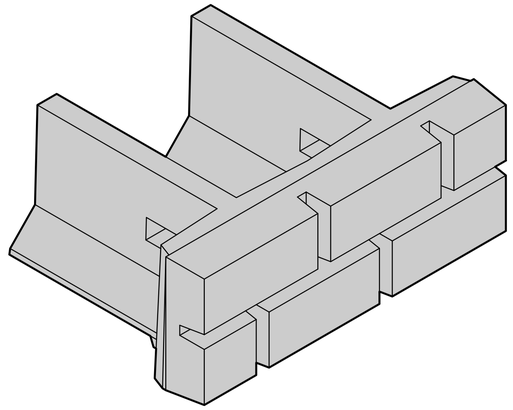
EARTH WALL PRODUCTS, LLC.
FORIX RETAINING WALL SYSTEM DRAWINGS



FORIX

1.0 FILL BEHIND UNIT

THE INFILL BACKFILL WITHIN 12 INCHES BEHIND THE BLOCK FACE SHALL BE WASHED #57 (2B) GRANULAR STONE MEETING THE FOLLOWING GRADATION AS DETERMINED IN ACCORDANCE WITH ASTM D422.

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

THE INFILL BEHIND THE WASHED #57 (2B) GRANULAR STONE SHALL BE COMMON SOIL BACKFILL MEETING THE FOLLOWING GRADATION AS DETERMINED IN ACCORDANCE WITH ASTM D422.

SIEVE SIZE	PERCENT PASSING
4 INCH	100
3/4 INCH	0 - 90
NO. 4	0 - 80
NO. 40	0 - 70
NO. 200	0 - 60

THE MAXIMUM SIEVE SIZE SHOULD BE LIMITED TO 6 INCH.

2.0 TECHNICAL REQUIREMENTS

ANY SOIL FILL PLACED BEHIND THE FORIX UNIT 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. 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.

TESTING METHODS, FREQUENCY AND VERIFICATION OF MATERIAL SPECIFICATIONS SHALL BE THE RESPONSIBILITY OF THE OWNER AND GENERAL CONTRACTOR.

INSTALLATION SHALL FOLLOW THE NPCA (NATIONAL PRECAST CONCRETE ASSOCIATION). FIELD INSTALLATION BEST PRACTICES MANUAL FOR PRECAST MODULAR BLOCK.

3.0 DRAINAGE

BACKFILL SHALL BE GRADED AWAY FROM THE BACK OF THE WALL AND COMPACTED TO 95% STANDARD PROCTOR AT THE END OF EACH WORK DAY TO PREVENT PONDING OF WATER ON THE SURFACE OF THE WALL 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 WALL MASS.

4.0 DESIGN PARAMETERS

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

INFILL	Φ' =	°	C' =	PSF	γ = PCF
RETAINED FILL	Φ' =	°	C' =	PSF	γ = PCF
FOUNDATION	Φ' =	°	C' =	PSF	γ = PCF

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	= 1.125
MINIMUM F.S. FOR SEISMIC	= 1.125

UNIFORM SURCHARGE	= PSF
HYDROSTATIC LOADING	=
SEISMIC LOADING	=
REQUIRED BEARING CAPACITY	= VARIES (SEE ELEVATION VIEW)

5.0 SPECIAL PROVISIONS

THE ENGINEER 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.

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 INFILL ZONE AND RECOMMENDATIONS REGARDING PERMISSIBLE CONSTRUCTION ACTIVITIES AROUND THE RETAINING WALL EARTH STRUCTURE.

GENERAL NOTES:

1. SOIL INSTALLED IN SLOPES BOTH ABOVE AND BELOW THE RETAINING WALL STRUCTURE SHALL BE COMPACTED TO WITHIN 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST (ASTM D-698).
2. 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 RETAINING WALL STRUCTURES.
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. WATERLINES INCLUDING IRRIGATION SYSTEMS MUST BE WATER TIGHT WITHIN 100 FEET OF THE WALL INFILL 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 RETAINING WALL, OR WITHIN 5 FEET BEHIND THE DEEPEST FORIX UNIT DEPTH.
5. THE RETAINING WALLS DESIGNED HEREIN ARE IN ACCORDANCE WITH THE STANDARD OF PRACTICE FOR THE PRECAST MODULAR BLOCK INDUSTRY.
6. ALL CONSTRUCTION ACTIVITY SHALL CONFORM TO THE MINIMUM REQUIREMENTS PER O.S.H.A. STANDARDS.
7. 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 THE ENGINEER. THIS DRAWING, DESIGN NOTES, AND ASSOCIATED CALCULATIONS HAVE BEEN PREPARED BY THE ENGINEEER.. FROM INFORMATION PROVIDED BY OTHERS. FINAL DETERMINATION OF THE SUITABILITY OF ANY INFORMATION CONTAINED HEREIN IS THE RESPONSIBILITY OF THE USER.
8. DISCOVERY OF SUBSURFACE GROUNDWATER SHALL BE REPORTED IMMEDIATELY TO THE PROJECT GEOTECHNICAL ENGINEER FOR ADDITIONAL DRAINAGE CONSIDERATION.
9. 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.
10. 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 IN THE VICINITY OF THE WALL SYSTEM AS WELL AS THE WALL FOUNDATION. HEAVY CONSTRUCTION EQUIPMENT SHOULD NOT BE PERMITTED TO OPERATE WITHIN 3.0 FEET BEHIND THE WALL UNITS STEM DEPTH.
11. 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. THE ENGINEER ASSUMES NO LIABILITY FOR THE LOCATION OF THE EARTH STRUCTURE. SURVEY CONTROL MUST BE PERFORMED USING THE CIVIL SITE DESIGNER'S LOCATION INFORMATION. DEVIATION FROM THE CIVIL SITE DESIGN LAYOUT MUST BE REPORTED TO AND APPROVED BY THE CIVIL SITE DESIGNER PRIOR TO THE RETAINING WALL EARTH STRUCTURE'S CONSTRUCTION.
12. 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 CONSTRUCTION. FAILURE TO VALIDATE THE ASSUMED SOIL PARAMETERS CAN RESULT IN STRUCTURE FAILURE.
13. 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 DISSIPATERS WITHIN 20.0' OF THE RETAINING WALL.

REVISION / ISSUE

NO.	DATE	DESCRIPTION
1	03/26/18	REVISION
2	08/21/18	REVISION
3	12/03/18	REVISION

FORIX
RETAINING WALL SYSTEM
SPECIFICATIONS AND DETAILS

EARTH WALL PRODUCTS, LLC.
MARIETTA, GEORGIA
WWW.EARTHWALLPRODUCTS.COM TEL: (678) 594-3451

DESIGNED BY: TLR | DRAWN BY: TR
DATE: 03/26/2018
PROJECT NO. .
SHEET 1 OF 15

MANUFACTURE SPECIFICATIONS

1. FORIX PRECAST UNITS SHALL BE FABRICATED AT AN APPROVED PLANT AND IN CONFORMANCE WITH ASTM C1776/C1776M–17 "STANDARD SPECIFICATION FOR WET CAST PRECAST MODULAR RETAINING WALL UNITS". PROVIDE CONCRETE FOR CASTING THE UNITS WITH A 28–DAY MINIMUM COMPRESSIVE STRENGTH OF 27.6 MPA [4000 PSI]. AIR CONTENT TO BE BETWEEN 4% AND 6.5%.

2. REINFORCEMENT TO BE DEFORMED WELDED WIRE FABRIC 4"X4" – 4 GAUGE. REINFORCING STEEL SHALL BE ASTM–A615 GRADE 60.

3. THE ACCEPTANCE OF THE FORIX UNITS IS DETERMINED IN PART BY THE COMPRESSION STRENGTH TESTING OF EACH LOT. A LOT IS DEFINED AS A TOTAL OF FOUR DAYS PRODUCTION WHERE A SINGLE CYLINDER IS TAKEN EACH DAY. OF THE FOUR CYLINDERS PER LOT MOLDED TO VERIFY THE MINIMUM COMPRESSIVE STRENGTH, TEST IN ACCORDANCE WITH ASTM C–31.

4. FORIX MOLDS SHALL BE CONSTRUCTED IN A MANNER THAT WILL ASSURE THE PRODUCTION OF UNIFORM UNITS WITHIN SPECIFIED MANUFACTURING TOLERANCES.

5. PREPARE AND MIX CONCRETE THEN DELIVER TO THE MOLD. USE METHODS THAT WILL PREVENT SEGREGATION OF THE CONCRETE MATERIALS. CAREFULLY PLACE AND VIBRATE THE CONCRETE IN THE MOLD TO PRODUCE A SURFACE FREE FROM IMPERFECTIONS SUCH AS HONEYCOMB, SEGREGATION, OR CRACKING. USE CLEAR FORM OIL FROM THE SAME MANUFACTURER THROUGHOUT THE CASTING OPERATION.

6. DO NOT PLACE CONCRETE WHEN AMBIENT TEMPERATURES ARE BELOW 40F (14C) OR ABOVE 100F (122C). ADMIXTURES CONTAINING CALCIUM CHLORIDE OR ADMIXES THAT CONTAIN CALCIUM ARE NOT PERMITTED.

7. ACCEPTABLE TOLERANCE FOR FINAL FORIX UNITS ARE AS FOLLOWS:
   - FACE WIDTH AND HEIGHT PLUS OR MINUS 3/16" [5MM]
   - DEVIATION FROM SQUARE MEASURED ON THE DIAGONAL OF THE FRONT FACE 1/2" [13MM]
   - SMOOTH FORM FINISH 1/4" (6MM) DEVIATION FROM A 5' [1524MM] STRAIGHT EDGE
   - TEXTURED FORMED FINISH 3/8" [10MM] DEVIATION FROM A 5' [1524MM] STRAIGHT EDGE
   - CHIPS SMALLER THAN 1.5" [38MM] IN ITS LARGEST DIMENSION AND CRACKS NOT WIDER THAN 0.012" [0.3MM] AND NOT LONGER THAN 25% OF THE NOMINAL HEIGHT OF THE PRECAST MODULAR RETAINING WALL UNIT.

8. MARK WITH WATERPROOF PAINT ON THE REAR FACE SURFACE OF EACH UNIT AN IDENTIFICATION CODE. RECORDS MUST BE KEPT OF ALL UNITS MANUFACTURED. PRODUCT MARKING SHALL CONSISTS OF THE FOLLOWING AS A MINIMUM:
   - ASTM SPECIFICATION DESIGNATION, ASTM C1776/C1776M–17
   - DATE OF MANUFACTURE
   - NAME OR TRADEMARK OF MANUFACTURER

9. HANDLE, STORE AND SHIP ALL UNITS IN SUCH A MANNER AS TO ELIMINATE CHIPPING, CRACKS AND FRACTURES.

10. BEFORE SHIPMENT, EXAMINE ALL SURFACES OF PRECAST FORIX UNITS; PATCH ALL SURFACE VOIDS AND OTHER DEFECTS IN WALL SURFACES IN ACCORDANCE WITH THE APPROVED QUALITY CONTROL PLAN AND AS DIRECTED BY THE ENGINEER. PATCHING OF SURFACE VOIDS AND DEFECTS MAY BE PERFORMED THAT ARE NO MORE THAN 1/2" [13MM] DEEP AND CANNOT BE DETECTED VISUALLY FROM A DISTANCE OF 25' [7620MM] UNDER DIFFUSED LIGHTING.

11. FORIX UNITS MAY BE REJECTED FOR THE FOLLOWING:

    1. FRACTURES OR CRACKS PASSING THROUGH THE STEM OR FRONT FACE.
    2. 28–DAY CYLINDER COMPRESSION STRENGTH IS LESS THAN DESIGN CONCRETE STRENGTH REQUIREMENTS.
    3. HONEYCOMBED OR OPEN TEXTURE CONCRETE.
    4. DIMENSIONS NOT CONFORMING TO THE ALLOWABLE TOLERANCES AS SPECIFIED.
    5. DEFECTS THAT INDICATE PROPORTIONING, MIXING AND MOLDING NOT IN COMPLIANCE WITH THIS SPECIFICATION.
    6. DAMAGED EDGES WHICH WOULD PREVENT MAKING SATISFACTORY JOINT.
    7. COLOR VARIATION ON THE FRONT FACE OF THE UNIT.

12. PROVIDE CERTIFICATION AND FURNISH A COPY OF ALL TEST RESULTS PERFORMED WHICH ARE NECESSARY TO ASSURE COMPLIANCE WITH THE SPECIFICATIONS.

