



Michael L. Thurmond
Chief Executive Officer

DeKalb County Zoning Board of Appeals
Department of Planning & Sustainability
330 Ponce De Leon Avenue, Suite 300
Decatur, GA 30030



Wednesday, July 14, 2021 at 1:00 PM

Planning Department Staff Analysis

D2 Case No: A-21-1244827 Parcel ID(s): 18-249-01-124

Commission District: 01 Super District 07

Applicant: April Ingraham
3688 Clearview Ave
Atlanta, GA 30329

Owner: Glenn Y. Cambre Jr.
3134 Smokestone Court
Atlanta, GA 30345

Project Name: 3134 Smokestone Court

Location: The property is located north of Smokestone Court at 3134 Smokestone Court Atlanta, GA 30345

REQUEST: Variance from Chapter 27- 5.4.7.(D) – Walls, fences, and retaining walls of the DeKalb County Zoning Ordinance to increase of the maximum height for a proposed retaining wall from 4 feet to 8 feet.

Staff Recommendation: **“Approval with condition” based on the submitted site plan, received June 24, 2021, to increase the maximum height for a proposed retaining wall from 4 feet to 7 feet subject to the following condition:**

1. That the following information about this variance shall be noted on any site plan prepared for the subject property: case number, approval date, type of variance, and condition(s) of approval.

STAFF FINDINGS:

Variance Analysis:

The subject property is currently developed with a detached, two-story, single-family structure and fronts a cul-de-sac. The property is located within the R-100 Zoning District. Chapter 27-2.2 Division 2- Residential Zoning Districts: Dimensional Requirements of the DeKalb County Zoning Ordinance states that the minimum lot area for R-100 zoned properties is 15,000 square feet, and the minimum lot width for properties facing a cul-de-sac is 35 feet. Based on the submitted site plan, the subject property has a lot size of approximately 15,261 square feet, a lot width of approximately 90 feet. Per the R-100 zoning requirements, the subject lot appears to be conforming.

The applicant is requesting a variance to increase the maximum height for a proposed retaining wall from 4 feet to 7 feet. Per Chapter 27- 5.4.7.(D) – Walls, fences, and retaining walls of the DeKalb County Zoning Ordinance the maximum height for retaining wall on residential properties is 4 feet. Per the letter of Intent, the intent of the proposed 7-foot retaining wall is to improve drainage and create a functional rear yard.

1. By reason of exceptional narrowness, shallowness or shape of a specific lot, or by reason of exceptional topographic conditions, which were not created by the owner or applicant, the strict application of the requirements of this chapter would deprive the property owner of rights and privileges enjoyed by other property owners in the same zoning district:

Based on the submitted survey, by reason of existing topographic conditions, the strict application of the requirements of this chapter may deprive the property owner of rights and privileges enjoyed by other property owners in the same zoning district

This lot is approximately 0.35 acres or 15,261square feet. The rear yard, which is an irregular, trapezoid shape, slopes severely on the northwestern portion of the property.

2. The requested variance does not go beyond the minimum necessary to afford relief, and does not constitute a grant of special privilege inconsistent with the limitations upon other properties in the zoning district in which the subject property is located:

The requested variance does not go beyond the minimum necessary to afford relief since the subject property severely slopes at the rear. Therefore, this variance request may not constitute a grant of special privilege in inconsistent with the limitations upon other properties in the zoning district in which the subject property

3. The grant of the variance will not be materially detrimental to the public welfare or injurious to the property or improvements in the zoning district in which the subject property is located:

The requested variance may not be materially detrimental to the public welfare, injurious to the property, or improvements in the zoning district in which the subject property is located.

The applicant is proposing to place the proposed 7-foot retaining wall approximately 8 feet from the rear property line as well as plant various trees along the rear of the property to obstruct the view of the wall.

4. The literal interpretation and strict application of the applicable provisions or requirements of this chapter would cause undue and unnecessary hardship:

Based on the submitted materials, the strict application of the applicable provisions and requirements of this chapter may cause an undue and unnecessary hardship due to the severe topography on the property.

5. The requested variance would be consistent with the spirit and purpose of this Chapter and the DeKalb County Comprehensive Plan Text:

Based on the submitted materials, it appears that the requested variance does not conflict with the spirit and purpose of this Chapter and the *DeKalb County Comprehensive Plan*.

FINAL STAFF ANALYSIS:

The requested variance does not go beyond the minimum necessary to afford relief since the subject property severely slopes at the rear. Therefore, this variance request may not constitute a grant of special privilege in inconsistent with the limitations upon other properties in the zoning district in which the subject property. Therefore, staff recommends approval with one condition.

Dekalb County
Department of Planning and Sustainability,
330 West Ponce De Leon Avenue
Decatur, GA 30030

Variance Letter of Intent:

3134 SMOKESTONE CT NE

ZONING: R-100

PARCEL ID#:18-249-01-124

VARIANCE REQUEST FOR THE CONSTRUCTION OF:
A NEW RETAINING WALL TO BE LOCATED IN THE SIDE AND REAR YARDS.
Increase allowable height from the required 4' to 8'

The owner, GLEN T. CAMBRE JR., requests a variance to appeal section 5.4.7 (D) to approve an increase of the allowable height for a proposed retaining wall to 8' in order to build a modular block wall to improve drainage a create a functional rear yard.

By reason of exceptional narrowness, shallowness, or shape of a specific lot, or by reason of exceptional topographic and other site conditions (such as, but not limited to, floodplain, major stand of trees, steep slope), which were not created by the owner or applicant, the strict application of the requirements of this chapter would deprive the property owner of rights and privileges enjoyed by other property owners in the same zoning district. By reason of exceptional topographic challenges in the rear yard, the owner is experiencing severe and extraordinary hardship, due to circumstances not created by the owner, where the yard has continuous slopes ranging from 29% to 14%. With the most severe slope located in the north east corner. This scenario renders 30% to 45% of the yard unusable and a nearly treacherous terrain due to exposed roots.

This lot is approximately 0.35 acres or 15,261sqft. The rear yard, which is irregular trapezoid shaped, comprises approximately 5,600sqft. New walls will help improve drainage and grades. Per the survey, the basement floor elevation is 935.61'. The most severe slope is an approximate 9' decline from the basement elevation in the northeast section. We are proposing a square shaped paver patio in that area that will need walls measuring 1' to 6.7'. The rest of the remaining yard will be sodded with varying wall heights.

The requested variance does not go beyond the minimum necessary to afford relief and does not constitute a grant of special privilege inconsistent with the limitations upon other properties in the zoning district in which the subject property is located. Granting a variance to allow construction of the wall up to 8' will allow the owner to practically improve existing drainage which has currently eroded soils and exposed plant roots.

The grant of this variance will not be materially detrimental to the public welfare or injurious to the property or improvements in the zoning district in which the subject property is located. We believe relief can be granted without substantial detriment to the public good and without substantial impairment of the intent and purpose of this chapter and the comprehensive plan. This plan will feasibly help improve stormwater runoff because levelling out the yard and growing turf, will slow down water runoff and increase the absorption and percolation of water into the soil and plant roots.

The literal interpretation and strict application of the applicable requirements of this chapter would cause undue and unnecessary hardship. It will result in an inability to improve and maintain new engineered grading with a wall that would only be allowed 4' tall. The residents would benefit from a levelled backyard space to enjoy their green space and conduct healthy activities.

The requested variance would be consistent with the spirit and purpose of this chapter and the DeKalb County Comprehensive Plan text preserves and enhances the integrity and quality of an existing residential neighborhood.

For the foregoing reasons, the Applicant respectfully requests the approval of the proposed variance from the Board of Appeals.

Respectfully submitted,

GLENN T. CAMBRE JR.

OWNER

Date: 03/30/2021

(POST DEFERRAL) AMENDMENT: Increase allowable height from the required 4' to 7'.

The changes made to provide a redefine a proposal that is less detrimental than the concerns previously voiced at the June 9th hearing regarding tree impact, drainage and privacy.

1. Moved & Reduced Wall to Reduce Impact:

- Upper retaining wall moved to 8' off the back property line and away from the adjoining property.
- Reduced proposed wall height to 7' from 8'
- Reduced the total linear footage of walls >4' to 56Lf from 75Lf.
- Eliminates a construction/maintenance easement.
- The impact on the neighbors 22" hardwood has been reduced to 19.1% impact (< 20% allowable limits)-see additional arborist letter
 - Arborist letter suggests but not required- conduct root pruning during wall excavation, and root injections on Cambre's property between the wall and fence to go above and beyond care and tree preservation during the proposed work.
 - Arborist letter suggests but not required – a fertilization treatment program to help stimulate root recovery though it is not necessary, it is to essentially go above and beyond future care and tree preservation after the work is complete.
- See new site plans.

2. Drainage Improvements:

- Engineer has revised the wall design to address water quality control by adding 4" outlets every 50' along the wall as opposed to a concentrated single discharge point with fewer outlets.
- Proposed Additional Landscaping -canopy will also control and improve rain water drainage and distribution.
- See revised engineers plans.

3. Added privacy screening:

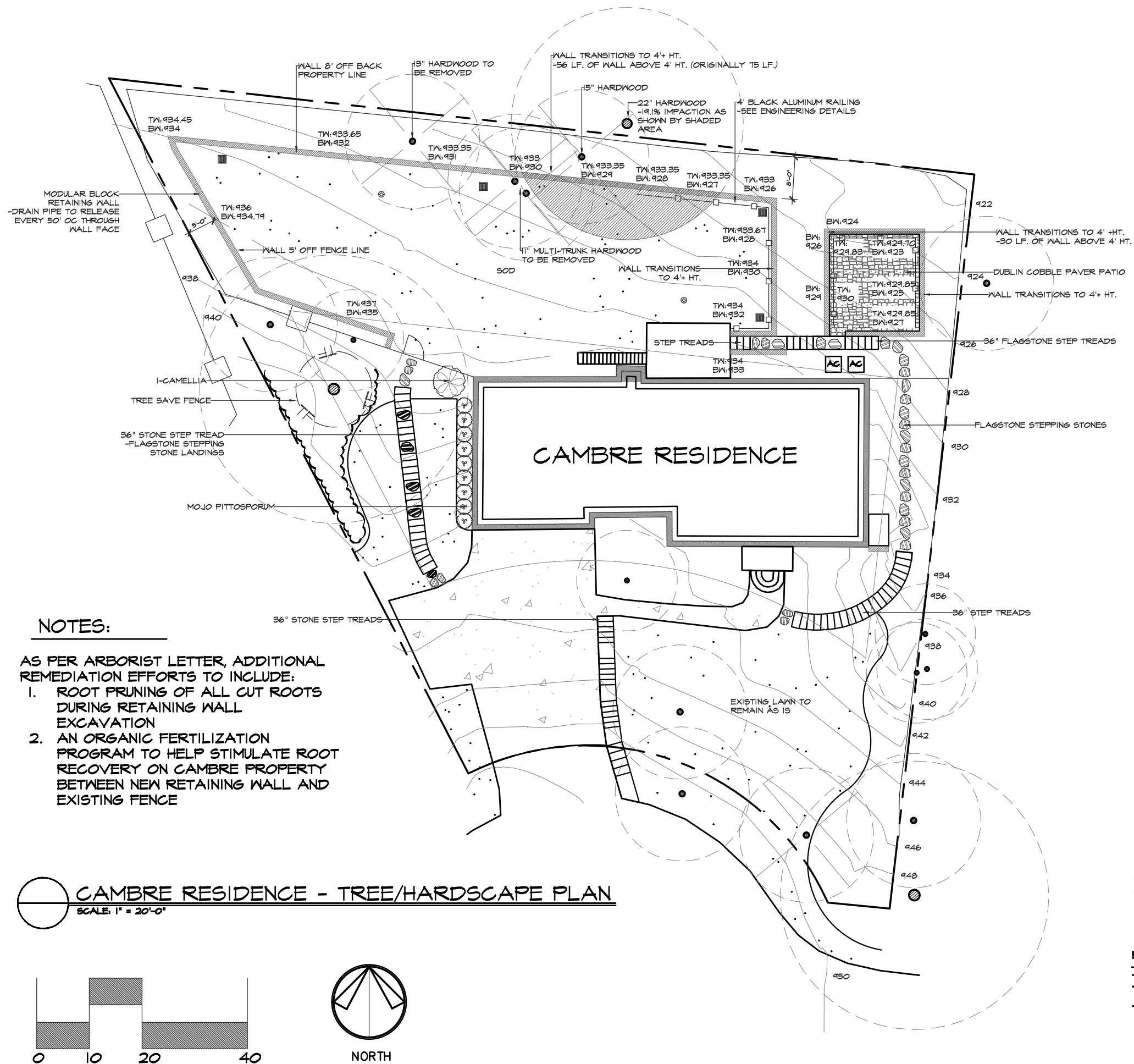
- See attached more realistically scaled elevational photo/rendering of wall-post installation from the neighbor's POV, using the neighbor's original hand mark up and
- See attached the updated planting proposal for the rear yard of 3134 Smokestone Court along the rear property line as it projected to reasonably appear from the neighbor's POV.
- See new landscape plan for actual proposal to address Screening and Privacy concerns for surrounding property owners.

