FOUNDATION AND EXCAVATION:

1.) DESIGN SOIL BEARING PRESSURE = 3,000 PSF. THE FOUNDATION DESIGN IS BASED ON THE RESULTS OF A SUBSURFACE INVESTIGATION AND GEOTECHNICAL REPORT PREPARED BY TRANSTECH ENGINEERING SERVICES, PC; PROJECT NO. G13-3523 DATED OCTOBER 14, 2013.

2.) THE BOTTOM OF ALL EXCAVATIONS SHALL BE INSPECTED BY THE OWNER'S GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE OR GRANULAR FILL TO VERIFY THE PRESUMPTIVE BEARING STRATA AND DESIGN SOIL BEARING PRESSURE. ALL UNSUITABLE MATERIAL (BRICK FRAGMENTS, ASPHALT, CONCRETE BOULDERS, ETC.) WITHIN THE BUILDING AREA AND EXCAVATION SHALL BE REMOVED FROM THE SITE.

3.) ALL WATER AND UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE BOTTOM OF THE EXCAVATION BEFORE COMPACTING SUBGRADE AND PLACING CONCRETE OR GRANULAR FILL.

4.) FOUNDATION WALLS AND FOOTINGS SHALL BEAR ON COMPACTED GRAVEL CUSHION PAD PLACED ON UNDISTURBED OR PROPERLY COMPACTED NATIVE SOIL UON.

5.) COMPACTED GRANULAR FILL SHALL CONSIST OF BROKEN OR CRUSHED STONE, OR BANK OR CRUSHED GRAVEL AND SHALL CONSIST OF SOUND, TOUGH DURABLE PARTICLES FREE FROM SOFT, THIN, ELONGATED OR LAMINATED PIECES AND FREE OF MUD, DIRT, VEGETATIVE OR OTHER DELETERIOUS SUBSTANCES GRADED AS FOLLOWS:

SQUARE MESH SIZE:	PERCENT PASSING BY WEIGHT:
PASS 3"	100
PASS #40	10-70
PASS #200	0-11

6.) THE COMPACTION EFFORT, WHERE REQUIRED, SHALL BE INSPECTED BY THE OWNER'S GEOTECHNICAL ENGINEER. MATERIAL REQUIRING COMPACTION SHALL BE PLACED IN MAXIMUM 8" LIFTS BEFORE COMPACTION. EACH LIFT SHALL BE COMPACTED WITH APPROPRIATE EQUIPMENT TO A MINIMUM OF 95% OF ITS MAXIMUM DENSITY AT OR NEAR OPTIMUM MOISTURE. THE OWNER'S GEOTECHNICAL ENGINEER SHALL TEST THE MATERIAL BEFORE AND AFTER COMPACTION FOR CONFORMANCE WITH THE SPECIFICATIONS. NO LIFTS SHALL BE PLACED WHEN WEATHER CONDITIONS ARE SUCH THAT THE MOISTURE CONTENT OF THE MATERIAL CANNOT BE PROPERLY CONTROLLED. IN PLACING OR COMPACTING MATERIAL, DO NOT DAMAGE NOR DISPLACE CONCRETE WORK ALREADY IN PLACE BY CONTACT WITH COMPACTION MACHINERY.

7.) ALL SOIL SURROUNDING AND UNDER NEW AND EXISTING FOUNDATIONS SHALL BE PROTECTED FROM FREEZING AND FROST ACTION THROUGHOUT THE COURSE OF CONSTRUCTION.

8.) VERTICAL CONSTRUCTION JOINTS IN WALLS SHALL BE USED ONLY WHEN UNAVOIDABLE AND SHALL BE LOCATED A MINIMUM 6'-0" FROM ANY SUPPORTING PIER OR BUTTRESS, EXCEPT WHERE SPECIFICALLY SHOWN ON THE DRAWINGS. NO HORIZONTAL CONSTRUCTION JOINTS OTHER THAN THOSE SHOWN ON THE DRAWINGS WILL BE ALLOWED.

9.) THE CONTRACTOR SHALL EMPLOY ALL NECESSARY MEASURES TO SAFEGUARD THE STRUCTURAL INTEGRITY OF ADJACENT STRUCTURES DURING EXCAVATION AND CONSTRUCTION OF NEW FOUNDATIONS.

