

KidSafe CT Retaining Wall Reconstruction  
19 Elm Street  
Vernon, CT 06066

## **ADDENDUM # 5**

April 20, 2023

To All Prospective Bidders:

As a result of discussion held during the pre-bid conference on March 28, 2023 attached is the revised drawings for the KidSafe CT Retaining Wall Reconstruction.

Requests for information are due by May 4, 2023 at 2:00 P.M.

Responses and the Federal Wage rate update will be issued on May 8, 2023.

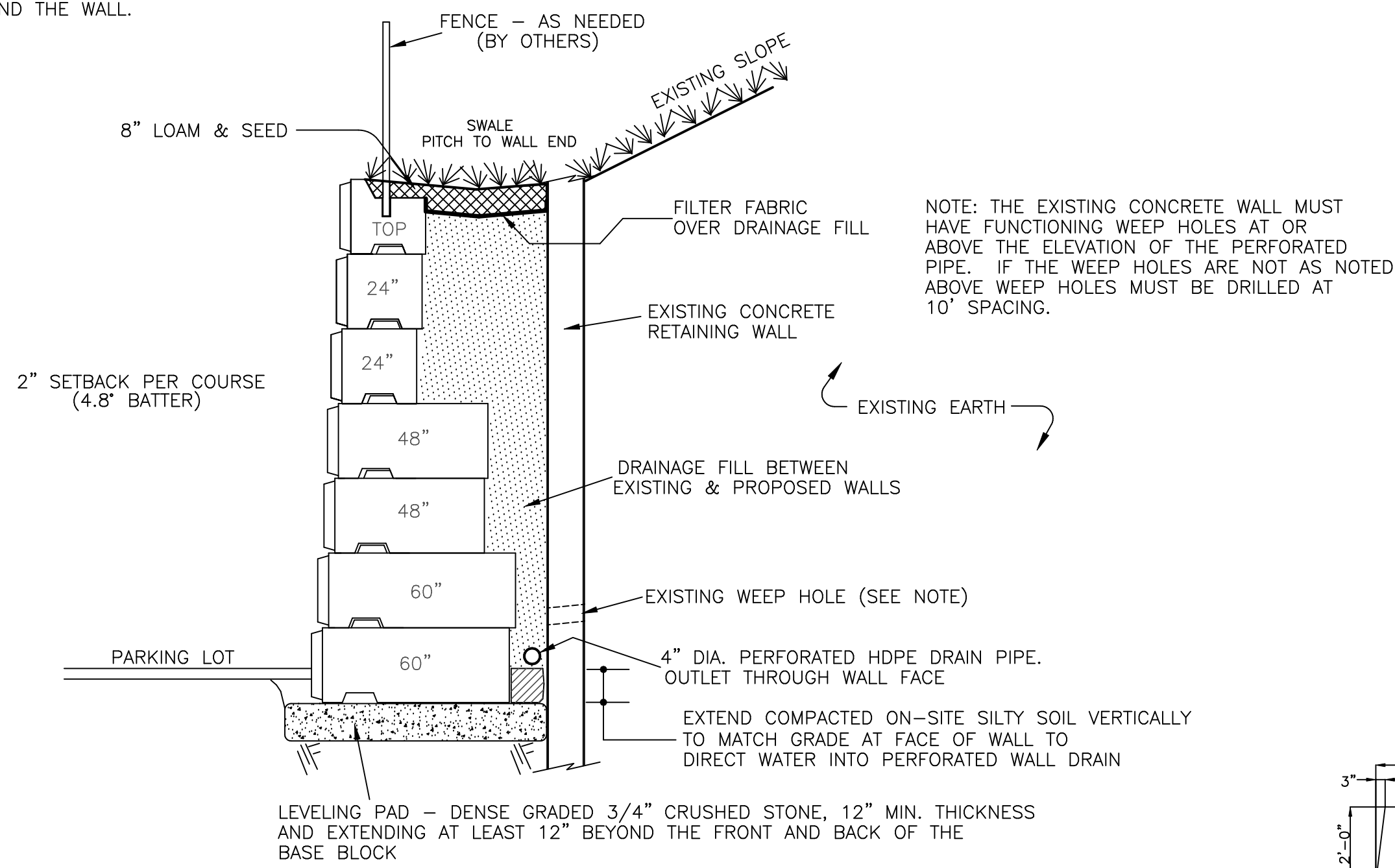
Bids are due on May 11, 2023 at 2:00 PM.

### **Add the following to the scope of work.**

1. Saw cut asphalt parallel with existing retaining wall 8'- 9' feet from face of wall and remove asphalt to allow for installation of leveling pad.
2. Upon completion of wall construction pave and compact area with bituminous concrete pavement to match existing grade.

***Note: Contractor shall acknowledge receipt of this addendum on the first page of the bid form. It is suggested that the contractor retain a copy of this addendum for their records.***