13. AN ACI FIELD TESTING TECHNICIAN MUST BE PRESENT DURING BATCHING IN ORDER TO PROPERLY PERFORM THE FOLLOWING TEST. ASTM C1064, ASTM C172, ASTM C143 (OR ASTM C1611, ASTM C138, ASTM C231, (OR ASTM C173), AND ASTM C31.

14. CEMENT MILL TEST CERTIFICATES MUST BE KEPT ON FILE FOR A MINIMUM OF 3 YEARS, AND SHOULD BE COLLECTED UPON EVERY LOAD DELIVERED.

15. ADMIXTURE DOSING EQUIPMENT AND WEIGHT BATCH SCALES FOR ALL CEMENTITIOUS AND AGGREGATE RAW MATERIALS MUST BE CALIBRATED ANNUALLY AND RECORDS OF THIS MUST BE KEPT ON FILE FOR A MINIMUM OF THREE TEARS.

16. FINE AGGREGATE GRADATIONS SHOULD BE OBTAINED EVERY 1,500 TONS DELIVERED (OR MONTHLY, WHICHEVER COMES FIRST).

17. COURSE AGGREGATE GRADATIONS SHOULD BE OBTAINED EVERY 2,000 TONS DELIVERED (OR MONTHLY, WHICHEVER COMES FIRST).

18. ASTM C143 (SLUMP) (OR ASTM C1611) SHOULD BE PERFORMED DAILY (OR EVERY 150 CUBIC YARDS BATCHED, WHICHEVER COMES FIRST)

19. ASTM C1064 (TEMPERATURE SHOULD BE PERFORMED DAILY (OR EVERY 150 CUBIC YARDS BATCHED, WHICHEVER COMES FIRST).

20. ASTM C138 (DENSITY) SHOULD BE PERFORMED AT A MINIMUM ONCE PER WEEK, BUT RECOMMENDED PRIOR TO EVERY AIR CONTENT (ASTM C231 OR ASTM C173) TEST.

21. ASTM C231 (AIR, PRESSURE) OR ASTM C173 (AIR, VOLUMETIC) SHOULD BE PERFORMED DAILY (OR EVERY 150 CUBIC YARDS BATCHED, WHICHEVER COMES FIRST).

22. COMPRESSIVE STRENGTH TESTS SHOULD BE PERFORMED WEEKLY (OR EVERY 150 CUBIC YARDS, WHICHEVERY COMES FIRST).

23. ALL OF THESE TEST REPORTS MUST BE KEPT ON FILE FOR A MINIMUM OF THREE YEARS.

24. THE TEMPERATURE OF FRESH MIXED CONCRETE SHOULD NOT BE LESS THAN 55 DEGREES FERINHEIGHT (12.8 DEGREES CELSIUS) AND SHOULD NOT BE GREATER THEN 90 DEGREES FERINHEIGHT (32.2 DEGREES CELSIUS) DURING THE BATCHING AND PLACING PROCESS.

25. THE MIX DESIGN WATER/CEMENT RATIO SHALL BE LESS THAN OR EQUAL TO .44

26. CONCRETE SHALL BE PLACED IN A MANNER THAT PREVENTS LOSS OF MOISTURE AND MINIMIZES WIND AND SUN EXPOSURE, EXTRA MEASURES MAY NEED TO BE TAKEN TO COVER THE FORMS AFTER PLACEMENT CONSOLIDATION IF SUCH ELEMENT EXPOSURES ARE PRESENT.

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1	03/26/18	REVISION
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3	12/03/18	REVISION

FORIX

RETAINING WALL SYSTEM

MANUFACTURE SPECIFICATIONS

EARTH WALL PRODUCTS, LLC.
MARIETTA, GEORGIA
WWW.EARTHWALLPRODUCTS.COM TEL: (678) 594–3451

DESIGNED BY:	DRAWN BY:
TLR	TR

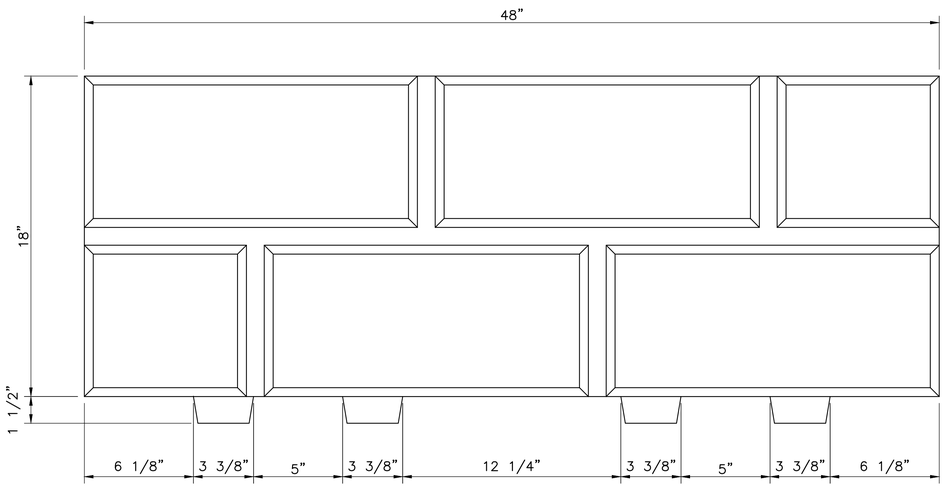
DATE: 03/26/2018

PROJECT NO.

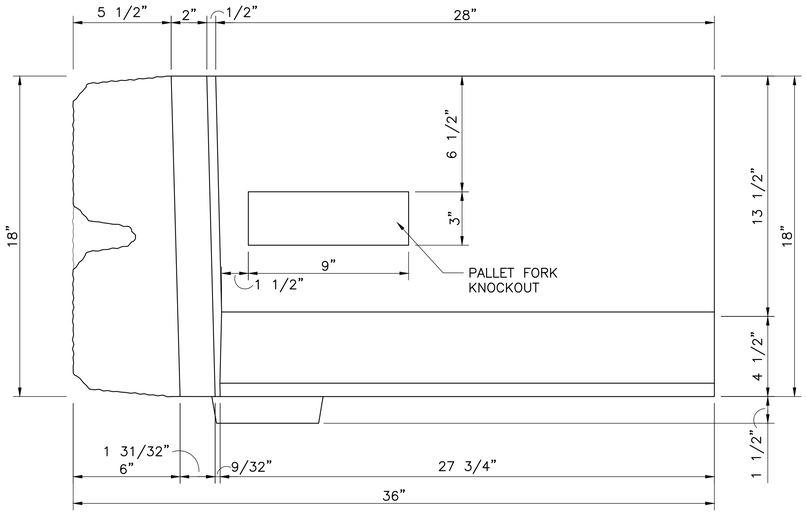
SHEET

2

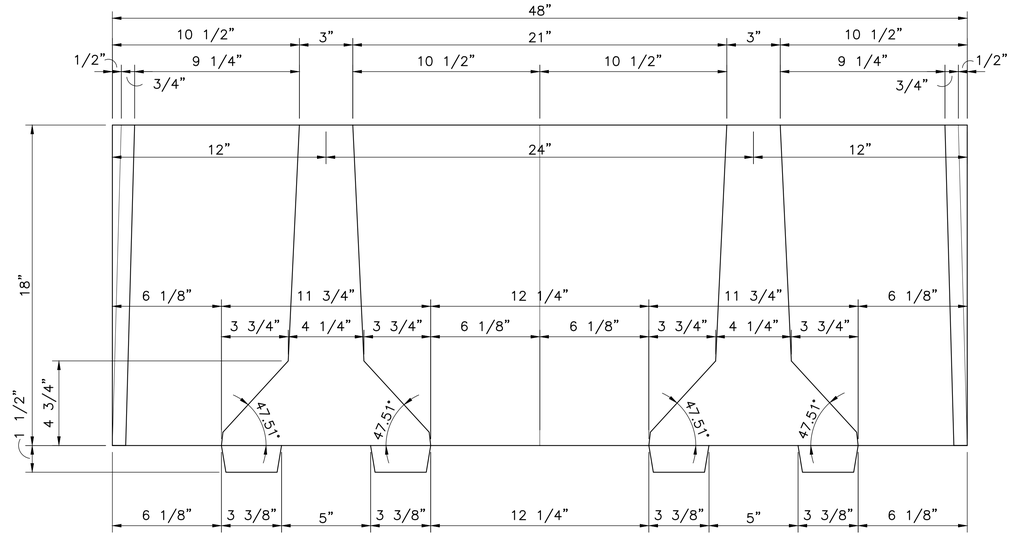
OF 15



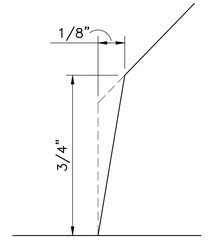
FORIX STANDARD UNIT
(FRONT VIEW)



FORIX STANDARD UNIT
(SIDE VIEW)



FORIX STANDARD UNIT
(BACK VIEW)



