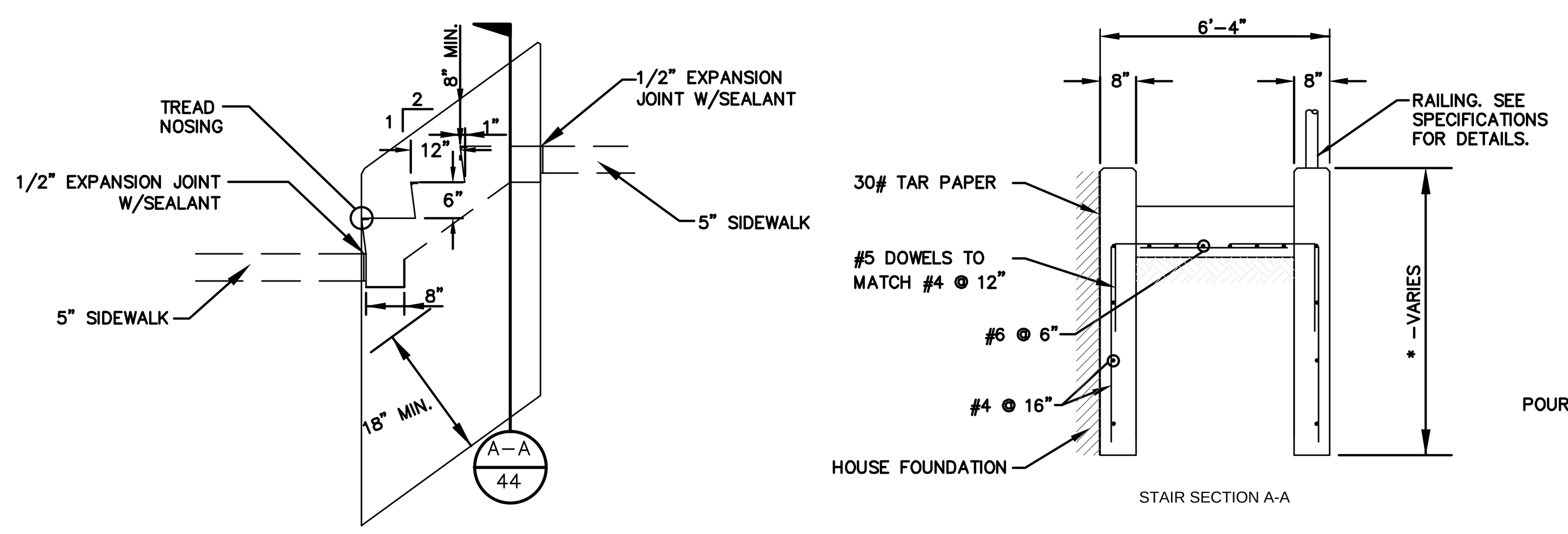
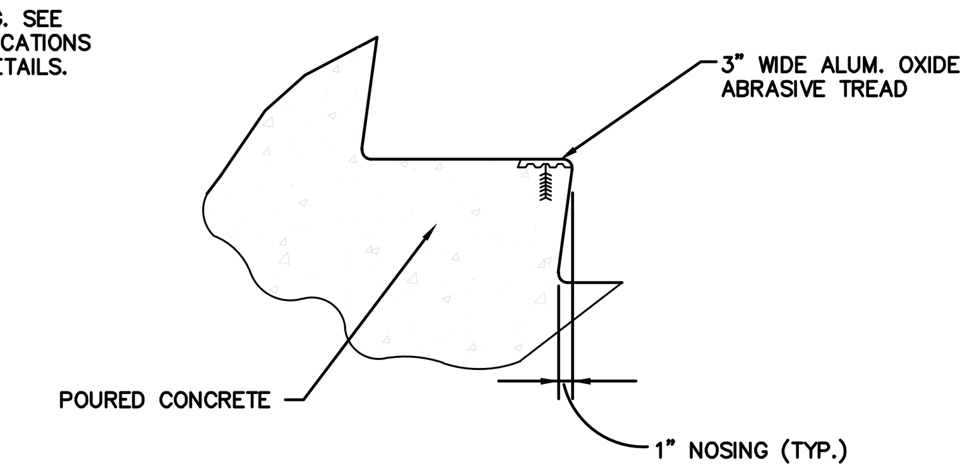
NOTES:

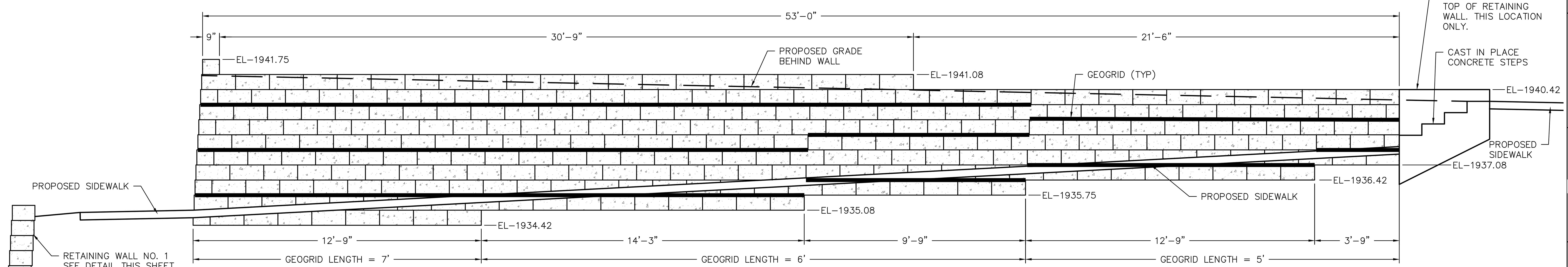
1. APPROVED BLOCK = DIAMOND PRO
2. APPROVED GEOGRID = TENCATI MIRAFI – MIRAGRID 3XT



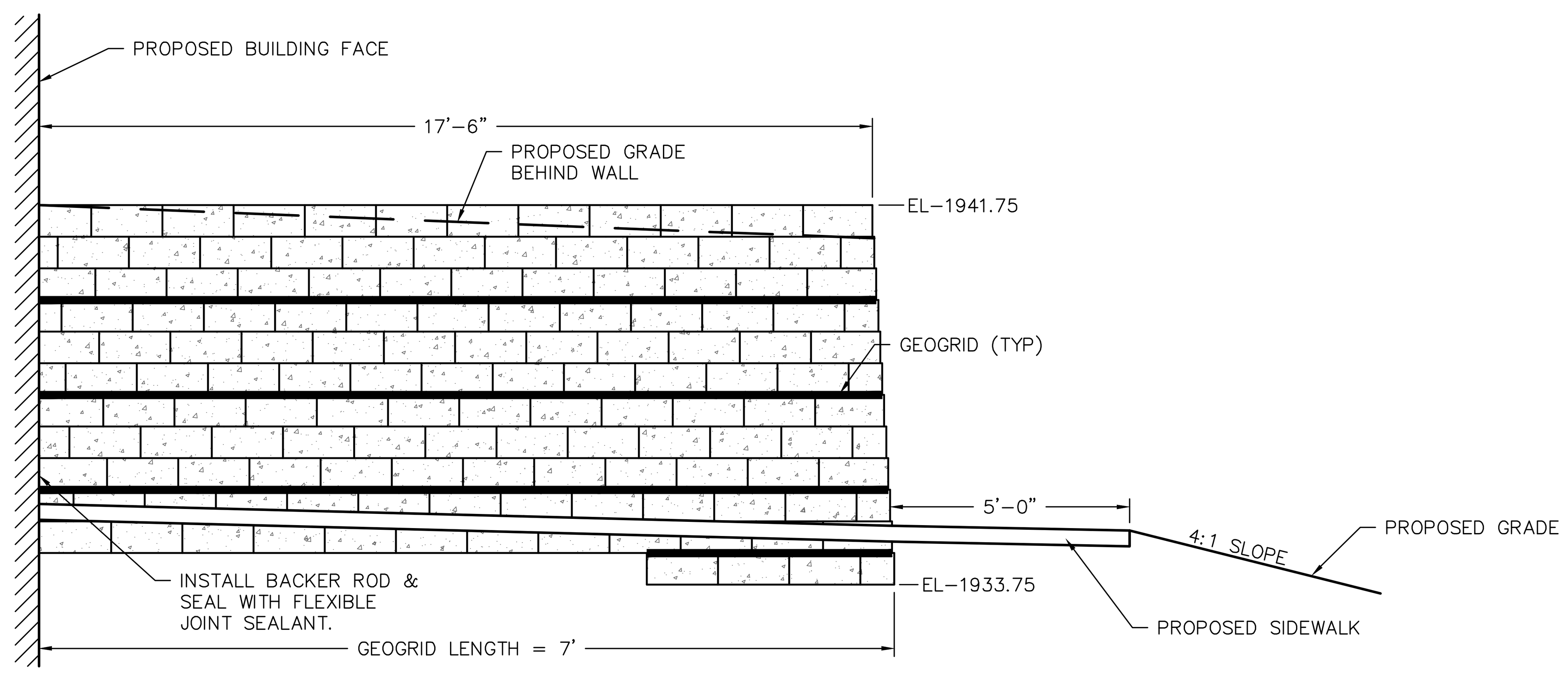
STAIR SECTIONS
SCALE: 3/8" = 1'-0"



