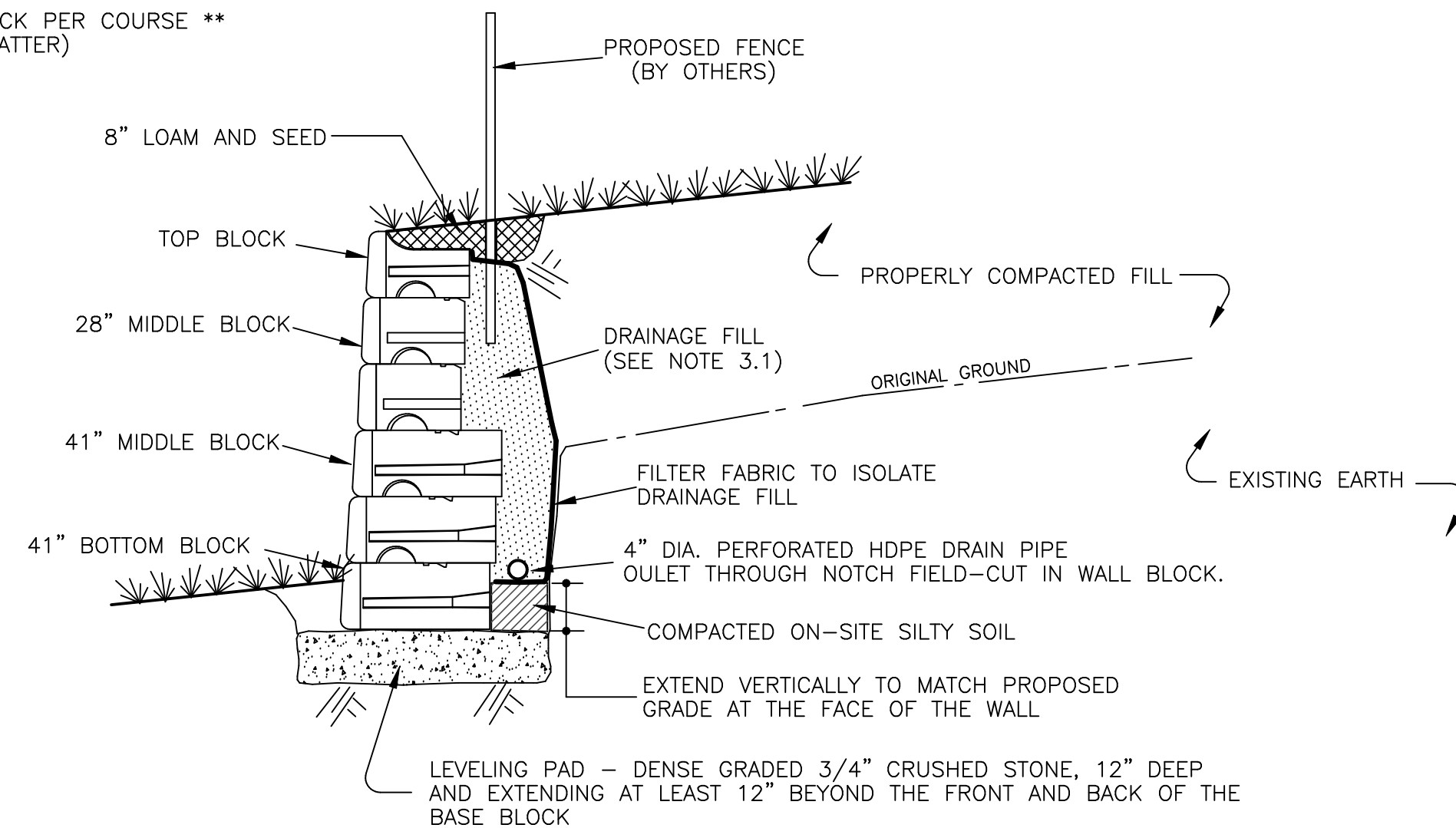


\*\* 1-5/8" SETBACK PER COURSE \*\*  
(5.0" BATTER)



MAXIMUM APPLIED BEARING PRESSURE: 1600 psf.