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FORIX

RETAINING WALL SYSTEM

STANDARD UNIT DIMENSIONS

EARTH WALL PRODUCTS, LLC.
MARIETTA, GEORGIA
WWW.EARTHWALLPRODUCTS.COM TEL: (678) 594-3451

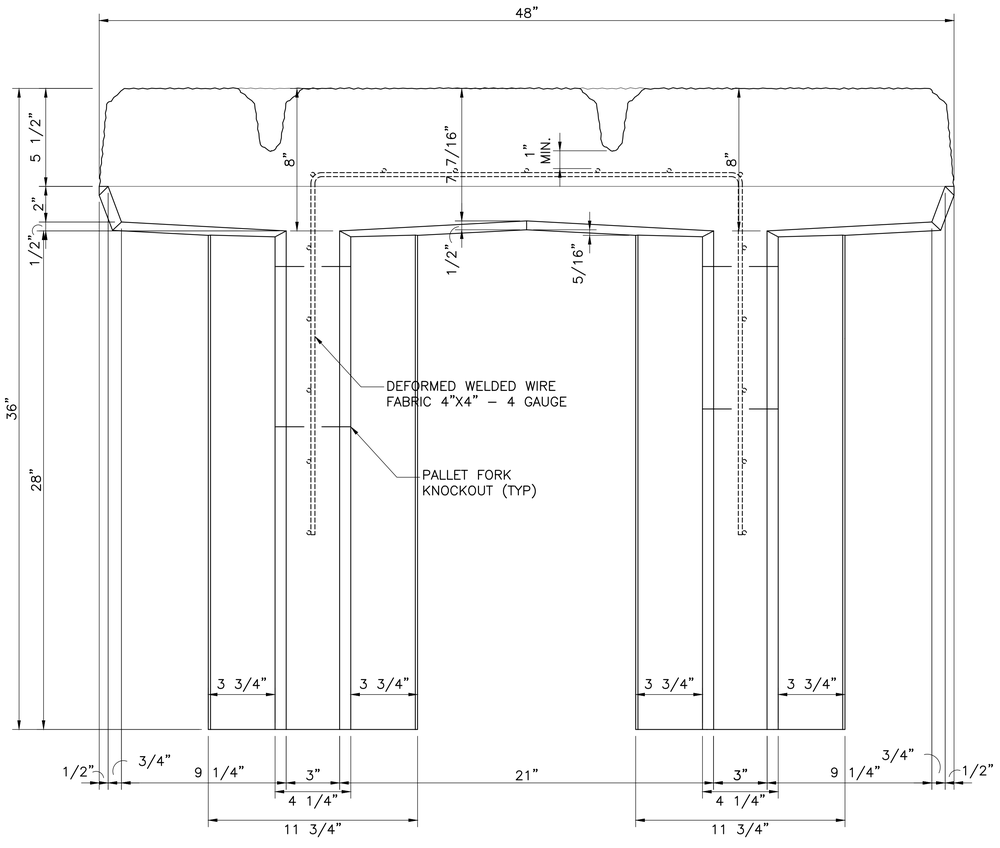
DESIGNED BY:	DRAWN BY:
TLR	TR

DATE: 03/26/2018

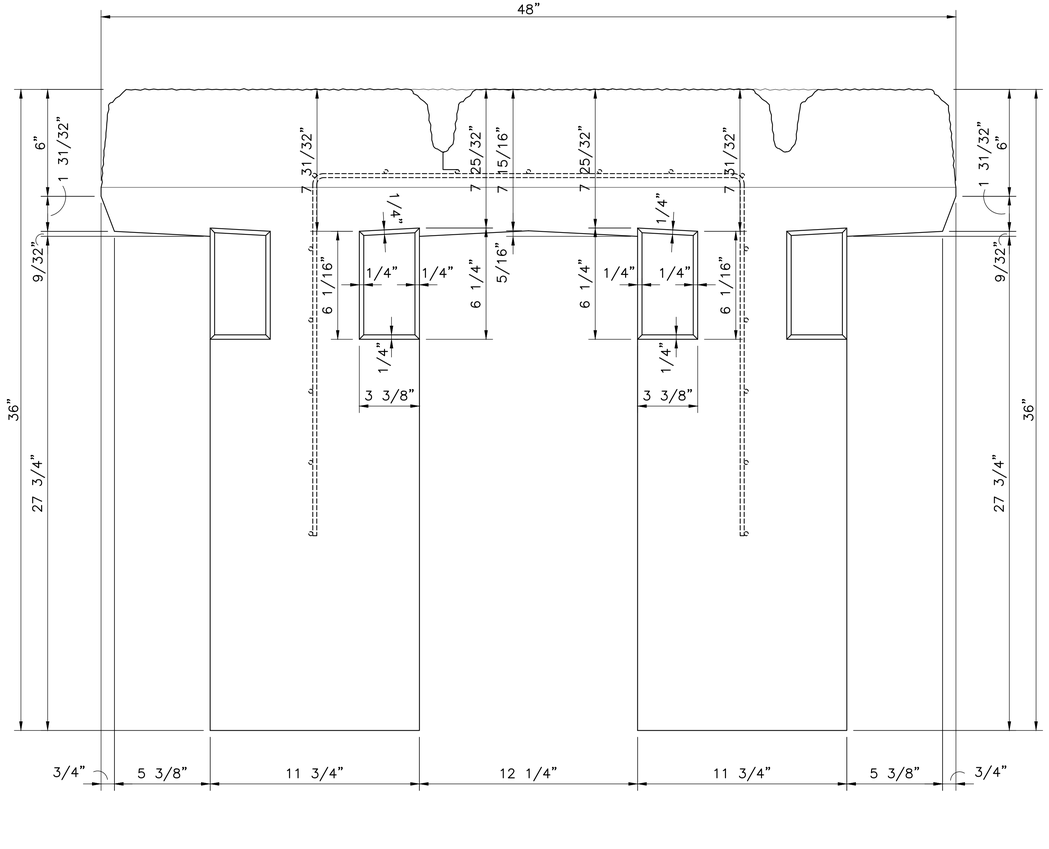
PROJECT NO. .

SHEET 3 OF 15

12/3/2018 2:32 PM FORIX Construction Drawings (2018-12-03).dwg



FORIX STANDARD UNIT
(TOP VIEW)



FORIX STANDARD UNIT
(BOTTOM VIEW)

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3	12/03/18	REVISION

FORIX

RETAINING WALL SYSTEM
STANDARD UNIT DIMENSIONS

EARTH WALL PRODUCTS, LLC.
MARIETTA, GEORGIA
WWW.EARTHWALLPRODUCTS.COM TEL: (678) 594-3451

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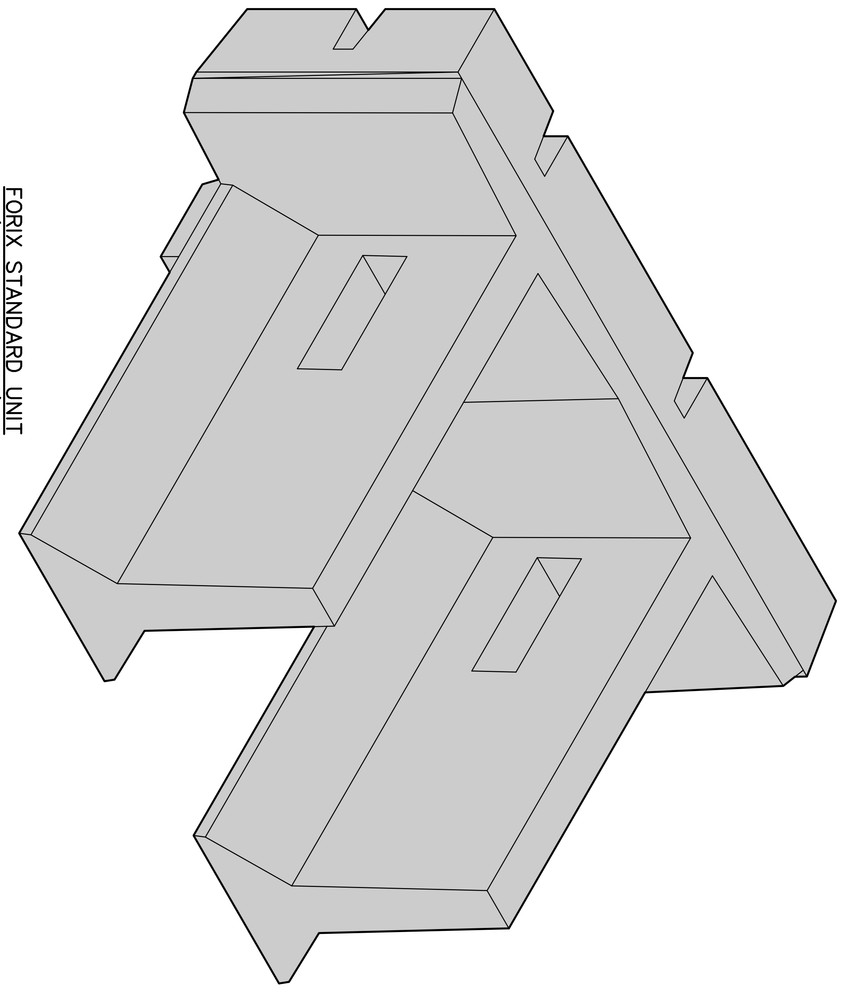
PROJECT NO. .

SHEET 4 OF 15

12/3/2018 2:32 PM FORIX Construction Drawings (2018-12-03).dwg

FORIX STANDARD UNIT
(ISOMETRIC VIEW)



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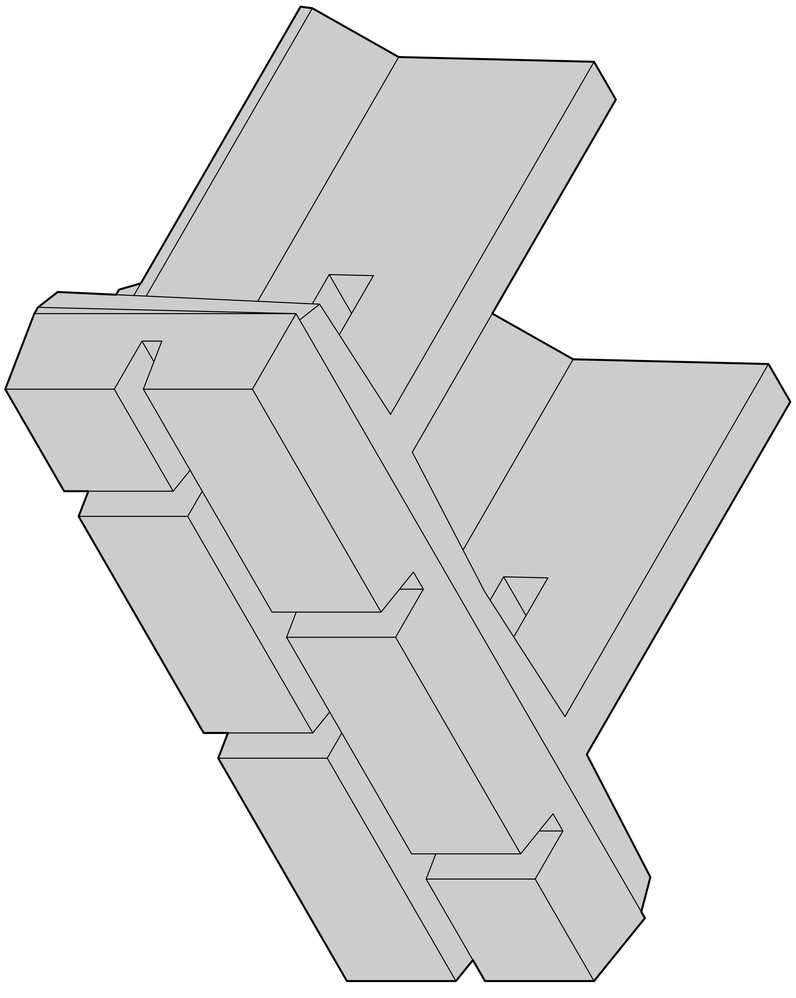

EARTH WALL PRODUCTS, LLC.

MARIETTA, GEORGIA

WWW.EARTHWALLPRODUCTS.COM TEL: (678) 594-3451

FORIX

RETAINING WALL SYSTEM
STANDARD UNIT ISOMETRIC

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DESIGNED BY: TLR
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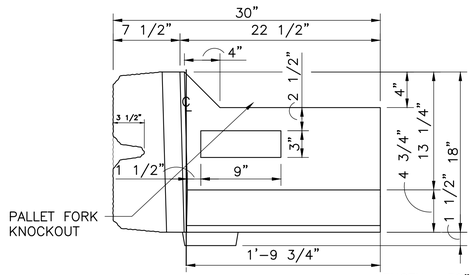
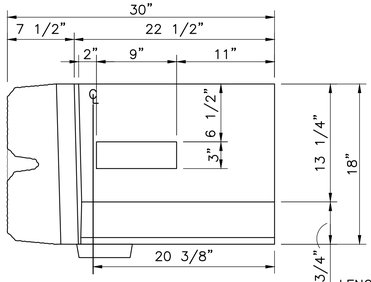
SHEET 5 OF 15



TOP UNIT – SIDE VIEW

SCALE: 1 1/2" = 1'-0"

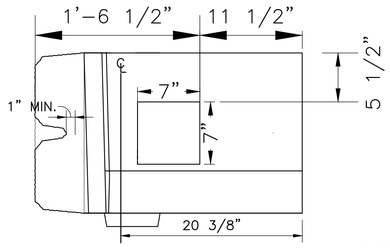
LENGTH	30"
VOLUME	3.99 FT³
DENSITY	143 LBS/FT
WEIGHT	571 LBS



30" UNIT – SIDE VIEW

SCALE: 1 1/2" = 1'-0"

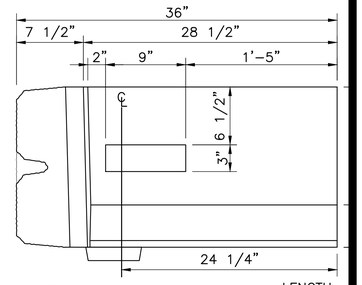
LENGTH	30"
VOLUME	5.65 FT³
DENSITY	143 LBS/FT
WEIGHT	808 LBS



30" MSE UNIT – SIDE VIEW

SCALE: 1 1/2" = 1'-0"

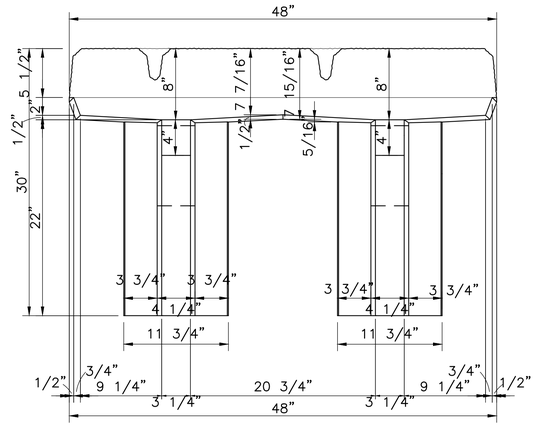
LENGTH	30"
VOLUME	5.60 FT³
DENSITY	143 LBS/FT
WEIGHT	801 LBS



36" UNIT – SIDE VIEW

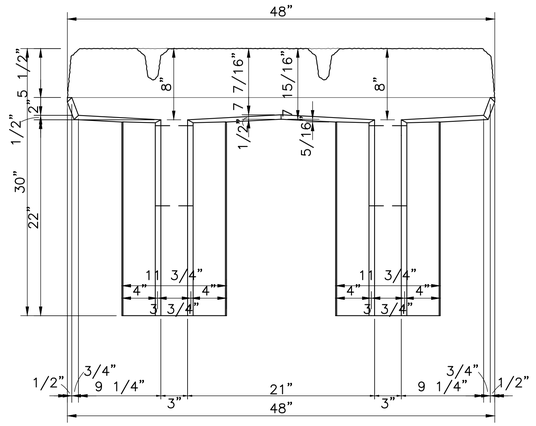
SCALE: 1 1/2" = 1'-0"

