



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JOEY R. HOPKINS
SECRETARY

November 26, 2024

Chad Julius, P.E.
Allan Block Corporation
7424 West 78th Street
Bloomington, MN 55439

Subject: Renewal of Allan Block’s AB Vertical MSE Wall System

Dear Mr. Julius:

The Geotechnical Engineering Unit (GEU) has reviewed the renewal submittal for Allan Block’s AB Vertical MSE Wall System in accordance with the *NCDOT Policy for Mechanically Stabilized Earth Retaining Walls* and the GEU Standard *Mechanically Stabilized Earth (MSE) Retaining Walls Provision*. Based on the information submitted, Allan Block’s MSE wall system is **approved for provisional use** on North Carolina Department of Transportation (NCDOT) projects in accordance with the MSE wall policy and standard provision. This policy and provision may be obtained from:
<https://connect.ncdot.gov/resources/Geological/Pages/Products.aspx>

See the standard MSE wall provision for restrictions on MSE wall systems with “approved for provisional use” status. This letter includes the approved facing elements and reinforcements with design parameter tables in accordance with the GEU standard MSE wall provision.

Facing Elements

18" x 8" x 12" deep AB Vertical Segmental Retaining Wall (SRW) Units for DOTs with 1 degree batter

Reinforcements

Strata Grid SG60 and SG80 Geogrids in accordance with the design parameter tables below:

- Fine Aggregate

Reinforcement (Product Label & Type, e.g., grid, strip, etc.)	T _{ult} (lb/ft)	RF _{CR} for 75 and 100-year design life	RF _D	RF _{ID}	T _{al} for 75 and 100-year design life (lb/ft)	F*	α	ρ (degrees)	CR _u	CR _{cr} for 75 and 100-year design life	T _{ac} for 75 and 100-year design life (lb/ft)
StrataGrid SG60	4110	1.43 and 1.44	1.3	1.25	1769 and 1756	0.54	0.8	28.4	0.28-0.55	0.20-0.38	627 and 1214 622 and 1206
StrataGrid SG80	5480	1.43 and 1.44	1.3	1.20	2457 and 2439	0.54	0.8	28.4	0.23-0.52	0.16-0.36	664 and 1527 660 and 1516

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
GEOTECHNICAL ENGINEERING UNIT
1589 MAIL SERVICE CENTER
RALEIGH NC 27699-1589

Telephone: 919-707-6850
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Customer Service: 1-877-368-4968

Website: www.ncdot.gov

Location:
CENTURY CENTER COMPLEX
ENTRANCE B-2
1020 BIRCH RIDGE DRIVE
RALEIGH NC

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A renewal is required if the Allan Block MSE wall system changes or 5 years from the date letter, for the system to stay on the NCDOT list of approved MSE wall systems. If there are any questions, I can be reached at (919) 707-6850.

Sincerely,

DocuSigned by:

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Matthew J. Alexander, P.E.
State Geotechnical Engineer

cc: Majid Khazaei, P.E., Eastern Regional Operations Engineer
Dean Hardister, P.E., Western Regional Operations Engineer
Todd Whittington, P.E., State Materials Engineer