**TYPICAL SECTION - GRAVITY WALL  
(TYPICAL DETAIL ONLY - SEE WALL FACE DRAWING  
FOR SPECIFIC BLOCK CONFIGURATIONS)**

"REDI-ROCK" SEGMENTAL RETAINING WALL

COMPACTED FILL/BACKFILL GENERAL REQUIREMENTS	
SIEVE SIZE	% PASSING
3"	100%
1/2"	50-85%
#4	40-75%
#50	8-28%
#200	0-10%

NOTE: THE DESIGN ENGINEER MUST BE MADE AWARE WHENEVER THE PERCENT PASSING THE #200 SIEVE EXCEEDS 10%. GROUNDWATER CONTROL METHODS MAY BE REQUIRED.

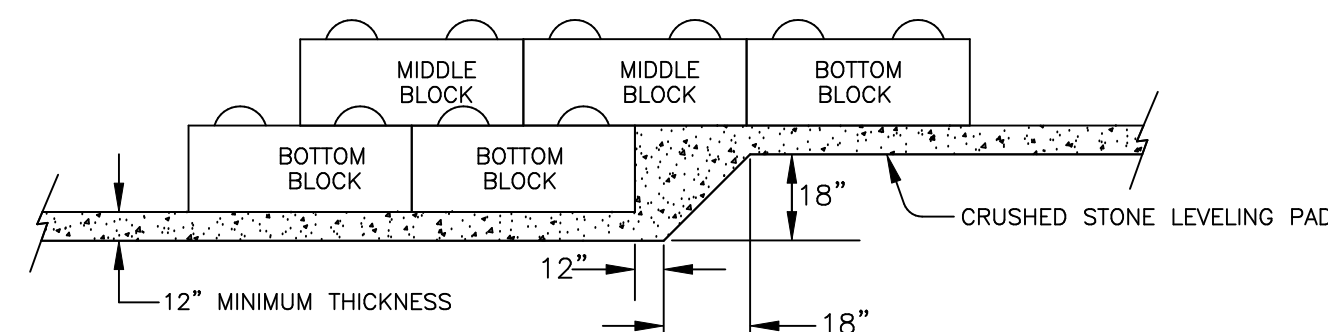
DENSE GRADED 3/4" CRUSHED STONE GRADATION REQUIREMENTS	
SIEVE SIZE	% PASSING
1"	100%
3/4"	90-100%
3/8"	60-85%
#8	25-60%
#200	10-20%

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	125	32
FOUNDATION SOIL	125	32
APPLIED SURCHARGE LOADING: NONE		
SEISMIC ACCELERATION = 0.10		

DRAINAGE FILL ME DOT 3/4" CRUSHED STONE GRADATION REQUIREMENTS	
SIEVE SIZE	% PASSING
1"	100
3/4"	90 - 100
1/2"	20 - 55
3/8"	0 - 15
#4	0 - 5

MINIMUM FACTORS OF SAFETY	
OVERTURNING	1.5
SLIDING	1.5
BEARING CAPACITY	2.0

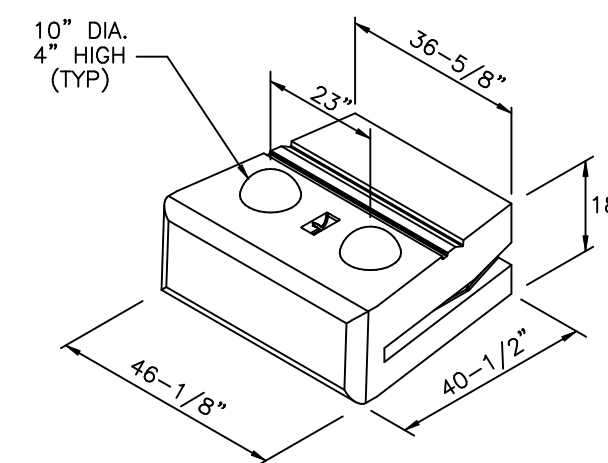


**BASE STEP DETAIL**  
(NOT TO SCALE)

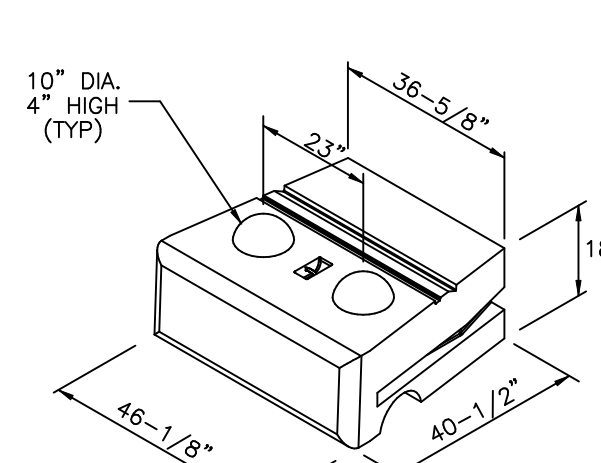
**BLOCK SPECIFICATION NOTES:**

- 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 SHALL BE CAST WITH THE LEDGESTONE FACE TEXTURE.