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



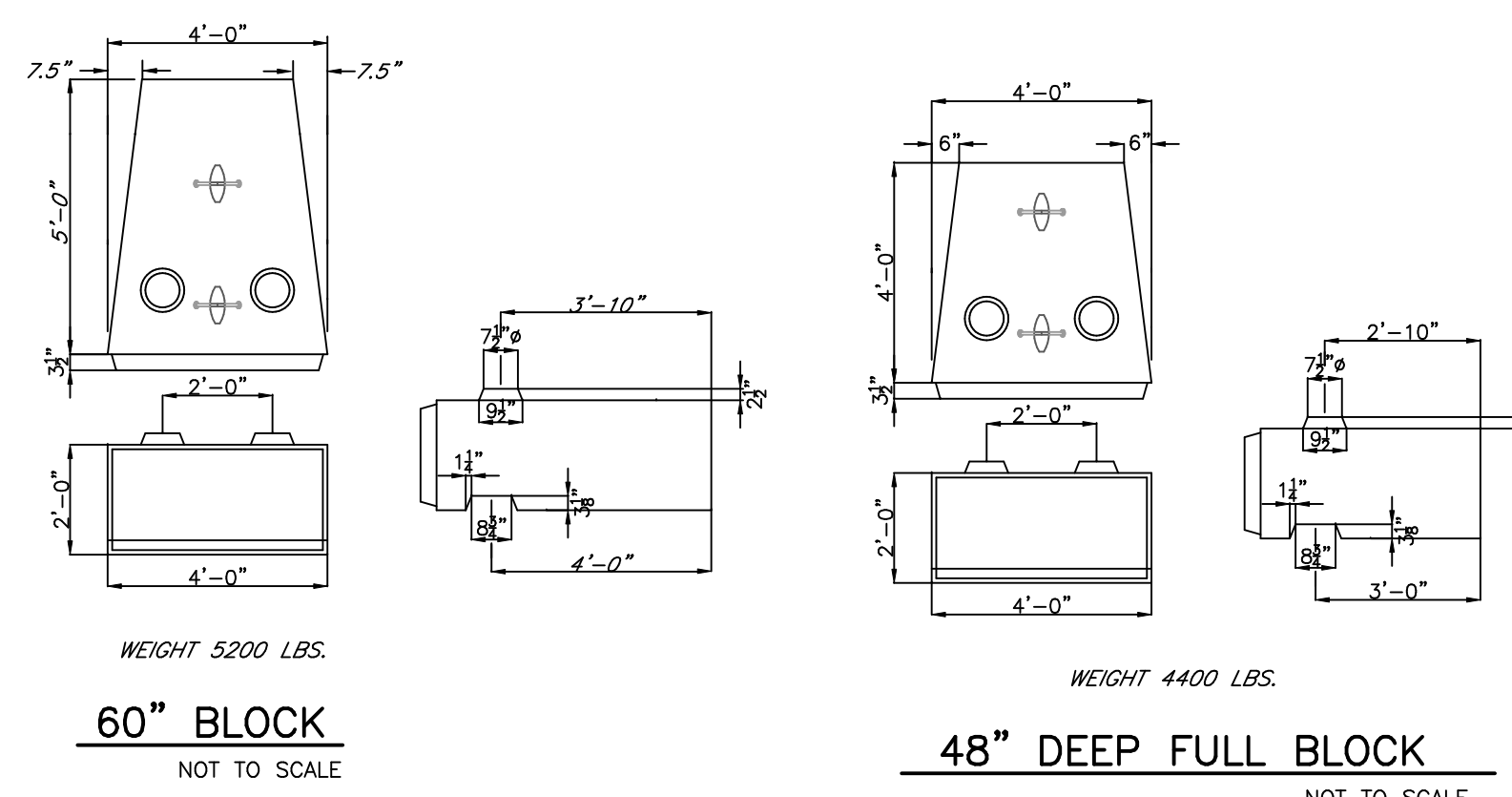
MAXIMUM APPLIED BEARING PRESSURE: 3200 psf.

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

"ATLAS BLOCK" SEGMENTAL RETAINING WALL

**BLOCK NOTES:**

- BLOCKS ARE CAST WITH 4000 PSI CONCRETGE WITH AN AIR CONTENT OF 4.5%-7.5%.
- HALF-BLOCKS HAVE THE SAME FEATURES AS SHOWN HERE FOR FULL BLOCKS BUT THEY ARE 24" WIDE, NOT THE FULL 48" WIDTH.

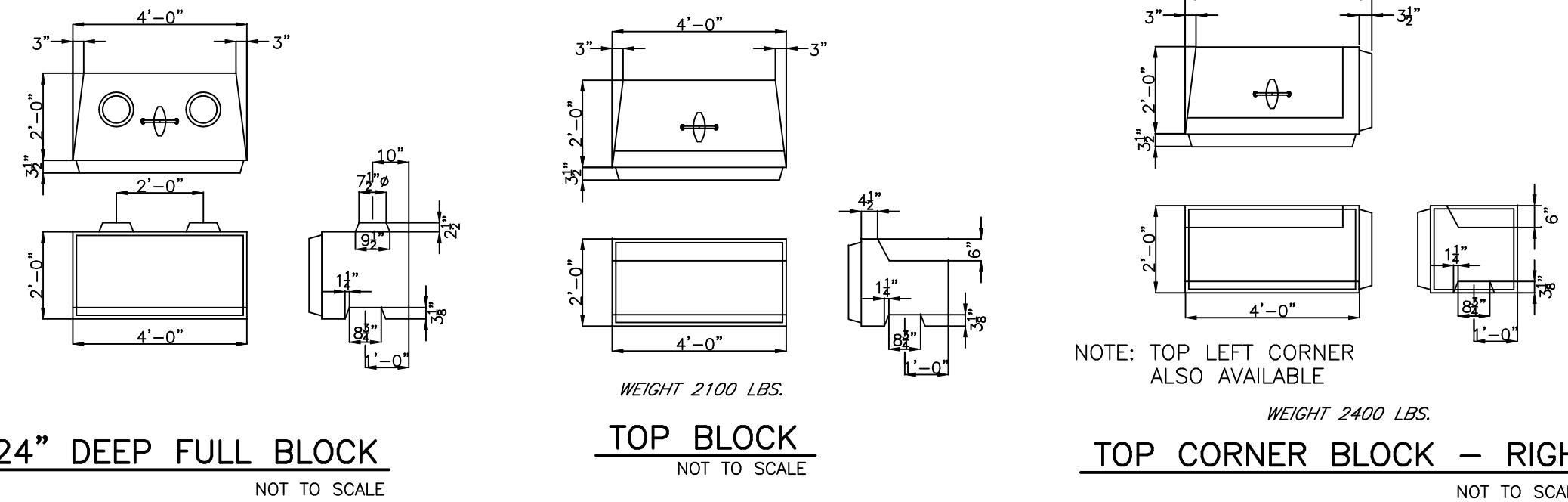


WEIGHT 5200 LBS.

**60" BLOCK**  
NOT TO SCALE

WEIGHT 4400 LBS.

