1. THIS DRAWING DEPICTS MINIMUM BASIC INSTALLATION OF A MODULAR BLOCK RETAINING WALL. VARIATIONS MAY BE MADE TO FIT VARIABLE CONDITIONS, HOWEVER GUIDELINES DEPICTED ON THIS DRAWING SHALL BE FOLLOWED.

2. MODULAR BLOCK RETAINING WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ITEM 611, INCLUDING THE APPLICABLE APPROVAL AND PERMITTING PROCESS, AND MANUFACTURER'S RECOMMENDATIONS.

3. MODULAR BLOCK RETAINING WALL INSTALLATION PROCEDURES SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL IN ACCORDANCE WITH ITEM 611.03 WITH THE FOLLOWING ADDITIONAL INFORMATION AS A MINIMUM:

   * INDICATE MODULAR BLOCK MANUFACTURER, UNIT, AND COLOR.
   * PROVIDE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
   * "RECENT" TEST DATA INDICATING STANDARD UNIT'S CONFORMANCE TO ASTM C-1372 (SEE NOTE 4 BELOW).
   * INDICATE FACE SETBACK DISTANCE.
   * INDICATE TIEBACK (ENGINEERING GEOGRID) LENGTH.
   * DEPICT PROPOSED METHOD OF CONSTRUCTING VERTICAL FACE RETURNS AT LOCATIONS REQUIRING A VERTICAL FACE (SEE NOTE 6 BELOW).
   * INDICATE TOE DETAIL, IF APPLICABLE (SEE NOTE 7 BELOW).
   * PROVIDE MANUFACTURER RECOMMENDED SEALANT SPECIFICATIONS (SEE NOTE 11 BELOW).
   * INDICATE SEALANT'S CONFORMANCE TO ASTM's E-514, D-1653-93, & d-3273-94 (SEE NOTE 11 BELOW).

4. MODULAR BLOCK STANDARD UNITS SHALL CONFORM TO ASTM 1372 AND SHALL BE ONE OF THE FOLLOWING:

   * ALLAN BLOCK – "STONES"
   * KEYSTONE – "STRAIGHT SPLIT" (STANDARD AND COMPACT)
   * UNILOCK – "PISA II"
   * VERSA-LOK – "STANDARD UNIT"

5. MODULAR BLOCK RETAINING WALLS SHALL BE ONE OF THE FOLLOWING COLORS AS DESIGNATED ON THE PLAN SET OR SELECTED BY THE ENGINEER DURING INSTALLATION PROCEDURE APPROVAL:

   * NATURAL GRAY
   * RUSTIC RED
   * SANDSTONE/BUFF

6. VERTICAL FACE RETURNS SHALL BE BUILT AGAINST ADJACENT EXISTING WALLS, STEPS, AND/OR OTHER STRUCTURES REQUIRING A VERTICAL FACE RETURN. THE LENGTH OF RETURNS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

7. MODULAR BLOCK RETAINING WALLS SHALL BURY BELOW THE TOP OF THE SIDEWALK OR FINISHED GRADE ONE (1) INCH OF BLOCK FACE FOR EVERY ONE (1) FOOT OF WALL HEIGHT WITH A MINIMUM OF ONE-HALF BLOCK FACE BURIED. MODULAR BLOCK WALLS SIX (6) FEET OR MORE IN HEIGHT SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND APPROVAL A PROPOSED TOE DETAIL DEPICTING BURY DEPTH AND HORIZONTAL PLACEMENT OF BURIED BLOCK UNITS.

8. BACKFILL BEHIND THE RETAINING WALL SHALL BE COMPACTED IN INTERVALS EQUIVALENT TO THE THICKNESS OF ONE (1) COURSE OF MODULAR BLOCK UNITS BY HAND OPERATED VIBRATORY MACHINES. NO HEAVY MACHINERY MAY BE USED BEHIND THE WALL.

9. ENGINEERING GEOGRID SHALL BE INSTALLED EVERY THREE (3) COURSES MAXIMUM, BUT NEVER WITHIN THE TWO (2) COURSES BELOW THE CAPSTONE.