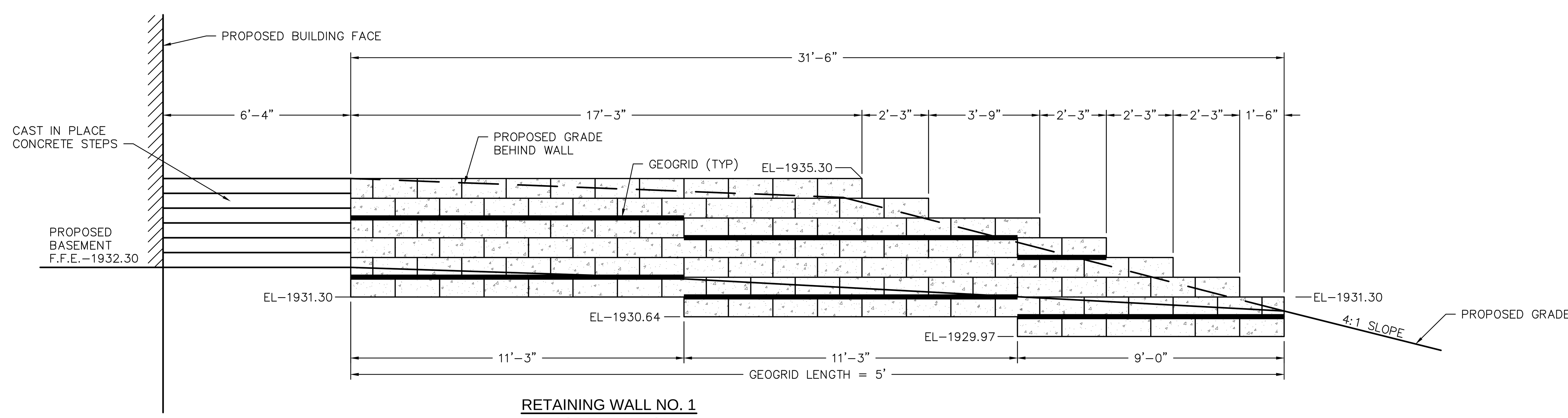
TYPICAL SAFETY TREAD DETAIL
1 1/2" = 1'-0"



RETAINING WALL NO. 2
NORTH ELEVATION
SCALE: 3/8"=1'-0"



RETAINING WALL NO. 2
EAST ELEVATION
SCALE: 3/8"=1'-0"



RETAINING WALL NO. 1
EAST ELEVATION
SCALE: 3/8"=1'-0"

REVISIONS:
02-03-2012 ADDENDUM NO. 3

DESIGN ARCHITECT: MFS
PROJECT ARCHITECT: CMB
DRAWN BY: LH
ISSUED: 01/17/2012

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GENERAL INFORMATION

SHA PROJECT NO. 10087

C402

SPECIFICATION FOR SEGMENTAL RETAINING WALL SYSTEMS

PART 1: GENERAL

1.01 DESCRIPTION

A. WORK INCLUDES FURNISHING AND INSTALLING SEGMENTAL RETAINING WALL (SRW) UNITS TO THE LINES AND GRADES DESIGNATED ON THE PROJECT'S FINAL CONSTRUCTION DRAWINGS OR AS DIRECTED BY THE ARCHITECT/ENGINEER. ALSO INCLUDED IS FURNISHING AND INSTALLING APPURTENANT MATERIALS REQUIRED FOR CONSTRUCTION OF THE RETAINING WALL AS SHOWN ON THE CONSTRUCTION DRAWINGS.

1.02 REFERENCE STANDARDS

A. SEGMENTAL RETAINING WALL UNITS

1. ASTM C 1372 – STANDARD SPECIFICATION FOR SEGMENTAL RETAINING WALL UNITS
2. ASTM C 140 – STANDARD TEST METHODS OF SAMPLING AND TESTING CONCRETE MASONRY UNITS

B. GEOSYNTHETIC REINFORCEMENT

1. ASTM D 4595 – TENSILE PROPERTIES OF GEOTEXTILES BY THE WIDE-WIDTH STRIP METHOD
2. ASTM D 5262 – TEST METHOD FOR EVALUATING THE UNCONFINED CREEP BEHAVIOR OF GEOSYNTHETICS
3. GRI:GG1 – SINGLE RIB GEOGRID TENSILE STRENGTH
4. GRI:GG5 – GEOGRID PULLOUT

C. SOILS

1. ASTM D 698 – MOISTURE DENSITY RELATIONSHIP FOR SOILS, STANDARD METHOD
2. ASTM D 422 – GRADATION OF SOILS
3. ASTM D 424 – ATTERBERG LIMITS OF SOIL

D. DRAINAGE PIPE

1. ASTM D 3034 – SPECIFICATION FOR POLYVINYL CHLORIDE (PVC) PLASTIC PIPE
2. ASTM D 1248 – SPECIFICATION FOR CORRUGATED PLASTIC PIPE

E. ENGINEERING DESIGN

1. "NCMA DESIGN MANUAL FOR SEGMENTAL RETAINING WALLS", THIRD EDITION
2. "MECHANICALLY STABILIZED EARTH WALLS AND REINFORCED SOIL SLOPES DESIGN AND CONSTRUCTION GUIDELINES", FEDERAL HIGHWAY ADMINISTRATION REPORT NO. FHWA-NHI-00-043, MARCH 2001.

F. WHERE SPECIFICATIONS AND REFERENCE DOCUMENTS CONFLICT, THE ARCHITECT/ENGINEER SHALL MAKE THE FINAL DETERMINATION OF APPLICABLE DOCUMENT.

1.03 SUBMITTALS

A. MATERIAL SUBMITTALS: THE CONTRACTOR SHALL SUBMIT MANUFACTURERS' CERTIFICATIONS TWO WEEKS PRIOR TO START OF WORK STATING THAT THE SRW UNITS AND GEOSYNTHETIC REINFORCEMENT MEET THE REQUIREMENTS OF SECTION 2 OF THIS SPECIFICATION.

1.04 DELIVERY, STORAGE AND HANDLING

A. CONTRACTOR SHALL CHECK MATERIALS UPON DELIVERY TO ASSURE THAT SPECIFIED TYPE AND GRADE OF MATERIALS HAVE BEEN RECEIVED AND PROPER COLOR AND TEXTURE OF SRW UNITS HAVE BEEN RECEIVED.

B. CONTRACTOR SHALL PREVENT EXCESSIVE MUD, WET CONCRETE, EPOXIES, AND LIKE MATERIALS THAT MAY AFFIX THEMSELVES, FROM COMING IN CONTACT WITH MATERIALS.

C. CONTRACTOR SHALL STORE AND HANDLE MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

D. CONTRACTOR SHALL PROTECT MATERIALS FROM DAMAGE. DAMAGED MATERIALS SHALL NOT BE INCORPORATED INTO THE RETAINING WALL.

PART 2: MATERIALS

2.01 SEGMENTAL RETAINING WALL UNITS

A. SRW UNITS SHALL BE MACHINE FORMED, PORTLAND CEMENT CONCRETE BLOCKS SPECIFICALLY DESIGNED FOR RETAINING WALL APPLICATIONS. SRW UNITS CURRENTLY APPROVED FOR THIS PROJECT ARE:
<u>ANCHOR BLOCKS – Diamond Pro Series.</u>

B. COLOR AND TEXTURE OF SRW UNITS SHALL BE SUBMITTED PRIOR TO CONSTRUCTION FOR APPROVAL.

C. SRW UNITS SHALL BE DESIGNED TO STACK ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND TO ALLOW FOR PLACEMENT OF GEOGRID.

D. SRW UNITS SHALL HAVE A MINIMUM WEIGHT OF 74 POUNDS.

E. SRW UNITS SHALL BE PLACED IN A RUNNING BOND PATTERN. THE UPPER UNIT SHOULD BE PLACED AND SLID FORWARD UNTIL IT'S BOTTOM "GROOVE" IS IN FULL CONTACT WITH THE BOTTOM UNIT'S "TONGUE". THE SETBACK PER PANEL SHOULD BE 1.0 INCHES RESULTING IN AN 7° CANTER FROM VERTICAL.

F. SRW UNITS SHALL BE CAPABLE OF BEING ERECTED WITH THE HORIZONTAL GAP BETWEEN ADJACENT UNITS NOT EXCEEDING 1/8 INCHES.

G. SRW UNITS SHALL BE CAPABLE OF BEING INSTALLED WITH A CONTINUOUS, LEVEL COURSE AT THE HEIGHT OF GEOSYNTHETIC REINFORCEMENT LAYERS.

H. SRW UNITS SHALL BE CAPABLE OF PROVIDING OVERLAP OF UNITS ON EACH SUCCESSIVE COURSE OF A CORNER SO THAT WALLS MEETING AT CORNER ARE INTERLOCKED AND CONTINUOUS. SRW UNITS THAT REQUIRE CORNERS TO BE MITERED SHALL NOT BE ALLOWED.

I. SRW UNITS SHALL BE SOUND AND FREE OF CRACKS OR OTHER DEFECTS THAT WOULD INTERFERE WITH THE PROPER PLACING OF THE UNIT OR SIGNIFICANTLY IMPAIR THE STRENGTH OR PERMANENCE OF THE STRUCTURE. CRACKING OR EXCESSIVE CHIPPING MAY BE GROUNDS FOR REJECTION. UNITS SHOWING CRACKS LONGER THAN 1/2" SHALL NOT BE USED WITHIN THE WALL. UNITS SHOWING CHIPS VISIBLE AT A DISTANCE OF 10 FEET FROM THE WALL SHALL NOT BE USED WITHIN THE WALL.

J. CONCRETE USED TO MANUFACTURE SRW UNITS SHALL HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF 4,000 PSI AND A MAXIMUM MOISTURE ABSORPTION RATE, BY WEIGHT, OF 7% AS DETERMINED IN ACCORDANCE WITH ASTM C140. COMPRESSIVE STRENGTH TEST SPECIMENS SHALL CONFORM TO THE SAW-CUT COUPON PROVISIONS OF ASTM C140.

K. SRW UNITS' MOLDED DIMENSIONS SHALL NOT DIFFER MORE THAN + 1/8 INCH FROM THAT SPECIFIED, IN ACCORDANCE WITH ASTM C1372.

