

TYPICAL SECTION - GRAVITY WALL - WALL #1
(TYPICAL DETAIL ONLY - SEE WALL FACE DRAWING
FOR SPECIFIC BLOCK CONFIGURATIONS)
 "REDI-ROCK" SEGMENTAL RETAINING WALL

COMPACTED FILL/BACKFILL GRAVEL BORROW MASS DOT M1.03.0 TYPE B		
<u>SIEVE</u>	<u>SIZE</u>	<u>% PASSING</u>
	3"	100%
	1 1/2"	50-85%
	#4	40-75%
	#50	8-28%
	#200	0-10%
NOTE: ALTERNATE MATERIALS SHALL ONLY BE USED WITH THE APPROVAL OF THE WALL DESIGN ENGINEER.		

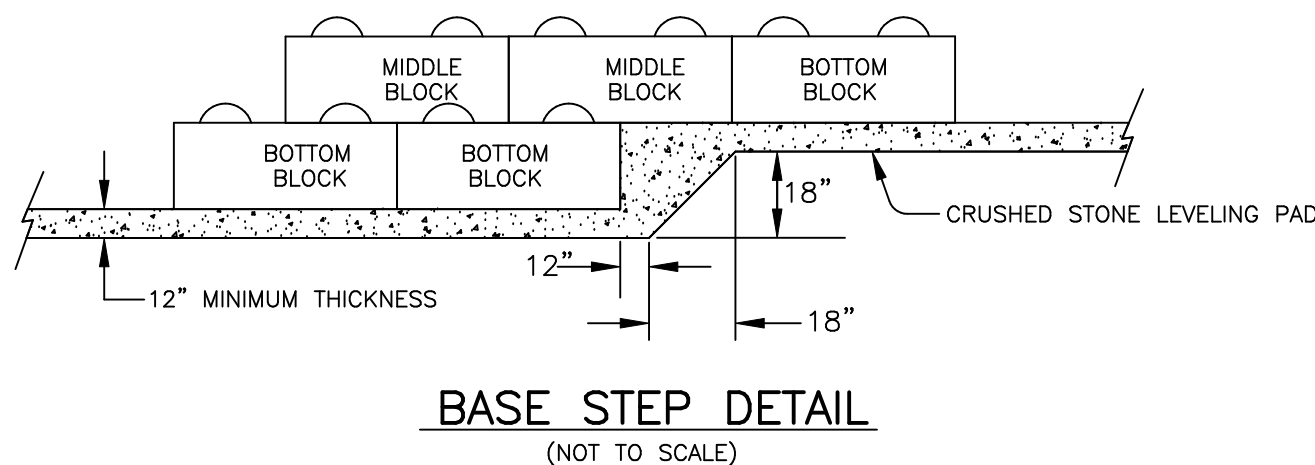
DENSE GRADED 3/4" CRUSHED STONE GRADATION REQUIREMENTS		
SIEVE SIZE	% PASSING	
1"	100%	
3/4"	90-100%	
3/8"	60-85%	
#8	25-60%	
#200	10-20%	
NOTE: ALTERNATE MATERIALS SHALL ONLY BE USED WITH THE APPROVAL OF THE WALL DESIGN ENGINEER.		

DESIGN ASSUMPTIONS		
SOIL	SOIL UNIT WEIGHT	φ
COMPACTED FILL/BACKFILL	130	34
RETAINED EARTH (NATIVE)	130	34
FOUNDATION SOIL	130	34
APPLIED SURCHARGE LOADING:		
DRIVEWAYS -	250 PSF	
SIDEWALKS -	100 PSF	
SEISMIC ACCELERATION = 0.12		

DRAINAGE FILL - 3/4" CRUSHED STONE MASS DOT M2.01.4		
SIEVE SIZE	% PASSING	
1"	100	
3/4"	90 - 100	
1/2"	10 - 50	
3/8"	0 - 20	
#4	0 - 5	

NOTE: THE SLOPES ABOVE THE WALLS VARY ACROSS THE SITE. THE SLOPES SHOWN ON THE GRADING PLAN WERE CONSIDERED IN THIS DESIGN

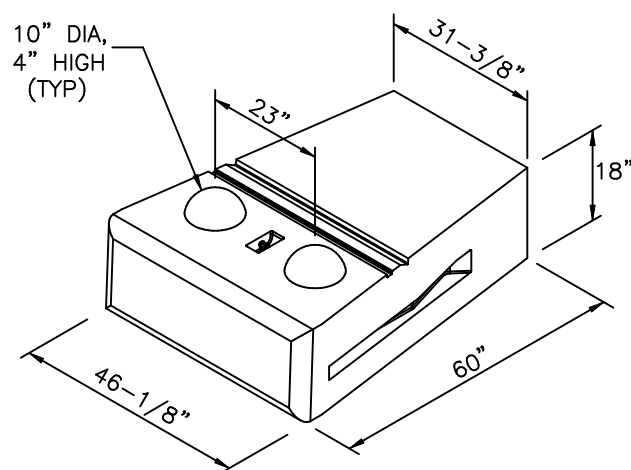
MINIMUM FACTORS OF SAFETY	
OVERTURNING	1.5
SLIDING	1.5
BEARING CAPACITY	2.0



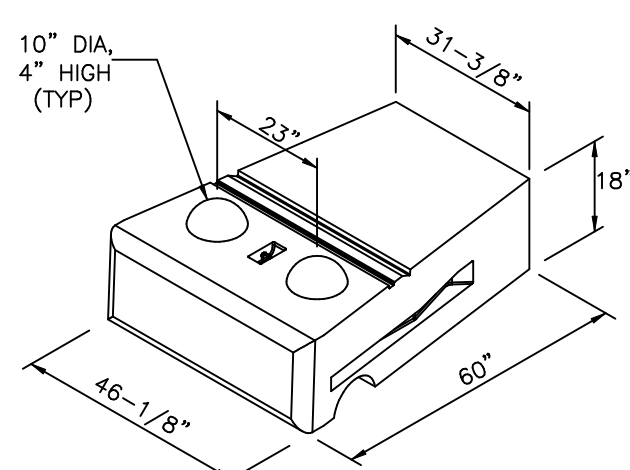
BLOCK SPECIFICATION NOTES:

- ALL BLOCKS SHALL BE MANUFACTURED BY A LICENSED REDI-ROCK (TM) MANUFACTURER.
- BLOCKS SHALL MEET THE MINIMUM REDI-ROCK SPECIFICATIONS OF 4000 psi WITH AN AIR CONTENT OF 4%-8%.
- THE REDI-ROCK UNITS MAY UTILIZE ANY OF THE AVAILABLE FACE TEXTURES. FACE TEXTURE IS AN AESTHETIC ISSUE, NOT STRUCTURAL, AND DOES NOT AFFECT THE STABILITY OF THE WALL.

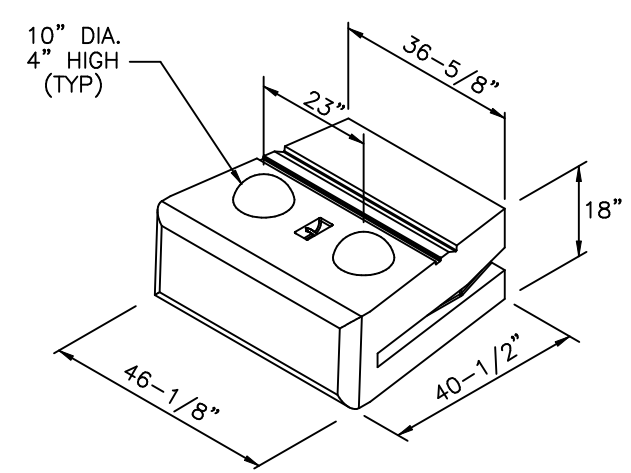
NOTE: HALF-BLOCKS HAVE THE SAME FEATURES AS SHOWN HERE FOR FULL BLOCKS BUT THEY ARE 23-1/16" WIDE, NOT THE FULL 46-1/8" WIDE.