LENGTH	
VOLUME	
DENSITY	
WEIGHT	



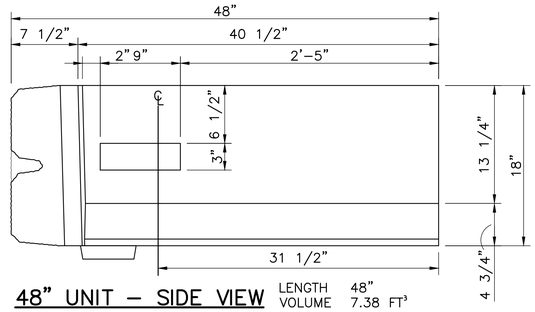
TOP UNIT – TOP VIEW

SCALE: 1 1/2" = 1'-0"



30" UNIT – TOP VIEW

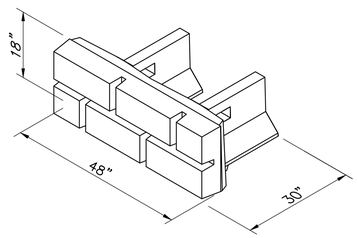
SCALE: 1 1/2" = 1'-0"



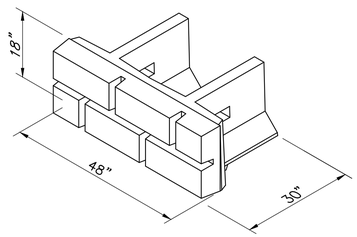
48" UNIT – SIDE VIEW

SCALE: 1 1/2" = 1'-0"

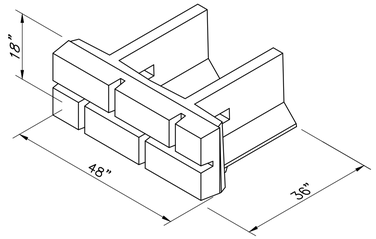
LENGTH	48"
VOLUME	7.38 FT³
DENSITY	143 LBS/FT
WEIGHT	1,056 LBS



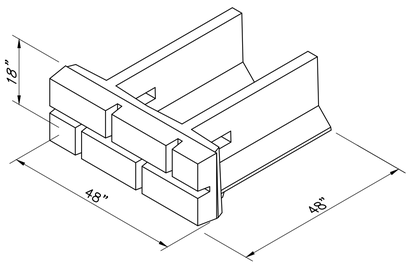
TOP UNIT



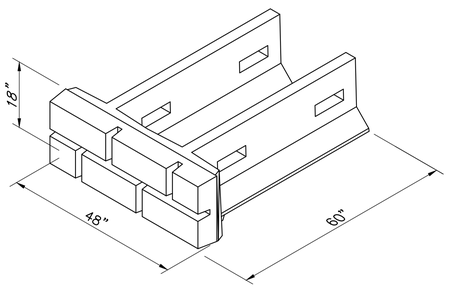
30" UNIT



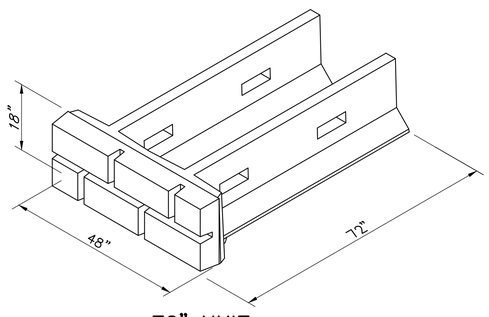
36" UNIT



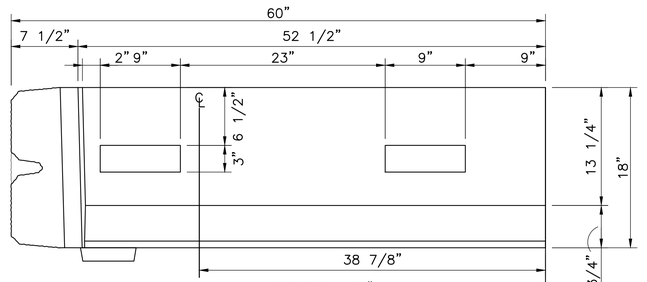
48" UNIT



60" UNIT



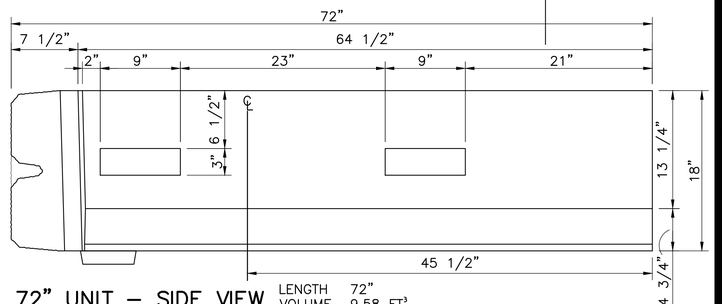
72" UNIT



60" UNIT – SIDE VIEW

SCALE: 1 1/2" = 1'-0"

LENGTH	60"
VOLUME	8.46 FT³
DENSITY	143 LBS/FT
WEIGHT	1,205 LBS



72" UNIT – SIDE VIEW

SCALE: 1 1/2" = 1'-0"

LENGTH	72"
VOLUME	9.58 FT³
DENSITY	143 LBS/FT
WEIGHT	1,370 LBS

REVISION / ISSUE

NO.	DATE	DESCRIPTION
1	03/26/18	REVISION
2	08/21/18	REVISION
3	12/03/18	REVISION

FORIX

RETAINING WALL SYSTEM

UNIT DIMENSIONS

EARTH WALL PRODUCTS, LLC.

MARIETTA, GEORGIA

WWW.EARTHWALLPRODUCTS.COM TEL: (678) 594-3451

DESIGNED BY:	TLR
DRAWN BY:	TR
DATE:	03/26/2018
PROJECT NO.	.

SHEET

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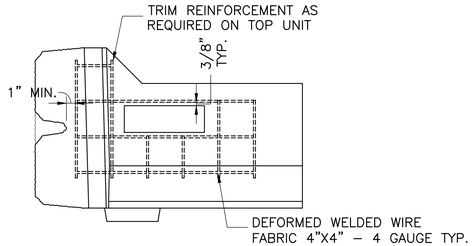
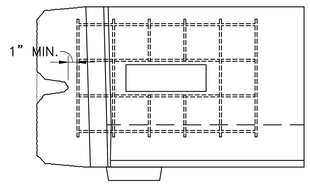
OF 15

12/3/2018 2:33 PM FORIX Construction Drawings (2018-12-03).dwg



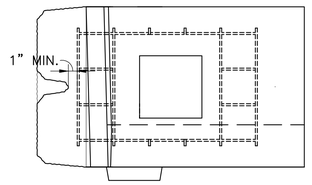
TOP UNIT – SIDE VIEW

SCALE: 1 1/2" = 1'–0"



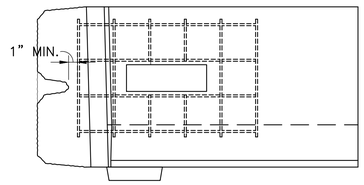
30" UNIT – SIDE VIEW

SCALE: 1 1/2" = 1'–0"



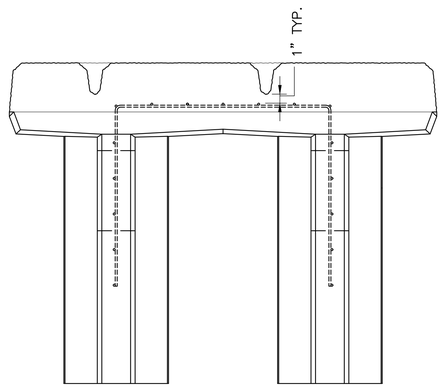
30" MSE UNIT – SIDE VIEW

SCALE: 1 1/2" = 1'–0"



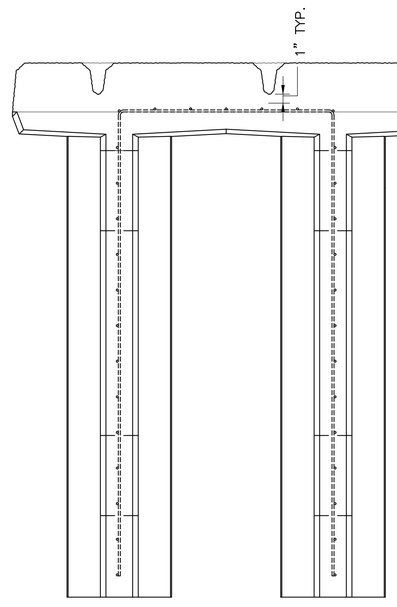
36" UNIT – SIDE VIEW

SCALE: 1 1/2" = 1'–0"



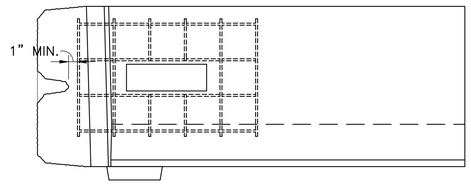
36" UNIT – TOP VIEW

SCALE: 1 1/2" = 1'–0"



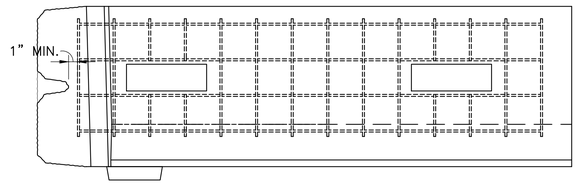
60" UNIT – TOP VIEW

SCALE: 1 1/2" = 1'–0"



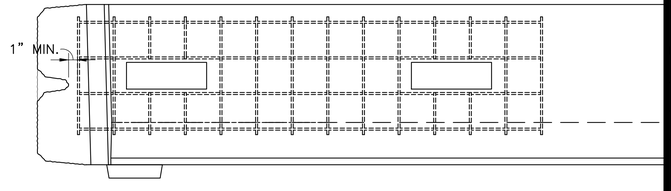
48" UNIT – SIDE VIEW

SCALE: 1 1/2" = 1'–0"



60" UNIT – SIDE VIEW

SCALE: 1 1/2" = 1'–0"



72" UNIT – SIDE VIEW

SCALE: 1 1/2" = 1'–0"

REVISION / ISSUE

NO.	DATE	DESCRIPTION
1	03/26/18	REVISION
2	08/21/18	REVISION
3	12/03/18	REVISION

FORIX

RETAINING WALL SYSTEM
UNIT DIMENSIONS

EARTH WALL PRODUCTS, LLC.
MARIETTA, GEORGIA
WWW.EARTHWALLPRODUCTS.COM TEL: (678) 594-3451

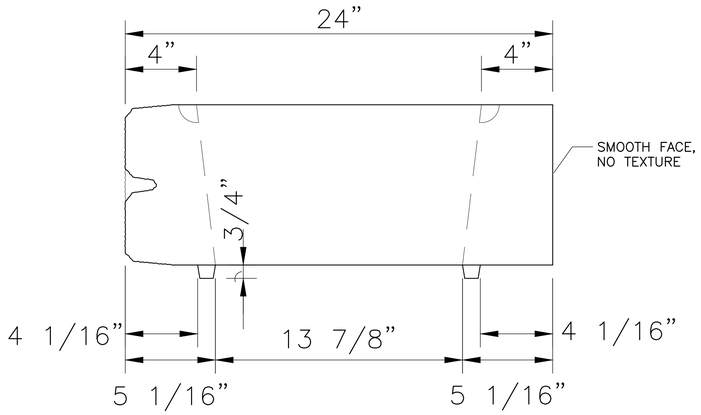
DESIGNED BY:	DRAWN BY:
TLR	TR

DATE: 03/26/2018

PROJECT NO. .