2.02 GEOSYNTHETIC REINFORCEMENT

A. GEOSYNTHETIC REINFORCEMENT SHALL CONSIST OF GEOGRIDS OR GEOTEXTILES MANUFACTURED AS A SOIL REINFORCEMENT ELEMENT. THE MANUFACTURERS/SUPPLIERS OF THE GEOSYNTHETIC REINFORCEMENT SHALL HAVE DEMONSTRATED CONSTRUCTION OF SIMILAR SIZE AND TYPES OF SEGMENTAL RETAINING WALLS ON PREVIOUS PROJECTS.

B. THE TYPE, STRENGTH, AND PLACEMENT LOCATION OF THE REINFORCING GEOSYNTHETIC ARE SHOWN ON THE WALL PROFILE SHEETS. APPROVED GEOSYNTHETIC REINFORCEMENT:
<u>TENCAIT-MIRAFI Miragrid 3XT</u>

2.04 LEVELING PAD

A. CRUSHED STONE OR GRANULAR FILL (MINIMUM 6") MEETING THE FOLLOWING GRADATION:

SIEVE SIZE	PERCENT PASSING
1 INCH	100
NO. 4	35 TO 70
NO. 40	10 TO 35
NO. 200	3 TO 10

B. LEAN CONCRETE WITH A STRENGTH OF 3000 PSI AND SIX INCHES THICK.
C. THE LEVELING PAD SHOULD EXTEND LATERALLY A DISTANCE OF 6 INCHES FROM THE TOE AND HEEL OF THE LOWERMOST SRW UNIT.

2.05 DRAINAGE AGGREGATE

A. INSTALL CLEAN DRAINAGE FILL MEETING THE FOLLOWING GRADATION BEHIND THE WALL FACE AND BELOW THE FINISHED GRADE AS SHOWN ON TYPICAL SECTION.

SIEVE SIZE	PERCENT PASSING
1 INCH	100
3/4 INCH	75 TO 100
NO. 4	0 TO 60
NO. 40	0 TO 50
NO. 200	0 TO 5

B. DRAINAGE AGGREGATE SHOULD BE WRAPPED IN <u>MIRAFI 140N GEOTEXTILE FILTER FABRIC</u>.

2.06 DRAINAGE PIPE

A. THE DRAINAGE COLLECTION PIPE SHALL BE PERFORATED OR SLOTTED PVC, OR CORRUGATED HDPE PIPE. THE DRAINAGE PIPE MAY BE WRAPPED WITH A GEOTEXTILE TO FUNCTION AS A FILTER.

B. DRAINAGE PIPE SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM D 3034 AND/OR ASTM D 1248

2.07 REINFORCED (INFILL) SOIL

A. THE REINFORCED SOIL MATERIAL SHALL CONSIST OF LEAN CLAY EXHIBITING A LIQUID LIMIT LESS THAN 40 PERCENT AND A PLASTICITY INDEX LESS THAN 20 PERCENT.
B. IN LIEU OF LEAN CLAY, A CLEAN CRUSHED STONE OR GRANULAR FILL MAY BE USED.
C. SAMPLES OF ALL PROPOSED INFILL SOIL SHALL BE SUBMITTED TO THE GEOTECHNICAL ENGINEER OF RECORD FOR APPROVAL PRIOR TO PLACEMENT ON SITE.

PART 3: DESIGN PARAMETERS

3.01 SOIL

THE SOIL PARAMETERS USED IN THE DESIGN OF THE WALL SYSTEMS WERE DETERMINED WITH INFORMATION OBTAINED FROM THE SUBSURFACE EXPLORATION AND GEOTECHNICAL EVALUATION; Bridges Housing, Highway 6/34 and South Southern Hills Road, dated January 16, 2012; PROVIDED BY OLSSON ASSOCIATES AND SHOWN BELOW.

MSE SOIL PARAMETERS
EFFECTIVE STRESS (DRAINED)

Material	ϕ, degrees	Unit Weight, pcf	Cu, psf
Foundation Soils (Peoria Loess)	23	110	0
Reinforced Soils (Structural Lean Clay)	26	120	0
Retained Soils (Peoria Loess)	23	110	100

PART 4: CONSTRUCTION

4.01 INSPECTION

A. THE WALL DESIGN ENGINEER (OLSSON ASSOCIATES) SHALL BE RETAINED BY THE OWNER TO VERIFY THAT THE CONTRACTOR MEETS ALL THE REQUIREMENTS OF THE SPECIFICATION. THIS INCLUDES ALL SUBMITTALS FOR MATERIALS AND DESIGN, QUALIFICATIONS, AND PROPER INSTALLATION OF WALL SYSTEM.

B. CONTRACTOR'S FIELD CONSTRUCTION SUPERVISOR SHALL HAVE DEMONSTRATED EXPERIENCE AND BE QUALIFIED TO DIRECT ALL WORK AT THE SITE.

4.02 EXCAVATION

A. CONTRACTOR SHALL EXCAVATE TO THE LINES AND GRADES SHOWN ON THE PROJECT GRADING PLANS. CONTRACTOR SHALL TAKE PRECAUTIONS TO MINIMIZE OVER-EXCAVATION. OVER-EXCAVATION SHALL BE FILLED WITH COMPACTED INFILL MATERIAL, OR AS DIRECTED BY THE ENGINEER/ARCHITECT, AT THE CONTRACTOR'S EXPENSE.

B. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING STRUCTURES AND UTILITIES PRIOR TO EXCAVATION. CONTRACTOR SHALL ENSURE ALL SURROUNDING STRUCTURES ARE PROTECTED FROM THE EFFECTS OF WALL EXCAVATION. EXCAVATION SUPPORT, IF REQUIRED, IS THE RESPONSIBILITY OF THE CONTRACTOR.

4.03 FOUNDATION PREPARATION

A. OVER-EXCAVATION OF FOUNDATION MATERIALS SHOULD BE COMPLETED AS SHOWN ON TYPICAL DETAILS.

B. FOUNDATION SOIL SHALL BE PROOFROLLED AND INSPECTED BY THE OWNER'S ENGINEER PRIOR TO PLACEMENT OF LEVELING PAD MATERIALS.

C. THE OVEREXCAVATION BACKFILL SHALL BE PLACED AS SHOWN IN THE FINAL WALL PLANS IN THE MAXIMUM COMPACTED LIFT THICKNESS OF 8 INCHES AND SHALL BE COMPACTED TO A MINIMUM OF 98% OF STANDARD PROCTOR DENSITY (ASTM D 698) AT A MOISTURE CONTENT WITHIN 2% OF OPTIMUM.

4.04 SRW UNIT INSTALLATION

A. ALL SRW UNITS SHALL BE INSTALLED AT THE PROPER ELEVATION AND ORIENTATION AS SHOWN ON THE FINAL, P.E. SEALED WALL PLANS AND DETAILS ON THE CONSTRUCTION PLANS OR AS DIRECTED BY THE WALL DESIGN ENGINEER. THE SRW UNITS SHALL BE INSTALLED IN GENERAL ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE SPECIFICATIONS AND DRAWINGS SHALL GOVERN IN ANY CONFLICT BETWEEN THE TWO REQUIREMENTS.

B. FOR EASE OF INSTALLATION, GENERALLY THE BASE COURSE OF SRW UNITS SHALL BE PLACED ON THE LEVELING PAD. THE UNITS SHALL BE LEVELED SIDE-TO-SIDE, FRONT-TO-REAR AND WITH ADJACENT UNITS, AND ALIGNED TO ENSURE INTIMATE CONTACT WITH THE LEVELING PAD. THE BASE COURSE IS THE MOST IMPORTANT TO ENSURE ACCURATE AND ACCEPTABLE RESULTS. NO GAPS SHALL BE LEFT BETWEEN THE FRONT OF ADJACENT UNITS. ALIGNMENT MAY BE DONE BY MEANS OF A STRING LINE OR OFFSET FROM BASE LINE TO THE BACK OF THE UNITS.

C. ALL EXCESS DEBRIS SHALL BE CLEANED FROM TOP OF UNITS.

D. PRIOR TO PLACEMENT OF SUBGRADE COURSE OF BLOCKS, THE LEVEL AND ALIGNMENT OF THE UNITS SHALL BE CHECKED AND CORRECTED, WHERE NEEDED.

E. LAYOUT OF CURVES AND CORNERS SHALL BE INSTALLED IN ACCORDANCE WITH THE WALL PLAN DETAILS OR IN GENERAL ACCORDANCE WITH SRW MANUFACTURER'S INSTALLATION GUIDELINES.

F. PROCEDURES C. THROUGH F. SHALL BE REPEATED UNTIL REACHING TOP OF WALL UNITS. GEOSYNTHETIC REINFORCEMENT, DRAINAGE MATERIALS, AND REINFORCED BACKFILL SHALL BE PLACED IN SEQUENCE WITH UNIT INSTALLATION AS DESCRIBED IN SECTION 4.06, 4.07, AND 4.08.

4.06 GEOSYNTHETIC REINFORCEMENT PLACEMENT

A. ALL GEOSYNTHETIC REINFORCEMENT SHALL BE INSTALLED AT THE PROPER ELEVATION AND ORIENTATION AS SHOWN ON THE FINAL, P.E. SEALED RETAINING WALL PLAN PROFILES AND DETAILS OR AS DIRECTED BY THE WALL DESIGN ENGINEER.