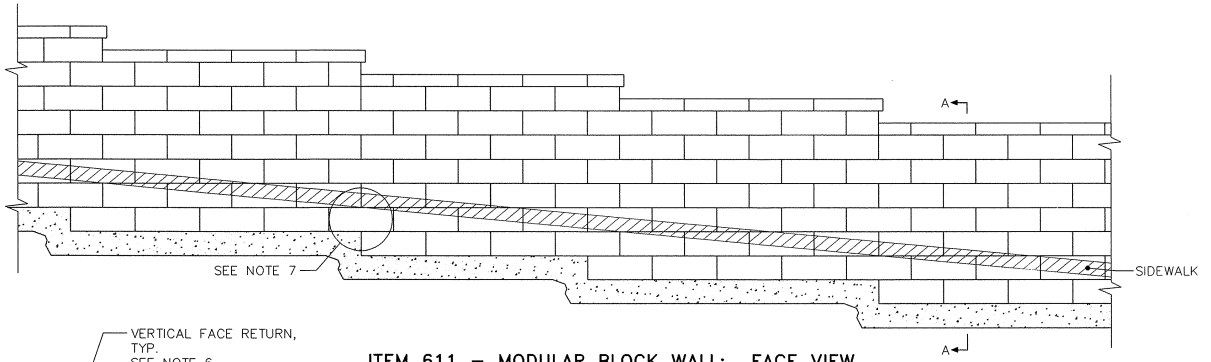
10. MAXIMUM FINISHED SLOPE ABOVE A MODULAR BLOCK WALL SHALL NOT EXCEED 3 TO 1. SLOPES FLATTER THAN 3 TO 1 ARE ACCEPTABLE PROVIDED POSITIVE DRAINAGE TOWARD THE STREET IS MAINTAINED.

11. ALL EXPOSED FACES OF MODULAR BLOCK WALLS SHALL BE COATED WITH A CLEAR, PENETRATING SEALANT THAT RESISTS WATER, WEATHER, MOLD, CORROSION, DE-ICING COMPOUNDS AND CONFORMS TO ASTM's E-514, D-1653-93, AND D-3273-94. COST CONSIDERED INCIDENTAL TO ITEM 611.

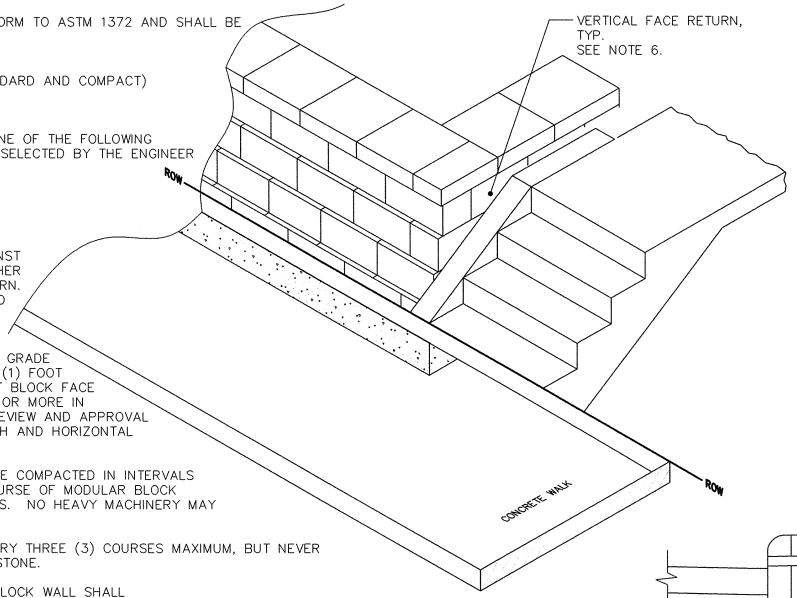
12. NATIVE SOILS EQUIVALENT TO THE THICKNESS OF ONE (1) COURSE OF MODULAR BLOCK UNITS SHALL BE PROVIDED ABOVE THE DRAINAGE AGGREGATE AND BELOW THE TOPSOIL.