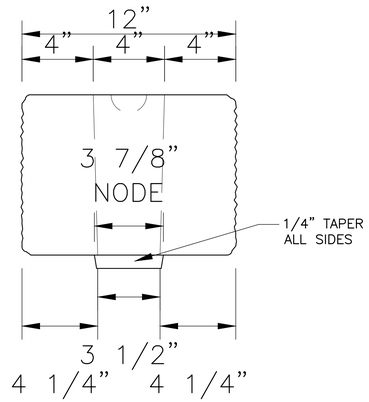
SHEET 7 OF 15

12/3/2018 2:33 PM FORIX Construction Drawings (2018-12-03).dwg



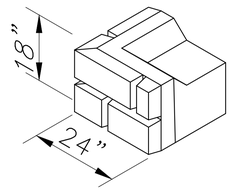
CORNER UNIT – SIDE VIEW

SCALE: 1 1/2” = 1’–0”



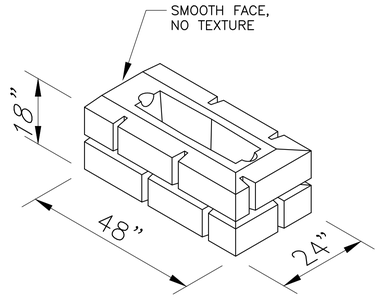
CORNER UNIT – END VIEW

SCALE: 1 1/2” = 1’–0”



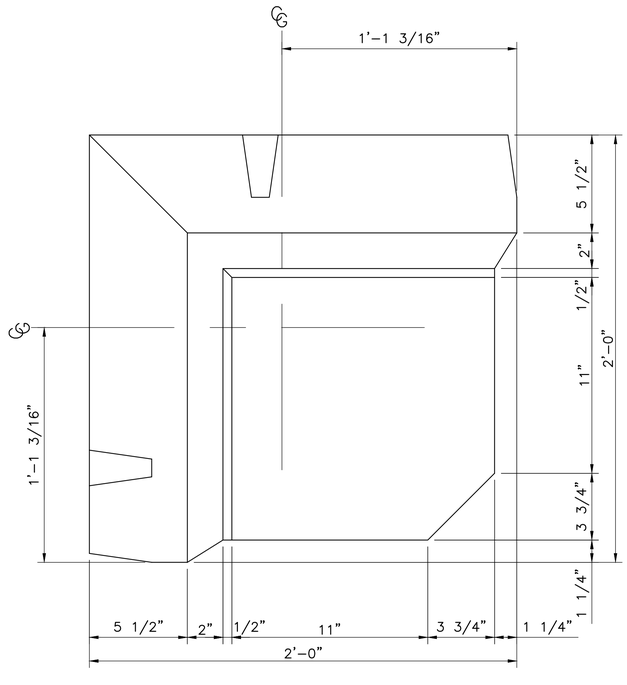
END UNIT

LENGTH	24”x24”
VOLUME	4.23 FT³
DENSITY	143 LBS/FT
WEIGHT	605 LBS



CORNER UNIT

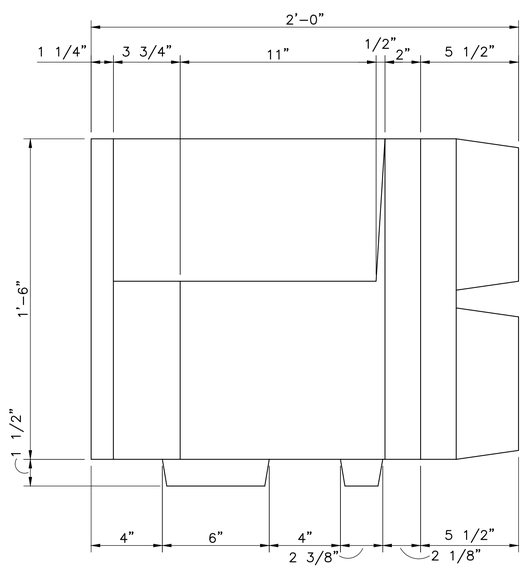
LENGTH	48”x24”
VOLUME	8.77 FT³
DENSITY	143 LBS/FT
WEIGHT	1,255 LBS



END UNIT – TOP VIEW

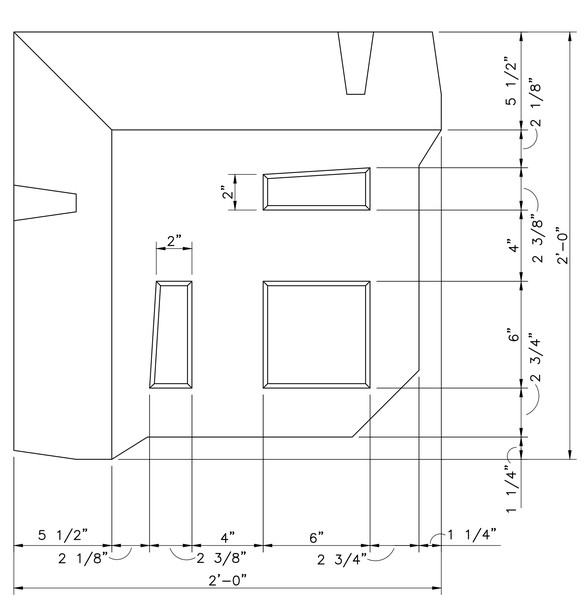
SCALE: 3” = 1’–0”

LENGTH	24”x24”
VOLUME	4.23 FT³
DENSITY	143 LBS/FT
WEIGHT	605 LBS



END UNIT – BACK/SIDE VIEW

SCALE: 3” = 1’–0”



END UNIT – BOTTOM VIEW

SCALE: 3” = 1’–0”

REVISION / ISSUE			
NO.	DATE	DESCRIPTION	
1	03/26/18	REVISION	
2	08/21/18	REVISION	
3	12/03/18	REVISION	

FORIX

RETAINING WALL SYSTEM

UNIT DIMENSIONS

EARTH WALL PRODUCTS, LLC.

MARIETTA, GEORGIA

WWW.EARTHWALLPRODUCTS.COM TEL: (678) 594-3451

DESIGNED BY:	DRAWN BY:
TLR	TR

DATE: 03/26/2018

PROJECT NO. .

SHEET 8 OF 15

LEGEND

TU — TOP UNIT (TU)

EU — END UNIT (EU)

CU — CORNER UNIT (CU)

PROPOSED GRADE

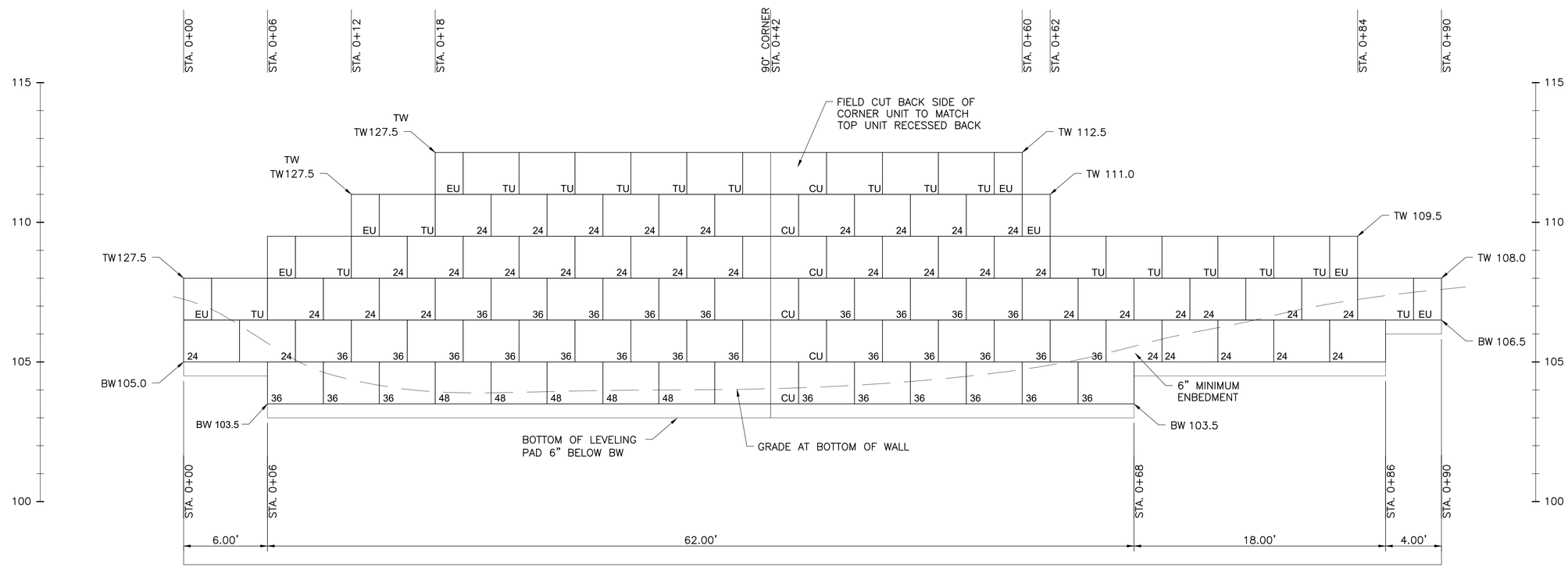
24 — STANDARD UNIT (24")

36 — STANDARD UNIT (36")

48 — STANDARD UNIT (48")

60 — STANDARD UNIT (60")

72 — STANDARD UNIT (72")



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

FRONT FACE ELEVATION VIEW – EXAMPLE WALL

SCALE: 1/4" = 1'–0"

REVISION / ISSUE

NO.	DATE	DESCRIPTION
1	03/26/18	REVISION
2	08/21/18	REVISION
3	12/03/18	REVISION

FORIX

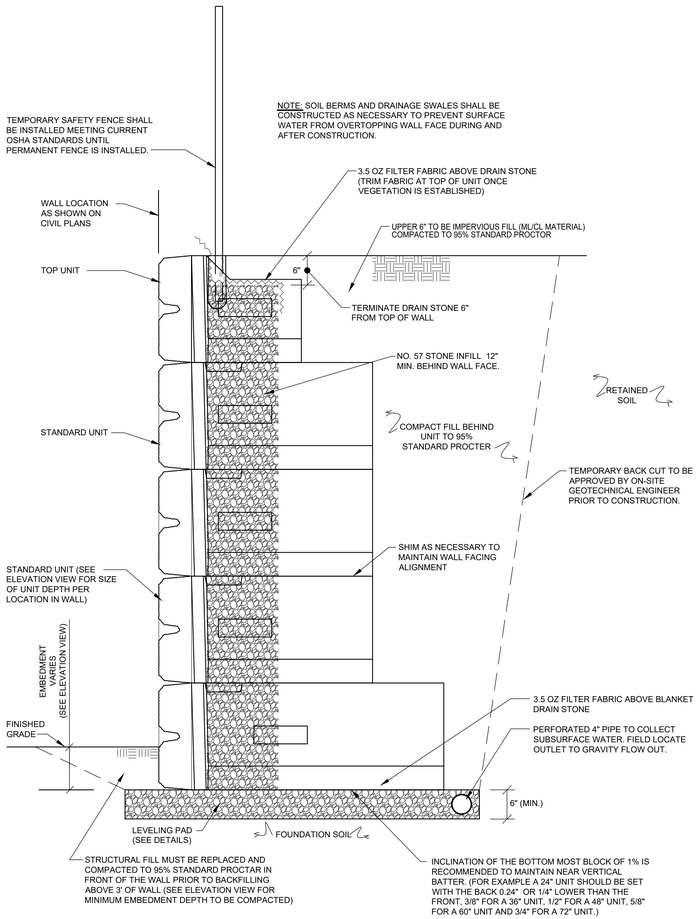
RETAINING WALL SYSTEM
ELEVATION VIEW

EARTH WALL PRODUCTS, LLC.
MARIETTA, GEORGIA
WWW.EARTHWALLPRODUCTS.COM TEL: (678) 594-3451

DESIGNED BY: TLR | DRAWN BY: TR
DATE: 03/26/2018
PROJECT NO. .

SHEET 9 OF 15

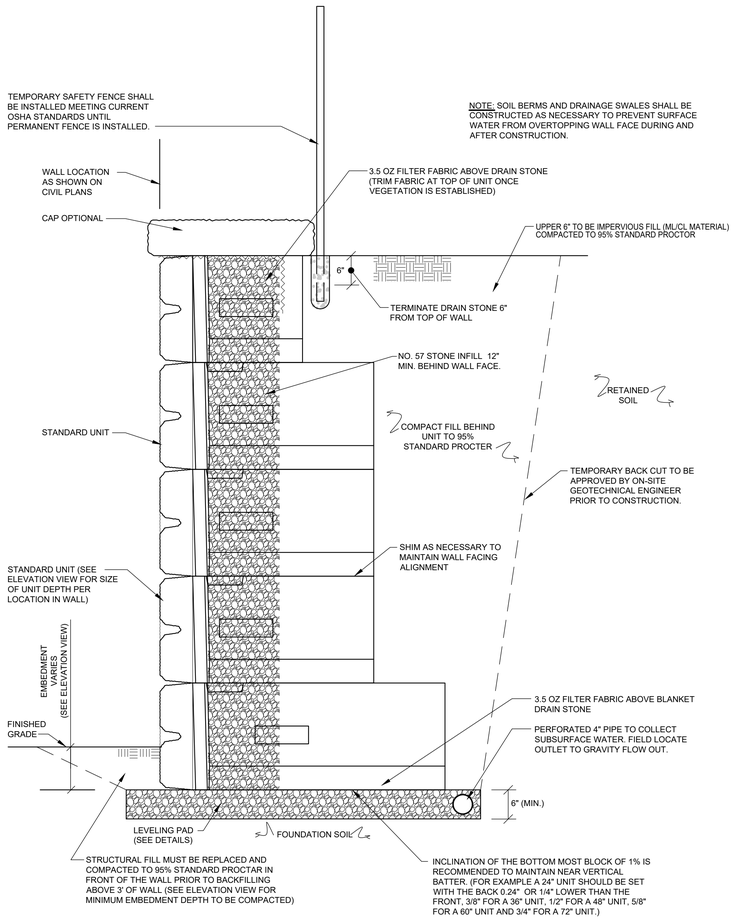
12/3/2018 2:33 PM FORIX Construction Drawings (2018-12-03).dwg



FOUNDATION REMEDIATION AS REQUIRED BY ON-SITE GEOTECHNICAL ENGINEER TO OBTAIN STABLE WORKING PLATFORM. VERIFICATION OF BEARING CAPACITY MUST BE APPROVED BY THE ON-SITE GEOTECHNICAL ENGINEER.

