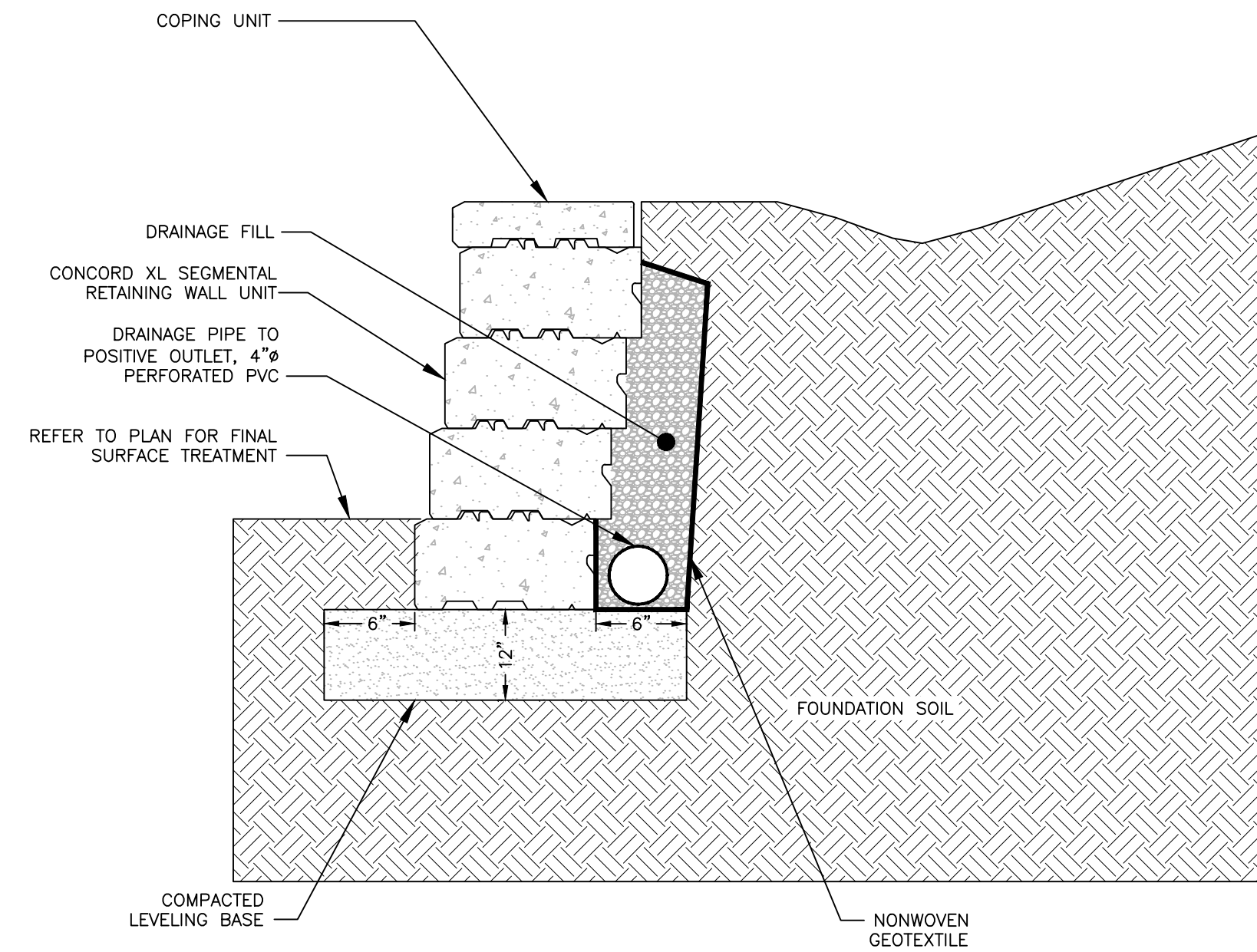


GENERAL RETAINING WALL NOTES:

- PROPOSED RETAINING WALL TO BE UNILOCK CONCORD WALL XL OR ESTATE WALL (SEE PLAN AND PROFILE SHEETS). ALL WALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- THE CONTRACTOR SHALL VERIFY MATERIAL COLORS WITH THE OWNER.