10.) CONFORM TO ALL BUILDING CODE OF NEW YORK STATE AND OSHA REQUIREMENTS REGARDING THE BRACING, SHEETING, SHORING, ETC. OF EXCAVATIONS.

CONCRETE MASONRY:

1.) ALL CONCRETE BLOCK SHALL BE NORMAL WEIGHT HOLLOW LOAD BEARING MASONRY UNITS UNLESS OTHERWISE NOTED ON THE DRAWINGS CONFORMING TO ASTM C90, CLASSIFICATION D-2, WITH A MINIMUM MASONRY COMPRESSIVE STRENGTH OF 1,500 PSI ON THE NET AREA OF THE UNITS. MINIMUM COMPRESSIVE STRENGTH OF CMU - 1,900 PSI.

2.) ALL MORTAR SHALL BE TYPE M AND CONFORM TO ASTM C270.

3.) COARSE GROUT USED IN PILASTERS AND WALLS SHALL CONFORM TO ASTM C476. USE ONE PART PORTLAND CEMENT, THREE PARTS DRY LOOSE SAND, 1.5 PARTS PEA GRAVEL AND THE MINIMUM AMOUNT OF WATER TO PRODUCE A WORKABLE MIX.

4.) CEMENT USED IN MORTAR SHALL CONFORM TO ASTM C150.

5.) ALL REINFORCING BARS SHALL BE DEFORMED BILLET STEEL CONFORMING TO ASTM A615, GRADE 60. JOINT (HORIZONTAL) REINFORCEMENT SHALL BE DUR-O-WALL TRUSS TYPE OR APPROVED EQUAL.

6.) MASONRY SHALL NOT BE CONSTRUCTED IN TEMPERATURES BELOW 40°F. PROVIDE A HEAT SOURCE AND PROTECTION AS REQUIRED TO MAINTAIN TEMPERATURE ABOVE 40°F.

7.) ALL CELLS WITHOUT AND WITH REINFORCING BARS OR BOLTS SHALL BE GROUTED SOLID.

8.) HOLLOW UNITS SHALL BE LAID WITH FULL MORTAR COVERAGE ON THE HORIZONTAL AND VERTICAL FACE SHELLS EXCEPT THAT WEBS SHALL ALSO BE BEDDED WHERE THEY ARE ADJACENT TO CELLS TO BE REINFORCED AND/OR FILLED WITH GROUT, IN THE STARTING COURSE, ON FOOTINGS AND SOLID FOUNDATION WALLS, AND IN NON-REINFORCED GROUTED PIERS, PILASTERS AND COLUMNS. SOLID MASONRY UNITS SHALL BE LAID W/ FULL HEAD & BED JOINTS.

9.) CONSOLIDATE GROUT POURS EXCEEDING 12" IN HEIGHT BY MECHANICAL VIBRATION AND RECONSOLIDATE BY MECHANICAL VIBRATION AFTER INITIAL WATER LOSS AND SETTLEMENT HAS OCCURRED.

10.) ALL MASONRY WORK, MATERIALS, INSPECTIONS, TESTING, ETC. SHALL CONFORM WITH THE REQUIREMENTS OF THE BUILDING CODE OF NEW YORK STATE;

CONCRETE:

1.) ALL DETAILING, FABRICATION AND PLACING OF REINFORCING BARS SHALL BE IN ACCORDANCE WITH THE ACI DETAILING MANUAL SP-66 (LATEST REVISION).

2.) CONCRETE SHALL BE NORMAL WEIGHT UON AND DEVELOP A MINIMUM STRENGTH IN 28 DAYS AS FOLLOWS:

LOCATION	STRENGTH
FOOTINGS	3000 PSI
WALLS	3500 PSI

3.) ALL GROUT SHALL SHALL BE OF NON-SHRINKAGE TYPE WITH A MINIMUM COMPRESSIVE STRENGTH OF 7,500 AT 28 DAYS.

4.) NO WELDING OF REINFORCING WILL BE PERMITTED.

5.) THE CONTRACTOR SHALL SUBMIT THE CONCRETE MIX DESIGN TO THE ENGINEER FOR APPROVAL TOGETHER WITH LABORATORY RESULTS ATTESTING THAT THE MIXES CAN ATTAIN THE MINIMUM STRENGTH REQUIRED IN ACCORDANCE WITH CHAPTER 3 OF ACI 301-XX.

6.) ALL REINFORCING BARS SHALL BE DEFORMED BILLET STEEL CONFORMING TO ASTM A615, GRADE 60.

7.) THE MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED ON THE DRAWINGS:

FOOTINGS - 3"
FOUNDATION WALLS 1-1/2" UON
SLABS - 2"

8.) ALL CONCRETE FORMWORK SHALL REMAIN IN PLACE FOR A MINIMUM 7 DAYS FOR WALL FORMS

9.) CONFORM TO ACI HOT & COLD WEATHER CONCRETING REQUIREMENTS AS REQUIRED.

10.) ALL REINFORCING BARS SHALL BE SECURELY HELD IN PLACE WHILE POURING CONCRETE. IF REQUIRED, ADDITIONAL BARS OR STIRRUPS SHALL BE FURNISHED BY THE CONTRACTOR TO PROVIDE PROPER SUPPORT FOR ALL BARS.

STONE WALL NOTES:

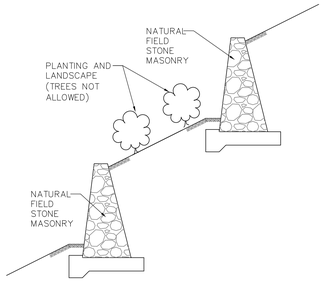
1.) TYPICAL FIELD STONE RETAINING WALL LAY-UP: STACK LARGER STONES AT BOTTOM TO SMALLER STONES AT TOP IN GRADUATED SIZE STACKING

2.) FINAL STONE SELECTION TO BE CONFIRMED BY THE LANDSCAPE ARCHITECT.

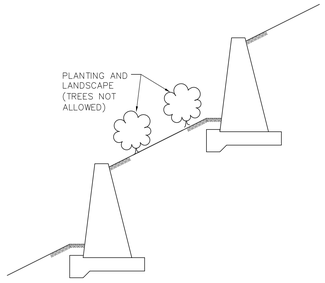
3.) IF REQUIRED, GUARD RAILS WILL BE PROVIDED.

4.) RECESS ALL MORTAR JOINTS FOR DRY STACK APPEARANCE.

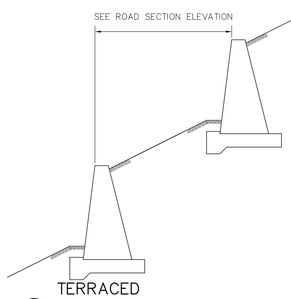
5.) PROVIDE A FLAT FIELD STONE AT TOP OF WALL. FLAT FIELD STONE TO BE OF A SIMILAR THICKNESS AS THE STONE BELOW. PITCH FIELD STONE FOR POSITIVE DRAIN.



10 NATURAL FIELD BOULDERS TERRACED RETAINING WALLS DT'L
SCALE: 1/4" = 1'-0"

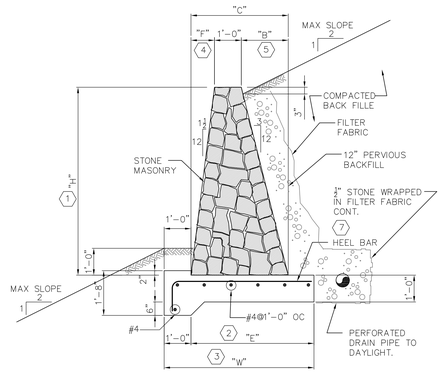


9 TERRACED RETAINING WALLS PLANTING AND LANDSCAPE
SCALE: 1/4" = 1'-0"

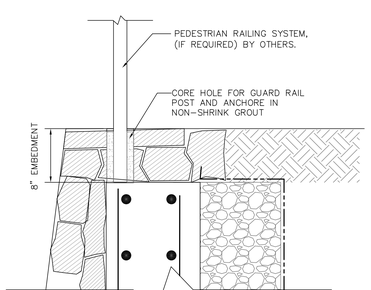


8 TERRACED RETAINING WALL LOCATION
SCALE: 1/4" = 1'-0"

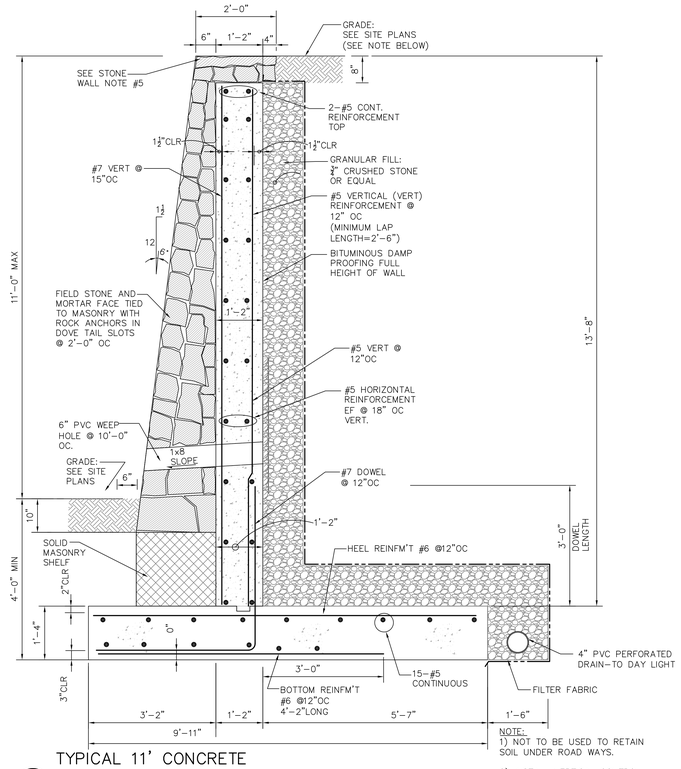
TAG	1	2	3	4	5	5	7
EXPOSED FACE HEIGTH	"H" STEM HEIGTH	"E"	"W"	"F"	"B"	"C"	HEEL BAR
6'-9" TO 7'-9"	8'-0"	5'-2"	6'-2"	1'-0"	2'-0"	4'-0"	#4 @ 9" OC
5'-9" TO 6'-9"	7'-0"	4'-4"	5'-4"	0'-10½"	1'-9"	3'-7½"	#4 @ 9" OC
4'-9" TO 5'-9"	6'-0"	3'-6"	4'-6"	0'-9"	1'-6"	3'-3"	#4 @ 18" OC
3'-9" TO 4'-9"	5'-0"	4'-5"	5'-5"	0'-7½"	1'-3"	2'-10½"	#4 @ 18" OC
2'-9" TO 3'-9"	4'-0"	2'-6"	3'-6"	0'-6"	1'-0"	2'-6"	#4 @ 18" OC
1'-9" TO 2'-9"	3'-0"	2'-2"	3'-2"	0'-4½"	0'-9"	2'-1½"	#4 @ 18" OC
0'-9" TO 1'-9"	2'-0"	1'-9"	2'-9"	0'-3"	0'-6"	1'-9"	#4 @ 18" OC



7 TYPICAL RETAINING WALL ALONG ROAD
SCALE: 1/2" = 1'-0"



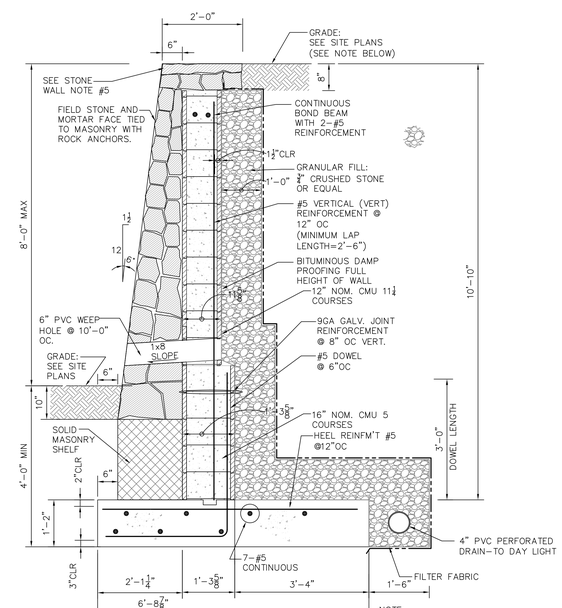
6 TYPICAL PEDESTRIAN GUARD RAIL POST ANCHOR DETAIL
SCALE: 1 1/2" = 1'-0"



NOTE:
1) NOT TO BE USED TO RETAIN SOIL UNDER ROAD WAYS.

2) INSTALL VERTICAL CONTROL JOINTS AT 60'-0" OC IN CONCRETE WALL AND NOT IN STONE WALL FACE

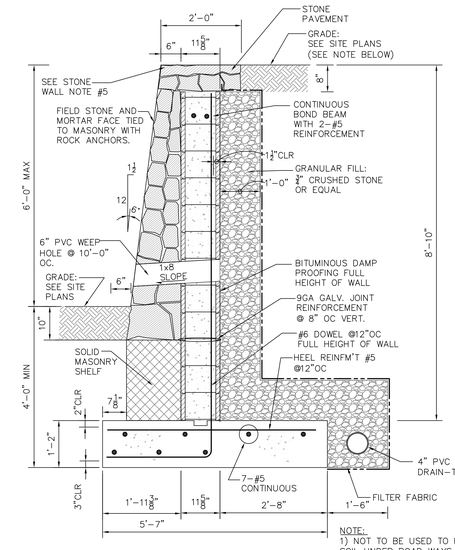
5 TYPICAL 11' CONCRETE RETAINING WALL SECTION
SCALE: 3/4" = 1'-0"



NOTE:
1) NOT TO BE USED TO RETAIN SOIL UNDER ROAD WAYS.

2) INSTALL VERTICAL CONTROL JOINTS AT 30'-0" OC CMU WALL AND NOT IN STONE FACE

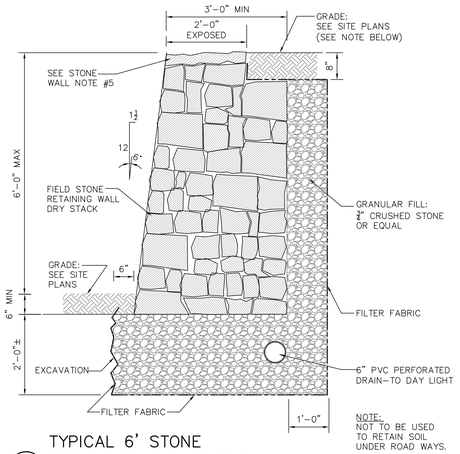
4 TYPICAL 8' CMU RETAINING WALL SECTION
SCALE: 3/4" = 1'-0"



NOTE:
1) NOT TO BE USED TO RETAIN SOIL UNDER ROAD WAYS.

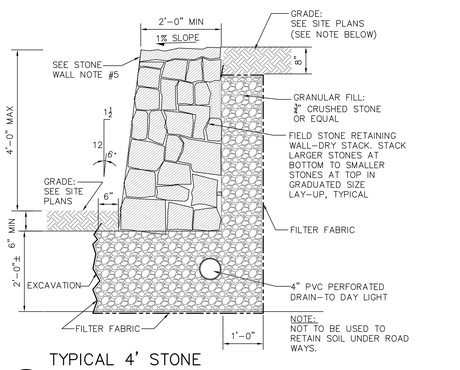
2) INSTALL VERTICAL CONTROL JOINTS AT 30'-0" OC IN CONCRETE MASONRY WALL AND NOT IN STONE FACE.

3 TYPICAL ALTERNATE 6' CMU RETAINING WALL SECTION
SCALE: 3/4" = 1'-0"



NOTE:
NOT TO BE USED TO RETAIN SOIL UNDER ROAD WAYS.

2 TYPICAL 6' STONE RETAINING WALL SECTION
SCALE: 3/4" = 1'-0"



NOTE:
NOT TO BE USED TO RETAIN SOIL UNDER ROAD WAYS.

1 TYPICAL 4' STONE RETAINING WALL SECTION
SCALE: 3/4" = 1'-0"

NOT FOR CONSTRUCTION

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SILO RIDGE

Amenia, New York
Duchess County

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SCALE: AS NOTED
NOTE: THIS DRAWING IS 30"X40" INCH SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR DIMENSIONS THAT ARE NOT INDICATED.

DATE	ISSUE
6/5/2014	FOR REVIEW
1/8/2015	SITE PLAN REV

REVISIONS

DATE	ISSUE

DRAWING TITLE: SITE RETAINING WALL SECTIONS AND DETAILS

PROJECT #: 12-507 / N0758
DRAWN BY: HJ
CHECKED BY: CP

DRAWING NO: S1.01

HJ], C:\Users\HJ\Documents\AcDocs\ BSES\758 - SILO RIDGE\dwgs\758 Silo Ridge.dwg, Page Setup: ecw, HHLarch, Plot Scale: 1:1, \\HH-PRINT-Canon iR2230-3300 PCL5c