B. AT THE ELEVATIONS SHOWN ON THE FINAL PLANS, (AFTER THE UNITS, DRAINAGE MATERIAL, AND BACKFILL HAVE BEEN PLACED TO THIS ELEVATION) THE GEOSYNTHETIC REINFORCEMENT SHALL BE LAID HORIZONTALLY ON COMPACTED INFILL AND ON TOP OF THE CONCRETE SRW UNITS, TO WITHIN ONE INCH OF THE FRONT FACE OF THE UNIT BELOW. EMBEDMENT OF THE GEOSYNTHETIC IN THE SRW UNITS SHALL BE CONSISTENT WITH SRW MANUFACTURER'S RECOMMENDATIONS. CORRECT ORIENTATION OF THE GEOSYNTHETIC REINFORCEMENT SHALL BE VERIFIED BY THE CONTRACTOR TO BE IN ACCORDANCE WITH THE GEOSYNTHETIC MANUFACTURER'S RECOMMENDATIONS. THE HIGHEST STRENGTH DIRECTION OF THE GEOSYNTHETIC MUST BE PERPENDICULAR TO THE WALL FACE.

C. GEOSYNTHETIC REINFORCEMENT LAYERS SHALL BE ONE CONTINUOUS PIECE FOR THEIR ENTIRE EMBEDMENT LENGTH. SPLICING OF THE GEOSYNTHETIC IN THE DESIGN STRENGTH DIRECTION (PERPENDICULAR TO THE WALL FACE) SHALL NOT BE PERMITTED. ALONG THE LENGTH OF THE WALL, HORIZONTALLY ADJACENT SECTIONS OF GEOSYNTHETIC REINFORCEMENT SHALL BE BUTTED IN A MANNER TO ASSURE 100 PERCENT COVERAGE PARALLEL TO THE WALL FACE.

D. TRACKED CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED DIRECTLY ON THE GEOSYNTHETIC REINFORCEMENT. A MINIMUM OF 6 INCHES OF BACKFILL IS REQUIRED PRIOR TO OPERATION OF TRACKED VEHICLES OVER THE GEOSYNTHETIC. TURNING SHOULD BE KEPT TO A MINIMUM. RUBBER-TIRED EQUIPMENT MAY PASS OVER THE GEOSYNTHETIC REINFORCEMENT AT SLOW SPEEDS (LESS THAN 5 MPH).

E. THE GEOSYNTHETIC REINFORCEMENT SHALL BE FREE OF WRINKLES PRIOR TO PLACEMENT OF SOIL FILL. THE NOMINAL TENSION SHALL BE APPLIED TO THE REINFORCEMENT AND SECURED IN PLACE WITH STAPLES, STAKES, OR BY HAND TENSIONING UNTIL REINFORCEMENT IS COVERED BY SIX INCHES OF FILL.

4.07 DRAINAGE MATERIALS

A. THE DRAINAGE MATERIAL SHOULD CONSIST OF ¾" WELL DRAINED STONE AND WRAPPED IN MIRAFI 140N FILTER FABRIC.

B. DRAINAGE COLLECTION PIPES SHALL BE INSTALLED TO MAINTAIN GRAVITY FLOW OF WATER OUTSIDE THE REINFORCED SOIL ZONE. THE DRAINAGE COLLECTION PIPE SHALL DAYLIGHT INTO A STORM SEWER OR ALONG A SLOPE, AT AN ELEVATION LOWER THAN THE LOWEST POINT OF THE PIPE WITHIN THE AGGREGATE DRAIN.

4.08 BACKFILL PLACEMENT

A. THE REINFORCED BACKFILL SHALL BE PLACED AS SHOWN IN THE FINAL WALL PLANS IN THE MAXIMUM COMPACTED LIFT THICKNESS OF 8 INCHES AND SHALL BE COMPACTED TO A MINIMUM OF 98% OF STANDARD PROCTOR DENSITY (ASTM D 698) AT A MOISTURE CONTENT WITHIN 2% OF OPTIMUM. THE BACKFILL SHALL BE PLACED AND SPREAD IN SUCH A MANNER AS TO ELIMINATE WRINKLES OR MOVEMENT OF THE GEOSYNTHETIC REINFORCEMENT AND THE SRW UNITS.

B. ONLY HAND-OPERATED COMPACTION EQUIPMENT SHALL BE ALLOWED WITHIN 3 FEET OF THE BACK OF THE WALL UNITS. COMPACTION WITHIN THE 3 FEET BEHIND THE WALL UNITS SHALL BE ACHIEVED BY AT LEAST THREE (3) PASSES OF A LIGHTWEIGHT MECHANICAL TAMPER, PLATE, OR ROLLER.

C. AT THE END OF EACH DAY'S OPERATION, THE CONTRACTOR SHALL SLOPE THE LAST LEVEL OF BACKFILL AWAY FROM THE WALL FACING AND REINFORCED BACKFILL TO DIRECT WATER RUNOFF AWAY FROM THE WALL FACE.

D. AT COMPLETION OF WALL CONSTRUCTION, BACKFILL SHALL BE PLACED LEVEL WITH FINAL TOP OF WALL ELEVATION. IF FINAL GRADING, PAVING, LANDSCAPING, AND/OR STORM DRAINAGE INSTALLATION ADJACENT TO THE WALL IS NOT PLACED IMMEDIATELY AFTER WALL COMPLETION, TEMPORARY GRADING AND DRAINAGE SHALL BE PROVIDED TO ENSURE WATER RUNOFF IS NOT DIRECTED AT THE WALL NOR ALLOWED TO COLLECT OR POND BEHIND THE WALL UNTIL FINAL CONSTRUCTION ADJACENT TO THE WALL IS COMPLETED.

4.09 CONSTRUCTION ADJACENT TO COMPLETED WALL

A. THE OWNER OR OWNER'S REPRESENTATIVE IS RESPONSIBLE FOR ENSURING THAT CONSTRUCTION BY OTHERS ADJACENT TO THE WALL DOES NOT DISTURB THE WALL OR PLACE TEMPORARY CONSTRUCTION LOADS ON THE WALL THAT EXCEED DESIGN LOADS, INCLUDING LOADS SUCH AS WATER PRESSURE, TEMPORARY GRADES, OR EQUIPMENT LOADING. HEAVY PAVING OR GRADING EQUIPMENT SHALL BE KEPT A MINIMUM OF THREE FEET BEHIND THE BACK OF THE WALL FACE. EQUIPMENT WITH WHEEL LOADS IN EXCESS OF 150 PSF LIVE LOAD SHALL NOT BE OPERATED WITHIN 10 FEET OF THE FACE OF THE RETAINING WALL DURING CONSTRUCTION ADJACENT TO THE WALL. CARE SHOULD BE TAKEN BY THE GENERAL CONTRACTOR TO ENSURE WATER RUNOFF IS DIRECTED AWAY FROM THE WALL STRUCTURE UNTIL FINAL GRADING AND SURFACE DRAINAGE COLLECTION SYSTEMS ARE COMPLETED.