- LEVELING BASE IS THE COMPACTED GRANULAR SOIL OR IF SPECIFIED IN THE CONSTRUCTION DOCUMENTS AN UNREINFORCED CONCRETE FOOTING, PLACED BENEATH THE FIRST COURSE OF SEGMENTAL RETAINING WALL UNITS.
 - THE LEVELING BASE MATERIAL SHALL BE NON-FROST SUSCEPTIBLE, WELL GRADED, COMPACTED ANGULAR GRAVEL-SAND MIXTURE (GW AS PER ASTM D2487).
- DRAINAGE FILL IS A FREE DRAINING AGGREGATE WITH HIGH PERMEABILITY PLACED DIRECTLY BEHIND THE MODULAR CONCRETE UNITS. THIS WALL INCLUDE A DRAINAGE PIPE AND MAY BE SEPARATED FROM OTHER FILL WITH A SUITABLE GEOTEXTILE FILTER.
 - THE DRAINAGE FILL SHALL BE A FREE DRAINING ANGULAR, GRAVEL MATERIAL OF UNIFORM PARTICLE SIZE SMALLER THAN 1 INCH AND GREATER THAN 1/4 INCH. THE DRAINAGE FILL SHALL BE SEPARATED FROM THE REINFORCED FILL OR RETAINED FILL BY A SPECIFIED GEOTEXTILE FILTER.
- DRAINAGE PIPE IS A PERFORATED PIPE USED TO CARRY WATER, COLLECTED FROM WITHIN THE SEGMENTAL RETAINING WALL, TO OUTLETS, TO PREVENT PORE WATER PRESSURES FROM BUILDING UP WITHIN THE SEGMENTAL RETAINING WALL AND SPECIFICALLY BEHIND THE SEGMENTAL RETAINING WALL UNITS.
 - THE DRAINAGE PIPE SHALL BE A PERFORATED CORRUGATED POLYETHYLENE OR PERFORATED PVC PIPE, WITH A MINIMUM DIAMETER OF 4 INCHES, PROTECTED BY A GEOTEXTILE FILTER TO PREVENT THE MIGRATION OF SOIL PARTICLES INTO THE DRAINAGE PIPE.
- GEOTEXTILE FILTER IS A PERMEABLE PLANAR POLYMER STRUCTURE THAT WILL ALLOW THE PASSAGE OF WATER FROM ONE SOIL MEDIUM TO ANOTHER WHILE PREVENTING THE MIGRATION OF FINE PARTICLES THAT MIGHT CLOG THE DOWNSTREAM FILL. SELECTION OF A GEOTEXTILE FILTER IS BASED ON THE CHARACTERISTICS OF THE DIFFERENT SOILS USED IN AND SURROUNDING THE SEGMENTAL RETAINING WALL.
 - THE GEOTEXTILE FILTER SHALL BE NEEDLE PUNCHED NONWOVEN (FOR DRAINAGE AND SEPARATION) BY ADS OR APPROVED EQUAL.
- DESIGN ASSUMPTIONS:
 - THE FOUNDATION SOILS WILL PRODUCE ACCEPTABLE TOTAL AND DIFFERENTIAL SETTLEMENT GIVEN THE APPLIED LOAD OF THE SEGMENTAL RETAINING WALL.
 - THE MAXIMUM GROUNDWATER ELEVATION IS AT LEAST 2/3 X H (HEIGHT) BELOW THE BASE OF THE SEGMENTAL RETAINING WALL.
 - THERE WILL BE NO HYDROSTATIC PRESSURE WITHIN OR BEHIND THE SEGMENTAL RETAINING WALL.
 - THE SURROUNDING STRUCTURES WILL NOT EXERT ANY ADDITIONAL LOADING ON THE SEGMENTAL RETAINING WALL.
 - THERE ARE NO STRUCTURES (UTILITIES SUCH AS GAS/WATER MAINS, STORM SEWERS, ELECTRICAL/COMMUNICATIONS CABLES, ETC) TO BE PLACED WITHIN OR BELOW THE REINFORCED FILL DURING OR AFTER CONSTRUCTION. (NOT APPLICABLE - NO REINFORCED FILL THIS PROJECT).
- IF UNEXPECTED SOURCES OF WATER ARE IDENTIFIED (E.G., A HIGHER WATER TABLE OR WEEPING SOIL LAYERS), ADDITIONAL DRAINAGE STRUCTURES MAY BE REQUIRED (E.G., BLANKET DRAINS OR CHIMNEY DRAINS). THE SPECIFIC DETAILS WILL NEED TO BE DETERMINED BY THE DESIGN ENGINEER. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IF UNEXPECTED SOURCES OF WATER ARE IDENTIFIED DURING INITIAL EXCAVATION.