Respectfully submitted,






APRIL INGRAHAM,

AGENT FOR OWNER, GLENN T. CAMBRE JR. _____

Date: 06/24/2021

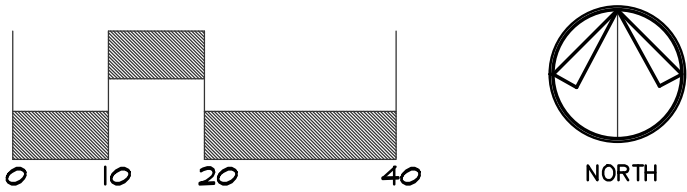


LEGEND:

-  EXISTING PLANTS TO REMAIN
-  EXISTING PLANTS TO BE REMOVED
-  EXISTING PLANTS TO BE REMOVED
-  DRAIN BOX
-  TREE SAVE FENCE

- NOTES:**
- AS PER ARBORIST LETTER, ADDITIONAL REMEDIATION EFFORTS TO INCLUDE:
1. ROOT PRUNING OF ALL CUT ROOTS DURING RETAINING WALL EXCAVATION
 2. AN ORGANIC FERTILIZATION PROGRAM TO HELP STIMULATE ROOT RECOVERY ON CAMBRE PROPERTY BETWEEN NEW RETAINING WALL AND EXISTING FENCE

CAMBRE RESIDENCE - TREE/HARDSCAPE PLAN
SCALE: 1" = 20'-0"



IMPERVIOUS LOT COVERAGE - ALLOWABLE
7,630.5 SF.
50% OF TRACT

EXISTING TRACT AREA
15,261 SF.

IMPERVIOUS LOT COVERAGE - EXISTING
3,928 SF.
25.1% OF TRACT

IMPERVIOUS LOT COVERAGE - EXISTING (BREAKOUT)
HOUSE - 2,267 SF.
CONCRETE DRIVE/WALK - 1,397 SF.
FRONT STOOP - 44 SF.
SIDE CONCRETE PAD - 27 SF.
REAR WOOD DECK AND STAIRS- 193 SF.
TOTAL EXISTING SF. - 3,928 SF.

IMPERVIOUS LOT COVERAGE - PROPOSED (BREAKOUT)
WALLS: 293 SF
CONCRETE PAVER PATIO: 317 SF
STEP TREADS/STEPPING STONE PATHWAYS: 435 SF
TOTAL PROPOSED SF.: 1,045 SF.

FINAL NEW IMPERVIOUS LOT COVERAGE
TOTAL EXISTING SF: 3,928 SF. +
TOTAL PROPOSED SF: 1,045 SF. = 4,973 SF.
- 32.6%



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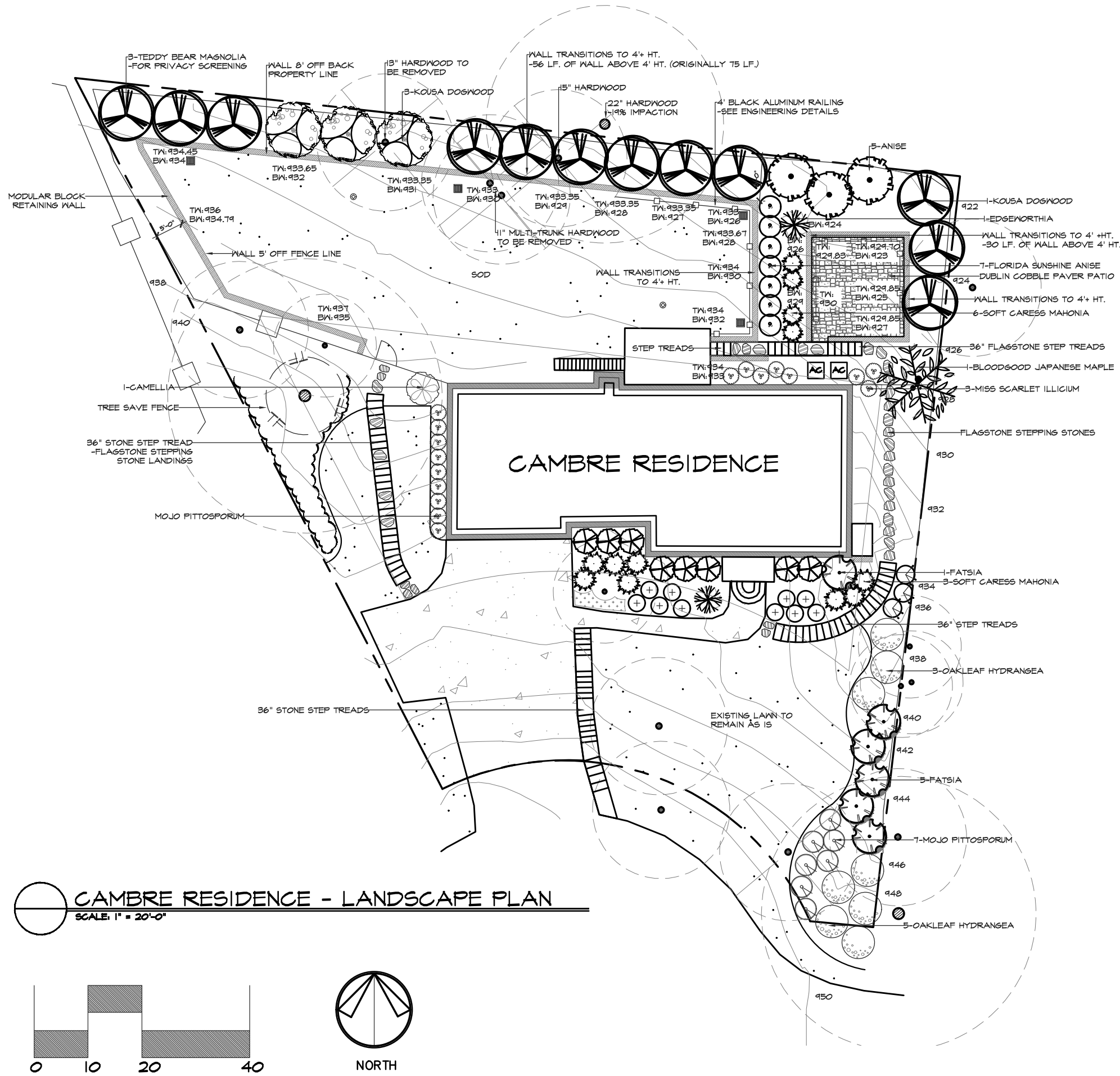
REVISIONS

NO.	DATE	NOTE





CAMBRE RESIDENCE
3134 SMOKESTONE COURT NE
ATLANTA, GA 30345

SHEET:
TREE PLAN
T-1 /
HARDSCAPE
PLAN
LS-2

DATE: JUNE 17, 2021
DRAWN BY: RF



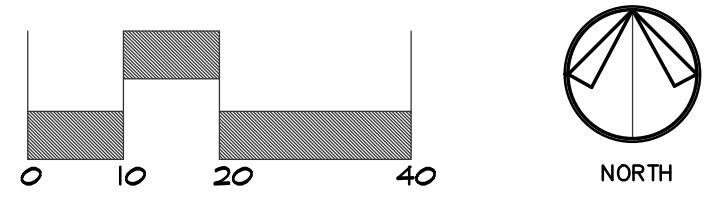
LEGEND

-  EXISTING PLANTS TO REMAIN
-  EXISTING PLANTS TO BE REMOVED
-  EXISTING PLANTS TO BE REMOVED
-  DRAIN BOX

SCOPE OF WORK:
 -THE OBJECTIVE OF THIS ENHANCEMENT IS TO PROVIDE A USEABLE AND LEVELED GRASSY UPPER AREA FOR KIDS, A LOWER STONE PATIO, STEPPING STONE PATHWAYS, TURF, AND ORNAMENTAL PLANTINGS.
 -CREATING A TIERED RETAINING WALL SYSTEM IN THE RIGHT CORNER OF THE BACK YARD WHERE SLOPE EXCEEDS 30", HELPS REDUCE OVERALL LENGTH OF RETAINING WALL REQUIRING 7' IN HEIGHT.

STORMWATER MANAGEMENT:
 -CREATING A LEVELED TURF AREA WILL HELP REDUCE STORMWATER RUNOFF BY SLOWING DOWN WATER AND INCREASED ABSORPTION INTO THE SOIL AND TURF ROOTS.

CAMBRE RESIDENCE - LANDSCAPE PLAN
 SCALE: 1" = 20'-0"



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REVISIONS

NO.	DATE	NOTE

CAMBRE RESIDENCE
 3134 SMOKESTONE COURT NE
 ATLANTA, GA 30345

SHEET:
LANDSCAPE PLAN
LS-1

DATE: JUNE 10, 2021

DRAWN BY: RF

3134 SMOKESTONE COURT

DEKALB COUNTY, GEORGIA DIAMOND PRO RETAINING WALL JANUARY 14TH, 2021

BY PLANTS CREATIVE LANDSCAPES

2977 ALCOVE DRIVE, SCOTSDALE, GA, 30079
TEL: (404) 309-7175

1.0 REINFORCED ZONE

THE REINFORCED BACKFILL SOIL SHALL BE COMPACTED GRANULAR FILL FREE OF DEBRIS AND MEETING THE FOLLOWING GRADATION AS DETERMINED IN ACCORDANCE WITH ASTM D422.