REVISIONS:
02-03-2012 ADDENDUM NO. 3

DESIGN ARCHITECT: MPS
PROJECT ARCHITECT: CMB
DRAWN BY: LH
ISSUED: 01/17/2012

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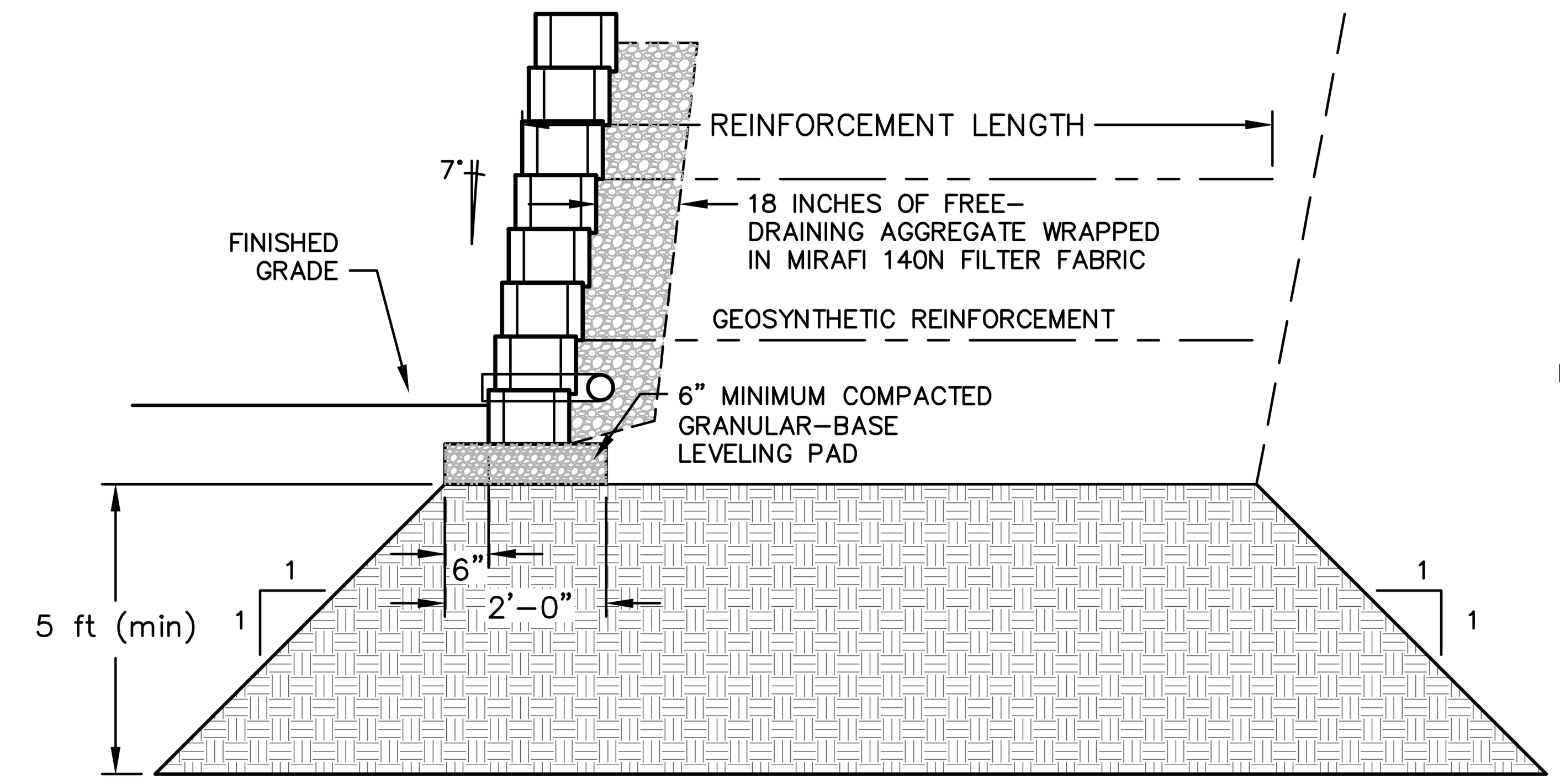
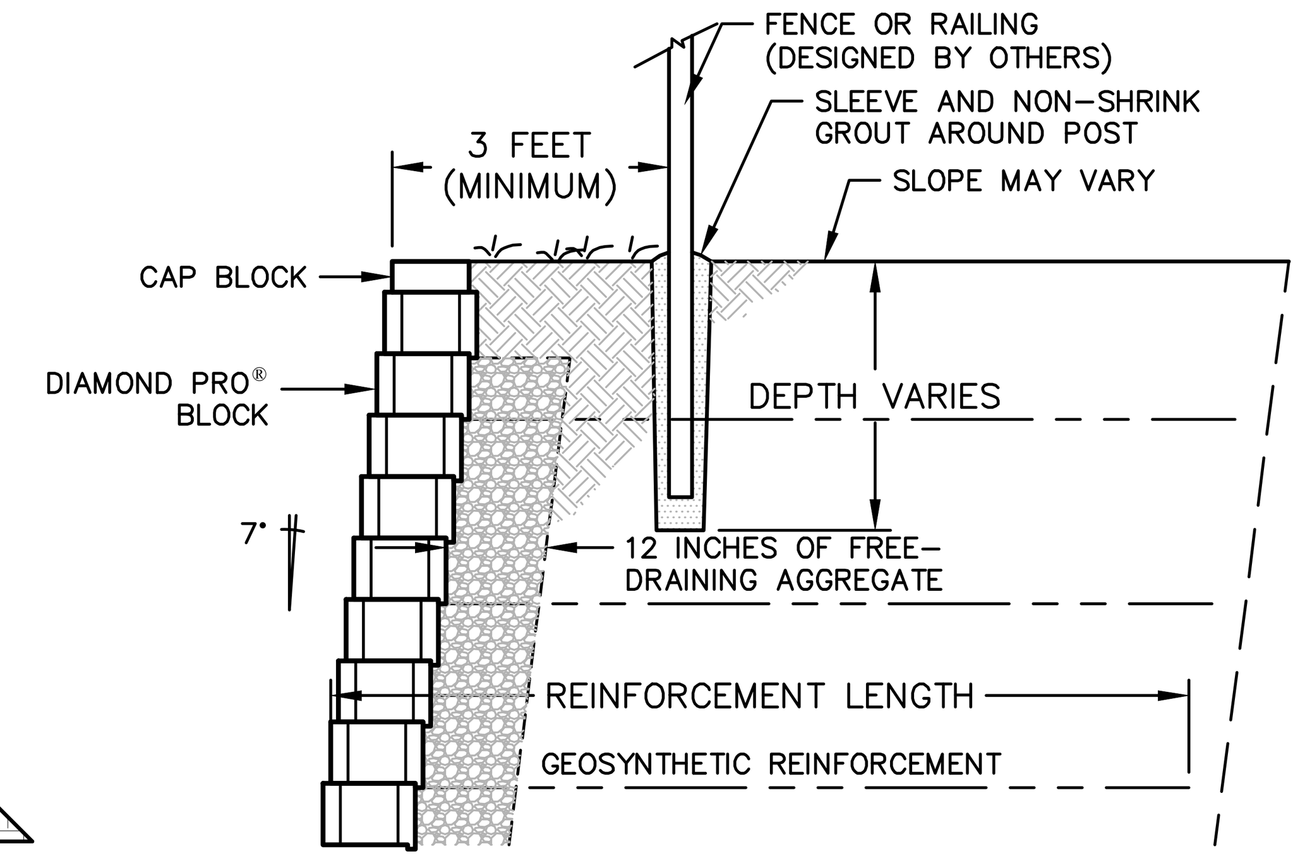
GENERAL INFORMATION