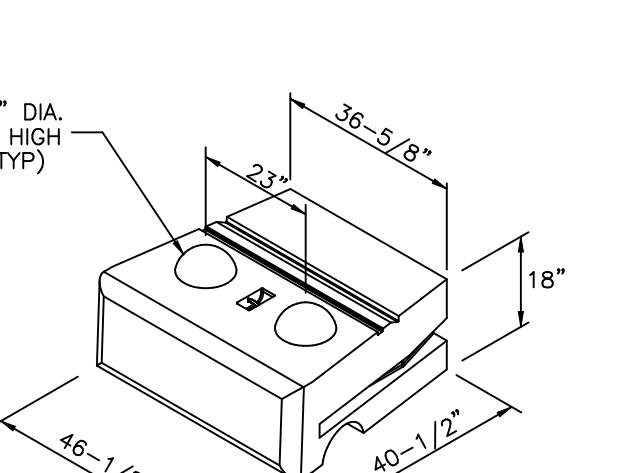
60" BOTTOM BLOCK
NOT-TO-SCALE



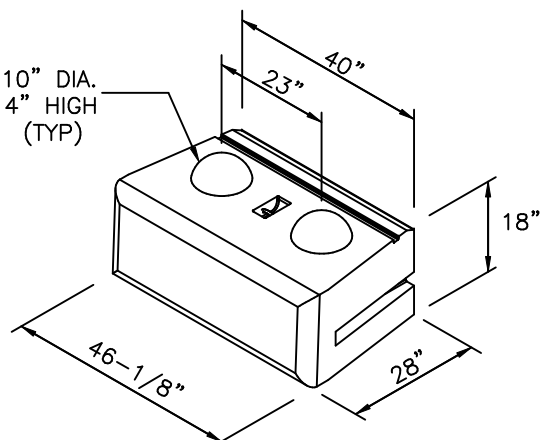
60" MIDDLE BLOCK
NOT-TO-SCALE



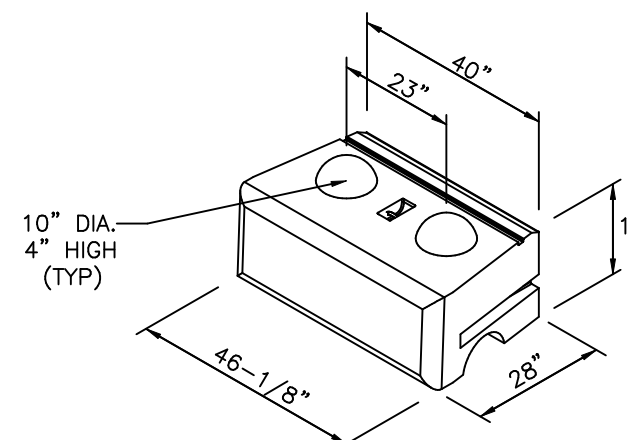
41" BOTTOM BLOCK
NOT-TO-SCALE



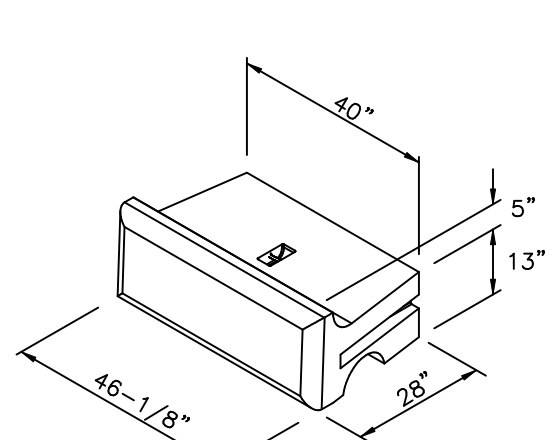
41" MIDDLE BLOCK
NOT-TO-SCALE



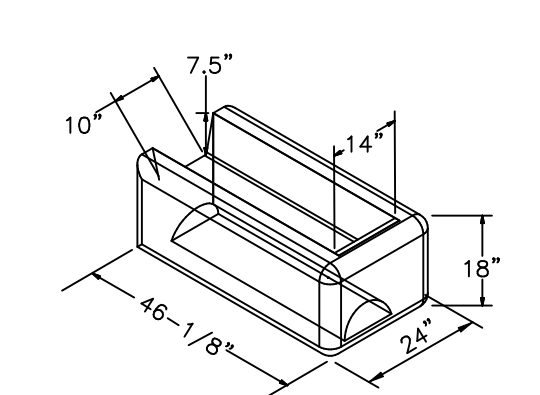
28" BOTTOM BLOCK
NOT-TO-SCALE



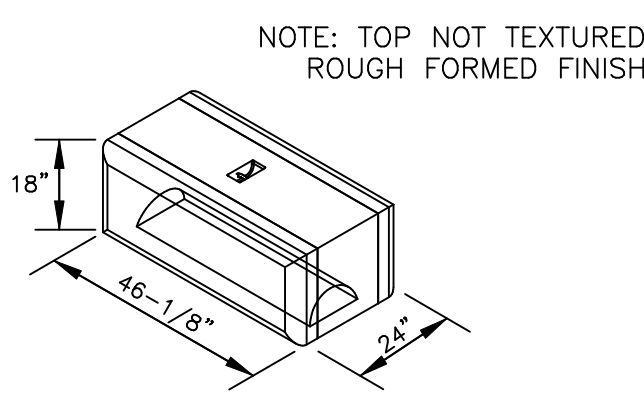
28" MIDDLE BLOCK
NOT-TO-SCALE



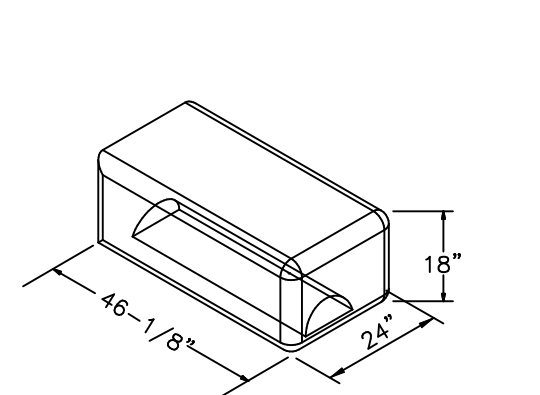
28" TOP BLOCK
NOT-TO-SCALE



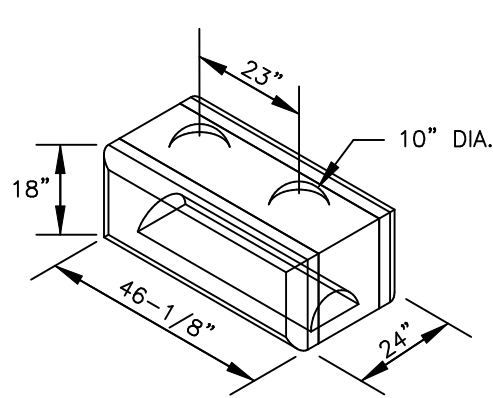
GARDEN CORNER BLOCK
NOT-TO-SCALE



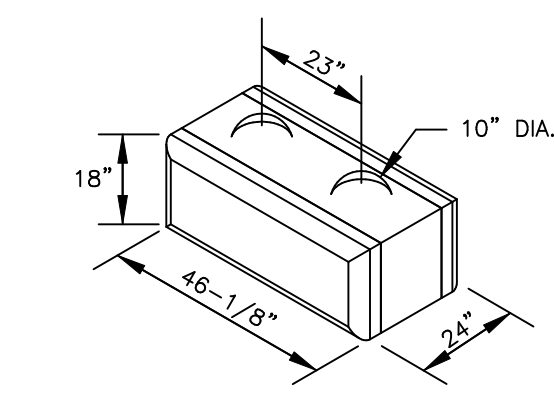
FREESTANDING TOP BLOCK
NOT-TO-SCALE



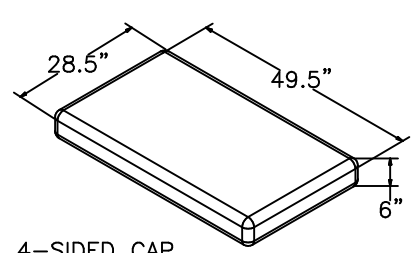
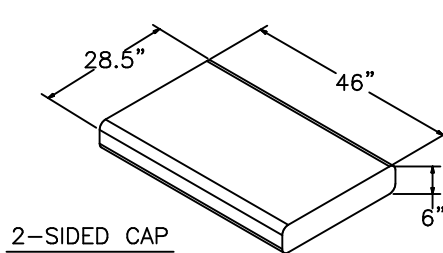
TOP CORNER BLOCK
NOT-TO-SCALE



FREESTANDING MIDDLE BLOCK
NOT-TO-SCALE



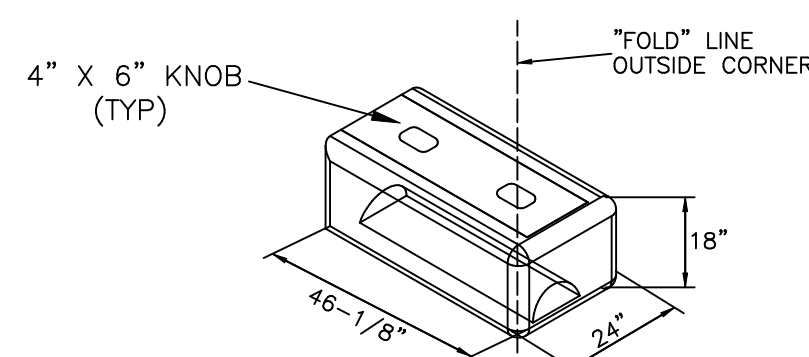
FREESTANDING BOTTOM BLOCK
NOT-TO-SCALE



CAP UNITS
NOT-TO-SCALE

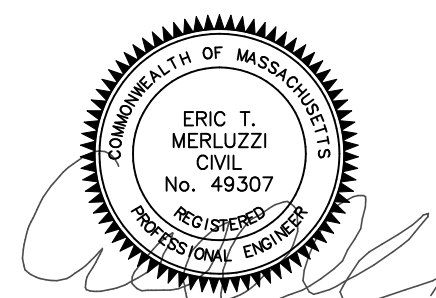
FREESTANDING VARIABLE RADIUS BLOCK TOP BLOCK

- ALL STRAIGHT BLOCK STYLES ARE AVAILABLE WITH THE END BLOCK INSERT TO ALLOW THE BLOCKS TO BE USED IN VARIABLE RADIUS WALLS (FREESTANDING BLOCK ONLY).
- FIELD SAW BLOCKS ON END TO PROVIDE VARIABLE RADIUS WALLS.
- INTERCHANGEABLE WITH "FLAT END" FREESTANDING BLOCK OF SIMILAR TYPE.
- "WINGS" CAST ON ONE END OF THE BLOCK ONLY.



