January 10, 2023

Dwayne Lewis
MSE Hardscapes
PO Box 942
Raymore, MO 64083

RE: Stacked Stone Retaining Wall
146 Ambersham

Per your request, Hart Creek Engineering has reviewed the construction of the retaining wall at the residence location at 146 Ambersham in Lee's Summit, MO. The wall construction appears to be in conformance with the attached wall details and built per industry standards.

If you have any questions or I may be of any further assistance, do not hesitate to contact me.

Sincerely,

Charley Farris, PE

Hart Creek Engineering
1218 E. Cedar Tree Lane
Hartsburg, MO 65039
Ph 573.289.8520
www.hartcreekengineering.com

1. MATERIALS

   a. DRAINAGE FILL BEHIND BACK FACE SHALL CONSIST OF CLEAN CRUSHED STONE OR CRUSHED GRAVEL MEETING THE REQUIREMENTS OF ASTM C33 #57 OR #67.

   b. LEVELING PAD SHALL BE WELL GRADED CRUSHED STONE MEETING ALL OF THE REQUIREMENTS OF KDOT AB-3 OR 2000 PSI LEAN CONCRETE.

   c. DRAIN PIPE SHALL BE 4" Ø PERFORATED OR SLOTTED PVC, OR CORRUGATED HDPE PIPE. THE DRAINAGE PIPE MAY BE WRAPPED WITH A GEOTEXTILE TO FUNCTION AS A FILTER.

2. TECHNICAL REQUIREMENTS

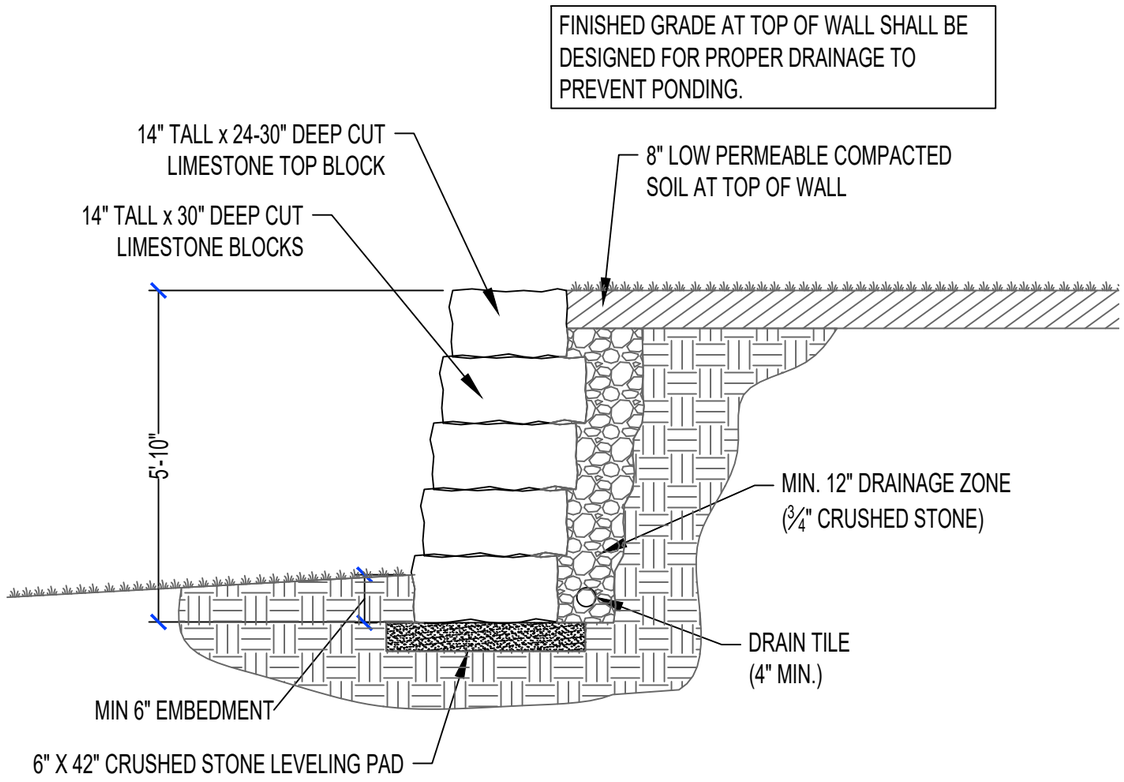
   a. PRIOR TO CONSTRUCTION OF THE WALLS, THE GRADING CONTRACTOR SHALL CLEAR AND GRUB THE REINFORCED BACKFILL ZONE AREA, REMOVING TOP SOILS, BRUSH, SOD OR OTHER ORGANIC MATERIALS. ANY UNSUITABLE SOILS SHALL BE OVER-EXCAVATED, REPLACED AND COMPACTED WITH REINFORCED BACKFILL MATERIAL TO PROJECT SPECIFICATIONS OR OTHERWISE DIRECTED BY THE OWNER'S GEOTECHNICAL ENGINEER.

   b. THE GEOTECHNICAL ENGINEER SHALL CONFIRM THAT THE SITE HAS BEEN PROPERLY PREPARED AND THE DESIGN PARAMETERS IN SECTION 5 ARE APPROPRIATE PRIOR TO FILL PLACEMENT. A WRITTEN CONFIRMATION SHALL BE PROVIDED TO HART CREEK ENGINEERING PRIOR TO FILL PLACEMENT.

   c. FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 10” IN UNCOMPACTED THICKNESS FOR HEAVY COMPACTION EQUIPMENT. FOR ZONES WHERE COMPACTION IS ACCOMPLISHED WITH HAND OPERATED EQUIPMENT, FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 6” IN UNCOMPACTED THICKNESS. ONLY HAND OPERATED EQUIPMENT SHALL BE ALLOWED WITHIN 3' OF THE BACK FACE OF THE WALL.

   d. FILL MATERIALS SHALL BE PLACED FROM THE BACK OF THE FACING UNITS TOWARDS THE ENDS OF THE GEOGRID TO ENSURE PROPER TENSIONING.

   e. FILL SHALL BE COMPACTED AS SPECIFIED BY PROJECT SPECIFICATIONS OR TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D-698.



1 WALL SECTION
3/8” = 1’–0”

STATE OF MISSOURI
CHARLES ROBERT FARRIS
NUMBER PE-2011015734
PROFESSIONAL ENGINEER
Jan 10, 2023

HART CREEK ENGINEERING
HARTCREEKENGINEERING.COM
HARTSBURG, MO 65039
573-289-8520
MO LICENSE E-2022018980

PROJECT NO:	23002
DRAWN BY:	CRF
REVIEWED BY:	CRF
DATE:	01/10/2023

PROJECT
146 AMBERSHAM

SHEET
RW1