TYPICAL CROSS SECTION

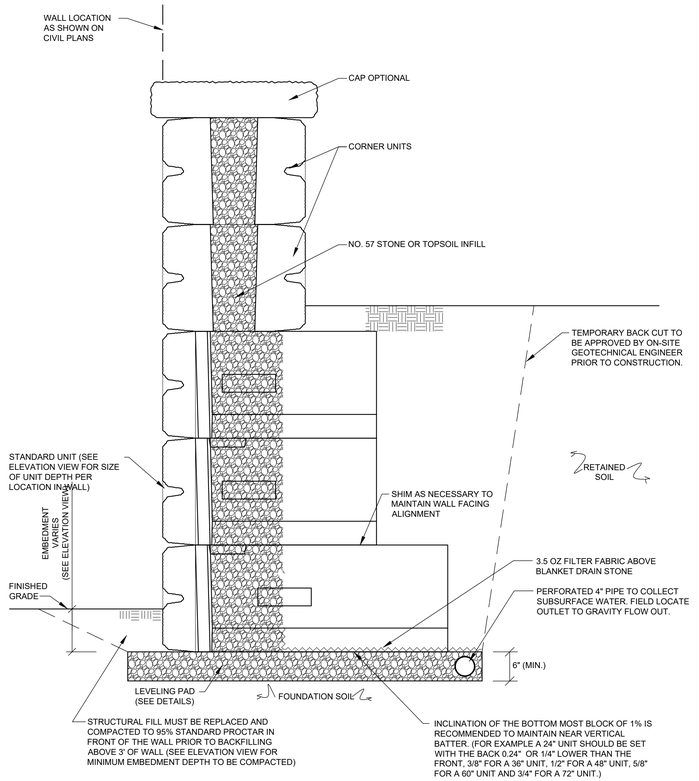
NOT TO SCALE



FOUNDATION REMEDIATION AS REQUIRED BY ON-SITE GEOTECHNICAL ENGINEER TO OBTAIN STABLE WORKING PLATFORM. VERIFICATION OF BEARING CAPACITY MUST BE APPROVED BY THE ON-SITE GEOTECHNICAL ENGINEER.

TYPICAL CROSS SECTION (WITH CAP)

NOT TO SCALE



FOUNDATION REMEDIATION AS REQUIRED BY ON-SITE GEOTECHNICAL ENGINEER TO OBTAIN STABLE WORKING PLATFORM. VERIFICATION OF BEARING CAPACITY MUST BE APPROVED BY THE ON-SITE GEOTECHNICAL ENGINEER.

TYPICAL SECTION WITH PARAPET

NOT TO SCALE

REVISION / ISSUE

NO.	DATE	DESCRIPTION
1	03/26/18	REVISION
2	08/21/18	REVISION
3	12/03/18	REVISION

FORIX

RETAINING WALL SYSTEM

TYPICAL CROSS SECTIONS

EARTH WALL PRODUCTS, LLC.
MARIETTA, GEORGIA
WWW.EARTHWALLPRODUCTS.COM TEL: (678) 594-3451

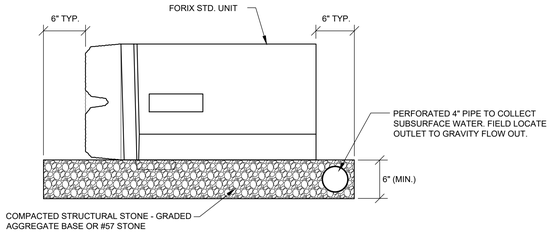
DESIGNED BY:	DRAWN BY:
TLR	TR

DATE: 03/26/2018

PROJECT NO. .

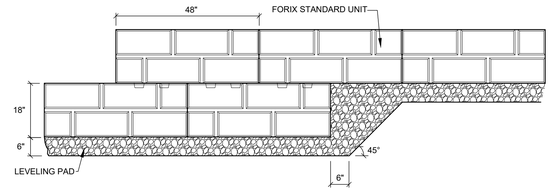
SHEET 10 OF 15

12/3/2018 2:33 PM FORIX Construction Drawings (2018-12-03).dwg



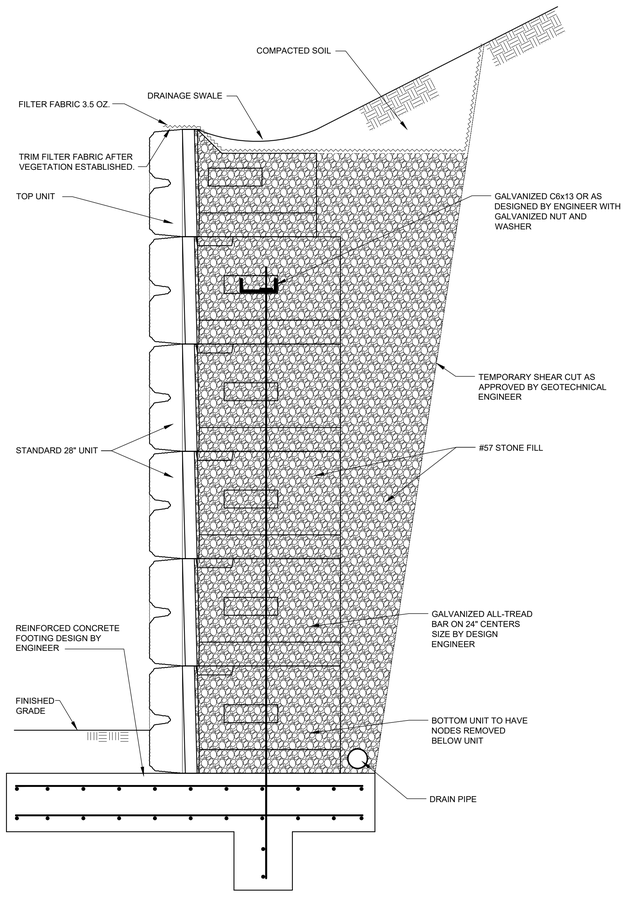
LEVELING PAD CROSS-SECTION

SCALE: NOT TO SCALE



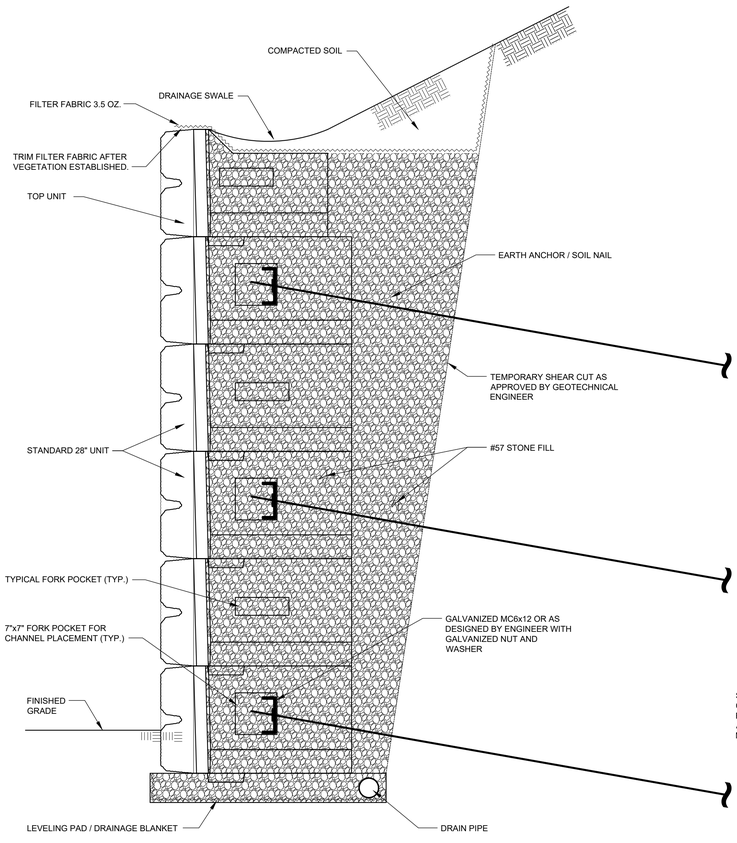
TYPICAL LEVELING PAD STEP

SCALE: NOT TO SCALE



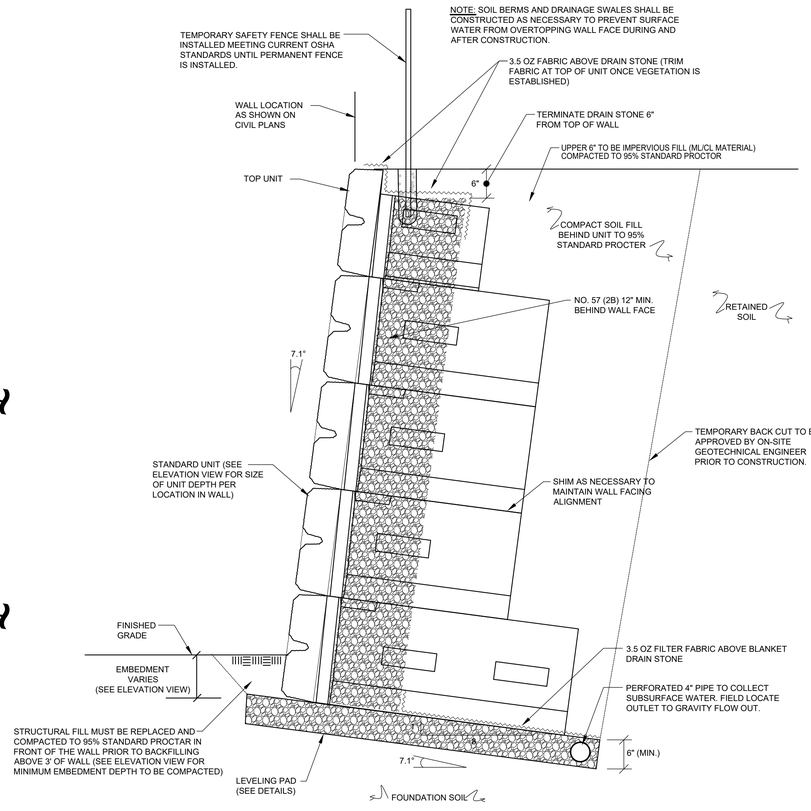
MINIMAL EXCAVATION CANTILEVER TYPICAL SECTION

SCALE: NOT TO SCALE



EARTH ANCHOR TYPICAL SECTION

SCALE: 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 RW2). VERIFICATION OF BEARING CAPACITY (NOTE 5.0, SHEET RW2) MUST BE APPROVED BY THE ON-SITE GEOTECHNICAL ENGINEER.