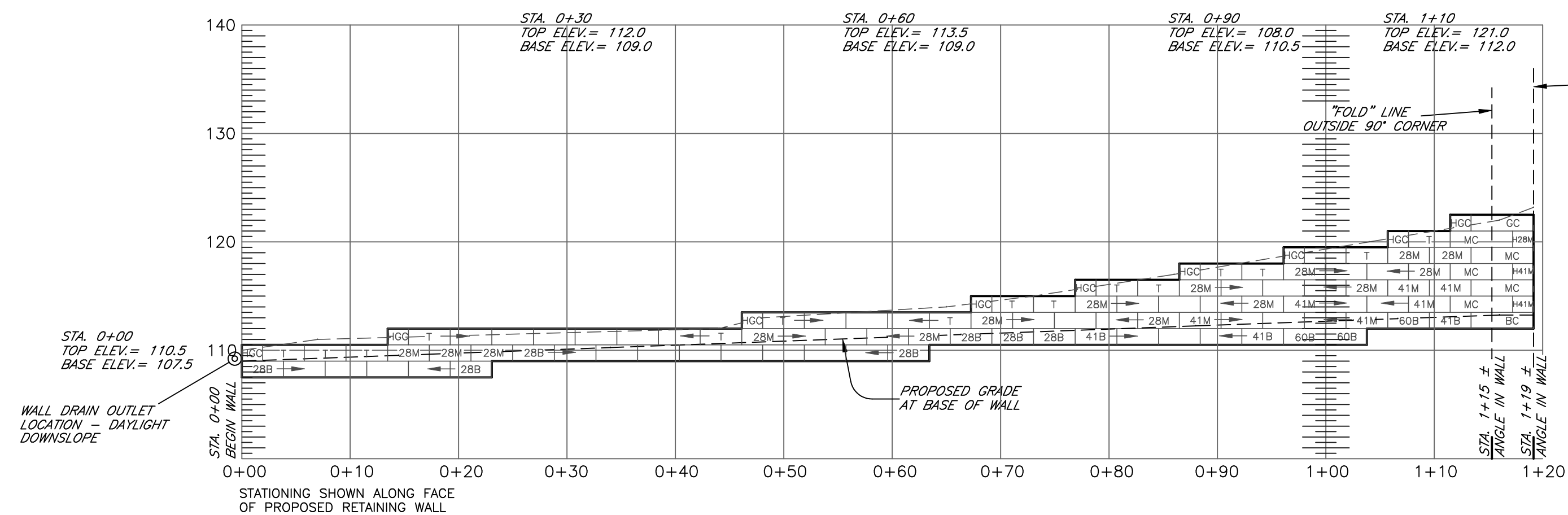
MIDDLE CORNER BLOCK
NOT-TO-SCALE

IT IS THE RESPONSIBILITY OF THE INSTALLER TO REVIEW THE NOTES AND DETAILS ON ALL SHEETS OF THIS PLAN SET



NOTE: THIS DRAWING WAS PREPARED FOR USE WITH REDI-ROCK (TM) RETAINING WALL SYSTEMS. CONTACT REDI-ROCK WALLS OF NEW ENGLAND AT (603) 863-1000.

ERIC MERLUZZI, P.E.		
184 ROWENTOWN ROAD, WENTWORTH, NH 03282		
PHONE: (603) 786-2751		E-MAIL: em35@earthlink.net
CLIENT: REDI-ROCK WALLS OF NEW ENGLAND		
8 REEDS MILL ROAD, NEWPORT, NH 03773		
PROJECT: 3 BURKE LANE		
WELLESLEY, MA		
SHEET TITLE: RETAINING WALL DESIGN SHEET 1		
DATE: AUGUST 26, 2019	SCALE: AS SHOWN	PROJECT No.: 2019-116



WALL FACE DRAWING
WALL #1

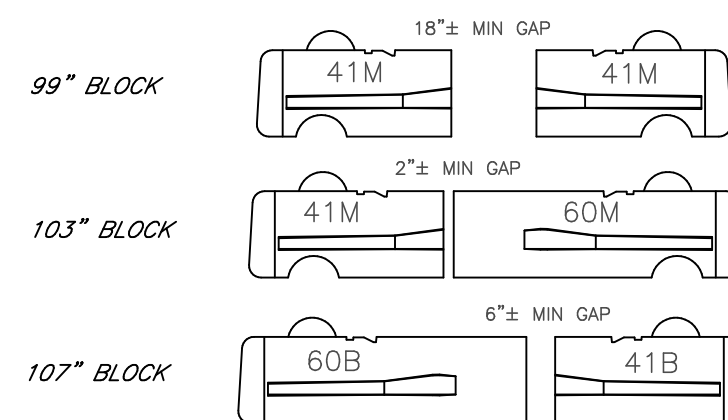
SCALE: 1" = 10'

WALL #1
BLOCK LEGEND & QUANTITIES

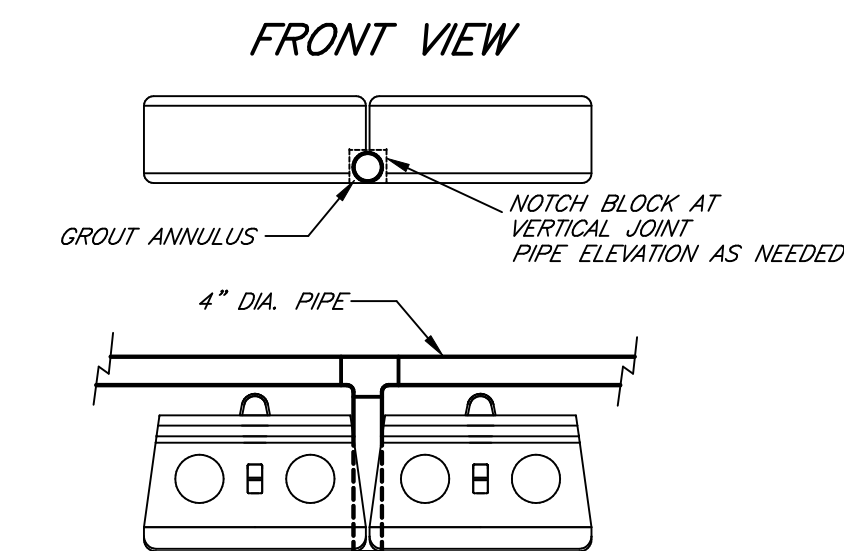
HGC	HALF GARDEN CORNER BLOCK	20
GC	GARDEN CORNER BLOCK	4
HT	HALF TOP BLOCK	3
T	TOP BLOCK	56
MC	MIDDLE CORNER BLOCK	19
BC	BOTTOM CORNER BLOCK	3
H28M	HALF 28" MIDDLE BLOCK	9
28M	28" MIDDLE BLOCK	99
H28B	HALF 28" BOTTOM BLOCK	1
28B	28" BOTTOM BLOCK	22
H41M	HALF 41" MIDDLE BLOCK	12 (4)
41M	41" MIDDLE BLOCK	74 (30)
41B	41" BOTTOM BLOCK	8 (27)
H60M	HALF 60" MIDDLE BLOCK	5 (4)
60M	60" MIDDLE BLOCK	54 (24)
60B	60" BOTTOM BLOCK	8 (27)
99	99" BLOCK	3
H103	HALF 103" BLOCK	4
103	103" BLOCK	24
107	107" BLOCK	27
(**)	ADDITIONAL BLOCK NEEDED TO MAKE COMPOSITE BLOCK	

COMPOSITE BLOCK LAYOUT

BLOCK DEPTH GREATER THAN 60" IS NOT AVAILABLE. WHERE BLOCK DEPTH GREATER THAN 60" IS SHOWN THE COMPOSITE BLOCK LAYOUT BELOW SHALL BE USED.