- GENERAL INSTALLATION GUIDES ILLUSTRATING PROPER METHODS AND TECHNIQUES FOR GOOD CONSTRUCTION ARE AVAILABLE TO THE INSTALLER FROM RISI STONE SYSTEMS OR THE SEGMENTAL RETAINING WALL MANUFACTURER UPON REQUEST.
- CONSTRUCTION: SITE PREPARATION.
 - COMPLY WITH ALL CURRENT FEDERAL, STATE, AND LOCAL REGULATIONS FOR EXECUTION OF THE WORK, INCLUDING LOCAL BUILDING CODES AND EXCAVATION REGULATIONS. PROVIDE EXCAVATION SUPPORT AS REQUIRED TO MAINTAIN STABILITY OF THE AREA DURING EXCAVATION AND SEGMENTAL RETAINING WALL CONSTRUCTION AND TO PROTECT EXISTING STRUCTURES, UTILITIES, LANDSCAPE FEATURES, PROPERTY OR IMPROVEMENTS.
 - PRIOR TO GRADING OR EXCAVATION OF THE SITE, CONFIRM THE LOCATION OF THE SEGMENTAL RETAINING WALL AND ALL UNDERGROUND FEATURES, INCLUDING UTILITY LOCATIONS WITHIN THE AREA OF CONSTRUCTION. ENSURE SURROUNDING STRUCTURES ARE PROTECTED FROM EFFECTS OF SEGMENTAL RETAINING WALL EXCAVATION.
 - COORDINATE INSTALLATION OF UNDERGROUND UTILITIES WITH SEGMENTAL RETAINING WALL INSTALLATION.
 - CONTROL SURFACE WATER DRAINAGE AND PREVENT INUNDATION OF THE SEGMENTAL RETAINING WALL CONSTRUCTION AREA DURING THE CONSTRUCTION PROCESS.
 - THE FOUNDATION SOIL SHALL BE EXCAVATED OR FILLED AS REQUIRED TO THE GRADES AND DIMENSIONS SHOWN ON THE PLAN.
 - THE FOUNDATION SOIL SHALL BE PROOF ROLLED AND EXAMINED BY THE GENERAL REVIEW ENGINEER TO ENSURE THAT IT MEETS THE MINIMUM STRENGTH REQUIREMENTS SPECIFIED IN THE CONSTRUCTION DOCUMENTS. IF UNACCEPTABLE FOUNDATION SOIL IS ENCOUNTERED, THE GENERAL REVIEW ENGINEER SHOULD CONTACT THE DESIGN ENGINEER TO DISCUSS OPTIONS AND DETERMINE THE MOST APPROPRIATE COURSE OF ACTION.
 - IN CUT SITUATIONS, THE NATIVE SOIL SHALL BE EXCAVATED TO THE LINES AND GRADES SHOWN IN THE CONSTRUCTION DOCUMENTS AND REMOVED FROM THE SITE OR STOCKPILED FOR REUSE AS REINFORCED OR RETAINED FILL AS IDENTIFIED ON THE PLAN. CARE SHOULD BE TAKEN NOT TO CONTAMINATE OR OVERLY SATURATE THE STOCKPILED FILL MATERIAL.
- CONSTRUCTION: INSTALLING DRAINAGE SYSTEM.
 - THE APPROVED GEOTEXTILE FILTER SHALL BE SET AGAINST THE BACK OF THE FIRST SEGMENTAL RETAINING WALL UNIT, OVER THE PREPARED FOUNDATION SOIL EXTENDING TOWARDS THE BACK OF THE EXCAVATION, UP THE EXCAVATION FACE AND EVENTUALLY OVER THE TOP OF THE DRAINAGE FILL TO THE BACK OF THE SEGMENTAL RETAINING WALL UNITS NEAR THE TOP OF THE WALL OR AS SHOWN ON THE PLAN. GEOTEXTILE OVERLAPS SHALL BE A MINIMUM OF 1 FOOT AND SHALL BE SHINGLED DOWN THE FACE OF THE EXCAVATION IN ORDER TO PREVENT THE MIGRATION OF PARTICLES FROM ONE FILL TYPE TO ANOTHER.