TYPICAL CROSS SECTION 7.1° BATTER (STONE BACKFILL)

SCALE: NOT TO SCALE

REVISION / ISSUE

NO.	DATE	DESCRIPTION
1	03/26/18	REVISION
2	08/21/18	REVISION
3	12/03/18	REVISION

FORIX

RETAINING WALL SYSTEM
DETAILS

EARTH WALL PRODUCTS, LLC.
MARIETTA, GEORGIA
WWW.EARTHWALLPRODUCTS.COM TEL: (678) 594-3451

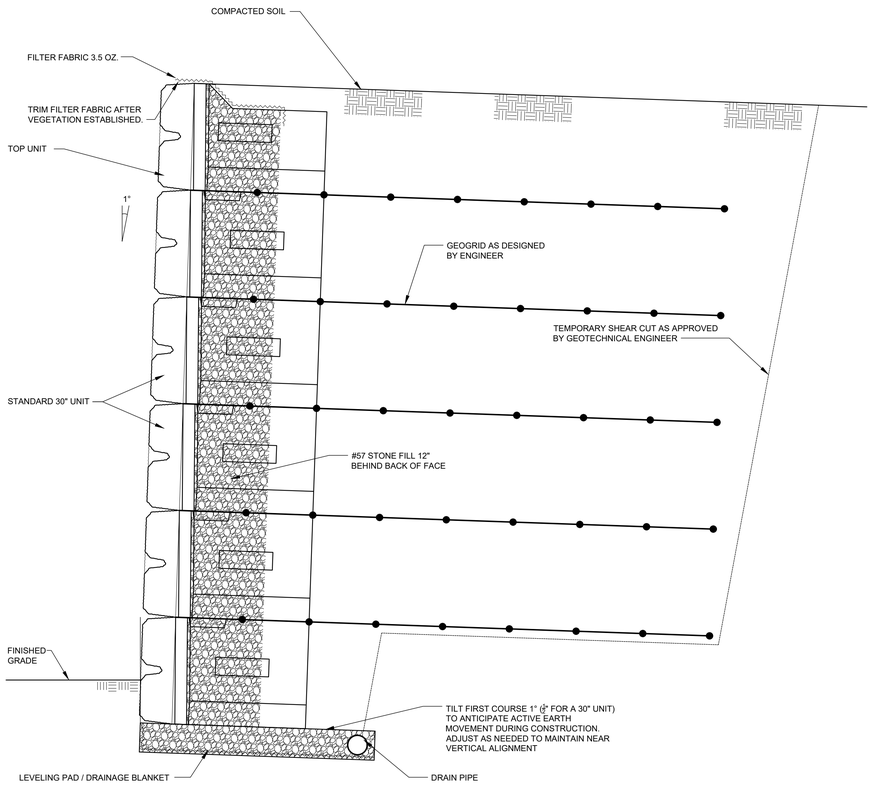
DESIGNED BY:	DRAWN BY:
TLR	TR

DATE: 03/26/2018

PROJECT NO. .

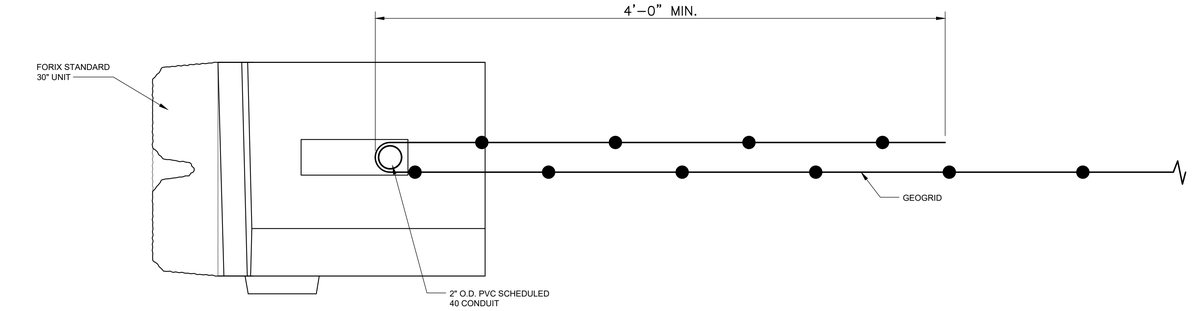
SHEET 11 OF 15

12/3/2018 2:33 PM FORIX Construction Drawings (2018-12-03).dwg



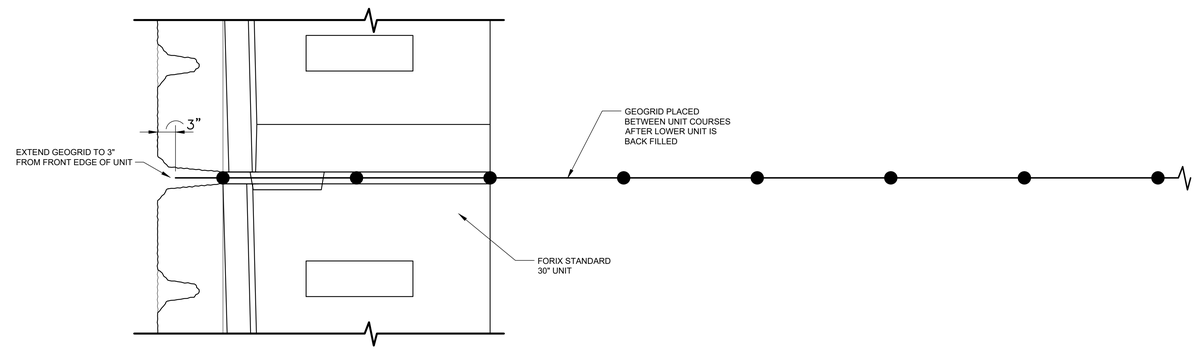
MSE GEOGRID REINFORCED TYPICAL SECTION

SCALE: NOT TO SCALE



MECHANICAL (POSITIVE) CONNECTION

SCALE: NOT TO SCALE



FRICTION CONNECTION

SCALE: NOT TO SCALE

REVISION / ISSUE

NO.	DATE	DESCRIPTION
1	03/26/18	REVISION
2	08/21/18	REVISION
3	12/03/18	REVISION

FORIX

RETAINING WALL SYSTEM

DETAILS

EARTH WALL PRODUCTS, LLC.

MARIETTA, GEORGIA

WWW.EARTHWALLPRODUCTS.COM TEL: (678) 594-3451

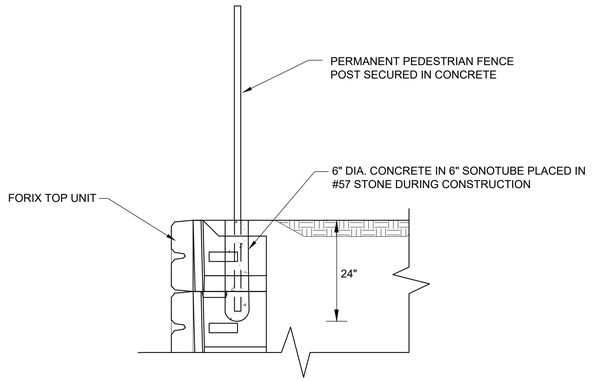
DESIGNED BY:	DRAWN BY:
TLR	TR

DATE: 03/26/2018

PROJECT NO. .

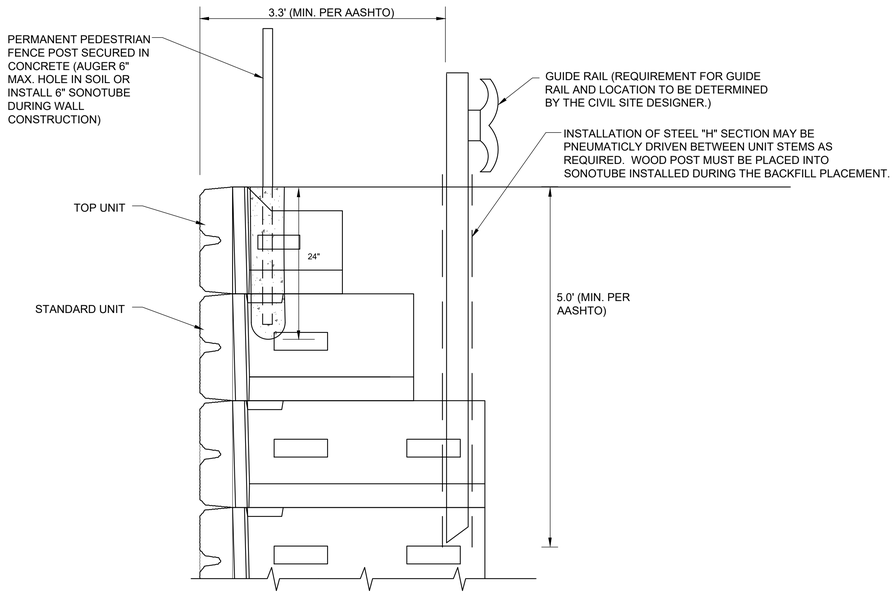
SHEET 12 OF 15

12/3/2018 2:33 PM FORIX Construction Drawings (2018-12-03).dwg



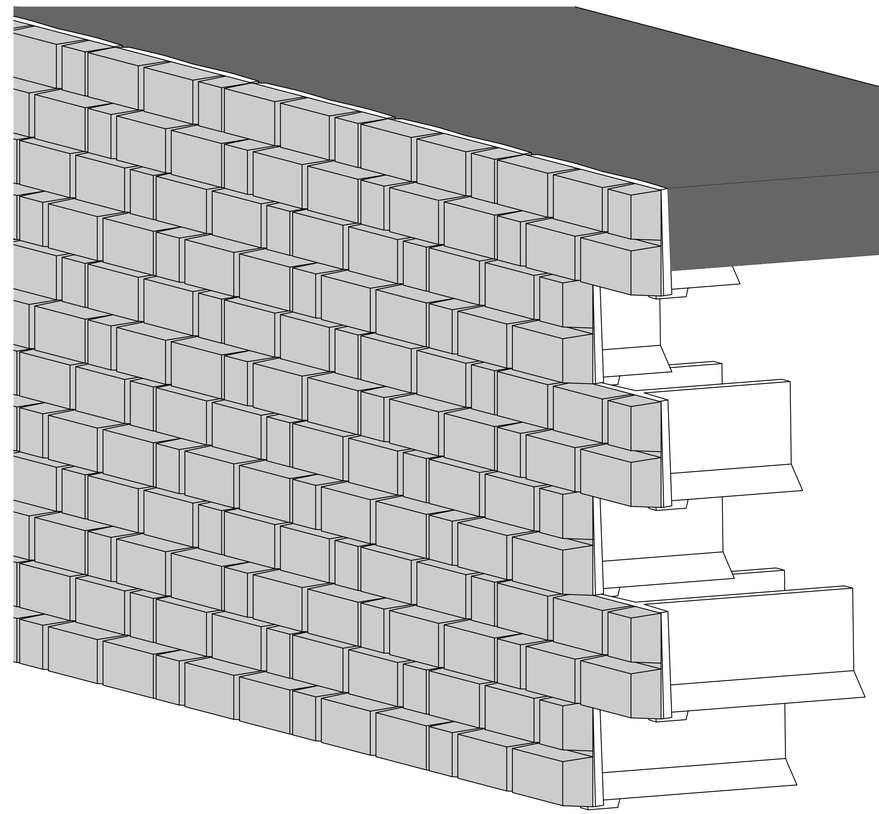
FENCE POST INSTALLATION DETAIL

SCALE: 3/4" = 1'-0"



TYPICAL FENCE POST / GUARD RAIL INSTALLATION

SCALE: 3/4" = 1'-0"



STACKED UNITS ISOMETRIC VIEW

SCALE: NOT TO SCALE

REVISION / ISSUE

NO.	DATE	DESCRIPTION
1	03/26/18	REVISION
2	08/21/18	REVISION
3	12/03/18	REVISION

FORIX

RETAINING WALL SYSTEM

FENCE POST / GUARD RAIL DETAILS

EARTH WALL PRODUCTS, LLC.
MARIETTA, GEORGIA
WWW.EARTHWALLPRODUCTS.COM TEL: (678) 594-3451

DESIGNED BY:	DRAWN BY:
TLR	TR

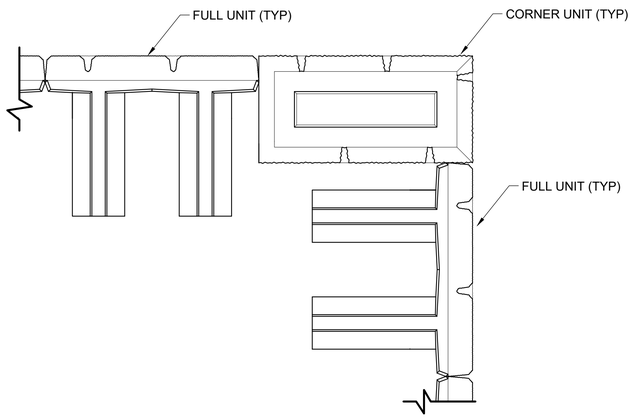
DATE: 03/26/2018

PROJECT NO. .