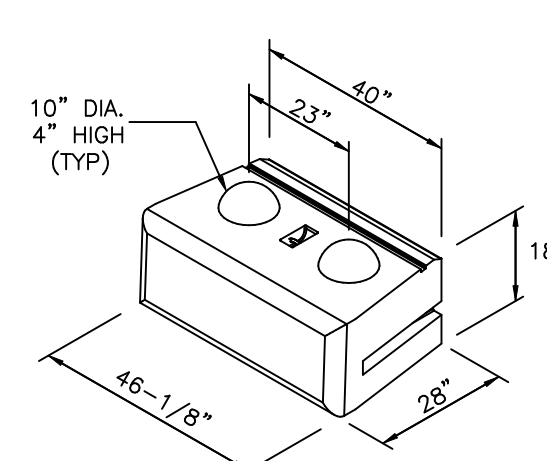
NOTE: HALF-BLOCKS HAVE THE SAME FEATURES AS SHOWN HERE FOR FULL BLOCKS BUT THEY ARE 23-1/16" WIDE, NOT THE FULL 46-1/8" WIDE.



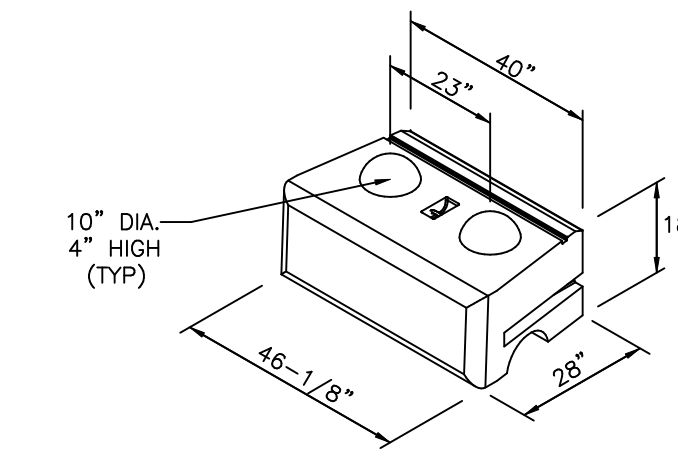
**41" BOTTOM BLOCK**  
NOT-TO-SCALE



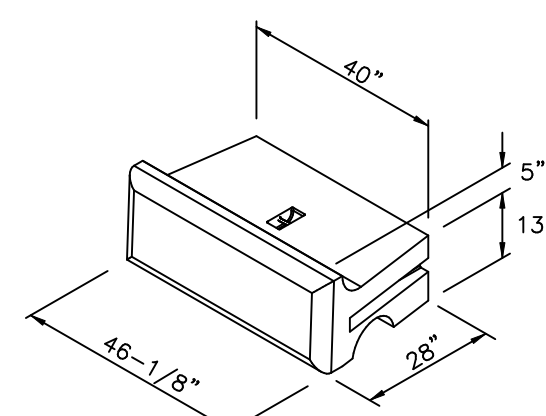
**41" MIDDLE BLOCK**  
NOT-TO-SCALE



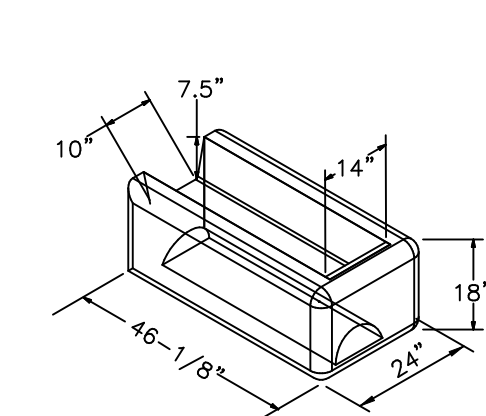
**28" BOTTOM BLOCK**  
NOT-TO-SCALE



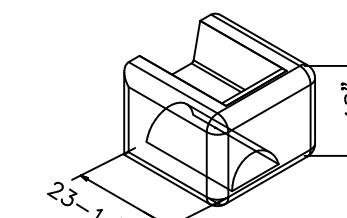
**28" MIDDLE BLOCK**  
NOT-TO-SCALE



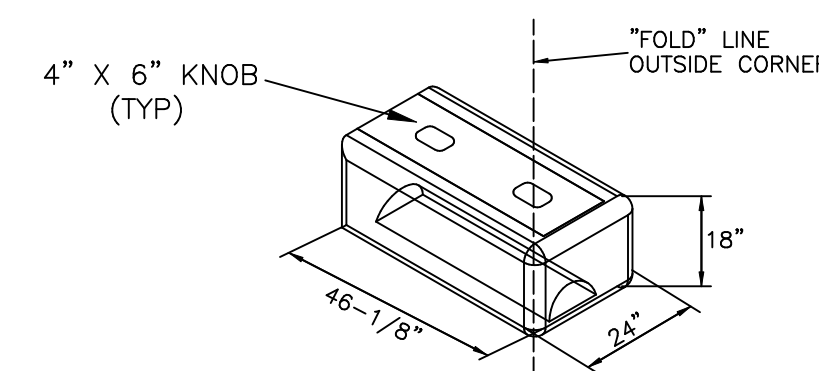
**28" TOP BLOCK**  
NOT-TO-SCALE



**GARDEN CORNER BLOCK**  
NOT-TO-SCALE



**HALF GARDEN CORNER BLOCK**  
NOT-TO-SCALE



NOTE: THE BOTTOM CORNER BLOCK IS SIMILAR TO THE MIDDLE CORNER EXCEPT THERE IS NO GROOVE ALONG THE BOTTOM OF THE BLOCK

**MIDDLE CORNER BLOCK**  
NOT-TO-SCALE

**GENERAL NOTES:**

**1. SITE PREPARATION:**

- STRIP ALL VEGETATION, ORGANIC SOILS AND UNSUITABLE FILL SOILS FROM THE WALL ALIGNMENT AREA.
- BENCH CUT ALL EXCAVATED SLOPES.
- DO NOT OVER EXCAVATE UNLESS DIRECTED TO DO SO BY THE OWNER'S SITE REPRESENTATIVE IN ORDER TO REMOVE UNSUITABLE SOIL.