SHA PROJECT NO. 10087

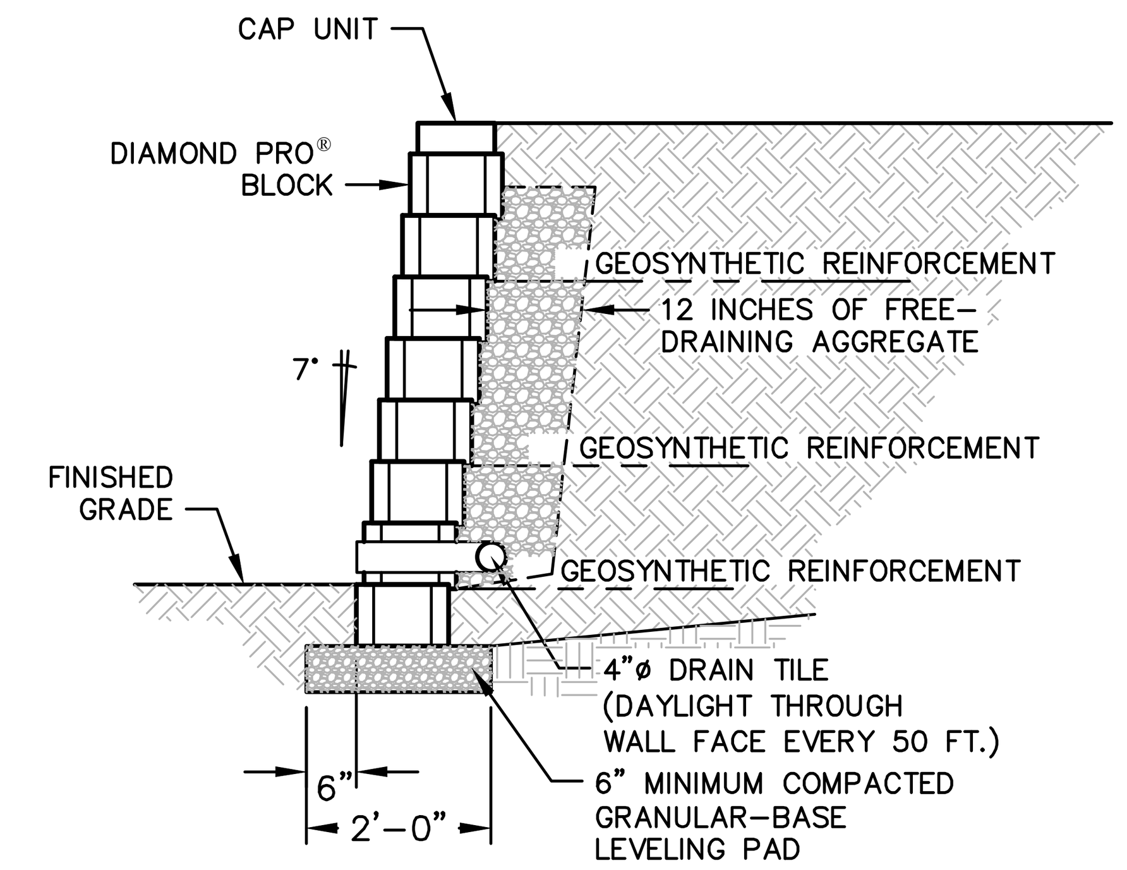
C403



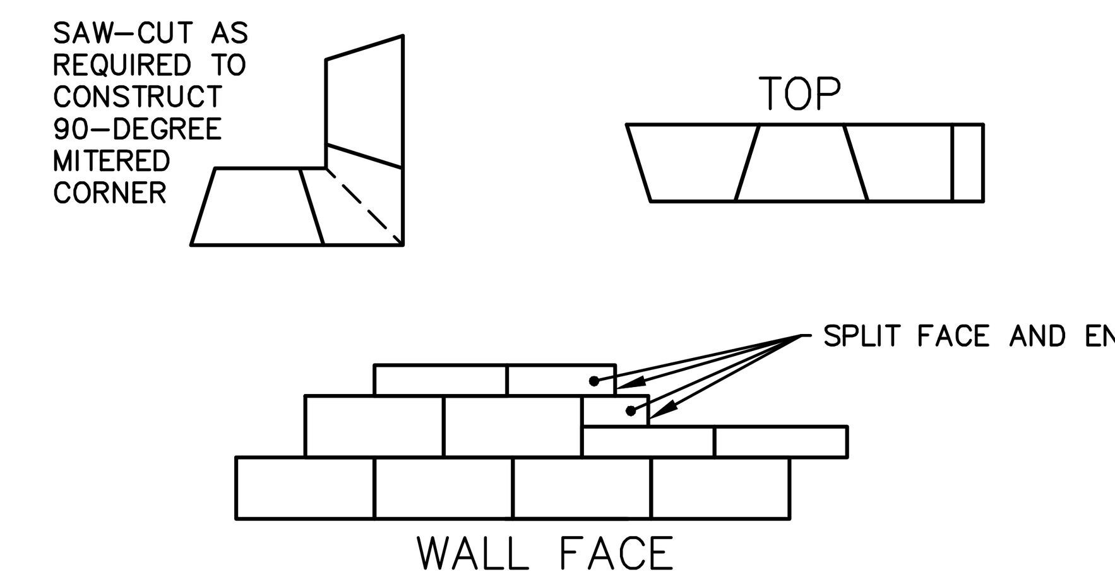
SUBGRADE OVER-EXCAVATION



FENCE BEHIND WALL

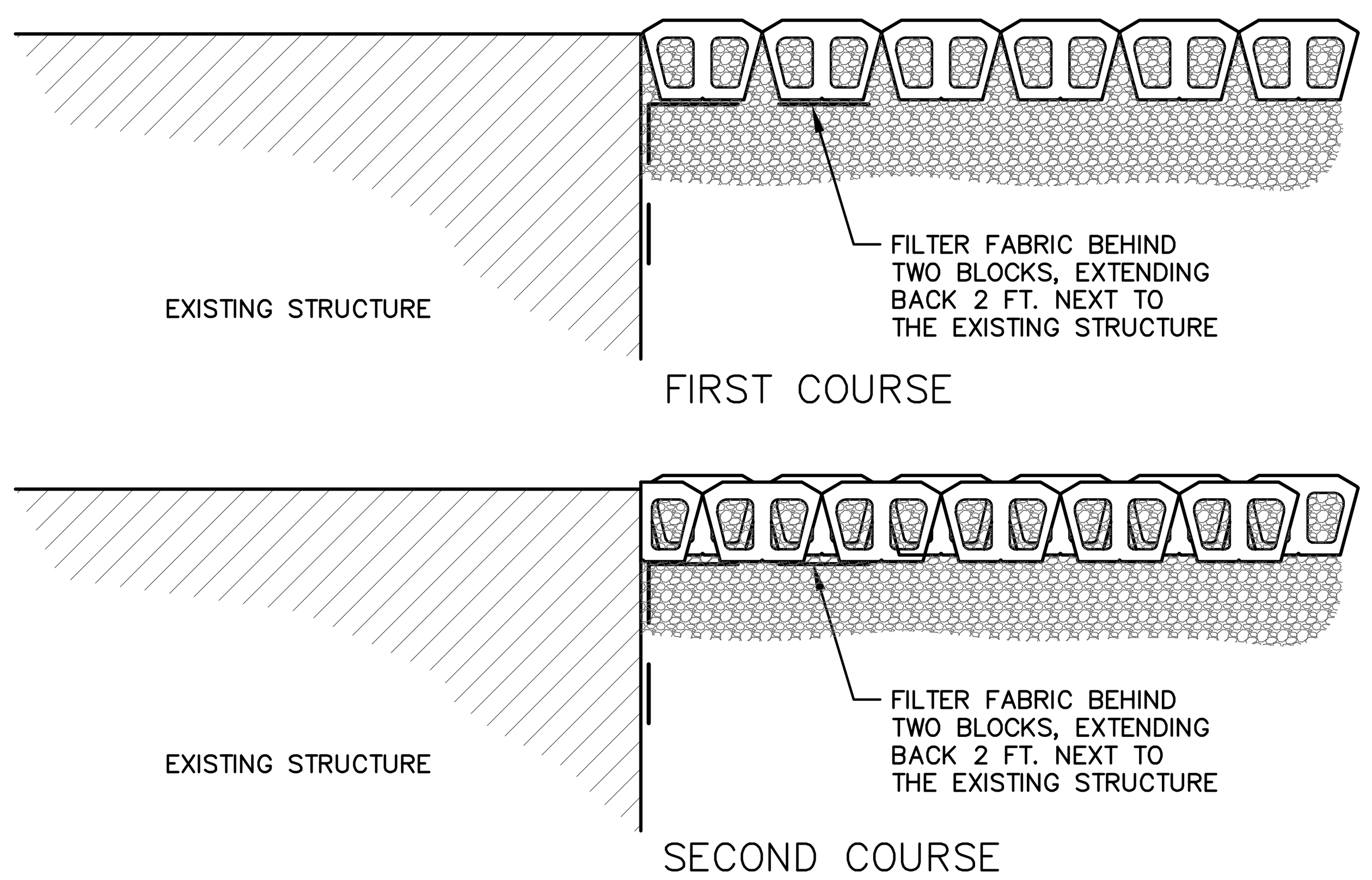


TYPICAL CROSS SECTION

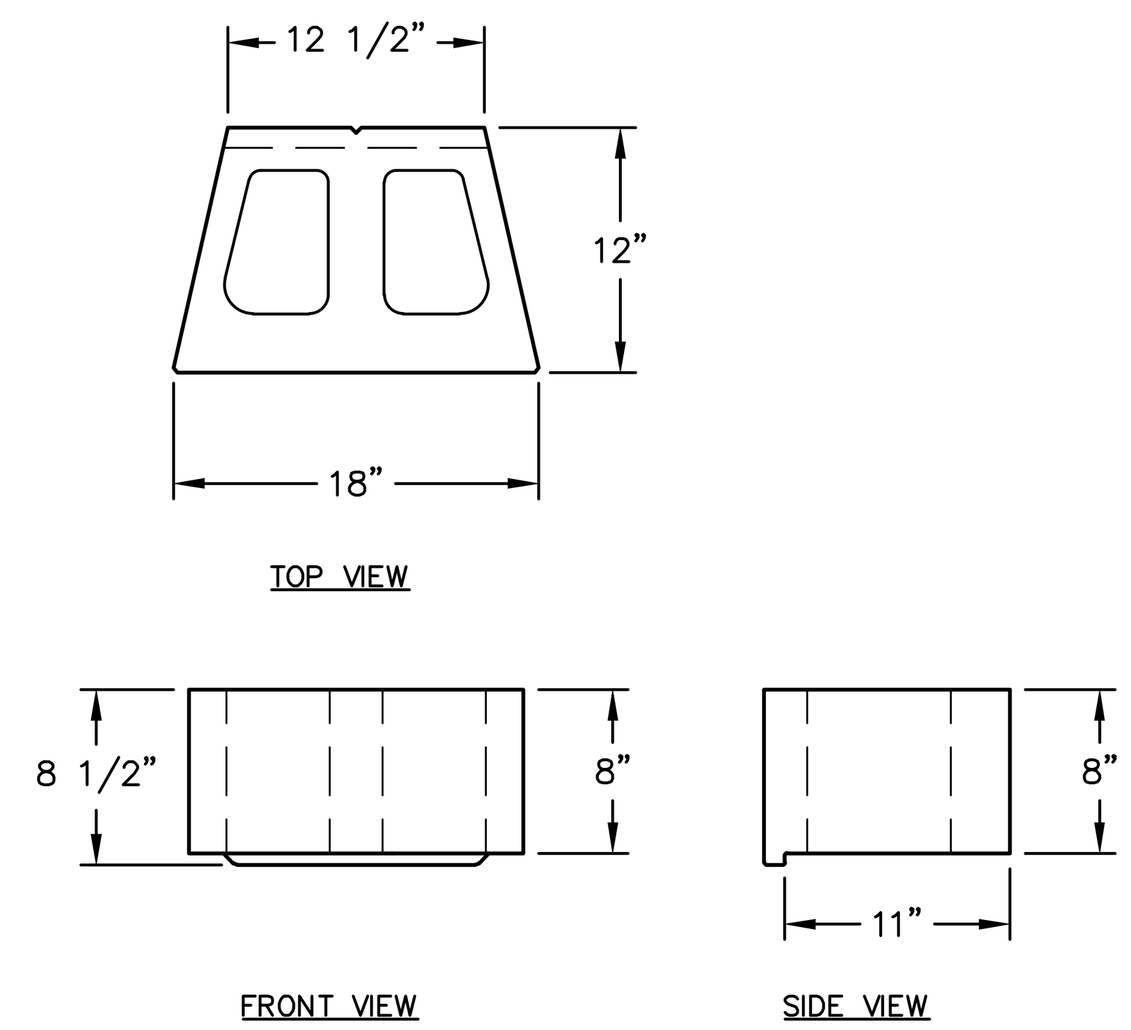


1. ALWAYS START CAPPING WALL FROM THE LOWEST ELEVATION.
2. LAY OUT CAPS PRIOR TO USING ADHESIVE.
3. CUT CAPS TO FIT. VARIOUS COMBINATIONS OF LONG AND SHORT CAP FACES WILL BE NECESSARY FOR RADII GREATER THAN THE MINIMUM.
4. ALTERNATE SHORT AND LONG CAP FACES EVERY OTHER CAP TO ACHIEVE A STRAIGHT ROW OF CAPS.
5. USE EXTERIOR-GRADE CONSTRUCTION ADHESIVE TO SECURE CAPS.