SIEVE SIZE	PERCENT PASSING
1 INCH	100 - 75
NO. 4	100 - 20
NO. 40	0 - 60
NO. 200	0 - 35

THE MAXIMUM SIEVE SIZE SHOULD BE LIMITED TO 1 INCH. REINFORCED BACKFILL SOIL SHALL CONSIST OF MATERIAL MEETING USCS CRITERIA FOR GW, GP, SW, SP, SC OR SM & THE MATERIAL TO HAVE A PH RANGE OF 3 - 9. THE PORTION PASSING THE NO. 40 SIEVE SHALL HAVE A PLASTICITY INDEX LESS THAN 20. THE MATERIAL SHALL BE SUBSTANTIALLY FREE OF SHALE OR OTHER SOFT, POOR DURABILITY PARTICLES. THE MATERIAL SHALL HAVE A MAGNESIUM SULFATE SOUNDNESS LOSS OF LESS THAN 30 PERCENT AFTER FOUR CYCLES (OR A SODIUM SULFATE VALUE LESS THAN 15 PERCENT AFTER FIVE CYCLES). TESTING SHALL BE IN ACCORDANCE WITH AASHTO T-104.

2.0 TECHNICAL REQUIREMENTS

FILL SHALL BE COMPACTED AS SPECIFIED BY THE PROJECT SPECIFICATIONS OR TO A MINIMUM 95% OF THE MAXIMUM DENSITY, AND WITHIN +3/-3 PERCENT OF OPTIMUM MOISTURE CONTENT AS DETERMINED IN ACCORDANCE WITH ASTM D-698 (STANDARD PROCTOR DENSITY), WHICHEVER IS GREATER.

FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 8 INCHES IN COMPACTED THICKNESS FOR HEAVY COMPACTION EQUIPMENT. FOR ZONES WHERE COMPACTION IS ACCOMPLISHED WITH HAND EQUIPMENT, FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 6 INCHES IN UNCOMPACTED THICKNESS. ONLY HAND OPERATED EQUIPMENT SHALL BE ALLOWED WITHIN 3 FEET OF THE WALL FACE.

IN THE ABSENCE OF OWNER'S DIRECTION TO EMPLOY MORE STRINGENT COMPACTION SPECIFICATIONS, THE COMPACTED DENSITY OF THE FILL SHALL BE TESTED EVERY 2,000 SQUARE FEET PER 8 INCH LIFT OR EVERY 200 LINEAR FEET OF A SINGLE COURSE OF BLOCKS, WHICHEVER IS LESS. (THESE TESTS MUST INCLUDE THE BACKFILL ZONE IMMEDIATELY BEHIND THE WALL WHERE HEAVY COMPACTION EQUIPMENT MAY NOT OPERATE.)

THE CAP UNIT SHALL BE GLUED TO THE TOP MOST STANDARD UNIT.

TESTING METHODS, FREQUENCY AND VERIFICATION OF MATERIAL SPECIFICATIONS AND COMPACTION SHALL BE THE RESPONSIBILITY OF THE OWNER AND/OR CONSTRUCTION VERIFICATION ENGINEER.

HEAVY AND/OR CONSTRUCTION EQUIPMENT NOT INVOLVED WITH THE WALL CONSTRUCTION SHALL NOT OPERATE WITHIN 10.0' OF THE WALL FACE UNTIL FINAL PAVEMENT AND CURBING IS IN PLACE BEHIND THE WALL AS APPLICABLE.

3.0 GEOGRID PLACEMENT

GEOGRID SHALL BE PLACED AT THE LOCATIONS, ELEVATIONS AND WITH THE PROPER EMBEDMENT LENGTH AS SHOWN ON THE CONSTRUCTION DRAWINGS. EMBEDMENT LENGTH IS MEASURED FROM THE FRONT FACE OF THE WALL UNIT. THE EDGE OF THE GEOGRID SHOULD BE VISIBLE AT THE WALL FACE FOR CONSTRUCTION VERIFICATION PURPOSES.

GEOGRIDS SHALL BE CONNECTED TO THE WALL UNIT PER THE MANUFACTURER'S INSTRUCTIONS.

NO MORE THAN TWO COURSES OF BLOCK SHOULD BE STACKED PRIOR TO INFILLING UNITS WITH #57 STONE. COURSES BELOW GEOGRID LAYER MUST BE INFILLED WITH #57 STONE PRIOR TO PLACING GEOGRID REINFORCEMENT.

PRIOR TO PLACING FILL MATERIALS IN THE REINFORCED FILL AREA, THE GEOGRIDS SHALL BE ANCHORED TO THE WALL UNITS, PULLED TIGHT TO REMOVE ANY SLACK, AND LAID FLAT AND HORIZONTAL. NO PORTION OF THE GEOGRID PLACEMENT SHALL BE STEEPER THAN 10% GRADE FROM THE HORIZONTAL OR ALLOWED TO DROOP DOWN DIRECTLY BEHIND THE BLOCK.

TRACKED CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED DIRECTLY ON THE GEOGRID MATERIALS. A MINIMUM FILL THICKNESS OF 8 INCHES IS REQUIRED FOR OPERATION OF TRACKED VEHICLES OVER THE GEOGRID. THE TURNING OF TRACKED VEHICLES SHALL BE KEPT TO A MINIMUM TO PREVENT DISPLACEMENT OF GEOGRIDS.

4.0 DRAINAGE

BACKFILL SHALL BE GRADED AWAY FROM THE WALL FACE AND COMPACTED TO 95% STANDARD PROCTOR AT THE END OF EACH WORK DAY TO PREVENT WATER FROM BEING DIRECTED TOWARDS THE REINFORCED SOIL MASS.

PERMANENT DRAINAGE AND SITE GRADING SHALL BE PERFORMED TO PREVENT RUNOFF FROM BEING DIRECTED OVER THE WALL FACE OR ALLOWED TO POND ABOVE THE REINFORCED MASS.

SURFACE WATER FLOW EITHER TEMPORARY OR PERMANENT SHOULD NOT BE ALLOWED TO RUN ALONG TOE OF EARTH STRUCTURE AT ANY TIME. CONCENTRATED WATER FLOW ALONG THE WALL TOE CAN UNDERMINE & DAMAGE THE EARTH STRUCTURE FOUNDATION. CIVIL SITE DESIGNER IS RESPONSIBLE FOR ADDRESSING ALL POSSIBLE EROSION CONCERNS TO PROTECT WALL FOUNDATION.

5.0 DESIGN PARAMETERS

DESIGN OF THE REINFORCED SOIL STRUCTURES IS BASED ON THE FOLLOWING PARAMETERS:

REINFORCED ZONE	$\Phi = 30^\circ$	$C = 0$ PSF	$\gamma = 120$ PCF
RETAINED ZONE	$\Phi = 30^\circ$	$C = 0$ PSF	$\gamma = 120$ PCF
FOUNDATION ZONE	$\Phi = 30^\circ$	$C = 0$ PSF	$\gamma = 120$ PCF

INTERNAL STABILITY:

MIN. F.S. AGAINST GEOGRID PULLOUT	= 1.5
SOIL-GEOGRID INTERACTION COEFFICIENT	= 0.8
PERCENT COVERAGE OF GEOGRID	= 100%
MINIMUM F.S. FOR UNCERTAINTIES	= 1.5

EXTERNAL STABILITY:

MINIMUM F.S. AGAINST BASE SLIDING	= 1.5
MINIMUM F.S. AGAINST OVERTURNING	= 2.0
MINIMUM F.S. FOR GLOBAL STABILITY	= 1.3
MINIMUM F.S. FOR RAPID DRAWDOWN	= N/A

UNIFORM SURCHARGE	= 250 PSF
HYDROSTATIC LOADING	= NONE
REQUIRED BEARING CAPACITY	= VARIES (SEE ELEVATION VIEW)

6.0 SPECIAL PROVISIONS

ACCEPTABLE GEOGRID REINFORCEMENTS ARE: TYPE 1 STRATAGRID 200 MIRAFI 3XT HTG 35

OTHER BLOCK AND GRID SYSTEMS MUST BE SUBMITTED FOR APPROVAL BY EES PRIOR TO CONSTRUCTION.

ENGINEERED EARTH SOLUTIONS, LLC. (EES) ASSUMES NO LIABILITY FOR INTERPRETATIONS OF SUBSURFACE CONDITIONS, SUITABILITY OF SOIL PARAMETERS, AND SUBSURFACE GROUNDWATER CONDITIONS. THE WALL CONTRACTOR AND/OR CONSTRUCTION VERIFICATION ENGINEER IS RESPONSIBLE FOR REVIEWING AND VERIFYING THAT CONDITIONS DESCRIBED ABOVE ARE ACCURATE PRIOR TO AND DURING CONSTRUCTION.

THE WALL CONTRACTOR AND/OR OWNER IS RESPONSIBLE FOR HAVING SUPERVISION OF ALL PHASES OF CONSTRUCTION BY A QUALIFIED GEOTECHNICAL ENGINEER (CONSTRUCTION VERIFICATION ENGINEER).

SETTLEMENT AND ITS EFFECT ON THE RETAINING WALL SYSTEM HAS NOT BEEN EVALUATED BY EES. FOR THE EVALUATION OF SETTLEMENT, ADDITIONAL TESTING OF THE SUBGRADE AND ADDITIONAL ENGINEERING IS REQUIRED WHICH IS OUTSIDE THE SCOPE OF PRODUCING THESE SHOP DRAWINGS. EES CAN PROVIDE A PROPOSAL TO PERFORM THE ADDITIONAL TESTING AND CALCULATIONS UPON REQUEST.

A COPY OF THESE DRAWINGS SHALL BE PROVIDED TO FUTURE OWNERS OF THE DEVELOPED PROPERTY TO PROVIDE THEM WITH A RECORD OF THE LOCATION OF THE REINFORCED ZONE AND RECOMMENDATIONS REGARDING PERMISSIBLE CONSTRUCTION ACTIVITIES AROUND THE MECHANICALLY STABILIZED EARTH STRUCTURE.

GENERAL NOTES:

1. SOIL INSTALLED IN SLOPES BOTH ABOVE AND BELOW THE REINFORCED STRUCTURE SHALL BE COMPACTED TO WITHIN 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST (ASTM D-698). FILL SOILS INSTALLED ABOVE AND BELOW THE REINFORCED ZONE MUST MEET THE REINFORCED STONE PARAMETERS NOTED IN NOTE 5.0 DESIGN PARAMETERS.

2. CONSTRUCTION VERIFICATION OF THE WALL INSTALLATION BY AN ENGINEER IS REQUIRED AND MUST BE PROVIDED BY A KNOWLEDGEABLE GEOTECHNICAL ENGINEER FAMILIAR WITH MECHANICALLY STABILIZED STRUCTURES. EES CAN PERFORM THIS VERIFICATION AS REQUESTED BUT MUST INCLUDE DAILY SITE VISITS.

3. IDENTIFICATION OF ALL UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY CONFLICTS SHALL BE REPORTED TO THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.

4. EXCAVATION THROUGH THE GEOSYNTHETIC REINFORCEMENT FOR THE PURPOSE OF PLANTING TREES OR INSTALLATION OF UTILITIES SHOULD NOT OCCUR WITHOUT APPROVAL BY THE ENGINEER OF RECORD.