- * FILL GAP & 1" BETWEEN BLOCK W/ 3/4" CRUSHED STONE.
- * REMOVE LIFTING LOOPS AT THE REAR OF THE BLOCK AS NEEDED.
- * DUE TO THE VARIATION BETWEEN BLOCKS THE ABOVE DIMENSIONS SHOULD BE CONSIDERED APPROXIMATE. SOME FIELD MODIFICATION SHOULD BE EXPECTED. CONTACT THE WALL DESIGN ENGINEER WITH CHANGES/QUESTIONS.
- * NOT TO SCALE

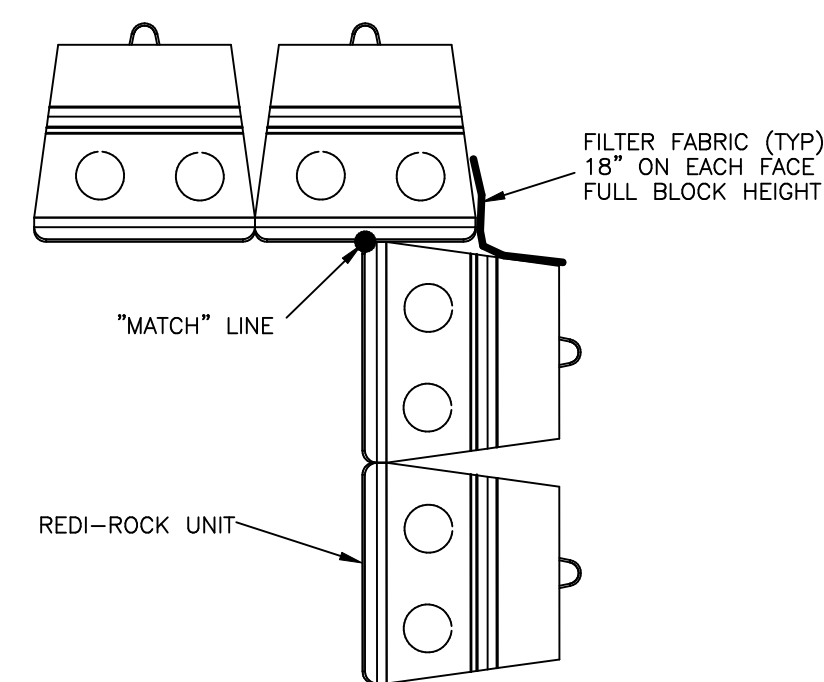


OVERHEAD VIEW
WALL DRAIN OUTLET - WALL #1
PIPE PENETRATION DETAIL
NOT-TO-SCALE

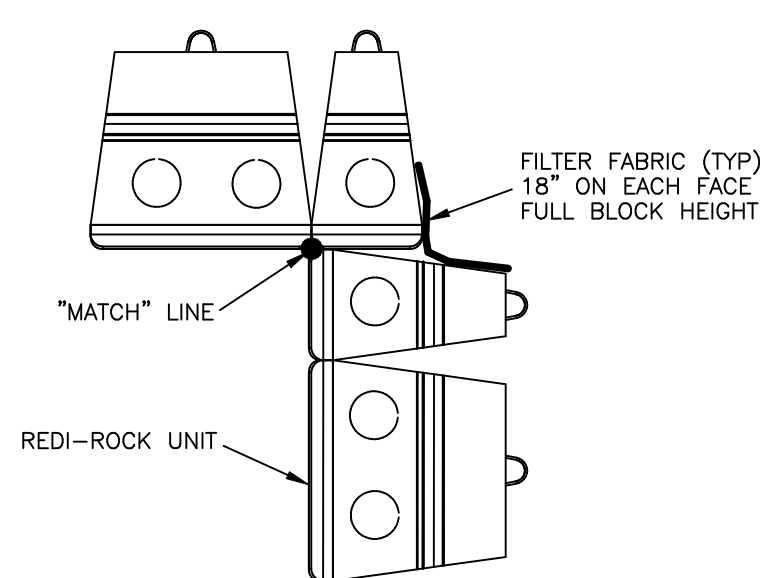
WALL FACE DRAWING
WALL #1, CONTINUED

SCALE: 1" = 10'

