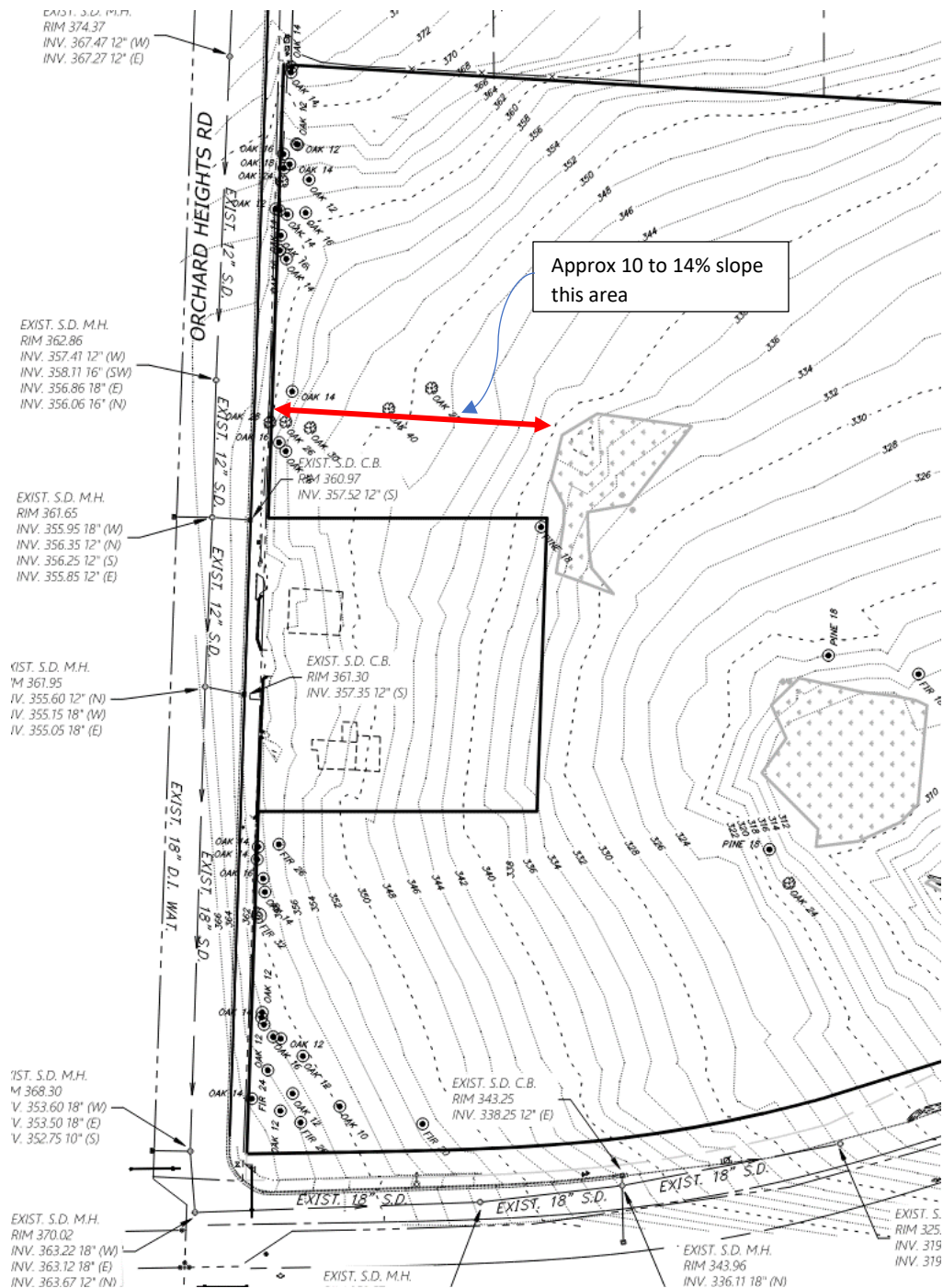
The new roadway to the south would need to have a maximum 5% slope away from Street “A” and the maximum street grade of 12% after that. This would put the new roadway at a proposed elevation of 318.0 as noted in the drawing below. This is approximately 20 feet below the existing ground in that area.

The cut slope away to the west would extend over 30 feet into the adjoining property (Dalke property). That would impact several trees.

Because one of the reasons for having the roadway in this location would be to service the Dalke property, this grade difference proves problematic. The roadway being more than 20 feet below the existing elevation of the Dalke property means that it would not be a serviceable connection. The construction of a roadway through this location would require the installation of retaining walls over 16 feet tall and would render this portion of the property unusable.



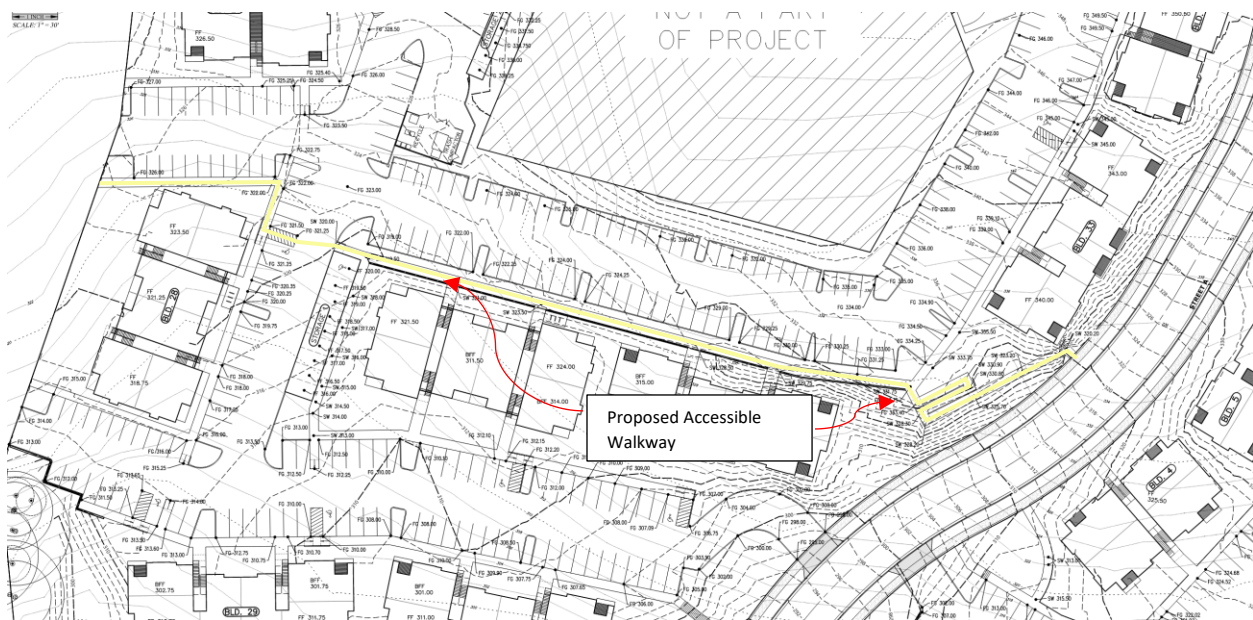
Providing a street through the portion of property located to the south of this project also poses a problem due to the proximity to the intersection of Doaks Ferry and Orchard Heights. Landagaard is approximately 960 feet to the west of the Doaks Ferry/Orchards Heights intersection. An additional north/south street would mean another intersection along Orchard Heights, approximately 400 feet west of the Doaks Ferry intersection.



The existing ground profile along the north side of Orchard Heights slope down significantly. Because of the previously mentioned grade requirements and maximums, a great deal of embankment work will be needed to get the street back on grade to match the existing ground. In addition, as the road moves south, it would sweep near an existing pond, a topographic low point. In order to still be able to connect into Orchard Heights, the site would require extensive fill work to be done. There are other development implications that come with large amounts of cutting and filling including but not limited to: potential excess dirt to be removed, shortage of quality fill material, either large use of space for cut/fill slopes or building retaining walls, challenges with utility connections, etc.

The roadway extension through the site would impact a much wider area than just the 60-foot wide right of way because of the extensive cuts and fill. Such an impact would greatly reduce the amount of developable area and the number of units that can be placed on the site. In addition to the reduced economic benefits from the number of units lost, the roadway will be very expensive to construct. The added costs would likely be in excess of \$ 500,000.00 for the roadway, not including the lost economic impacts from the lost units.

Proposed Accessible Walkway



We have shown above the location of a proposed accessible walkway from Street “A” to the south limits of the proposed site plan.

This should meet the intent of providing pedestrian connection from Street A towards Orchard Heights.