**48" DEEP FULL BLOCK**  
NOT TO SCALE

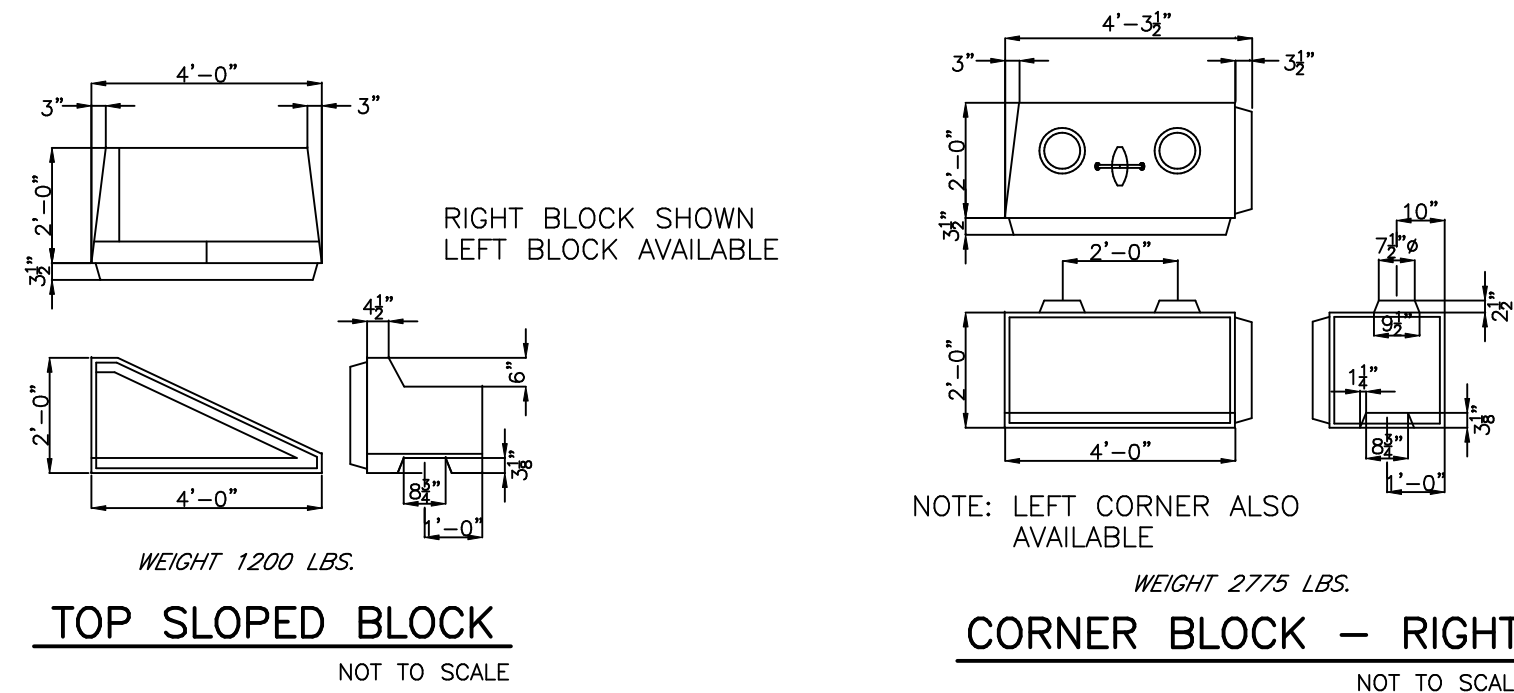


WEIGHT 2100 LBS.

**TOP BLOCK**  
NOT TO SCALE

WEIGHT 2400 LBS.

**TOP CORNER BLOCK - RIGHT**  
NOT TO SCALE



WEIGHT 1200 LBS.

**TOP SLOPED BLOCK**  
NOT TO SCALE

WEIGHT 2775 LBS.

**CORNER BLOCK - RIGHT**  
NOT TO SCALE

**GENERAL NOTES:**

- SITE PREPARATION:**
  - STRIP ALL VEGETATION, ORGANIC SOILS AND UNSUITABLE FILL SOILS FROM THE WALL ALIGNMENT AREA.
  - EXCAVATION SAFETY IS THE RESPONSIBILITY OF THE WALL INSTALLATION CONTRACTOR.
  - THE OWNER'S SITE REPRESENTATIVE SHALL VERIFY THE COMPETENCY OF THE FOUNDATION SOILS.
- LEVELING PAD & BOTTOM BLOCK:**
  - LEVELING PAD SHALL CONSIST OF COMPACTED, DENSE-GRADED 3/4" CRUSHED STONE, AT LEAST 12" THICK AND EXTENDING AT LEAST 12" TO EITHER SIDE OF THE BOTTOM 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.
- WALL DRAIN:**
  - DRAINAGE FILL SHALL MEET THE REQUIREMENTS OF CT DOT M.01.01 No. 6 CRUSHED STONE. IT SHALL BE PLACED BETWEEN THE REAR OF THE PROPOSED ATLAS BLOCK WALL AND THE FACE OF THE EXISTING WALL. AT LOCATIONS WHERE THE EXISTING WALL IS NOT PRESENT A FILTER FABRIC MUST BE PLACED AT THE REAR OF THE DRAINAGE FILL.
  - THE 4" DIA. PERFORATED WALL DRAIN SHALL OUTLET THROUGH THE WALL FACE VIA NOTCHES FIELD CUT IN THE WALL BLOCK.
  - 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.
- 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.)
- 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. PERMANENT SWALES SHALL BE PITCHED TO THE WALL ENDS TO PROMOTE DRAINAGE OF SURFACE WATER RUNOFF.
  - 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.
  - THE END OF THE RETAINING WALL 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 BLENDING 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

COMPACTED FILL GRADATION REQUIREMENTS	
SIEVE SIZE	% PASSING
1-1/2"	100%
3/4"	45-80%
1/4"	25-60%
#10	15-45%
#40	5-25%
#100	0-10%
#200	0-5%

SPEC: CT DOT M.02.06, GRADING C

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

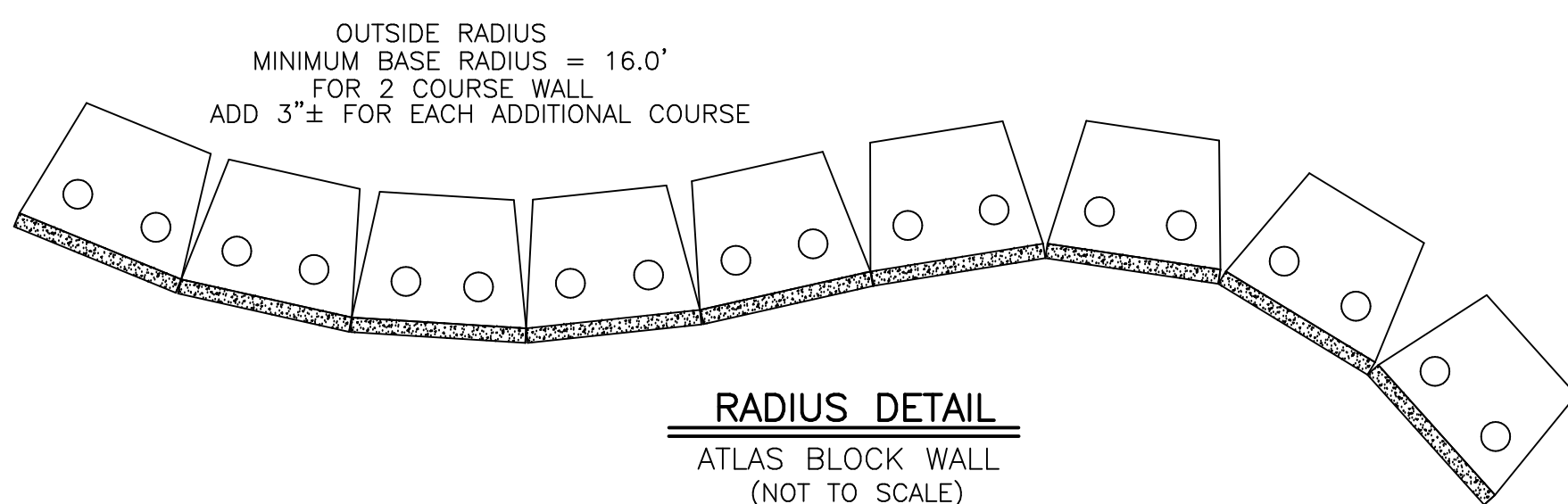
NOTE: ALTERNATE MATERIALS SHALL ONLY BE USED WITH THE APPROVAL OF THE WALL DESIGN ENGINEER.

DESIGN ASSUMPTIONS		
SOIL	SOIL UNIT WEIGHT	φ
COMPACTED FILL	130	34
RETAINED SOIL	125	32
FOUNDATION SOIL	125	32
DRAINAGE FILL	110	45

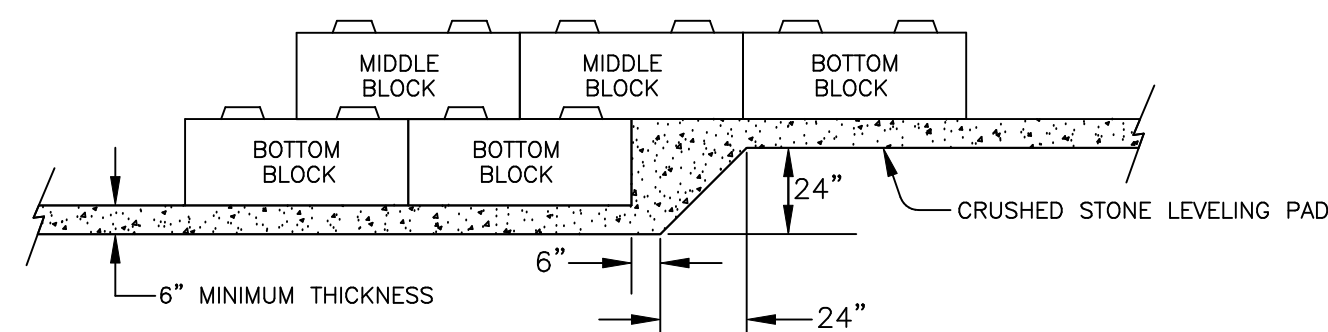
APPLIED SURCHARGE LOADING: NONE  
SEISMIC ACCELERATION = 0.14  
MAX. SLOPE ABOVE WALL - SWALE TO 2H:1V

DRAINAGE FILL CT DOT M.01.01 No. 6 STONE GRADATION REQUIREMENTS	
SIEVE SIZE	% PASSING
1"	100
3/4"	90 - 100
1/2"	20 - 55
3/8"	0 - 15
#4	0 - 5

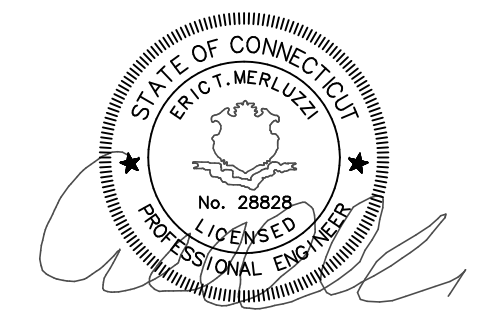
MINIMUM FACTORS OF SAFETY	
OVERTURNING	1.5
SLIDING	1.5
BEARING CAPACITY	2.0



**RADIUS DETAIL**  
ATLAS BLOCK WALL  
(NOT TO SCALE)

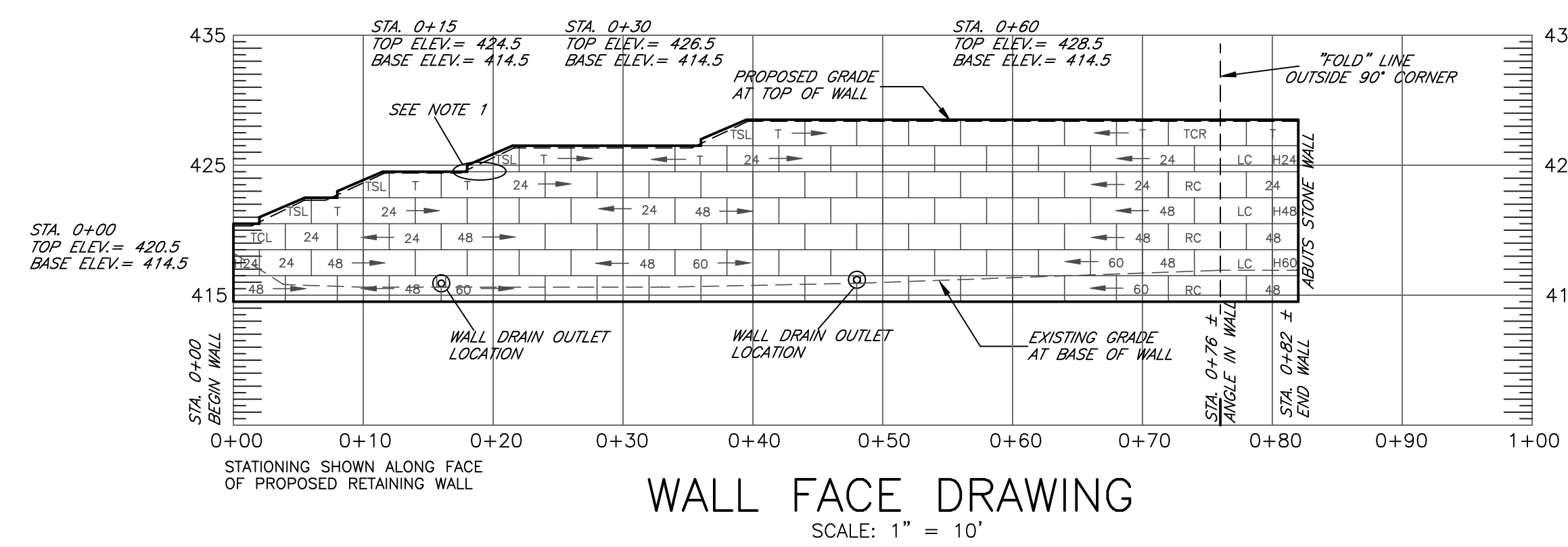


**BASE STEP DETAIL**  
(NOT TO SCALE)



NOTE: THIS DRAWING WAS PREPARED FOR USE WITH ATLAS BLOCK (TM) RETAINING WALL SYSTEMS. CONTACT ATLAS CONCRETE PRODUCTS AT (800) 774-1112.

<b>ERIC MERLUZZI, P.E.</b>	
184 ROWENTOWN ROAD, WENTWORTH, NH 03282	
PHONE: (603) 786-2751	E-MAIL: em35@earthlink.net
CLIENT: <b>ATLAS CONCRETE PRODUCTS</b> 65 BURRITT STREET, NEW BRITAIN, CT 06053	
PROJECT: <b>EXCHANGE CLUB</b> 19 ELM STREET, VERNON, CT	
SHEET TITLE: <b>RETAINING WALL DESIGN SHEET 1</b>	
DATE: <b>AUGUST 11, 2022</b>	SCALE: <b>AS SHOWN</b>
PROJECT No.: <b>2022-243</b>	



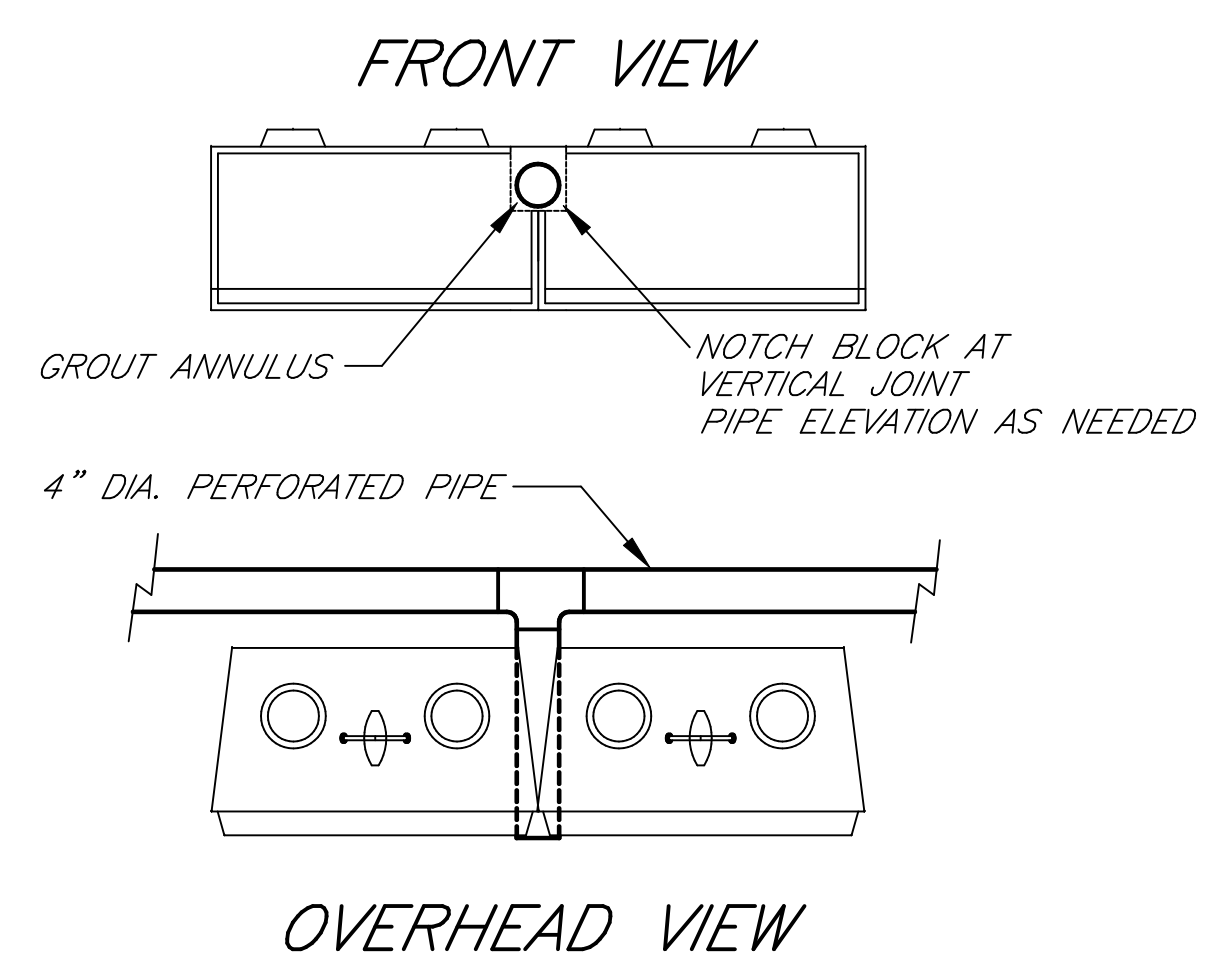
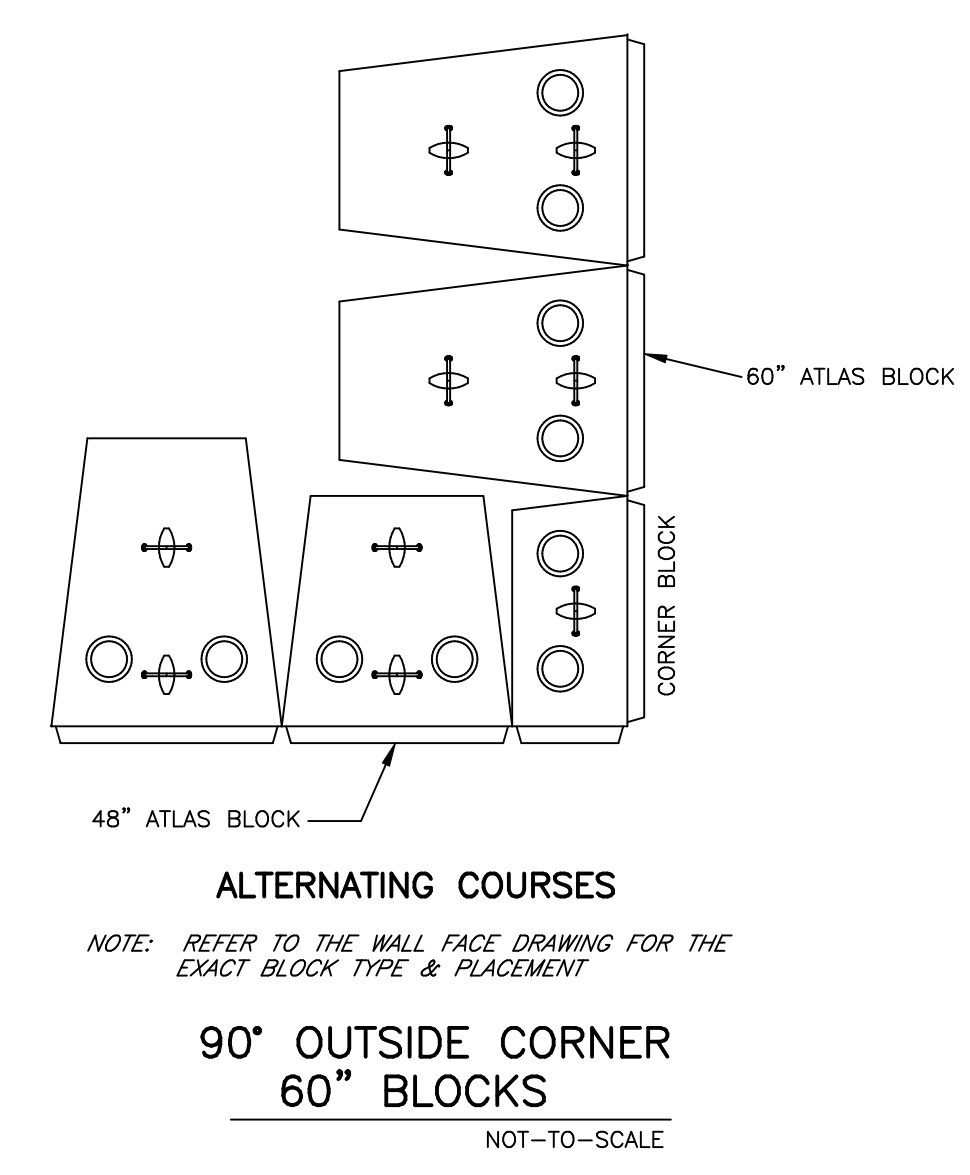
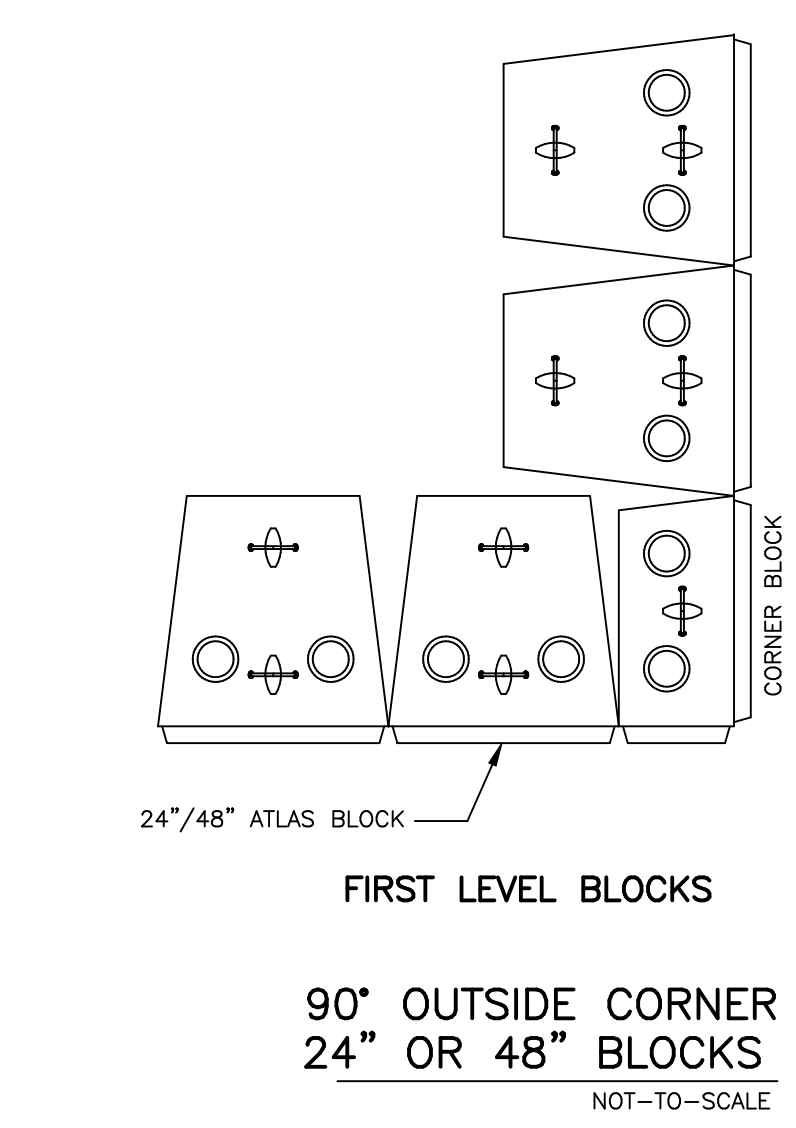
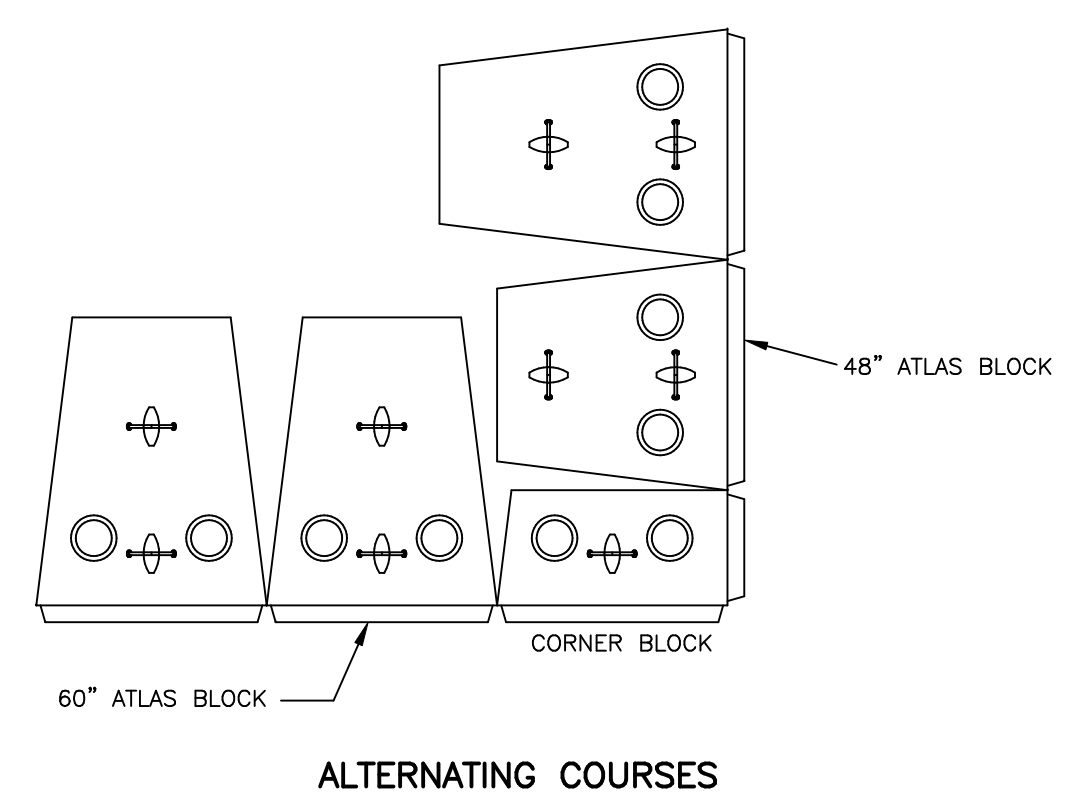
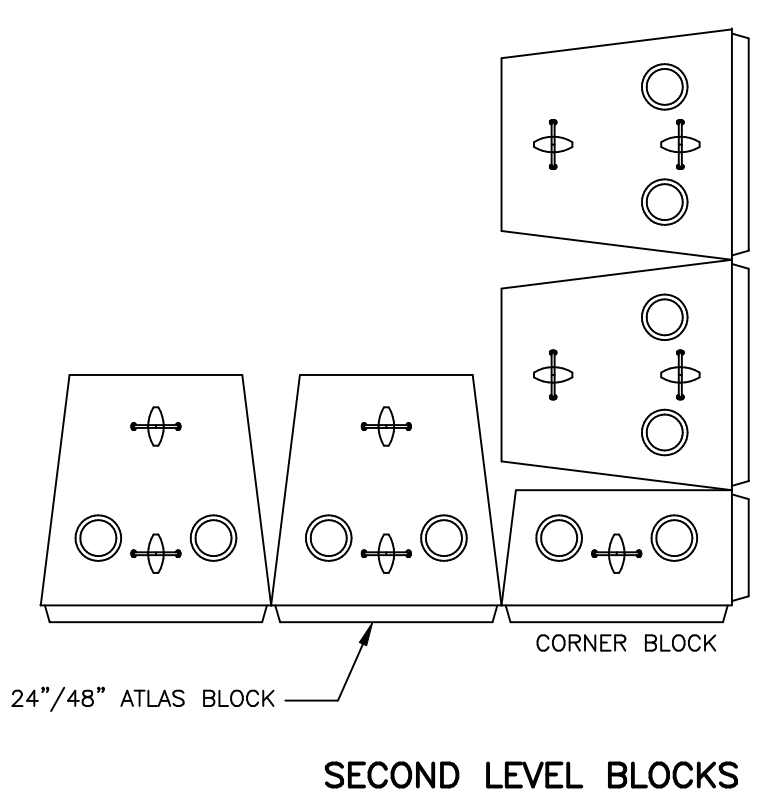
**WALL FACE DRAWING**  
SCALE: 1" = 10'