- THE OWNER'S SITE REPRESENTATIVE SHALL VERIFY THE COMPETENCY OF THE FOUNDATION SOILS.

**2. LEVELING PAD & BOTTOM BLOCK:**

- LEVELING PAD SHALL CONSIST OF DENSE GRADED 3/4" CRUSHED STONE, 12" THICK AND EXTENDING AT LEAST 12" TO EITHER SIDE OF THE BASE BLOCK.
- MINIMUM EMBEDMENT OF WALL BELOW FINISH GRADE SHALL BE AS INDICATED ON THE WALL FACE DRAWING.
- FOLLOW APPLICABLE PROVISIONS OF THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND WRITTEN SPECIFICATIONS, ESPECIALLY WITH REGARDS TO LEVELING OF BLOCKS AND BASE.

**3. WALL DRAIN:**

- DRAINAGE FILL SHALL CONSIST OF ME DOT 3/4" CRUSHED STONE PLACED FOR A DEPTH OF AT LEAST 12" BEHIND THE WALL. A FILTER FABRIC SHALL BE PLACED OVER THE CUT OR FILL FACE BEHIND THE WALL TO PREVENT THE MIGRATION OF SOIL INTO THE DRAINAGE MATERIAL.
- THE 4" DIA. PERFORATED WALL DRAIN SHALL OUTLET THROUGH THE WALL FACE VIA NOTCHES FIELD CUT IN THE WALL BLOCK. SEE THE WALL FACE DRAWING FOR OUTLET LOCATIONS.
- PLACE A FILTER FABRIC (MIRAFI 140N, OR EQUAL) OVER THE DRAINAGE MATERIAL TO MINIMIZE SOIL MIGRATION FROM THE SURFACE MATERIAL (TOPSOIL) INTO THE DRAINAGE MATERIAL.