5. WATERLINES INCLUDING IRRIGATION SYSTEMS MUST BE WATER TIGHT WITHIN 100 FEET OF THE REINFORCED ZONE. LEAKAGE BEHIND A RETAINING WALL WILL INCREASE THE HORIZONTAL PRESSURE AGAINST THE WALL LEADING TO WALL FAILURE. FOR THIS REASON, SUBSURFACE WATERLINES AND IRRIGATION SYSTEMS SHOULD NOT BE INSTALLED ABOVE THE REINFORCED ZONES OF THE RETAINING WALL, OR WITHIN 5 FEET BEHIND THE REINFORCED ZONES.

6. THE RETAINING WALLS DESIGNED HEREIN ARE IN ACCORDANCE WITH THE STANDARD OF PRACTICE AS OUTLINED BY THE NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA) DESIGN MANUAL FOR SEGMENTAL RETAINING WALLS, SECOND EDITION.

7. ALL CONSTRUCTION ACTIVITY SHALL CONFORM TO THE MINIMUM REQUIREMENTS PER O.S.H.A. STANDARDS.

8. THIS DESIGN IS BASED UPON SPECIFIC PROPERTIES OF MATERIALS WHICH ARE PROPRIETARY. ANY SUBSTITUTION OF THE SPECIFIED PRODUCTS OR CHANGE IN STRUCTURE GEOMETRY WILL INVALIDATE THIS DESIGN. THIS DRAWING IS BEING FURNISHED FOR USE ON THIS SPECIFIC PROJECT ONLY. ANY PARTY ACCEPTING THIS DOCUMENT DOES SO IN CONFIDENCE AND AGREES THAT IT SHALL NOT BE DUPLICATED, IN WHOLE OR IN PART, NOR DISCLOSED TO OTHERS WITHOUT THE CONSENT OF ENGINEERED EARTH SOLUTIONS, LLC. THIS DRAWING, DESIGN NOTES, AND ASSOCIATED CALCULATIONS HAVE BEEN PREPARED BY ENGINEERED EARTH SOLUTIONS, LLC. FROM INFORMATION PROVIDED BY OTHERS. FINAL DETERMINATION OF THE SUITABILITY OF ANY INFORMATION CONTAINED HEREIN IS THE RESPONSIBILITY OF THE USER.

9. DISCOVERY OF SUBSURFACE GROUNDWATER SHALL BE REPORTED IMMEDIATELY TO THE PROJECT GEOTECHNICAL ENGINEER, CONSTRUCTION VERIFICATION ENGINEER AND EES FOR ADDITIONAL DRAINAGE CONSIDERATION.

10. STORM DRAIN SYSTEMS ARE PRONE TO LEAKING. THEREFORE, IF A JOINT IN A STORM WATER PIPE IS LOCATED WITHIN 100 FEET OF THE RETAINING WALL THE STORM WATER PIPE MUST BE WATER TIGHT. NEOPRENE O-RINGS MUST BE INSTALLED AT ALL STORM PIPE JOINTS AS A MINIMUM.

11. CONSTRUCTION ACTIVITIES, WHICH OCCUR ON THE SITE AFTER COMPLETION OF THE RETAINING WALL, SHOULD BE MONITORED BY THE OWNER'S REPRESENTATIVE TO INSURE THAT THEY DO NOT RESULT IN EXCAVATION THROUGH GEOSYNTHETIC REINFORCEMENT OR IN THE VICINITY OF THE WALL FOUNDATION. HEAVY CONSTRUCTION EQUIPMENT SHOULD NOT BE PERMITTED TO OPERATE WITHIN 10.0 FEET BEHIND A WALL FACE.

12. EARTH STRUCTURE LOCATION IN RELATION TO PROPERTY LINES, WATERSHED EASEMENTS, UTILITY EASEMENTS OR ANY OTHER TYPE OF EASEMENT OR BUFFER ARE THE RESPONSIBILITY OF THE OWNER OR THE SITE CIVIL ENGINEER. EES ASSUMES NO LIABILITY FOR THE LOCATION OF THE EARTH STRUCTURE. SURVEY CONTROL MUST BE PERFORMED USING THE CIVIL SITE DESIGNER'S LOCATION INFORMATION AND ACCOUNT FOR ALL STRUCTURE FACE BATTER. DEVIATION FROM THE CIVIL SITE DESIGN LAYOUT MUST BE REPORTED TO AND APPROVED BY THE CIVIL SITE DESIGNER PRIOR TO THE CONSTRUCTION OF THE EARTH STRUCTURE / RETAINING WALL.

13. THE OWNER OR OWNER'S REPRESENTATIVE HAS NOT PROVIDED SPECIFIC SOIL PARAMETERS FOR THE PROPOSED EARTH STRUCTURE, AND TESTING OF THE PROPOSED SOILS HAS NOT BEEN PERFORMED PRIOR TO THE DESIGN. IN PREPARATION OF THE DESIGN, ASSUMED SOIL PARAMETERS WERE USED. THEREFORE, CONSTRUCTION VERIFICATION OF THE ABOVE ASSUMED SOIL CONDITIONS IS IMPERATIVE PRIOR TO AND DURING CONSTRUCTION. FAILURE TO VALIDATE THE ASSUMED SOIL PARAMETERS CAN RESULT IN STRUCTURE FAILURE.

14. ALL ROOF DRAINS AND ROOF DRAIN OUTLETS MUST BE PIPED TO STORM DRAIN SYSTEM. ROOF DRAINS SHALL NOT BE EMPTIED INTO DRY WELLS OR POP UP DISSIPATORS WITHIN 20 FT OF THE REINFORCED ZONE.

15. THE WALL DESIGN FOLLOWS SECTION 18-15 OF THE SBCC. ONE ITEM HOWEVER, THAT HAS CONFLICTING SPECIFICATION IS THE INCLUSION OF RFR AT THE CONNECTION. EES FOLLOWS THE NCMA METHODOLOGY AS ALLOWED BY SECTION 18-15 WITH RESPECT TO CONNECTION CAPACITY.

16. COPYRIGHT © 2020 ENGINEERED EARTH SOLUTIONS, LLC.

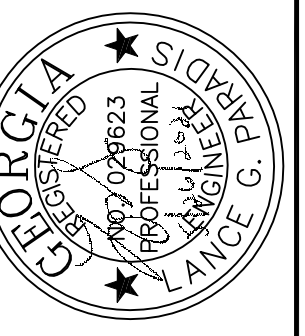
NOTE: THE CIVIL SITE DESIGNER SHALL APPROVE PRIOR TO CONSTRUCTION THE DETAILED LAYOUT FOR THE RETAINING WALL(S) AS SHOWN IN THESE SHOP DRAWINGS. DESIGN AND COORDINATION OF SURFACE DRAINAGE, STORM STRUCTURES, UTILITIES, FENCES, CURBS, GUARDRAILS AND OTHER NEW AND EXISTING IMPROVEMENTS IN THE RETAINING WALL AREA REMAINS THE SOLE RESPONSIBILITY OF THE CIVIL SITE DESIGNER.

THE WALL INSTALLER IS RESPONSIBLE FOR PROVIDING DRAINAGE AS SHOWN ON THE CONSTRUCTION DRAWINGS. FAILURE TO FOLLOW THESE DRAWINGS IN THEIR ENTIRETY WILL INVALIDATE THE DESIGN.

REVISION / ISSUE

NO.	DATE	DESCRIPTION
1	1/14/21	ISSUE FOR CONSTRUCTION
2	5/26/21	REVISED PER CLIENT REQUEST

DRAWN BY:	SJC
DESIGNED BY:	SWS
CHECKED BY:	LGP
DATE:	01/14/21
SCALE:	AS NOTED



PLANTS CREATIVE LANDSCAPES

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TEL: (404) 309-7175
CLIENT

ENGINEERED EARTH SOLUTIONS, LLC

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TEL: (770) 592-2950 FAX: (770) 592-2953
EMAIL: ENGINEERING@EESOLS.COM
ENGINEEREDEARTHSOLUTIONS.COM



ENGINEER

3134 SMOKESTONE COURT

GEORGIA

DEKALB COUNTY

TITLE SHEET

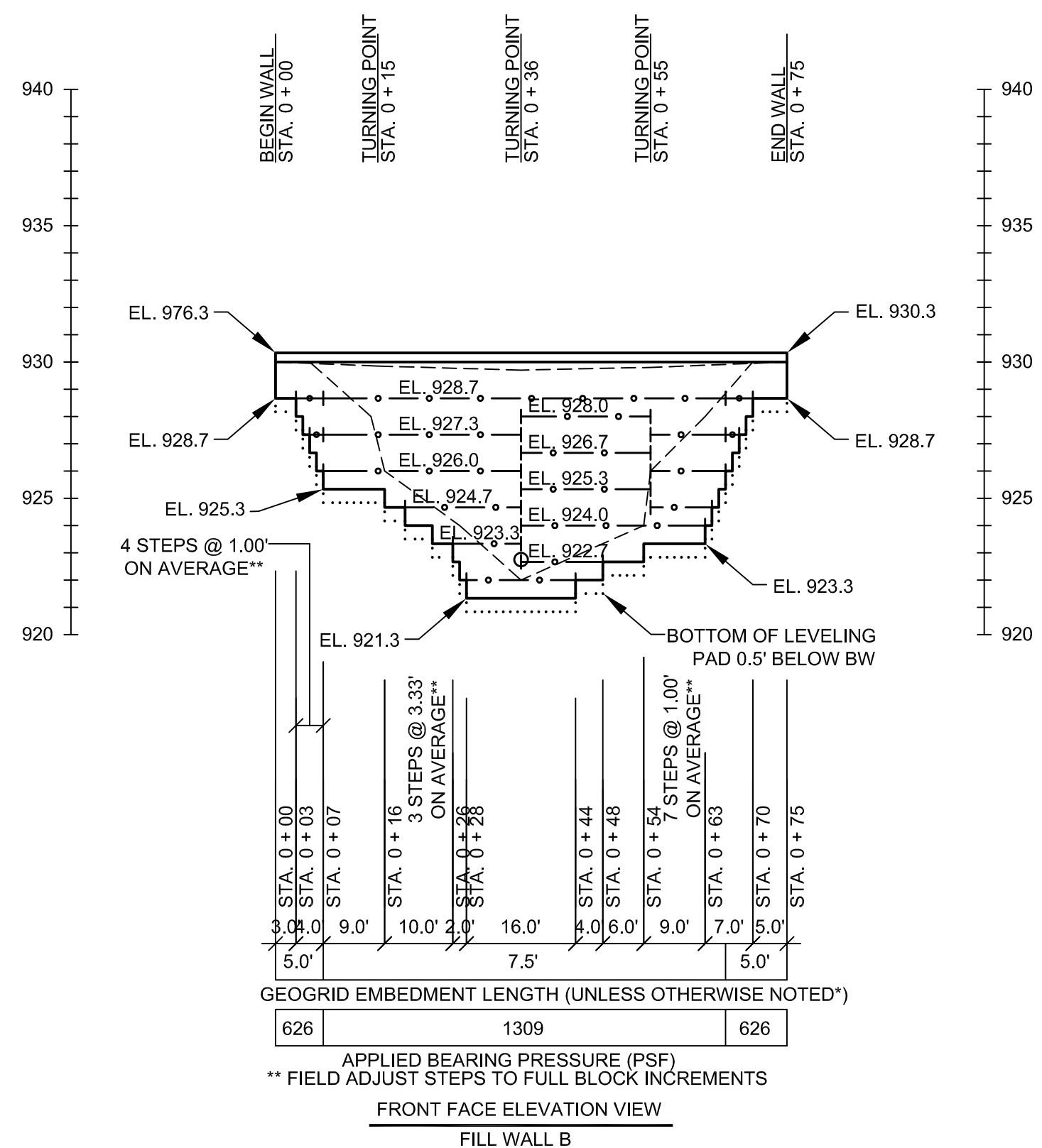
SHEET
RW1
OF 3

PROJECT NO.: Z20-1031





Know what's below
Call before you dig



APPLIED BEARING PRESSURE (PSF)
** FIELD ADJUST STEPS TO FULL BLOCK INCREMENTS

FRONT FACE ELEVATION VIEW
FILL WALL B

NOTE: CONSTRUCTION VERIFICATION OF THE WALL INSTALLATION BY AN ENGINEER IS REQUIRED AND MUST BE PROVIDED BY A KNOWLEDGEABLE GEOTECHNICAL ENGINEER FAMILIAR WITH MECHANICALLY STABILIZED STRUCTURES.