13. ALL CAPSTONES SHALL BE GLUED.

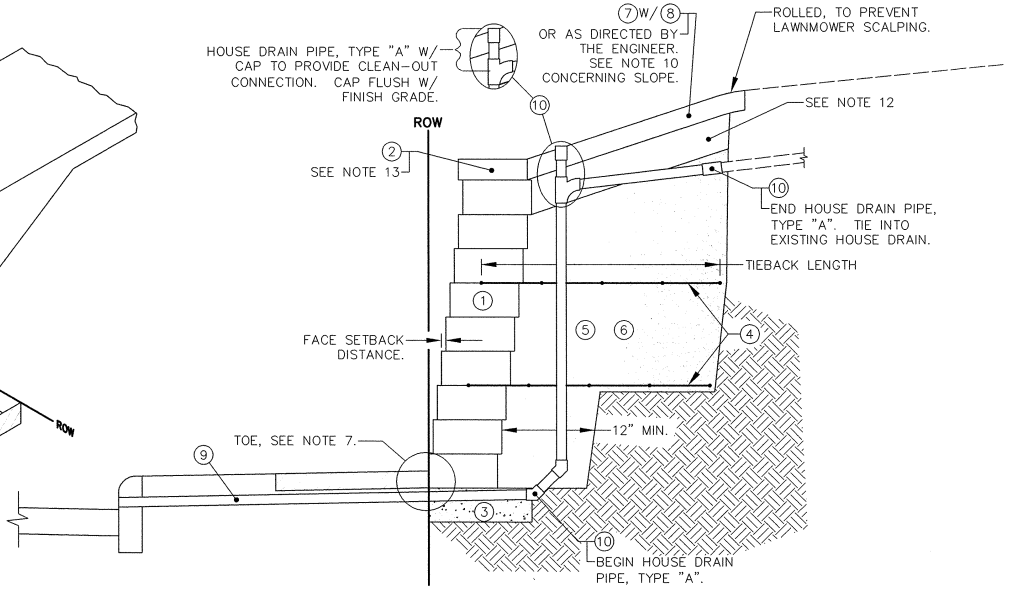
14. MODULAR BLOCK RETAINING WALLS SHALL BE CONSTRUCTED SO THAT THE FACE OF THE WALL ABUTS THE RIGHT-OF-WAY FOR THE ENTIRE LENGTH OF THE WALL. WHERE AN INCLINING STREET GRADE AND SPECIFIED FACE SETBACK RESULTS IN THE WALL TO FALL-AWAY FROM THE RIGHT-OF-WAY, THEN ADJUSTMENTS TO THE WALLS ALIGNMENT SHALL BE MADE TO MAINTAIN ABUTMENT TO THE RIGHT-OF-WAY.



ITEM 611 – MODULAR BLOCK WALL: FACE VIEW



VERTICAL FACE RETURN: ISOMETRIC VIEW



SECTION A-A

CODE	DESCRIPTION	ITEM No.	PAYMENT
1	MODULAR BLOCK WALL	611	S.F.
2	CAP STONE		INCLUDED WITH 611
3	COMPACTED GRANULAR BASE, 6" THICK (NO. 57)		INCLUDED WITH 611
4	TIEBACK (ENGINEERING GEOGRID FOR ROADWAYS, TENSAR BX1200, PER 609)		INCLUDED WITH 611
5	DRAINAGE AGGREGATE (NO. 57)		INCLUDED WITH 611
6	AGGREGATE REFILL, TYPE 1 (PER 203)		INCLUDED WITH 611
7	TOPSOIL FURNISHED AND PLACED, 4" THICK (PER 653)		INCLUDED WITH 611
8	LAWN SEEDING AND MULCHING (PER 659)		INCLUDED WITH 611
9	HOUSE DRAIN PIPE, COMPLETE	556	EACH
10	HOUSE DRAIN PIPE, TYPE "A"	556	L.F.

DO NOT SCALE – USE DIMENSIONS ONLY

CITY OF AKRON
ENGINEERING BUREAU

Michael L. Madonio 5/18/05
MANAGER, DESIGN DIVISION

James O. Wilson 5.19.05
MANAGER, CONSTRUCTION DIVISION

David Nichols 5/20/05
CITY ENGINEER

CONSTRUCTION STANDARD DWG. No. LA-3.1

MODULAR BLOCK RETAINING WALL

AUTOCAD DRAWING – STD_LA-3.1.DWG May 18, 2005

REVISIONS: