

Date : 04/17/2025
Project No : 2025C150
Client Company : Davidson Homes
Arrival Time : 04/17/2025
Onsite Hours :

As requested, the site was visited by our AS Engineering and Consulting (ASEC) representative for the purpose of providing quality control inspection and testing services. Visual observation techniques were employed to verify compliance with project drawing/specifications, applicable codes, and materials submittals. The following observations were observed on site this day.

Upon arrival to the retaining wall construction site, the grading foreman, Darwin, communicated that a change to the retaining wall design would be implemented without prior engineering approval. Specifically, the modification involves a reduction in the wall height from the original maximum of 18 feet by approximately 4 to 6 feet. Concurrently, the adjacent slope will be steepened to accommodate this change. Following up on the progress from the previous day, work has continued behind Lots #224-#229.

Focusing on backfilling and compaction operations behind the newly installing retaining wall structure along Lots #224-#229, Following the drainage installation, the next layer of backfill was placed over the previously installed geogrid reinforcement sheet, in preparation for subsequent compaction. Excavation and movement of fill material were conducted using a Kobelco 310LC excavator and transported on site with a CAT 750 dump truck to achieve a 1-foot lift of fill material. Subsequent to placement, two Takeuchi TL12R2 Bobcats were used to distribute the fill uniformly along Lots #224-#229. Once the fill was evenly spread, compaction was carried out using a Bomag BW211 sheep foot compactor in combination with a Bomag RR-106 ride on sheeps-foot vibratory roller.

Nuclear gauge density testing with a Troxler 3430 (serial #29588) was conducted on the compacted layer. While testing no elevation available. All testing was performed approximately every 100 feet.

During routine observation of an off-road dump truck operation, a potential soil issue was identified in the area between the retaining wall and the adjacent house pad. Excavation to a depth of approximately 2-3 feet over an area measuring roughly 4 feet by 20 feet revealed soil with elevated moisture content, raising concerns regarding stability and support.

Based on the recommendation of the grading foreman, a layer of geogrid reinforcement was installed to improve subgrade stability. Additionally, per the recommendation of the on-site ASEC technician, a 6-inch layer of stone was placed over the geogrid to enhance drainage and bearing capacity.

Remedial actions were completed in accordance with field recommendations, and the area has since been stabilized. Supporting photos have been included for reference.

Upon successful compaction of the first lift, the contractor advanced to the next layer of backfill. This subsequent layer underwent the same testing and quality control process. Adjacent to the wall the compaction is carried out with remote compactor BMP8500 for even compaction along the retaining wall.

Following backfills operations, preparations commenced for the next course of retaining wall construction, including Geo Grid Reinforcement sheet placement and layout for the upcoming lift.

Date : 04/17/2025
Project No : 2025C150
Client Company : Davidson Homes
Arrival Time : 04/17/2025
Onsite Hours :

We appreciate the opportunity to be of service to you on this project. If you have any questions regarding this report, please feel free to contact us.



Compaction along wall



Remediation required area



Wall Changes

ASEC Report ID : 80210
Name of the Project : Riverwood Retaining Wall
Project Location : Dallas
Weather : sunny
Departure Time : 04/17/2025
ASEC Technician Name : Russell Hendrix

Date : 04/17/2025
Project No : 2025C150
Client Company : Davidson Homes
Arrival Time : 04/17/2025
Onsite Hours :



Retaining wall



Retaining wall



Testing

Kenneth Mosman

Kenneth Mosman

The results presented in this report relate only to the items tested. This report shall not be reproduced, except in full, without written approval from AS Engineering and Consulting LLC.