INSPECTION REQUIREMENT:

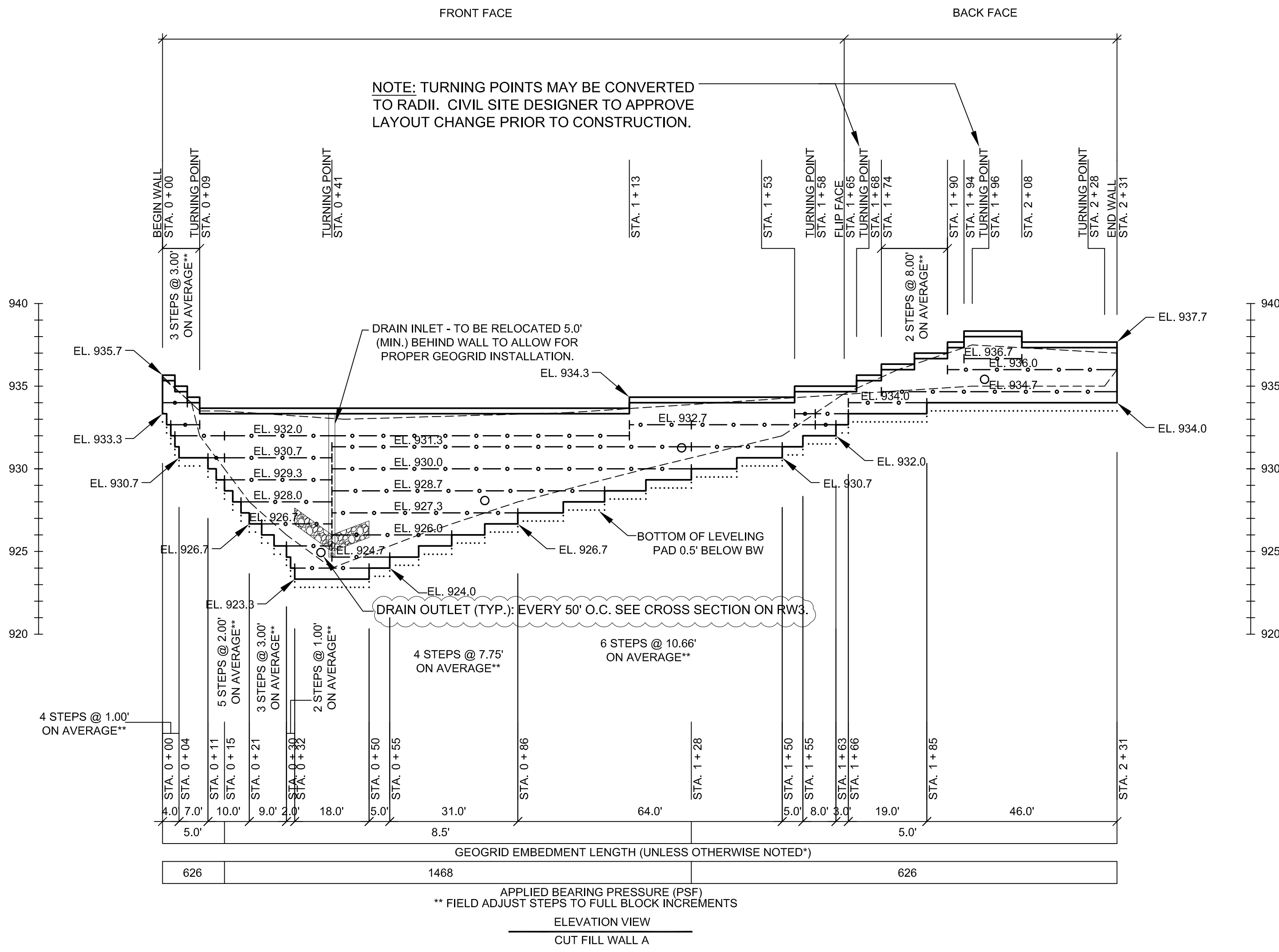
1) THE ON-SITE GEOTECHNICAL ENGINEER SHALL SUBMIT DAILY INSPECTION REPORTS TO THE DEKALB COUNTY DEVELOPMENT DEPARTMENT. THE REPORTS SHALL INCLUDE VERIFICATION THAT THE DESIGN SOIL STRENGTH, BEARING CAPACITY AND COMPACTION REQUIREMENTS ARE MET IN THE FIELD.

2) THE WALL DESIGN ENGINEER SHALL MONITOR THE WALL CONSTRUCTION FOR CONFORMANCE WITH THE DESIGN INTENT.

NOTE: CONSTRUCTION VERIFICATION OF THE WALL INSTALLATION BY AN ENGINEER IS REQUIRED BY THE LOCAL MUNICIPALITY AND MUST BE PROVIDED BY A KNOWLEDGEABLE GEOTECHNICAL ENGINEER FAMILIAR WITH MECHANICALLY STABILIZED STRUCTURES.

LEGEND	
BW	BOTTOM OF WALL
TW	TOP OF WALL
---	GRADE LINE
-+ -	CHANGE IN EMBEDMENT LENGTH OR REINFORCEMENT TERMINATION
-EL. XX.X-	REINFORCEMENT ELEVATION
—•—	GEOGRID TYPE 1 REINFORCEMENT
.....	LEVELING PAD
[Hatched Box]	EXTENTS OF COLLECTOR DRAIN (REFER TO RW3 FOR DETAILS)
REFER TO RW1 FOR GEOGRID REINFORCEMENT OPTIONS	

NOTE: GEOGRID REINFORCEMENT EXTENDS BEYOND PROPERTY LINE. AN EASEMENT MUST BE OBTAINED PRIOR TO CONSTRUCTION OR WALL MUST BE RELOCATED FOR PROPER INSTALLATION.

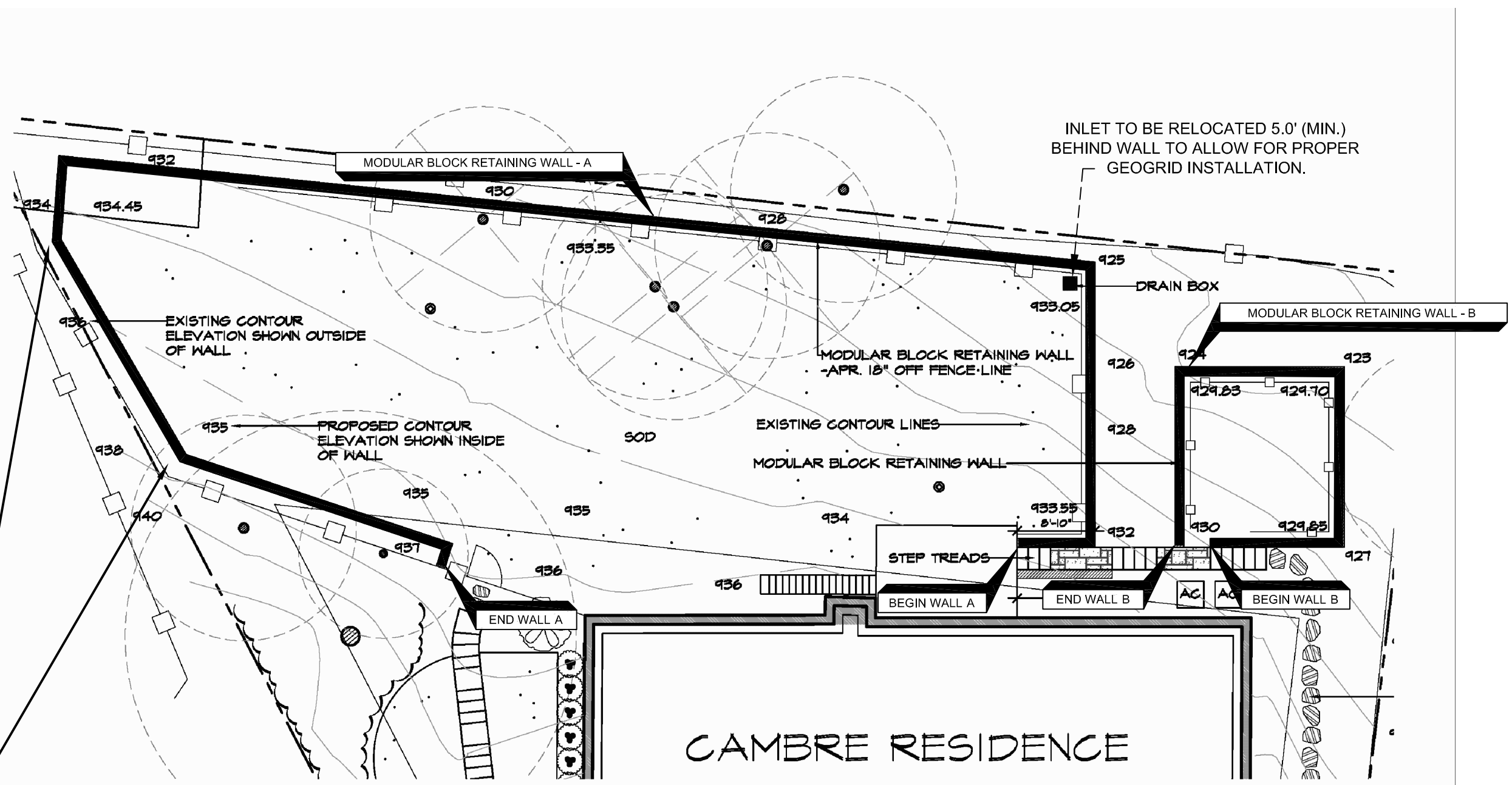


FRONT FACE BACK FACE

NOTE: TURNING POINTS MAY BE CONVERTED TO RADII. CIVIL SITE DESIGNER TO APPROVE LAYOUT CHANGE PRIOR TO CONSTRUCTION.

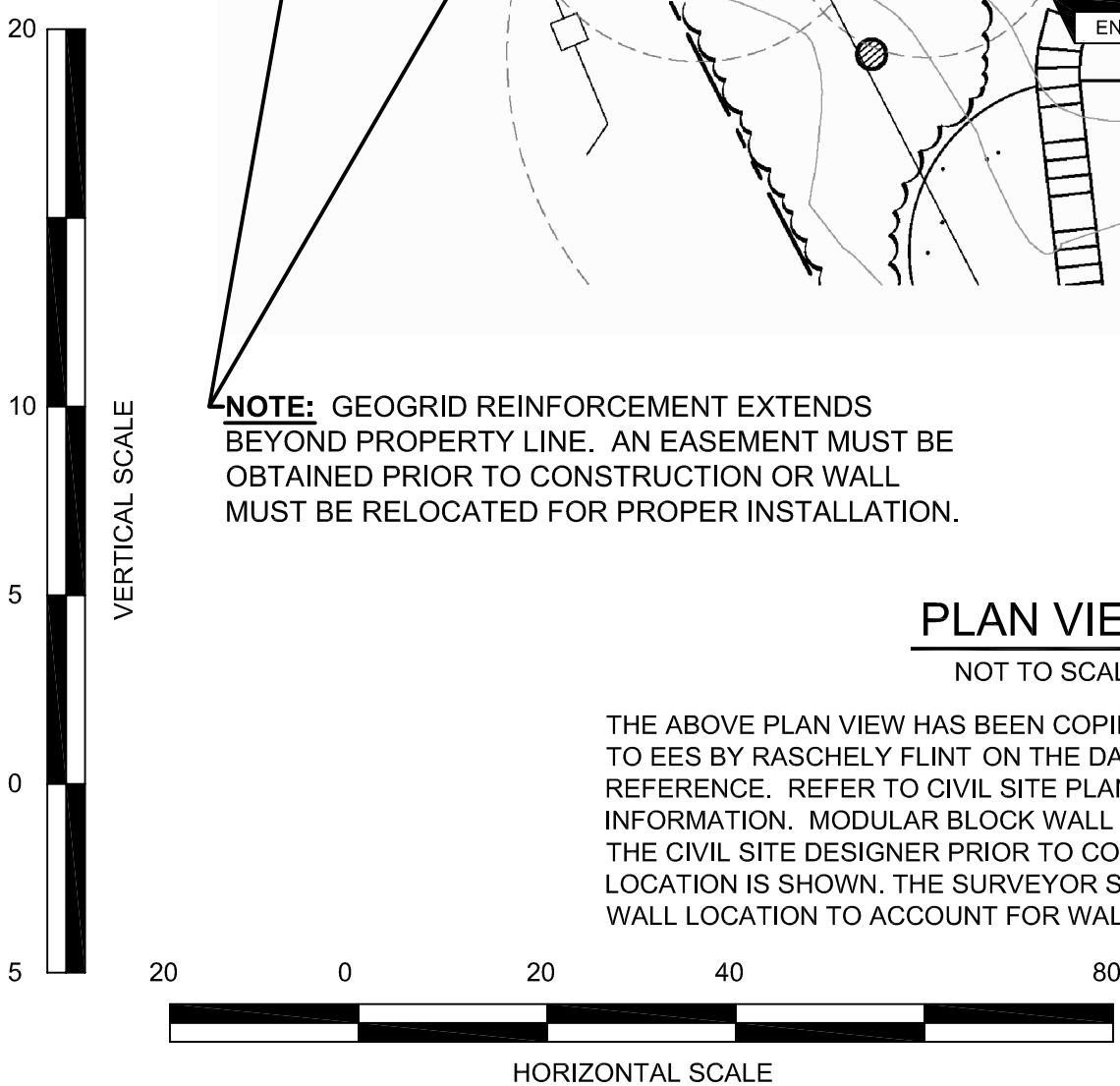
APPLIED BEARING PRESSURE (PSF)
** FIELD ADJUST STEPS TO FULL BLOCK INCREMENTS

ELEVATION VIEW
CUT FILL WALL A



PLAN VIEW
NOT TO SCALE

THE ABOVE PLAN VIEW HAS BEEN COPIED FROM CIVIL SITE PLANS SENT TO EES BY RASCHELY FLINT ON THE DATE OF NOVEMBER 25, 2020 FOR REFERENCE. REFER TO CIVIL SITE PLANS FOR STRUCTURE LAYOUT INFORMATION. MODULAR BLOCK WALL LAYOUT SHALL BE APPROVED BY THE CIVIL SITE DESIGNER PRIOR TO CONSTRUCTION. THE TOP OF WALL LOCATION IS SHOWN. THE SURVEYOR SHALL ADJUST THE BOTTOM OF WALL LOCATION TO ACCOUNT FOR WALL BATTER.

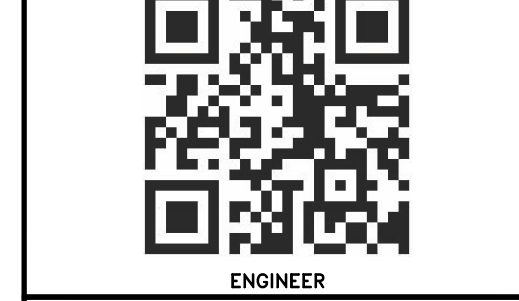


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ENGINEEREARTH SOLUTIONS.COM



3134 SMOKESTONE COURT
DEKALB COUNTY
GEORGIA

PLAN & ELEVATION VIEW SHEET

SHEET
RW2
OF 3

PROJECT NO.: Z20-1031

THIS DESIGN IS BASED UPON SPECIFIC PROPERTIES OF MATERIALS WHICH ARE PROPRIETARY. ANY SUBSTITUTION OF THE SPECIFIED PRODUCTS OR CHANGE IN STRUCTURE GEOMETRY WILL INVALIDATE THIS DESIGN. THIS DRAWING IS BEING FURNISHED FOR USE ON THIS SPECIFIC PROJECT ONLY. ANY PARTY ACCEPTING THIS DOCUMENT DOES SO IN CONFIDENCE AND AGREES THAT IT SHALL NOT BE DUPLICATED, IN WHOLE OR IN PART, NOR DISCLOSED TO OTHERS WITHOUT THE CONSENT OF ENGINEERED EARTH SOLUTIONS, LLC. THIS DRAWING, DESIGN NOTES, AND ASSOCIATED CALCULATIONS HAVE BEEN PREPARED BY ENGINEERED EARTH SOLUTIONS, LLC. FROM INFORMATION PROVIDED BY OTHERS. FINAL DETERMINATION OF THE SUITABILITY OF ANY INFORMATION CONTAINED HEREIN IS THE RESPONSIBILITY OF THE USER.

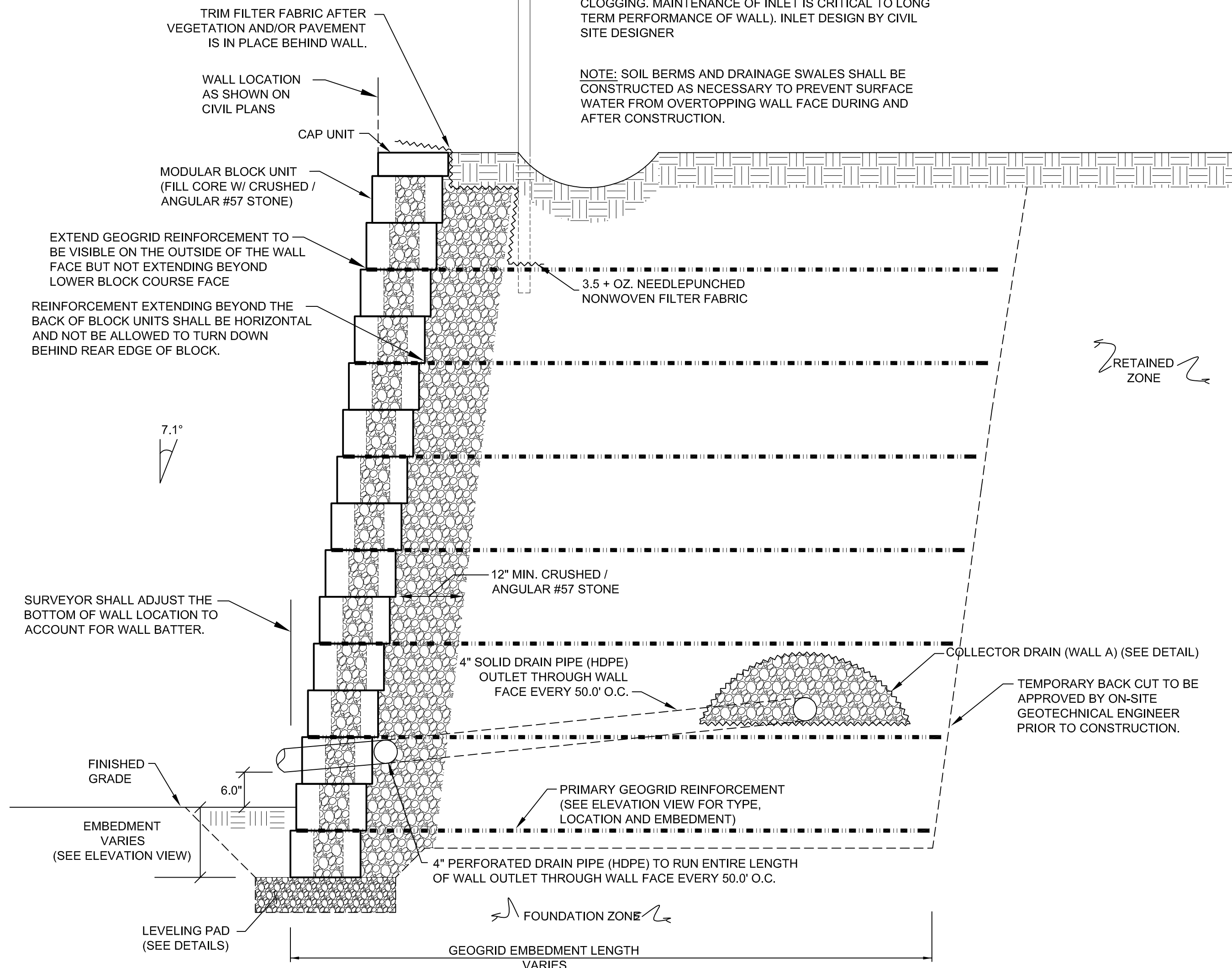
COPYRIGHT © 2020 ENGINEERED EARTH SOLUTIONS, LLC.



TEMPORARY SAFETY FENCE SHALL BE INSTALLED MEETING CURRENT O.S.H.A. STANDARDS UNTIL PERMANENT FENCE (DESIGNED AND PROVIDED BY OTHERS) IS INSTALLED. ENGINEERED EARTH SOLUTIONS, LLC. IS RESPONSIBLE FOR THE REINFORCED EARTH STRUCTURE ONLY. ALL SAFETY RESTRAINT SYSTEMS (FENCES, GUARDRAILS, BALLARDS, ETC.) SHALL BE DESIGNED BY THE CIVIL SITE DESIGNER.