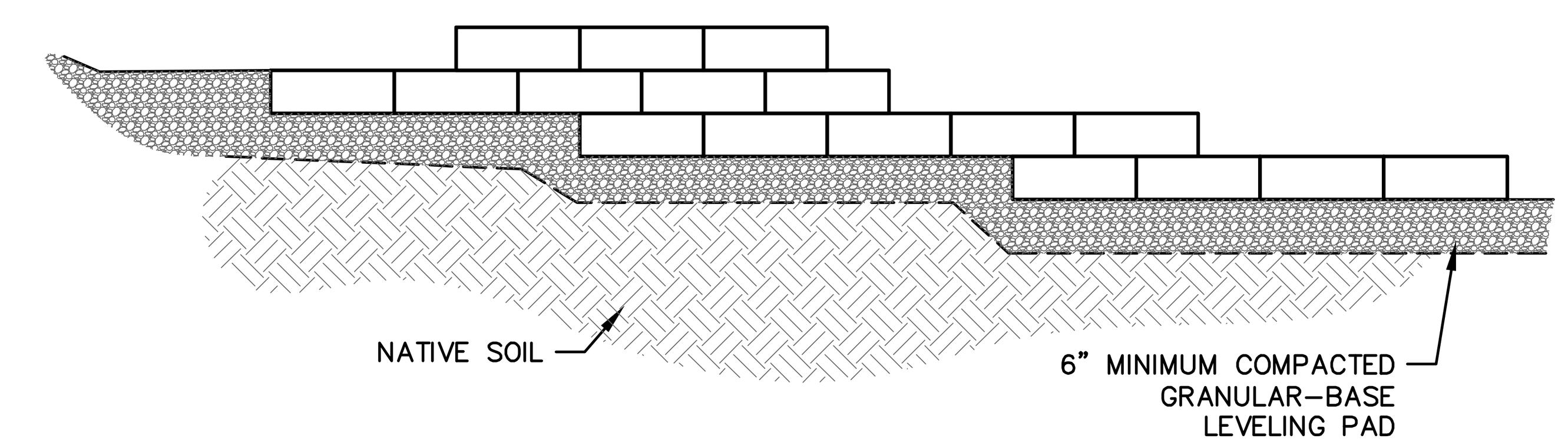
CAP BLOCK DETAILS



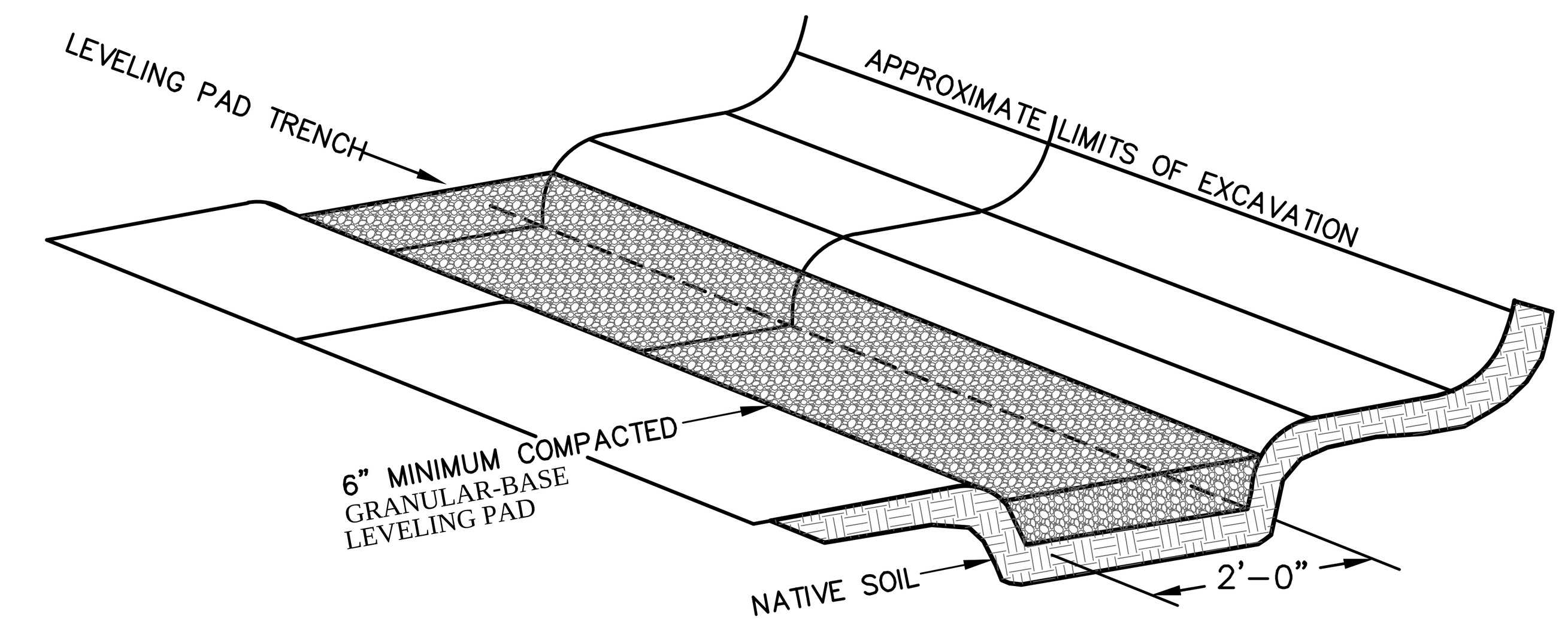
WALL ABUTTING STRUCTURE



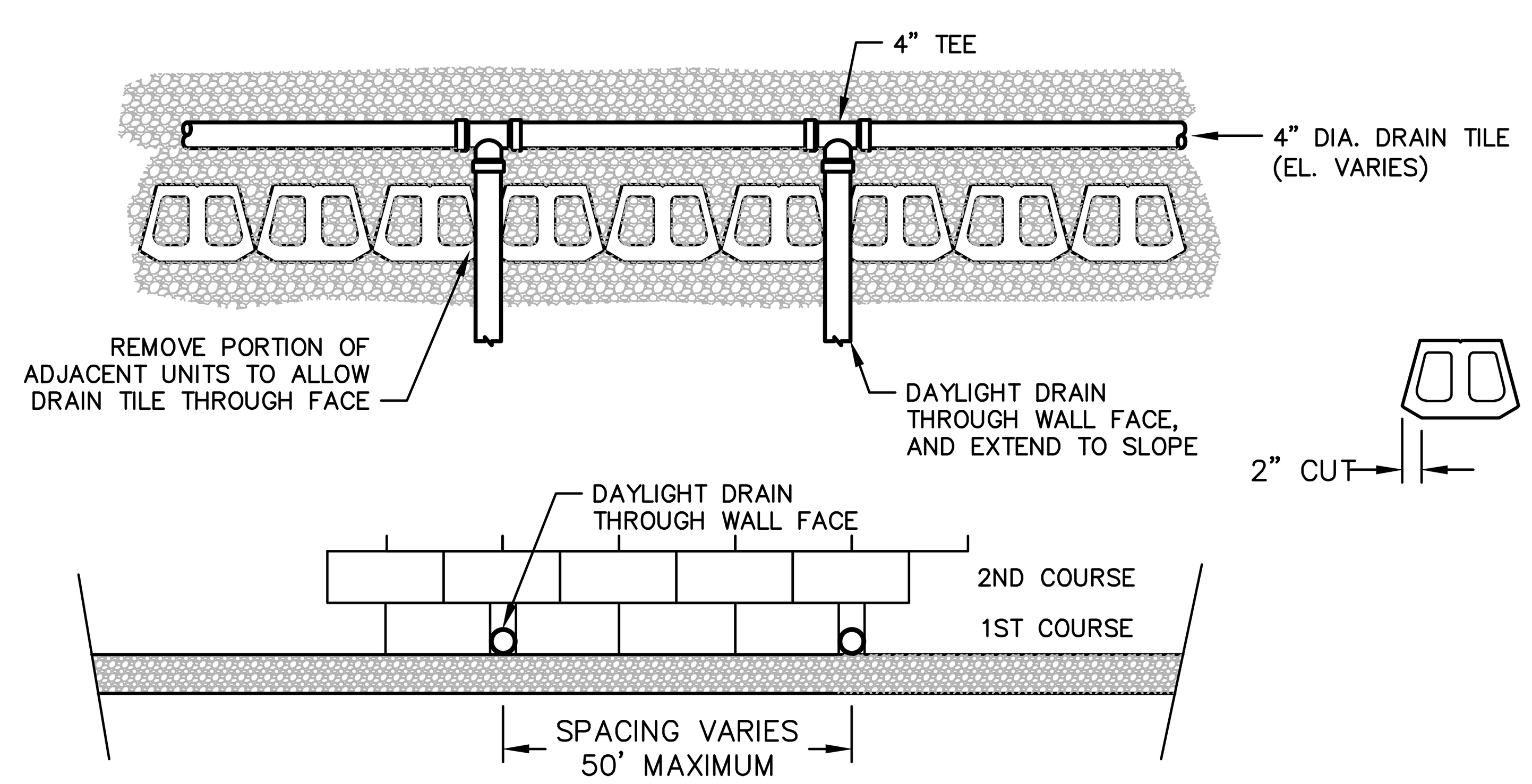
INDIVIDUAL BLOCK VIEWS



TYPICAL STEP-UP DETAIL

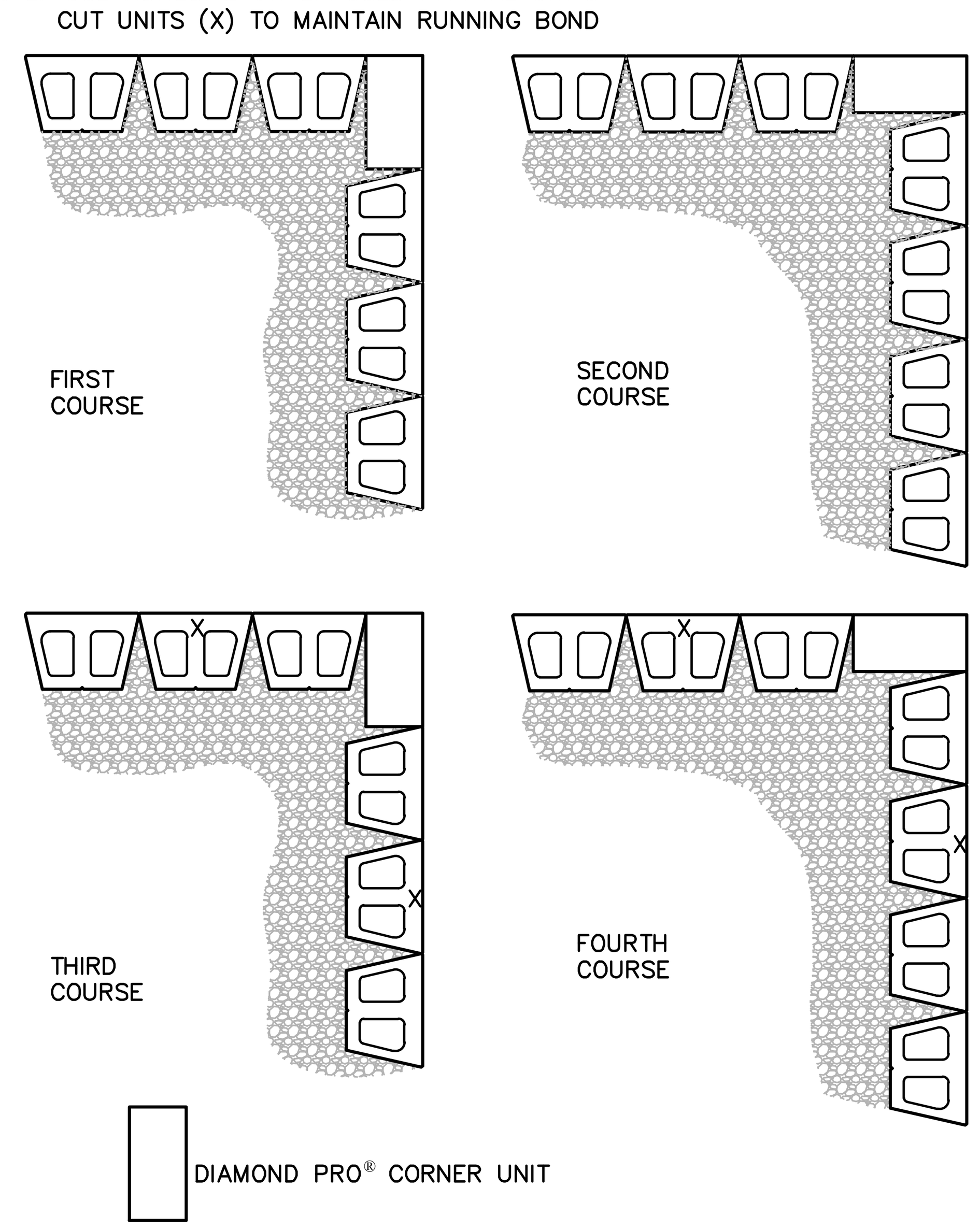


TYPICAL BASE PREPARATION

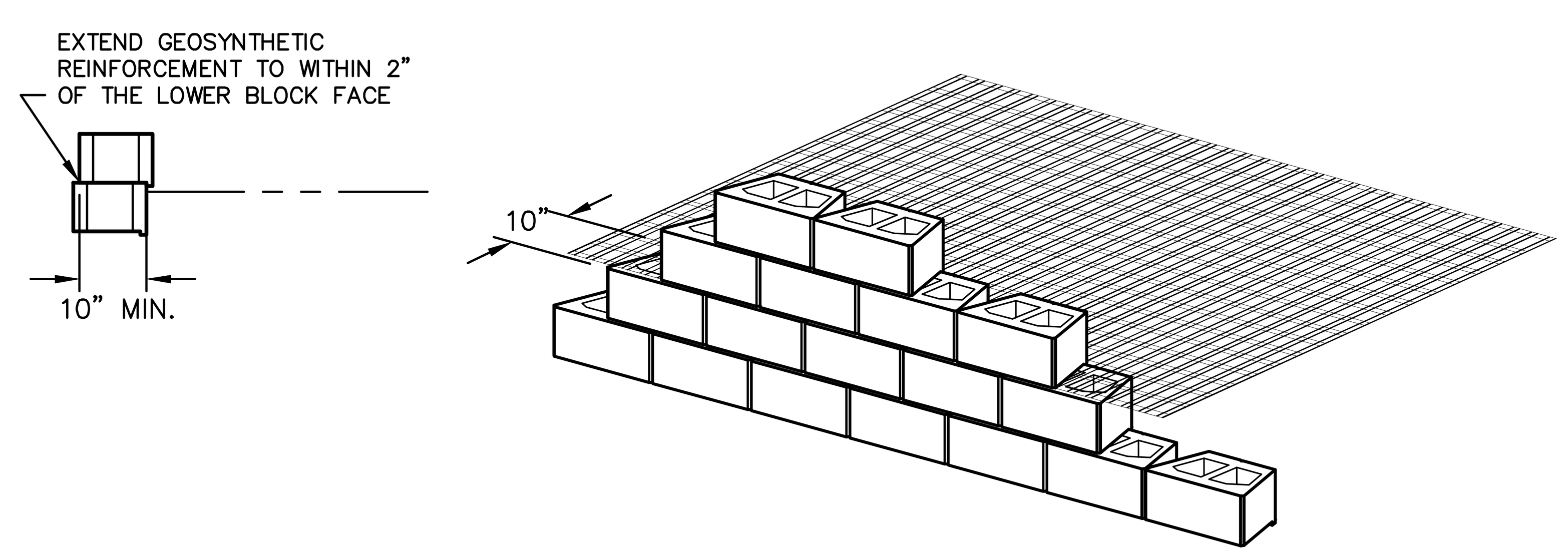


DAYLIGHT DRAINTILE THRU SLOPE

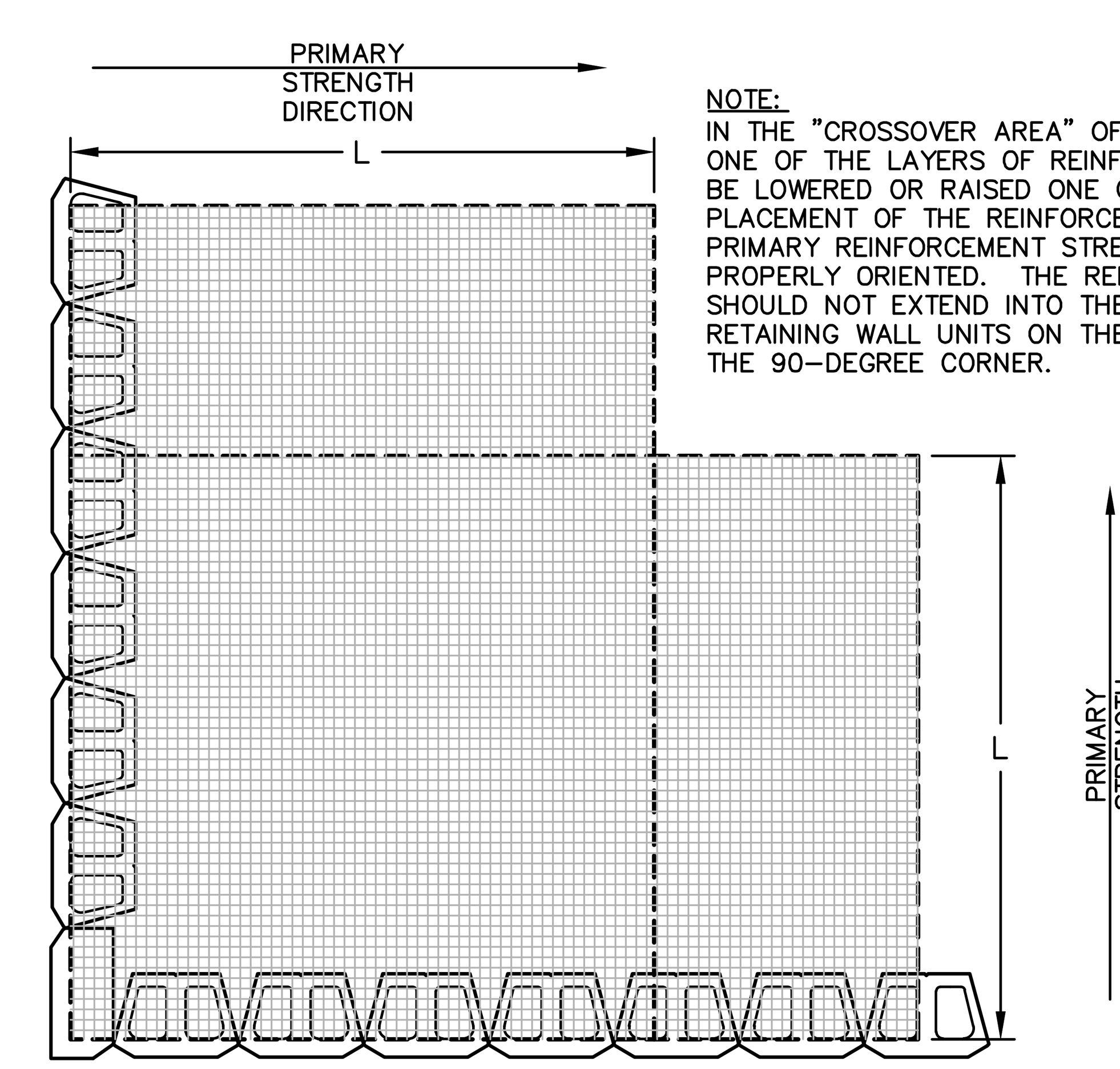
NOTE: USE ADHESIVE ON EXPOSED PARTIAL UNITS
CUT UNITS (X) TO MAINTAIN RUNNING BOND



90-DEGREE OUTSIDE CORNER



REINFORCEMENT CONNECTION DETAIL



NOTE:
IN THE "CROSSOVER AREA" OF REINFORCEMENT, ONE OF THE LAYERS OF REINFORCEMENT SHOULD BE LOWERED OR RAISED ONE COURSE TO ALLOW PLACEMENT OF THE REINFORCEMENT WITH THE PRIMARY REINFORCEMENT STRENGTH DIRECTION PROPERLY ORIENTED. THE REINFORCEMENT SHOULD NOT EXTEND INTO THE SEGMENTAL RETAINING WALL UNITS ON THE RETURN LEG OF THE 90-DEGREE CORNER.

90-DEGREE OUTSIDE CORNER DETAIL

REVISIONS:
02-03-2012 ADDENDUM NO. 3

DESIGN ARCHITECT: MPS
PROJECT ARCHITECT: CMB
DRAWN BY: LH
ISSUED: 01/17/2012

This document originally issued and sealed by:
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Registered Professional Engineer
E-12767
On: 02-03-2012
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GENERAL INFORMATION

SHA PROJECT NO. 10087

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