ALTERNATING COURSES

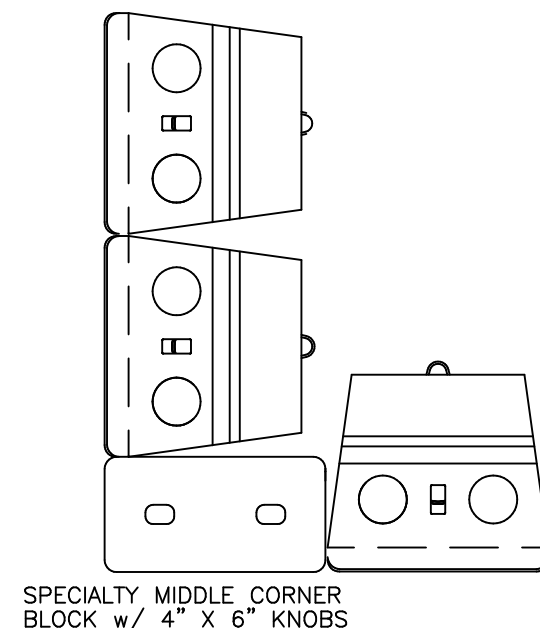


ALTERNATING COURSES

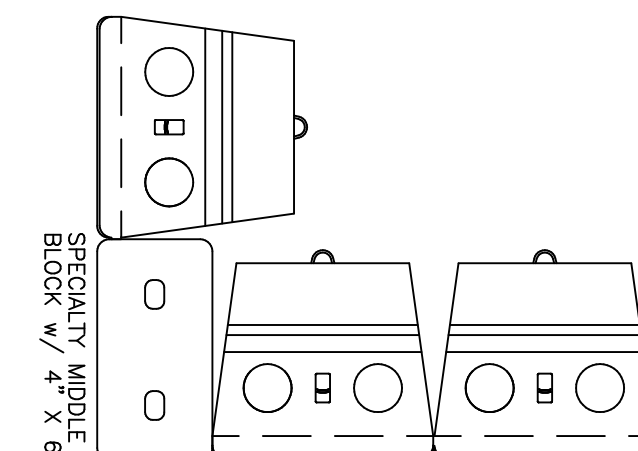


NOTE: REFER TO THE WALL FACE DRAWING FOR SPECIFIC BLOCK TYPE & LOCATION

INSIDE CORNER - NON INTERLOCKING
NOT-TO-SCALE



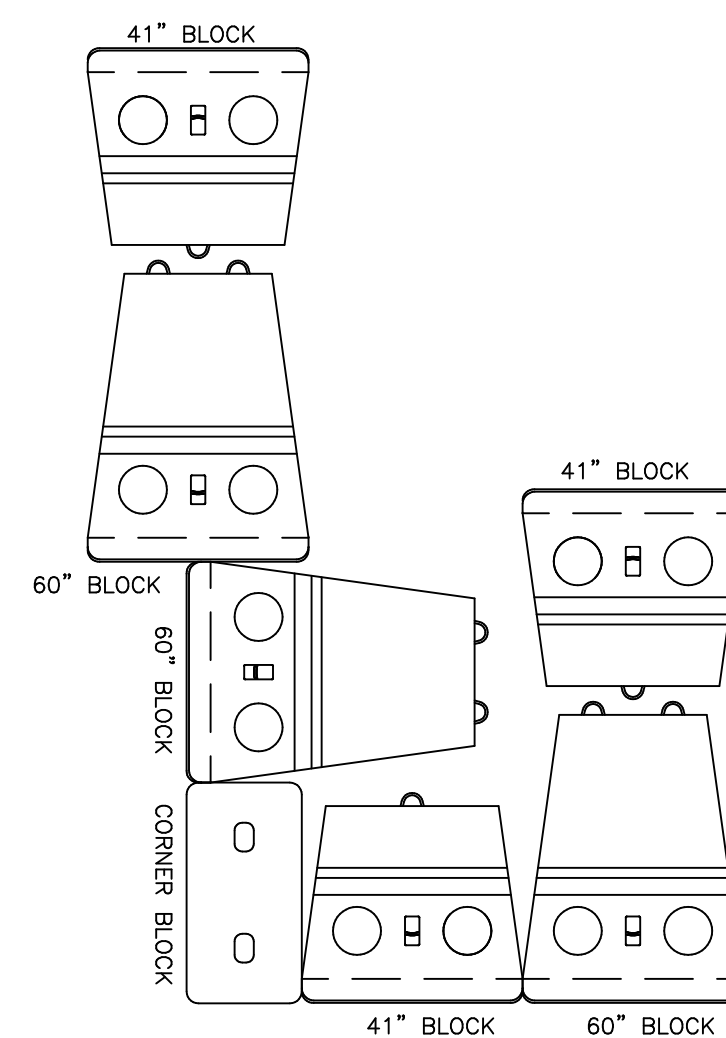
ALTERNATING COURSES



ALTERNATING COURSES

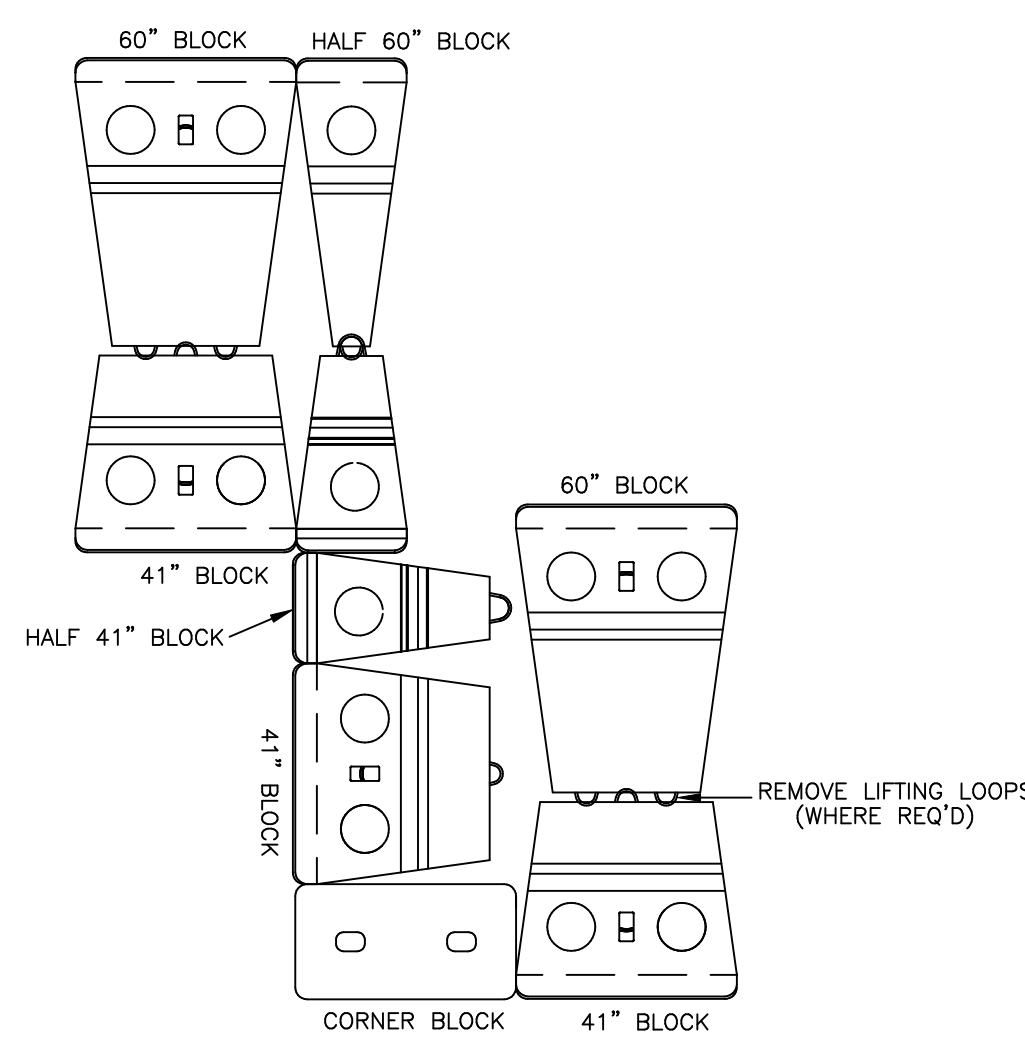
NOTE: REFER TO THE WALL FACE DRAWING FOR SPECIFIC BLOCK TYPE & LOCATION

90° OUTSIDE CORNER
NOT-TO-SCALE



WALL #1, STA. 1+92
FIRST COURSE

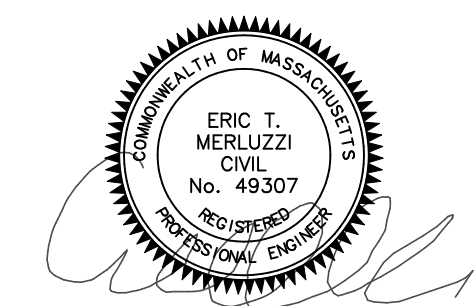
NOT-TO-SCALE



WALL #1, STA. 1+92
SECOND COURSE

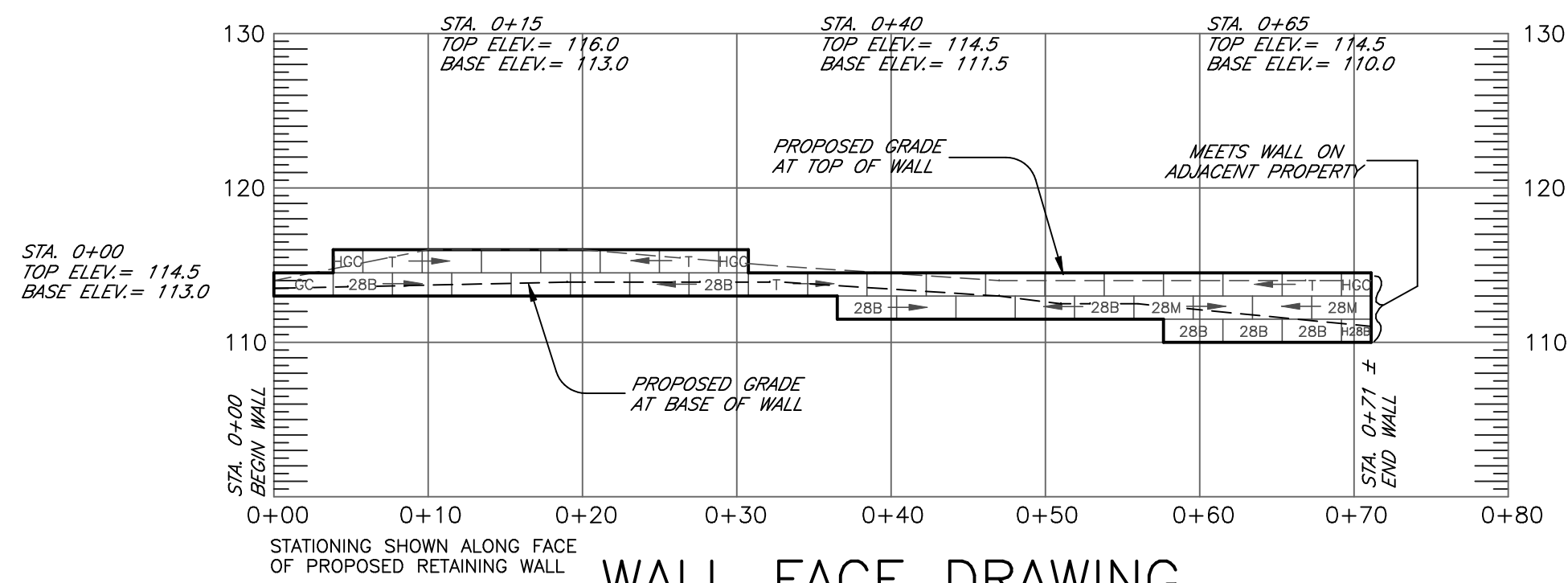
NOT-TO-SCALE

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CLIENT:	REDI-ROCK WALLS OF NEW ENGLAND 8 REEDS MILL ROAD, NEWPORT, NH 03773	
PROJECT:	3 BURKE LANE WELLESLEY, MA	
SHEET TITLE:	RETAINING WALL DESIGN SHEET 2	
DATE:	SCALE:	PROJECT No.:
AUGUST 26, 2019	AS SHOWN	2019-116



WALL FACE DRAWING
WALL #2

SCALE: 1" = 10'

**WALL #2
BLOCK LEGEND & QUANTITIES**

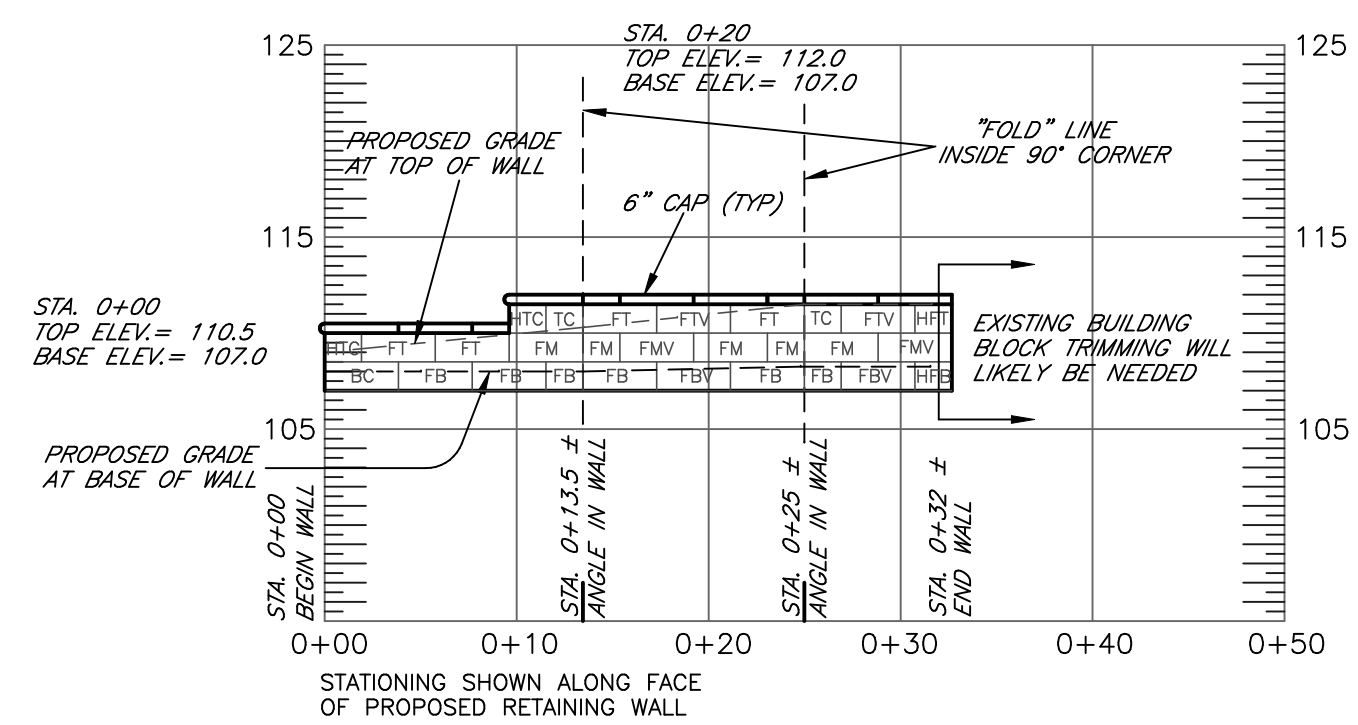
HGC	HALF GARDEN CORNER BLOCK	3
GC	GARDEN CORNER BLOCK	1
T	TOP BLOCK	16
28M	28" MIDDLE BLOCK	4
H28B	HALF 28" BOTTOM BLOCK	1
28B	28" BOTTOM BLOCK	15

WALL #2 NOTE:
* IT IS OUR OPINION A PERFORATED DRAIN PIPE IS NOT NEEDED FOR THIS WALL.

NOTE REGARDING FIELD-TRIMMING OF REDI-ROCK COMPONENTS:

THE CONTRACTOR SHOULD ANTICIPATE SOME FIELD TRIMMING OF THE REDI-ROCK WALL COMPONENTS. TYPICAL SITUATIONS THAT REQUIRE FIELD TRIMMING INCLUDE:

1. TRIMMING THE "WINGS" ON VARIABLE RADIUS BLOCK TO ADJUST THE LENGTH OF WALL SEGMENTS.
2. CUTTING 4 SIDED CAPS WHERE 3 SIDED CAPS ARE NEEDED.
3. CUTTING FILL LENGTH CAPS WHERE HALF LENGTH CAPS ARE NEEDED.
4. OTHER SITUATIONS, AS NEEDED.



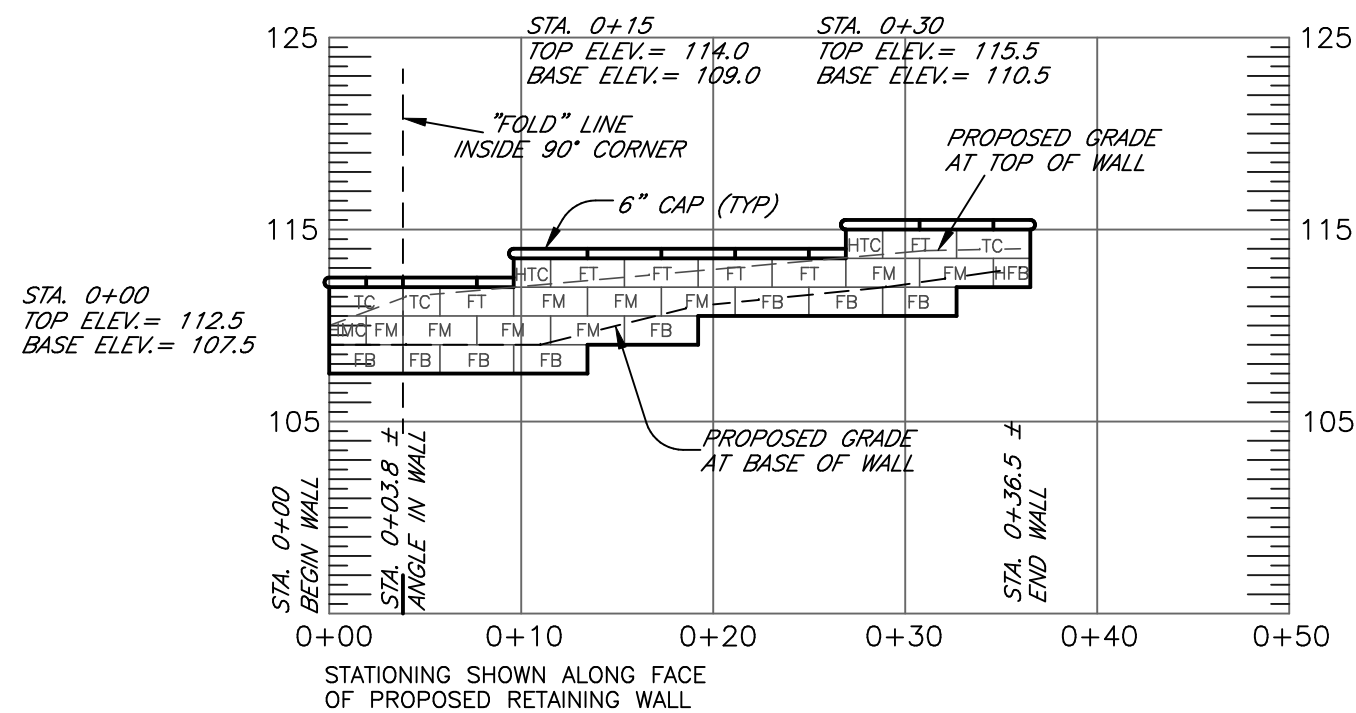
WALL FACE DRAWING
WALL #3

SCALE: 1" = 10'

**WALL #3
BLOCK LEGEND & QUANTITIES**

HTC	HALF TOP CORNER BLOCK	2
TC	TOP CORNER BLOCK	2
HFT	HALF FREESTANDING TOP BLOCK	1
FT	FREESTANDING TOP BLOCK	4
FTV	FREESTANDING TOP VARIABLE RADIUS BLOCK	2
FM	FREESTANDING MIDDLE BLOCK	5
FMV	FREESTANDING MIDDLE VARIABLE RADIUS BLOCK	2
BC	BOTTOM CORNER BLOCK	1
HFB	HALF FREESTANDING BOTTOM BLOCK	1
FB	FREESTANDING BOTTOM BLOCK	6
FBV	FREESTANDING BOTTOM VARIABLE RADIUS BLOCK	2
	6" CAPS, 2 SIDED	6
	6" CAPS, 4 SIDED	4

WALL #3 NOTES:
1. IT IS OUR OPINION A PERFORATED DRAIN PIPE IS NOT REQUIRED FOR THIS WALL.
2. VARIABLE RADIUS BLOCK ARE PROVIDED TO SIMPLIFY BLOCK TRIMMING WHERE FIELD ADJUSTMENT OF THE LENGTH OF WALL SEGMENTS IS NEEDED.