 - THE DRAINAGE PIPE SHALL BE PLACED AS SHOWN ON THE PLAN, IN ACCORDANCE WITH THE OVERALL DRAINAGE PLAN FOR THE SITE. THE MAIN COLLECTION DRAIN PIPE SHALL BE A MINIMUM OF 4 INCHES IN DIAMETER. THE PIPE SHALL BE LAID TO ENSURE GRAVITY FLOW OF WATER FROM THE REINFORCED FILL. CONNECT DRAINAGE COLLECTION PIPE AT A STORM SEWER CATCH BASIN OR DAYLIGHT ALONG SLOPE AT AN ELEVATION LOWER THAN LOWEST POINT OF PIPE, EVERY 50 FEET MAXIMUM.
 - IF OTHER SOURCES OF WATER ARE DISCOVERED DURING EXCAVATION OR ANTICIPATED, REFER TO NOTE 8 ABOVE.
- CONSTRUCTION: INSTALLING SEGMENTAL RETAINING WALL UNITS.
 - THE BOTTOM ROW OF SEGMENTAL RETAINING WALL UNITS SHALL BE PLACED ON THE LEVELING BASE AS SHOWN IN THE CONSTRUCTION DOCUMENTS. THE UNITS SHALL BE PLACED IN THE MIDDLE OF THE LEVELING BASE. CARE SHALL BE TAKEN TO ENSURE THAT THE SEGMENTAL RETAINING WALL UNITS ARE ALIGNED PROPERLY, LEVELED FROM SIDE TO SIDE AND FRONT TO BACK AND ARE IN COMPLETE CONTACT WITH THE LEVELING BASE.
 - THE SEGMENTAL RETAINING WALL UNITS ABOVE THE BOTTOM COURSE SHALL BE PLACED TO INTERCONNECT THE SHEAR KEY AND THEN PUSHED FORWARD, CREATING THE SPECIFIED BATTER OF THE SEGMENTAL RETAINING WALL FACE.
 - THE SEGMENTAL RETAINING WALL UNITS SHALL BE SWEEP CLEAN BEFORE PLACING ADDITIONAL COURSES TO ENSURE THAT NO DIRT, CONCRETE OR OTHER FOREIGN MATERIALS BECOME LODGED BETWEEN SUCCESSIVE LIFTS OF THE SEGMENTAL RETAINING WALL UNITS.
 - SUCCESSIVE COURSES SHALL BE PLACED TO CREATE A RUNNING BOND PATTERN WITH THE EDGE OF ALL UNITS BEING APPROXIMATELY ALIGNED WITH THE MIDDLE OF THE UNIT IN THE COURSE BELOW IT. CUT SEGMENTAL RETAINING WALL UNITS MAY NEED TO BE PLACED TO ENSURE THE VERTICAL LINE BETWEEN ADJACENT SEGMENTAL RETAINING WALL UNITS REMAINS WITHIN THE MIDDLE THIRD OF THE SEGMENTAL RETAINING WALL UNIT BELOW.
 - WHERE APPLICABLE, A MAXIMUM OF 3 COURSES OF SEGMENTAL RETAINING WALL UNITS CAN BE PLACED ABOVE THE LEVEL OF THE REINFORCED FILL AT ANY TIME.
 - THE INSTALLER SHALL CHECK THE LEVEL OF SEGMENTAL RETAINING WALL UNITS WITH EACH LIFT TO ENSURE THAT NO GAPS ARE FORMED BETWEEN SUCCESSIVE LIFTS THAT MAY AFFECT THE PERFORMANCE OF THE SEGMENTAL RETAINING WALL.
 - CARE SHALL BE TAKEN TO ENSURE THAT THE SEGMENTAL RETAINING WALL UNITS AND GEOSYNTHETIC REINFORCEMENT, WHERE APPLICABLE, ARE NOT DAMAGED DURING HANDLING AND PLACEMENT.
 - NO HEAVY EQUIPMENT, FOR COMPACTION, FILL PLACEMENT OR OTHER, SHALL BE ALLOWED WITHIN 3 FEET OF THE BACK OF THE SEGMENTAL RETAINING WALL UNITS.
- CONSTRUCTION: DRAINAGE FILL.