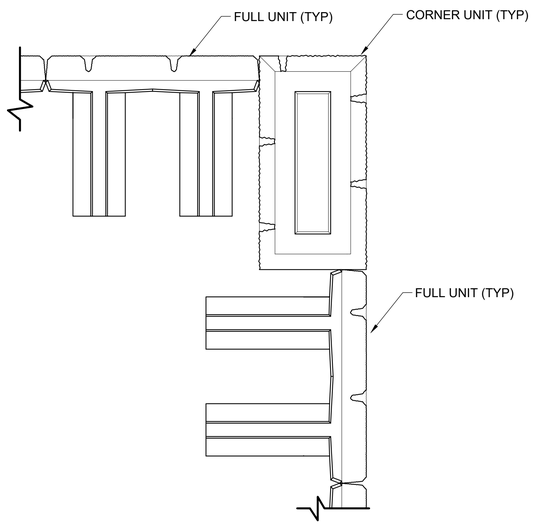
SHEET 13 OF 15

12/3/2018 2:33 PM FORIX Construction Drawings (2018-12-03).dwg

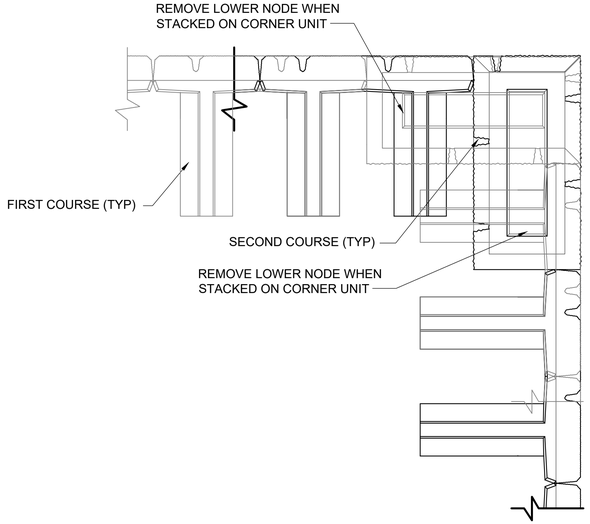
NOTE: BUILD FROM OUTSIDE CORNER OUT
TO PROVIDE UNIFORM RUNNING BOND



FIRST COURSE



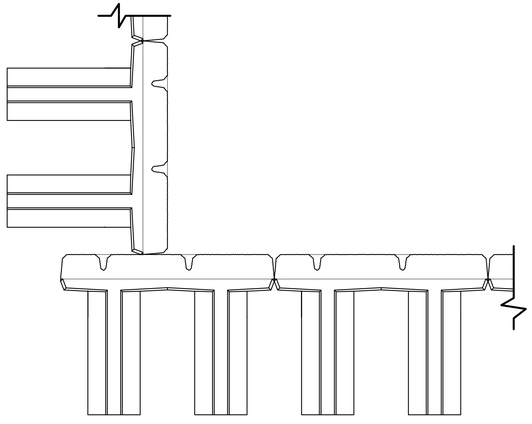
SECOND COURSE



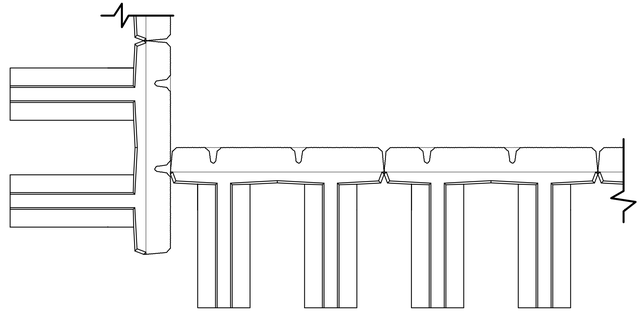
FIRST AND SECOND COURSE OVERLAYED

OUTSIDE 90° CORNER DETAIL

SCALE: 1 1/2" = 1'-0"



FIRST COURSE



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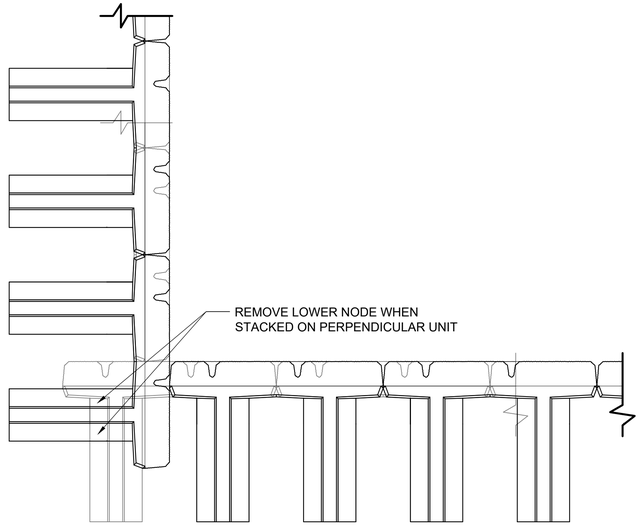


FIRST AND SECOND COURSE OVERLAYED

INSIDE 90° CORNER DETAIL

SCALE: 1 1/2" = 1'-0"

REVISION / ISSUE

NO.	DATE	DESCRIPTION
1	03/26/18	REVISION
2	08/21/18	REVISION
3	12/03/18	REVISION

FORIX

RETAINING WALL SYSTEM
90 DEGREE CORNER DETAIL

EARTH WALL PRODUCTS, LLC.
MARIETTA, GEORGIA
WWW.EARTHWALLPRODUCTS.COM TEL: (678) 594-3451

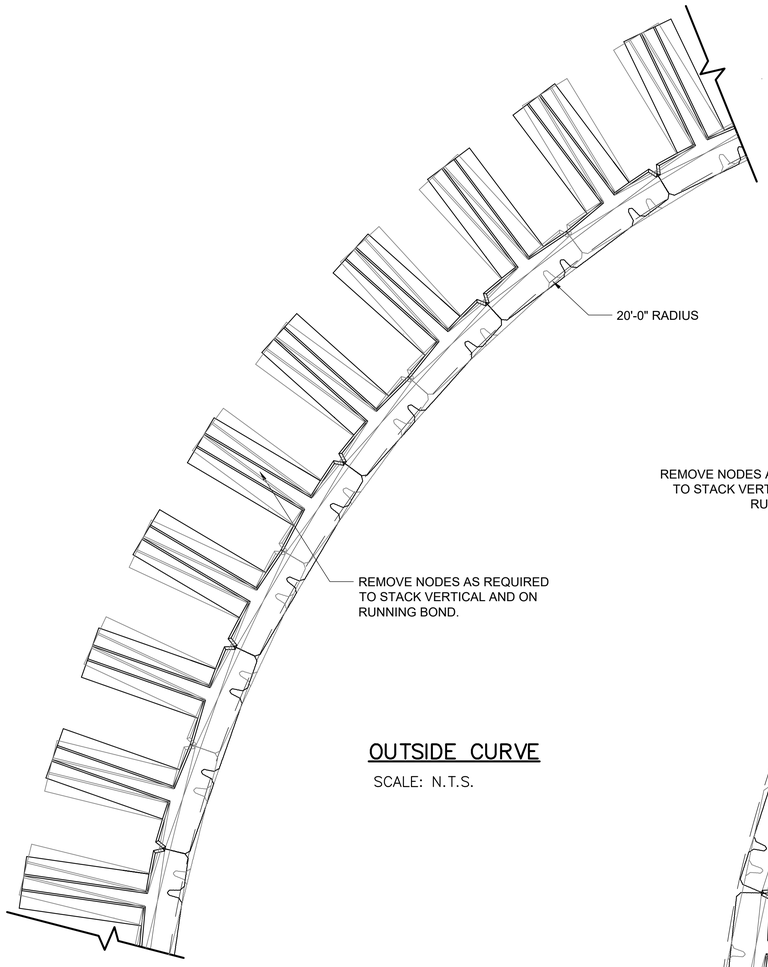
DESIGNED BY:	DRAWN BY:
TLR	TR

DATE: 03/26/2018

PROJECT NO. .

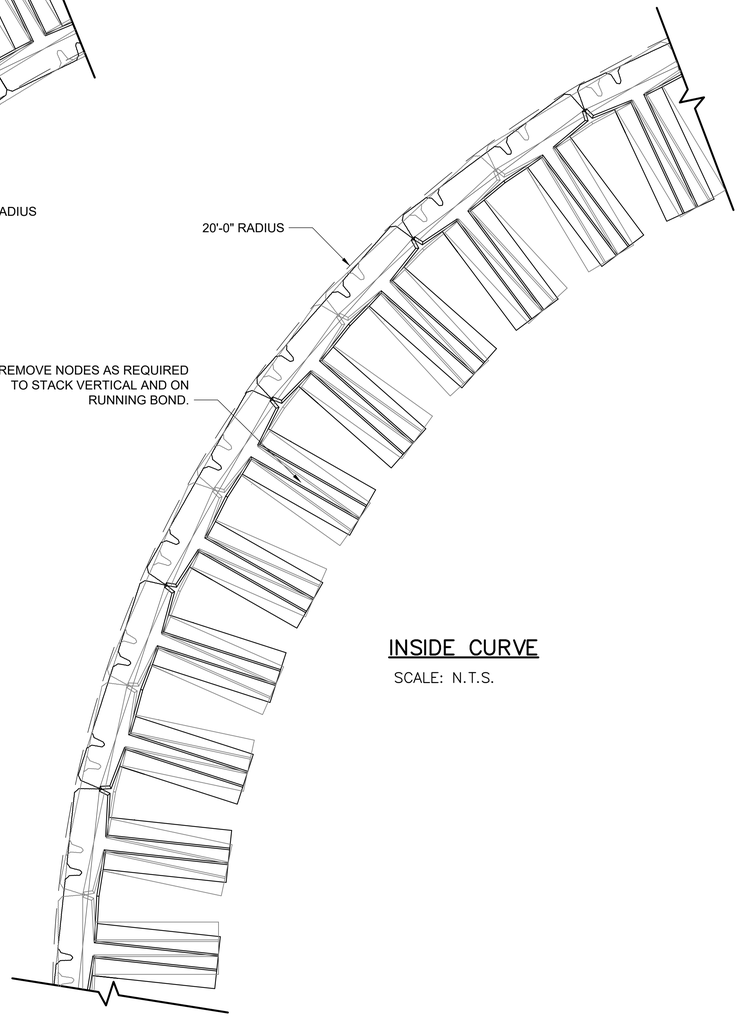
SHEET 14 OF 15

12/3/2018 2:33 PM FORIX Construction Drawings (2018-12-03).dwg



OUTSIDE CURVE

SCALE: N.T.S.



INSIDE CURVE

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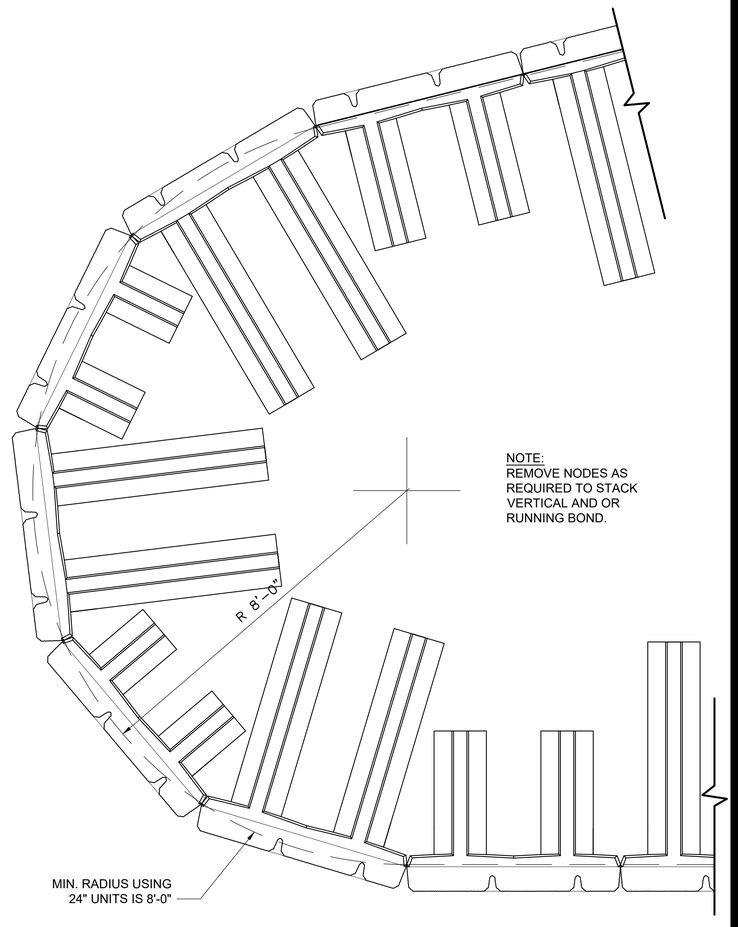

MINIMUM RADIUS DETAIL

SCALE: N.T.S.

REVISION / ISSUE

NO.	DATE	DESCRIPTION
1	03/26/18	REVISION
2	08/21/18	REVISION
3	12/03/18	REVISION

FORIX

RETAINING WALL SYSTEM

DETAILS

EARTH WALL PRODUCTS, LLC.
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WWW.EARTHWALLPRODUCTS.COM TEL: (678) 594-3451

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SHEET 15 OF 15

12/3/2018 2:33 PM FORIX Construction Drawings (2018-12-03).dwg