NOTE: DIVERT RUNOFF TO DRAIN INLET. (EES RECOMMENDS A DOMED INLET TO HELP PREVENT CLOGGING. MAINTENANCE OF INLET IS CRITICAL TO LONG TERM PERFORMANCE OF WALL). INLET DESIGN BY CIVIL SITE DESIGNER

NOTE: SOIL BERMS AND DRAINAGE SWALES SHALL BE CONSTRUCTED AS NECESSARY TO PREVENT SURFACE WATER FROM OVERTOPPING WALL FACE DURING AND AFTER CONSTRUCTION.



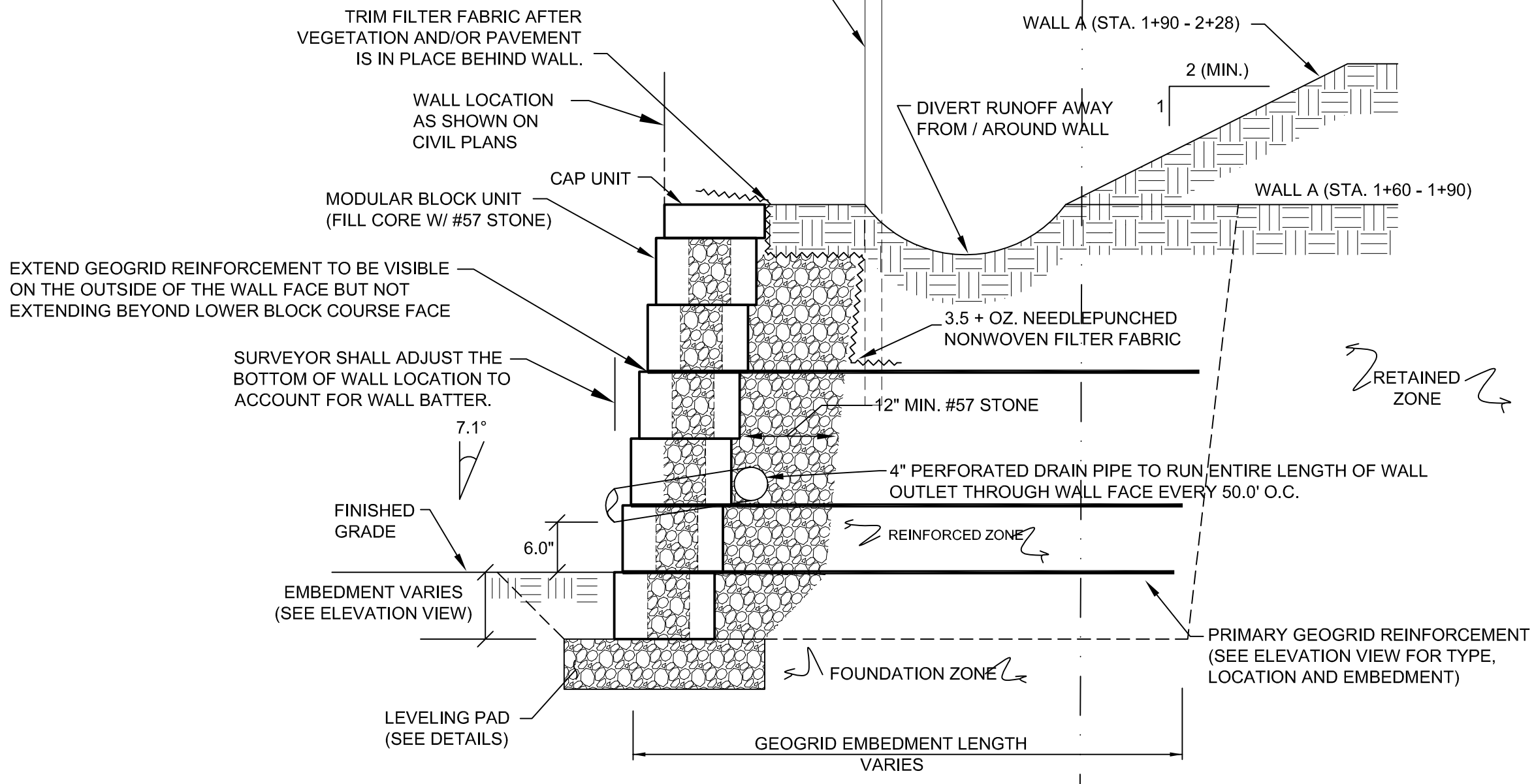
TYPICAL CROSS-SECTION
NOT TO SCALE

FOUNDATION REMEDIATION AS REQUIRED BY ON-SITE GEOTECHNICAL ENGINEER TO OBTAIN STABLE WORKING PLATFORM MEETING THE PARAMETERS IN NOTE 5.0 (SHEET RW1). VERIFICATION OF BEARING CAPACITY (NOTE 5.0, SHEET RW1) MUST BE APPROVED BY THE ON-SITE GEOTECHNICAL ENGINEER.

TEMPORARY SAFETY FENCE SHALL BE INSTALLED MEETING CURRENT O.S.H.A. STANDARDS UNTIL PERMANENT FENCE (DESIGNED AND PROVIDED BY OTHERS) IS INSTALLED. ENGINEERED EARTH SOLUTIONS, LLC. IS RESPONSIBLE FOR THE REINFORCED EARTH STRUCTURE ONLY. ALL SAFETY RESTRAINT SYSTEMS (FENCES, GUARDRAILS, BALLARDS, ETC.) SHALL BE DESIGNED BY THE CIVIL SITE DESIGNER.

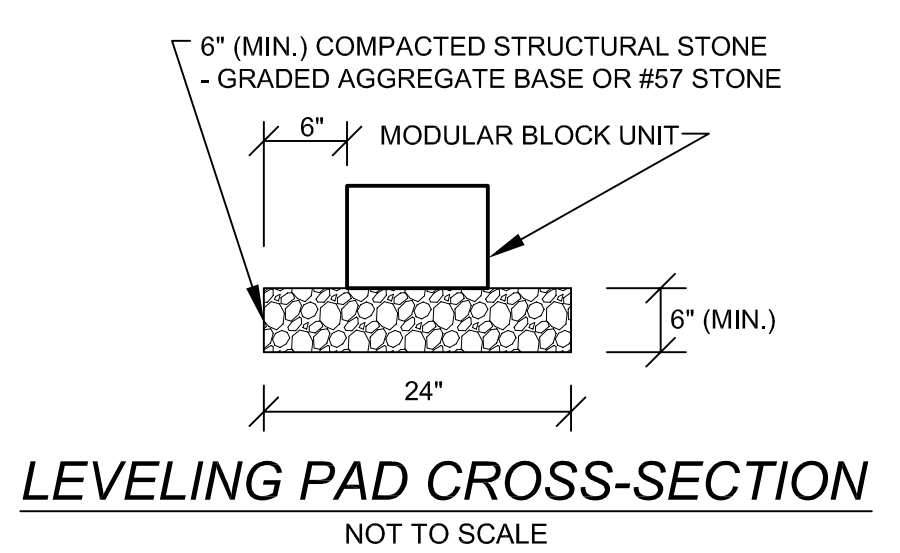
NOTE: DIVERT RUNOFF TO DRAIN INLET. (EES RECOMMENDS A DOMED INLET TO HELP PREVENT CLOGGING. MAINTENANCE OF INLET IS CRITICAL TO LONG TERM PERFORMANCE OF WALL). INLET DESIGN BY CIVIL SITE DESIGNER

PROPERTY LINE BEHIND WALL A (STA. 1+60-1+98). AN EASEMENT MAY BE REQUIRED.

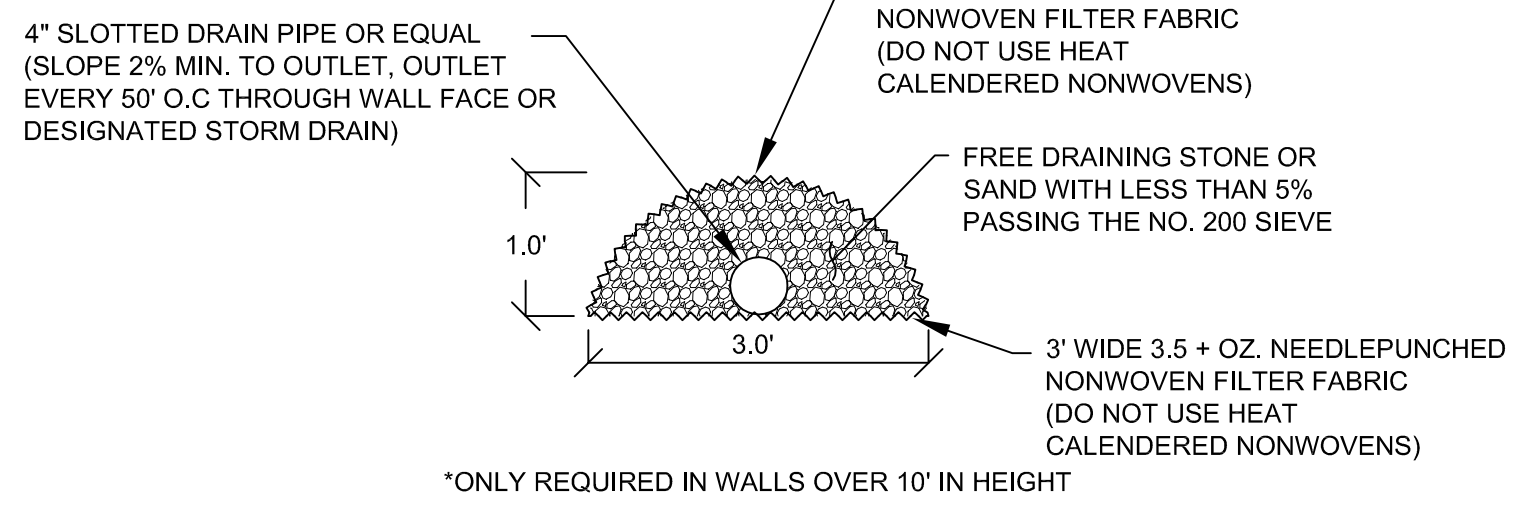


TYPICAL CROSS-SECTION (WALL A (STA. 1+60 TO END OF WALL))
NOT TO SCALE

FOUNDATION REMEDIATION AS REQUIRED BY ON-SITE GEOTECHNICAL ENGINEER TO OBTAIN STABLE WORKING PLATFORM MEETING THE PARAMETERS IN NOTE 5.0 (SHEET RW1). VERIFICATION OF BEARING CAPACITY (NOTE 5.0, SHEET RW1) MUST BE APPROVED BY THE ON-SITE GEOTECHNICAL ENGINEER.