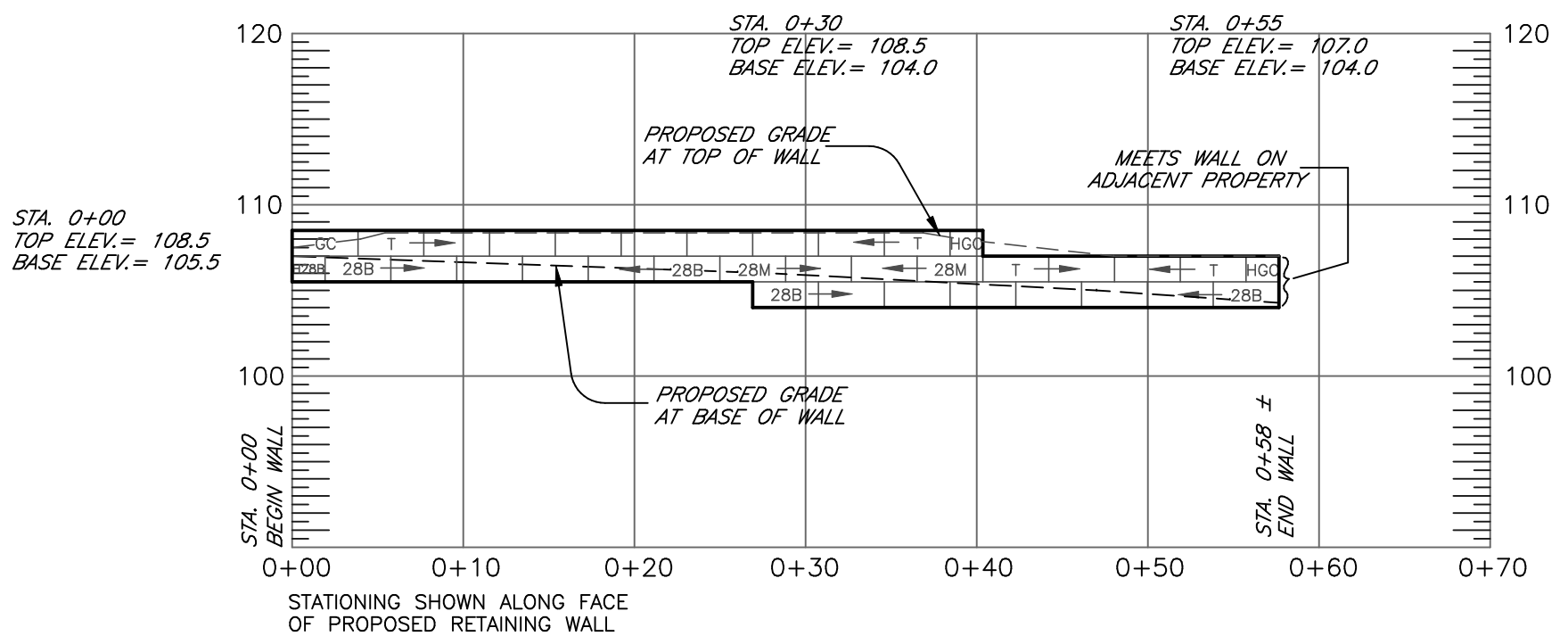
WALL FACE DRAWING
WALL #4

SCALE: 1" = 10'

**WALL #4
BLOCK LEGEND & QUANTITIES**

HTC	HALF TOP CORNER BLOCK	2
TC	TOP CORNER BLOCK	3
FT	FREESTANDING TOP BLOCK	6
HMC	HALF MIDDLE CORNER BLOCK	1
FM	FREESTANDING MIDDLE BLOCK	9
HFB	HALF FREESTANDING BOTTOM BLOCK	1
FB	FREESTANDING BOTTOM BLOCK	8
	6" CAPS, 2 SIDED	6
	6" CAPS, 4 SIDED	5

WALL #4 NOTE:
1. IT IS OUR OPINION A PERFORATED DRAIN PIPE IS NOT REQUIRED FOR THIS WALL.



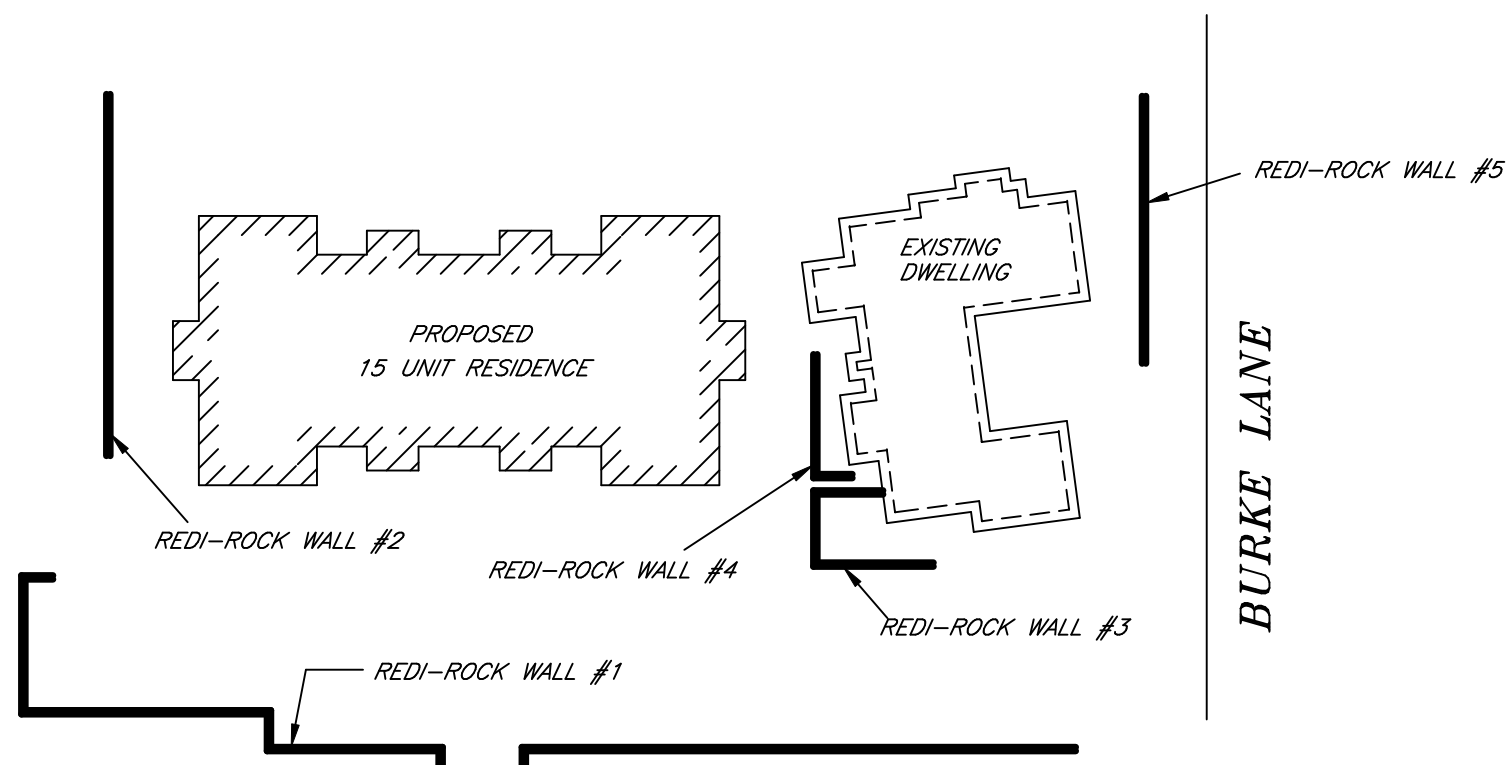
WALL FACE DRAWING
WALL #5

SCALE: 1" = 10'

**WALL #5
BLOCK LEGEND & QUANTITIES**

HGC	HALF GARDEN CORNER BLOCK	2
GC	GARDEN CORNER BLOCK	1
T	TOP BLOCK	13
28M	28" MIDDLE BLOCK	4
H28B	HALF 28" BOTTOM BLOCK	1
28B	28" BOTTOM BLOCK	14

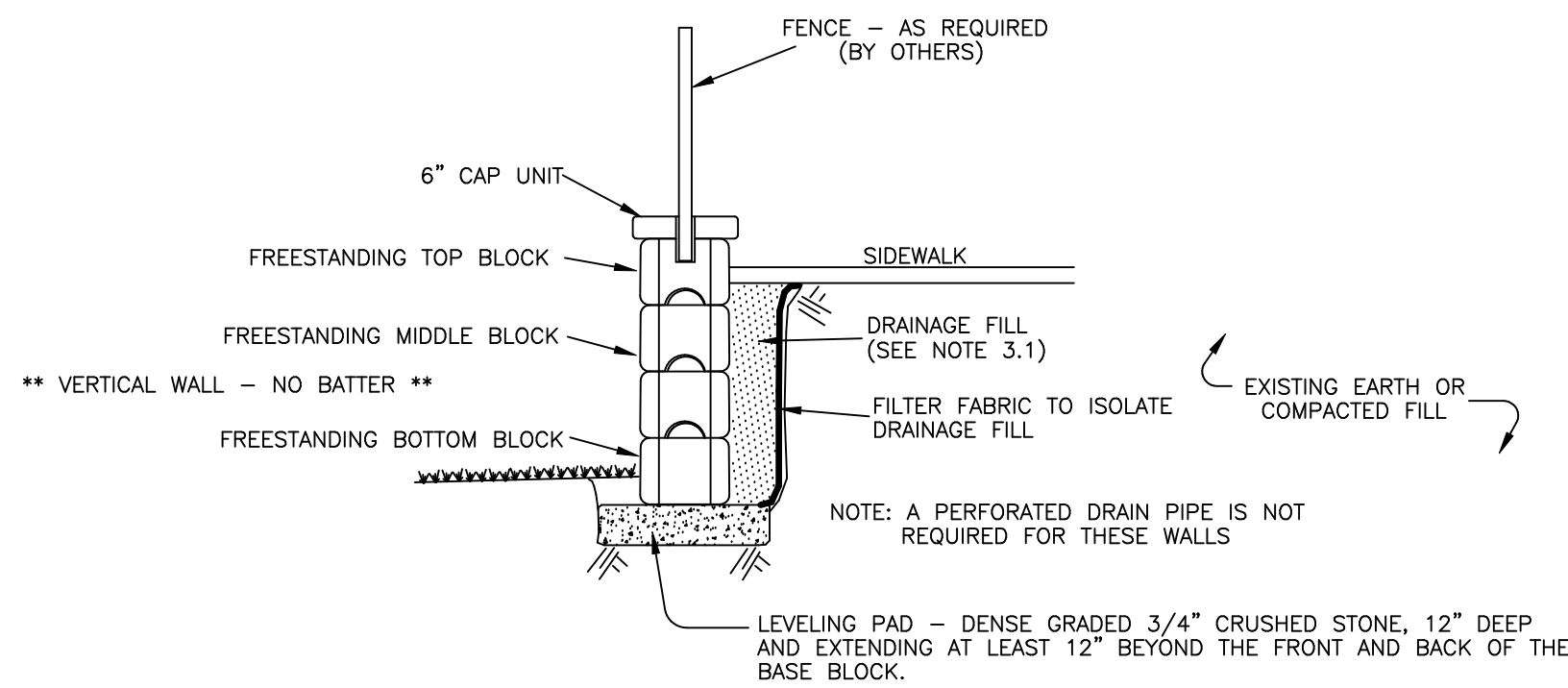
WALL #5 NOTE:
* IT IS OUR OPINION A PERFORATED DRAIN PIPE IS NOT NEEDED FOR THIS WALL.