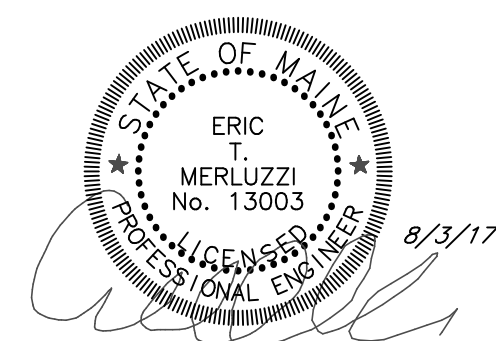
**4. BACKFILLING & COMPACTION:**

- BACKFILL AND COMPACT THE FILL MATERIAL BEHIND THE WALL AS THE WALL IS INSTALLED.
- COMPACTION TESTS SHALL BE TAKEN AS THE WALL IS INSTALLED. THE MINIMUM NUMBER OF TESTS SHALL BE DETERMINED BY THE OWNER'S SITE REPRESENTATIVE.
- COMPACTION SHALL BE TO A MINIMUM OF 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY.
- RECOMMENDED COMPACTION EQUIPMENT WITHIN 15 FEET OF THE BACK OF THE WALL IS AS FOLLOWS:  
0 - 4 FEET HAND TAMP OR VIBRATORY PLATE COMPACTOR  
4 - 15 FEET NOTHING LARGER THAN TWO-DRUM, WALK-BEHIND VIBRATORY ROLLER (LARGER ROLLERS CAN BE USED STATICALLY, PROVIDED LIFT SIZE DOES NOT COMPROMISE ACHIEVEMENT OF NECESSARY COMPACTION RATES.)

**5. GENERAL WALL LAYOUT & CONSTRUCTION:**

- FINAL WALL ALIGNMENT SHALL BE LOCATED IN THE FIELD BY THE OWNER'S SITE REPRESENTATIVE.
- PROVIDE LATERAL DRAINAGE SWALES TO DIRECT FLOWS AROUND THE ENDS OF THE WALL AND AWAY FROM THE WALL DURING CONSTRUCTION. DO NOT CONSTRUCT A SWALE BEHIND THE WALL AS PART OF THE FINISHED WALL. GRADE ABOVE THE WALL SO THAT WATER FLOWS OVER THE WALL FACE OR TO A POINT AT LEAST AS FAR BEHIND THE WALL AS THE WALL HEIGHT.
- TURF, OR SOME ACCEPTABLE FORM OF SOIL EROSION PROTECTION, SHOULD BE ESTABLISHED AT THE TOP OF THE WALL (WHERE REQUIRED) BY THE LANDSCAPE CONTRACTOR AS SOON AS THE WALL IS COMPLETED.
- ENDS OF THE RETAINING WALLS SHALL BE BLENDED INTO THE PROPOSED/EXISTING GRADE IN A MANNER SATISFACTORY TO THE OWNER'S SITE REPRESENTATIVE. AT THE ENDS OF A WALL WHERE BLENDED TAKES PLACE, THE ISSUE IS NOT A STRUCTURAL FACTOR BUT AN AESTHETIC FACTOR AND THE OWNER'S SITE REPRESENTATIVE IS QUALIFIED TO MAKE THIS JUDGEMENT.
- IF CONDITIONS ARE DIFFERENT THAN THOSE STATED IN THESE DRAWINGS AND SPECIFICATIONS, THE CONTRACTOR MUST CONTACT THE DESIGN ENGINEER PRIOR TO PROCEEDING WITH THE CONSTRUCTION OF THE WALL.
- THESE WALLS HAVE BEEN DESIGNED WITH CONSIDERATION OF SEISMIC LOADINGS.
- WALL CERTIFICATIONS: OCCASIONALLY A "SIGN OFF" BY THE DESIGN ENGINEER IS NEEDED AFTER COMPLETION OF WALL CONSTRUCTION. IF THIS SERVICE IS NEEDED ARRANGEMENTS MUST BE MADE WITH THE DESIGN ENGINEER PRIOR TO WALL CONSTRUCTION FOR A SERIES OF SITE VISITS TO OBSERVE WALL CONSTRUCTION. ACCEPTANCE LETTERS, SIGN OFFS, CERTIFICATIONS, WARRANTIES, ETC. WILL NOT BE PROVIDED WITHOUT PERIODIC SITE VISITS.

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 COLEMAN CONCRETE, INC. AT (603) 447-5936.

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184 ROWENTOWN ROAD, WENTWORTH, NH 03282		
PHONE: (603) 786-2751	E-MAIL: em35@earthlink.net	
CLIENT:	COLEMAN CONCRETE, INC. 9 NH ROUTE 113, CONWAY, NH 03818	
PROJECT:	PROPOSED RETAINING WALL 131 WASHINGTON STREET, PORTLAND, ME	
SHEET TITLE:	RETAINING WALL DESIGN SHEET 1	
DATE:	SCALE:	PROJECT No.:
AUGUST 3, 2017	AS SHOWN	2017-216

SHEET 1 OF 2