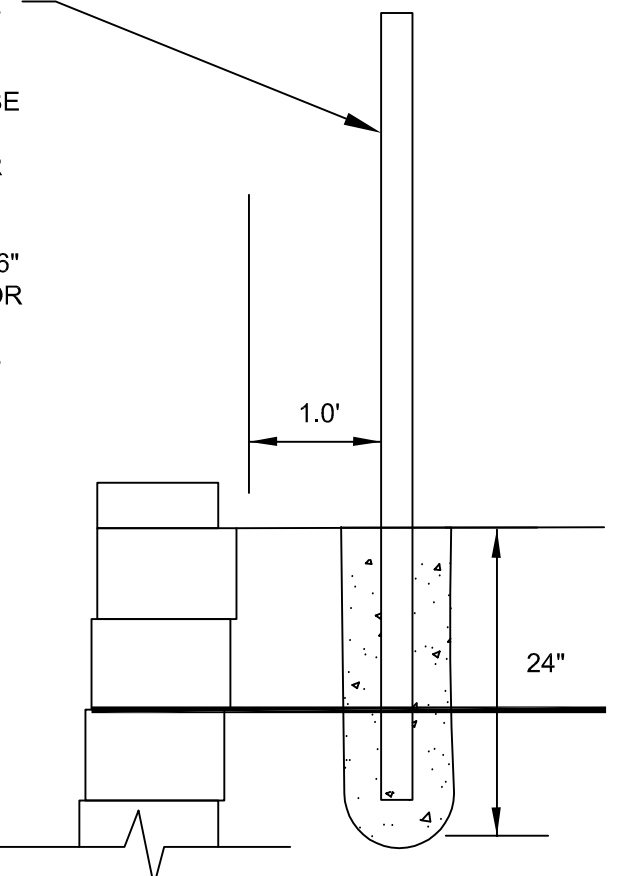


LEVELING PAD CROSS-SECTION
NOT TO SCALE



COLLECTOR DRAIN
NOT TO SCALE

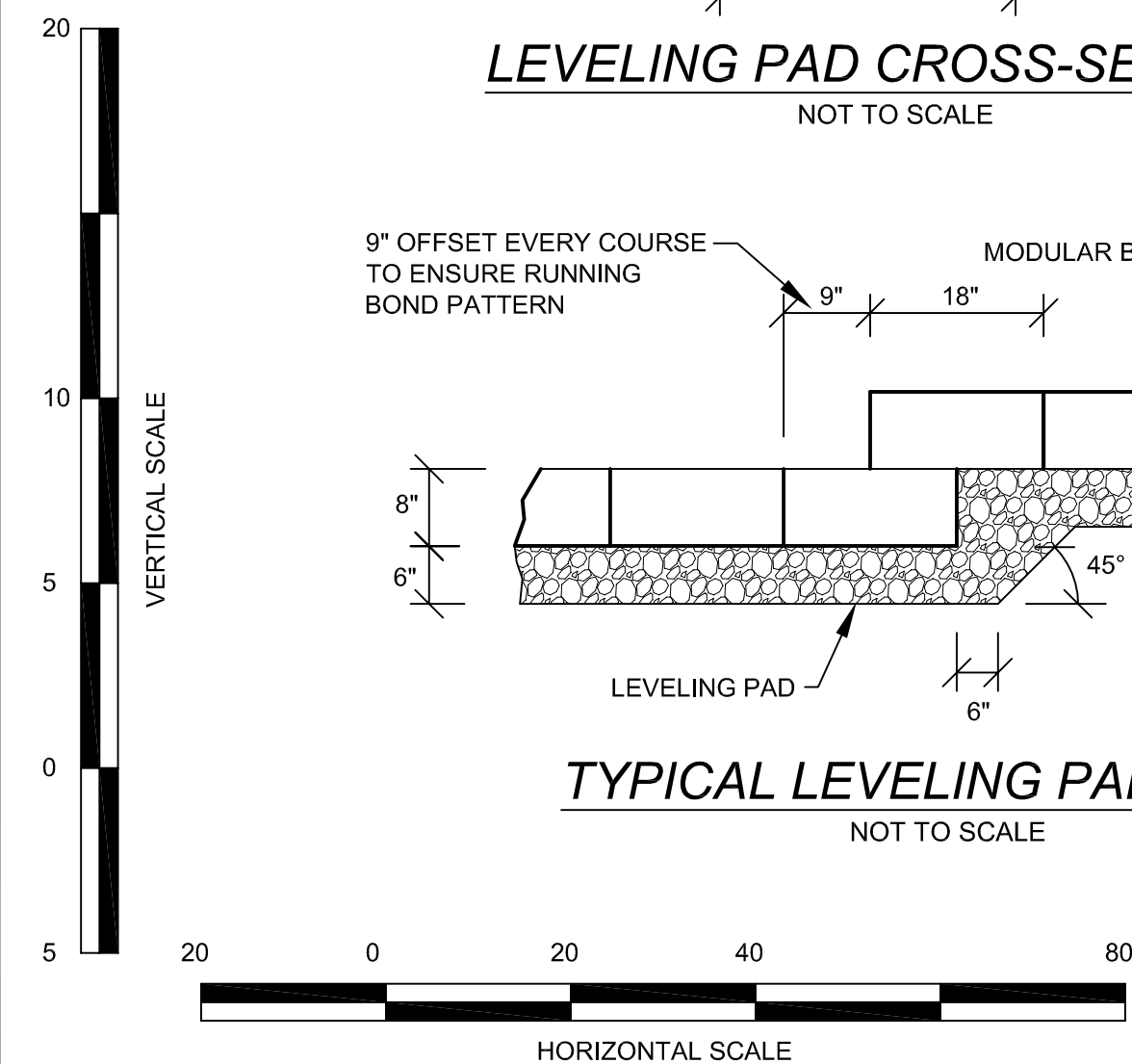
THE PERMANENT FENCE IS TO BE 42" MIN. HEIGHT, SHALL HAVE NO OPENING THAT CAN PASS A 4" SPHERE, AND THE FENCE MUST BE ABLE TO WITHSTAND A 200 LB. LOAD AT 42" ABOVE GROUND PER DEKALB COUNTY. PERMANENT PEDESTRIAN FENCE POST SECURED IN CONCRETE (AUGER 6" MAX. HOLE THROUGH GEOGRID OR INSTALL 6" SONOTUBE DURING WALL CONSTRUCTION, 4' O.C. MIN.)



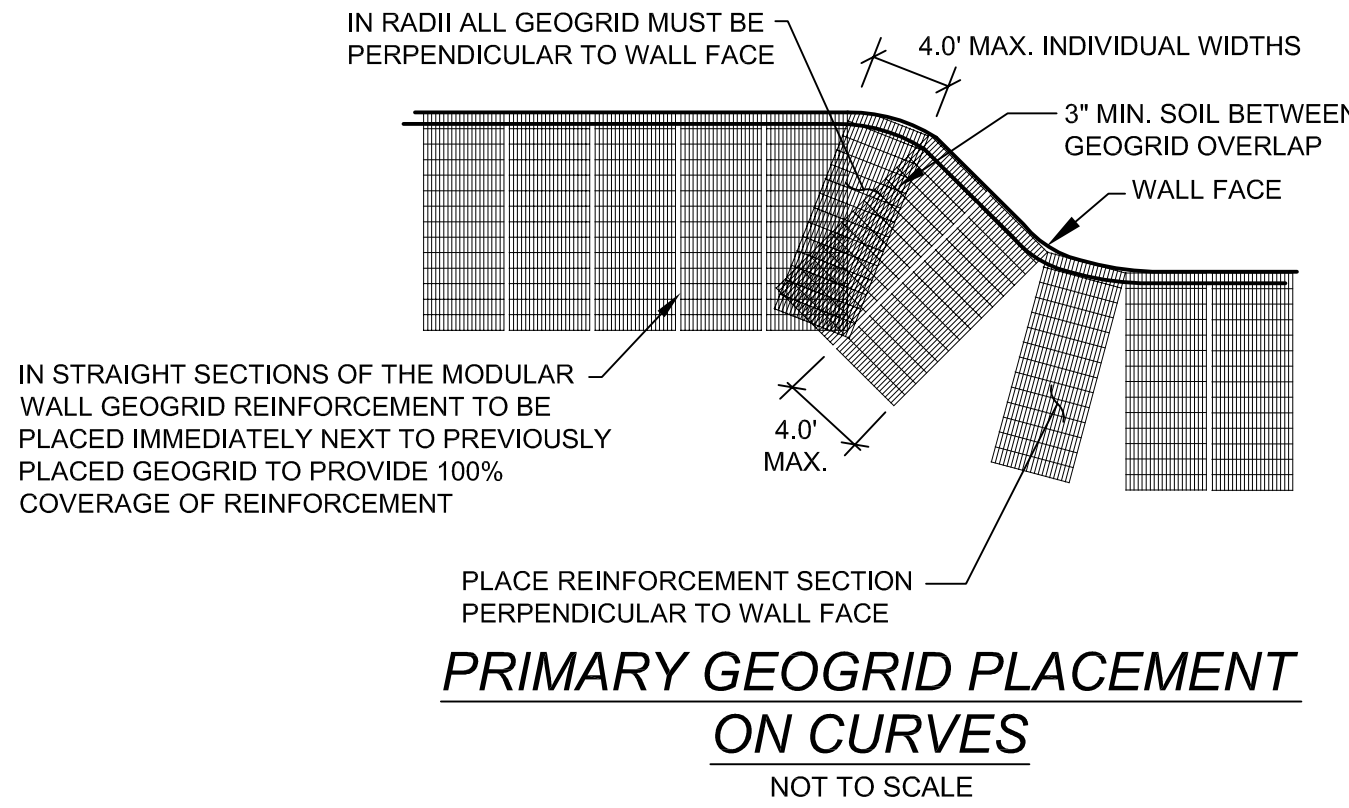
TYPICAL FENCE POST INSTALLATION
NOT TO SCALE

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TYPICAL LEVELING PAD STEP
NOT TO SCALE



PRIMARY GEOGRID PLACEMENT ON CURVES
NOT TO SCALE

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3134 SMOKESTONE COURT

GEORGIA

DEKALB COUNTY

DETAIL SHEET

SHEET
RW3
OF 3

PROJECT NO.: Z20-1031



P.O. Box 1354
Oxford, Georgia 30054
404-291-1095

RE: Arborist Report for 3134 Smokestone Court

On June 3, 2021 Ben Kent with Southern Arbor Source LLC conducted a level I visual assessment of trees located to the rear of the residence on the property. The assessment was conducted for the purposes of building a retaining wall located at the rear property line between 3134 Smokestone Court and 3137 Smokecreek Court. All trees identified with potential impacts are located on the property line and 3137 Smokecreek Court.

The primary trees of concern are a 20" DBH red oak and 27" DBH tulip poplar. The red oak was found to have a significant lean towards the residence of 3134 Smokestone Court. The tree exhibits enough lean that the tree can potentially be deemed hazardous. It is highly recommended that if this tree which appears to be located on the property line is to remain, it should be pruned significantly to reduce limb weight in order to lessen the risk of failure. The tulip poplar which is approximately 5-10' from the property line, will be impacted minimally.

In an effort to remediate construction related impacts, it is suggested that the trees along the property line be root pruned at the time of silt fence installation and / or any major excavation activities. It is also suggested that these trees be organically fertilized.

Respectfully,

Benjamin J Kent
ISA Certified Arborist
ISA Certificate #SO-7070A
Tree Risk Assessor Qualified



Leaning red oak towards rear of residence of 3134 Smokestone Court.



Tulip poplar additionally impacted.

NEIGHBORS EXISTING POINT OF VIEW- BEFORE WALL AND PLANTINGS





NEIGHBORS POINT OF VIEW-
BEFORE PRIVACY SCREENING
PLANTED



NEIGHBORS POINT OF VIEW-
AFTER PRIVACY SCREENING
PLANTED