**BLOCK LEGEND & QUANTITIES**

TSL	TOP SLOPE LEFT BLOCK	4
TCR	TOP CORNER RIGHT BLOCK	1
TCL	TOP CORNER LEFT BLOCK	1
T	TOP BLOCK	16
RC	RIGHT CORNER BLOCK	3
LC	LEFT CORNER BLOCK	3
H24	HALF 24" BLOCK	2
24	24" BLOCK	33
H48	HALF 48" BLOCK	1
48	48" BLOCK	38
H60	HALF 60" BLOCK	1
60	60" BLOCK	23

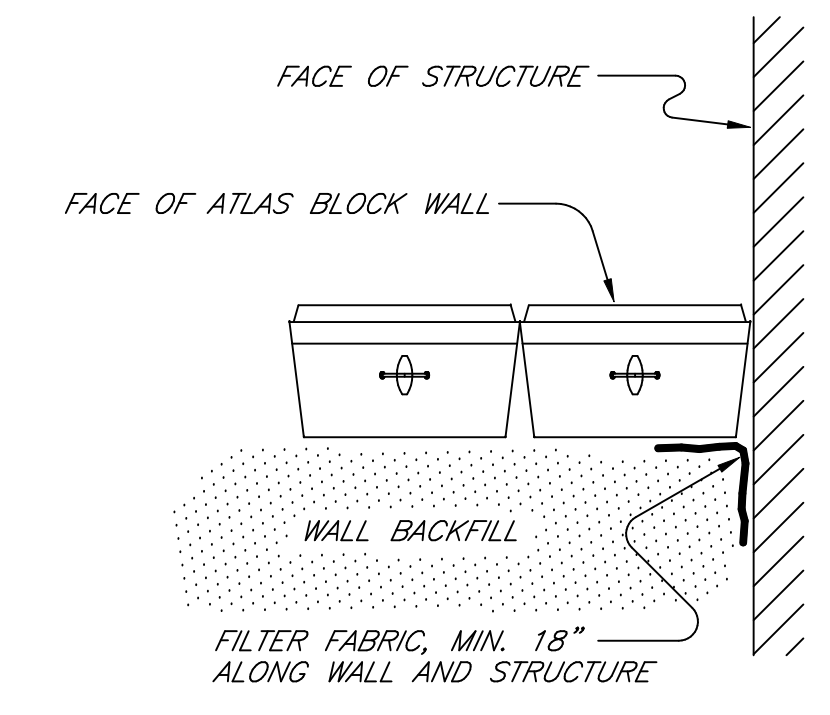
**WALL NOTES:**  
 1. WHERE THE TSL OVERHANGS THE TOP BLOCK FILL THE TROUGH IN THE TOP BLOCK W/ DRAINAGE STONE  
 2. SOME MORTAR/CONCRETE INFILL, STONE MASONRY OR BLOCK TRIMMING WILL LIKELY BE NEEDED WHERE THE TWO WALLS ABUT.  
 3. A DETAILED SITE AND GRADING PLAN WAS NOT PROVIDED. SOME MINOR FIELD CHANGES TO THIS DESIGN MAY BE NEEDED.

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 TOPOGRAPHIC SKETCH PLAN (SHEET 1 OF 1) PREPARED BY TOWN OF VERNON DATED 6/17/22.

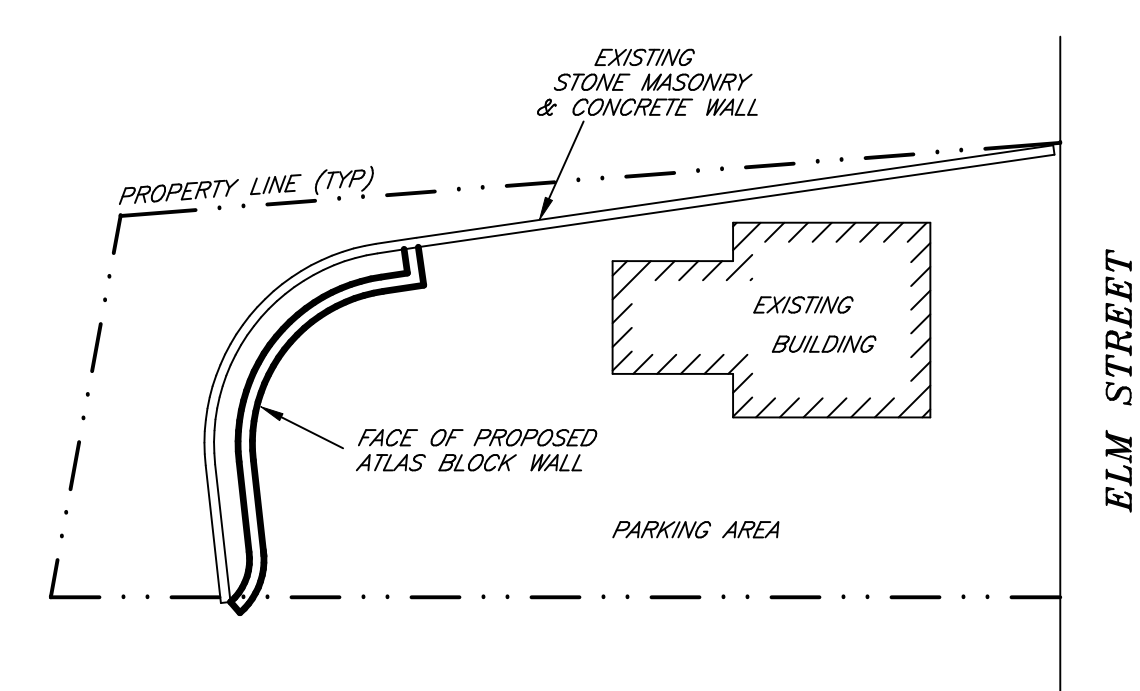


**WALL DRAIN OUTLET - STA. 0+16± & STA. 0+48±**  
**PIPE PENETRATION DETAIL**  
NOT-TO-SCALE

WHERE THE WALL ABUTS A STRUCTURE, A FILTER FABRIC (MIRAFI 140N, OR EQUAL) SHALL BE PLACED VERTICALLY ALONG THE SEAM TO PREVENT MIGRATION OF SOILS BETWEEN THE WALL BLOCK AND THE STRUCTURE. THE FABRIC SHOULD EXTEND AT LEAST 18" ALONG THE STRUCTURE AND 18" ALONG THE REAR OF THE WALL BLOCK.

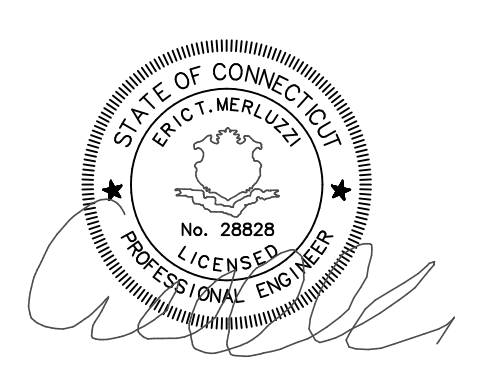


**DETAIL WALL ABUTTING STRUCTURE**  
(NOT TO SCALE)



**VICINITY SKETCH**  
(NOT TO SCALE)  
SEE CONSTRUCTION DRAWINGS BY OTHERS

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PROJECT:	EXCHANGE CLUB 19 ELM STREET, VERNON, CT
SHEET TITLE:	RETAINING WALL DESIGN SHEET 2
DATE:	AUGUST 11, 2022
SCALE:	AS SHOWN
PROJECT No.:	2022-243