VICINITY SKETCH

(NOT TO SCALE)
SEE CONSTRUCTION DRAWINGS BY OTHERS

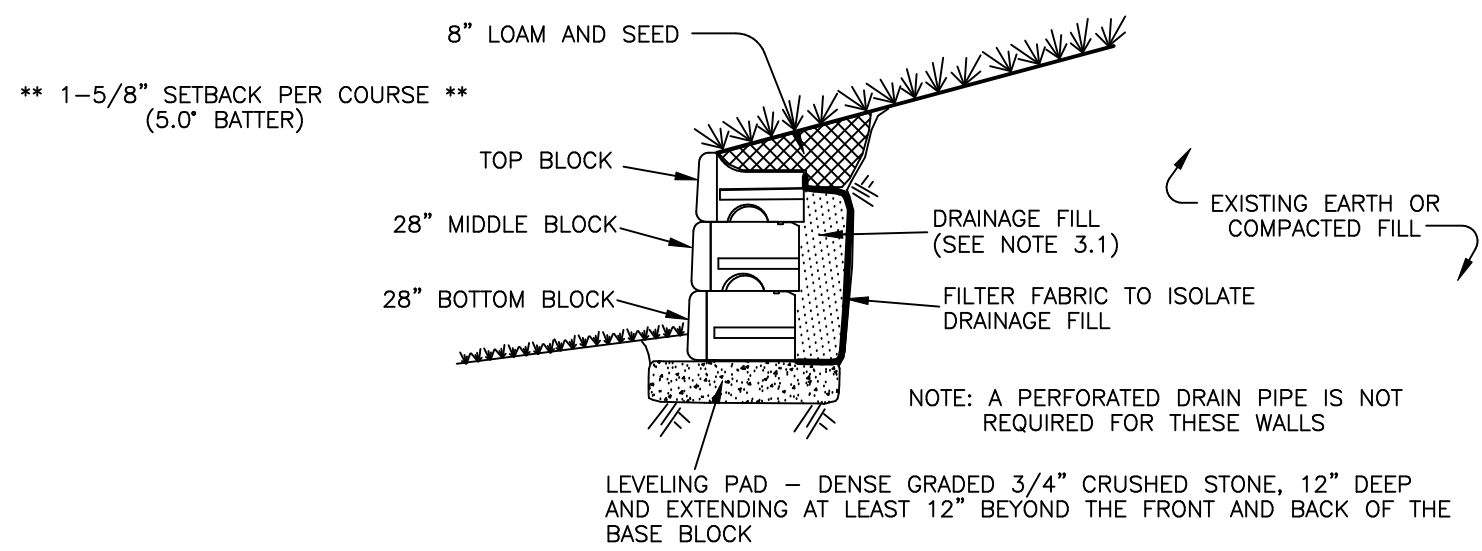
CAP & TOP BLOCK TO BE FIELD-CORED TO ACCEPT FENCE POST. CORE TO EXTEND 6" MIN. INTO TOP BLOCK. ANNULUS SHALL BE FILLED WITH NON-SHRINK GROUT (TYPE BY FENCE SUPPLIER). KEEP CORE HOLE EDGE AT LEAST 6" FROM OUTSIDE EDGE OF BLOCK.



MAXIMUM APPLIED BEARING PRESSURE: WALL #3 - 700 psf WALL #4 - 1000 psf

**TYPICAL SECTION - GRAVITY WALL
WALLS #3 & #4
(TYPICAL DETAIL ONLY - SEE WALL FACE DRAWING
FOR SPECIFIC BLOCK CONFIGURATIONS)**

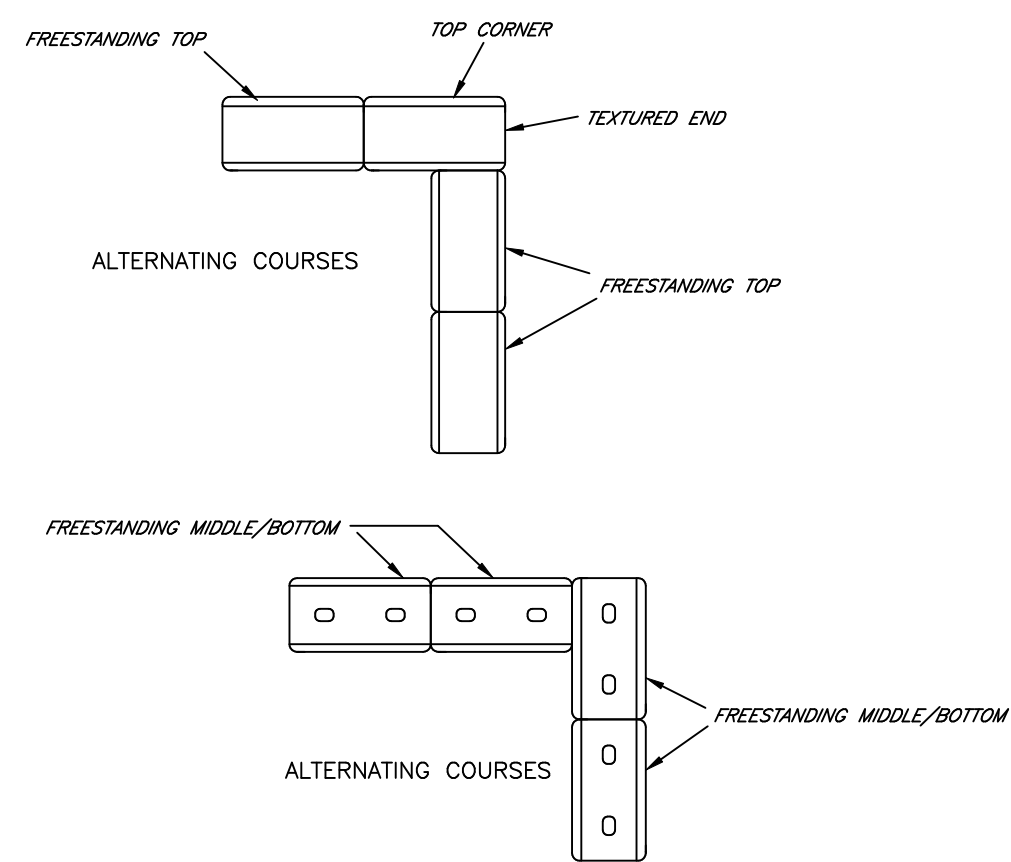
"REDI-ROCK" SEGMENTAL RETAINING WALL



MAXIMUM APPLIED BEARING PRESSURE: WALL #2 - 700 psf WALL #5 - 700 psf

**TYPICAL SECTION - GRAVITY WALL
WALLS #2 & #5
(TYPICAL DETAIL ONLY - SEE WALL FACE DRAWING
FOR SPECIFIC BLOCK CONFIGURATIONS)**

"REDI-ROCK" SEGMENTAL RETAINING WALL



NOTE: REFER TO THE WALL FACE DRAWING FOR SPECIFIC BLOCK TYPE & LOCATION

**90° INSIDE CORNER
FREESTANDING BLOCKS**

NOT-TO-SCALE

NOTE: IF THE FIELD CONDITIONS INDICATE THE GRADE AT THE BASE AND/OR TOP OF THE WALL TO BE DIFFERENT FROM THAT SHOWN ON THESE PLANS, THE DESIGN ENGINEER SHALL BE CONTACTED TO VERIFY CHANGES TO THE WALL BASE COURSE AND/OR TOP OF WALL ELEVATION. THE GRADES SHOWN ON THIS PLAN ARE BASED ON THE GRADING PLAN (SHEET 3 OF 7) PREPARED BY GUERRIERE & HALNON, INC., REVISION #1, DATED 6/11/19.

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NOTES AND DETAILS ON ALL SHEETS OF THIS PLAN SET



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CLIENT:	REDI-ROCK WALLS OF NEW ENGLAND 8 REEDS MILL ROAD, NEWPORT, NH 03773	
PROJECT:	3 BURKE LANE WELLESLEY, MA	
SHEET TITLE:	RETAINING WALL DESIGN SHEET 3	
DATE:	SCALE:	PROJECT No.:
AUGUST 26, 2019	AS SHOWN	2019-116

SHEET 3 OF 3