 - THE DRAINAGE FILL WILL BE PLACED BEHIND THE SEGMENTAL RETAINING WALL UNITS WITH A MINIMUM WIDTH OF 1 FOOT AND SEPARATED FROM OTHER SOILS USING THE SPECIFIED GEOTEXTILE FILTER. DUE TO SITE CONSTRAINTS, THE DRAINAGE FILL MINIMUM WIDTH IS 6 INCHES FOR THIS PROJECT).
 - DRAINAGE FILL SHALL BE PLACED BEHIND THE SEGMENTAL RETAINING WALL FACING IN MAXIMUM LIFTS OF 6 INCHES AND COMPACTED TO A MINIMUM DENSITY OF 95% STANDARD PROCTOR.
- CONSTRUCTION: SECURE COPING.
 - COPING UNITS SHALL BE SECURED TO THE TOP OF THE SEGMENTAL RETAINING WALL WITH TWO 3/8 INCH BEADS OF CONCRETE ADHESIVE POSITIONED 2 INCHES IN FRONT AND BEHIND THE TONGUE OF THE LAST COURSE OF SEGMENTAL RETAINING WALL UNITS.

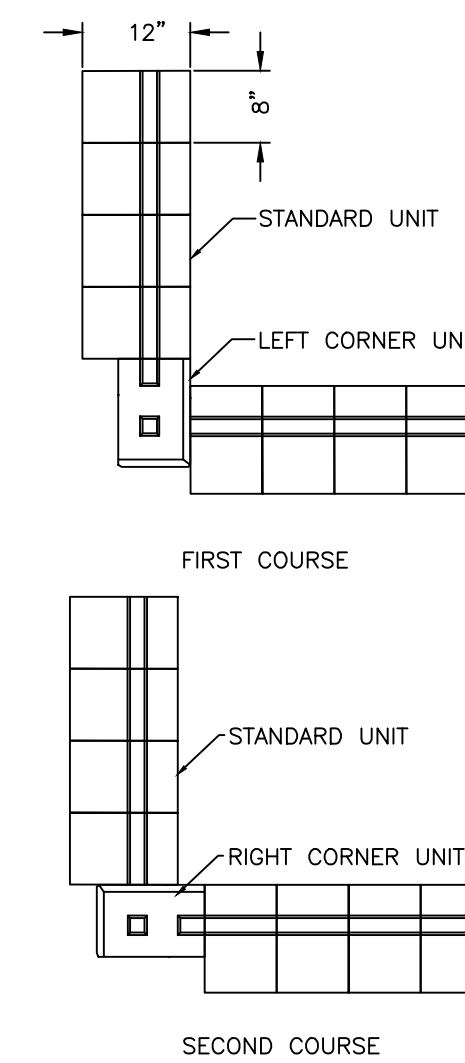
PROJECT SPECIFIC RETAINING WALL NOTES:

- THE CONTRACTOR SHALL BE COGNIZANT OF THE CLOSE PROXIMITY TO THE ADJACENT PROPERTY LINE, AND SHALL MAINTAIN LIMITS OF WORK WITHIN THE SUBJECT PROPERTY BOUNDS.
- IN ORDER TO MAKE THE TRANSITION FROM THE CONCORD XL UNITS TO THE STATE WALL UNITS, THE TONGUE ON THE CONCORD XL UNITS SHALL BE CHIPPED OFF. TWO 3/8 INCH BEADS OF CONCRETE ADHESIVE POSITIONED 2 INCHES IN FRONT AND BEHIND THE REMOVED TONGUE OF THE SEGMENTAL RETAINING WALL UNITS SHALL BE APPLIED.
- IN ADDITION TO THE COPING ADHESIVE INSTALLATION, ALL ESTATE WALL UNITS SHALL HAVE CONCRETE ADHESIVE APPLIED: TWO 3/8 INCH BEADS OF CONCRETE ADHESIVE POSITIONED 2 INCHES FROM THE FACE AND THE BACK OF EACH SEGMENTAL RETAINING WALL UNIT.
- DUE TO LIMITED AVAILABLE PROPERTY CONTROL, THE LEVELING BASE SHALL EXTEND 6 INCHES BEYOND THE BACK OF THE BASE CONCORD XL UNIT. THE CONTRACTOR SHALL PREPARE A NEAR VERTICAL EXCAVATION AT THE PROPERTY LINE IN ORDER TO CREATE THE REQUIRED SECTION.
- THE DRAINAGE PIPE SHALL TRANSITION TO 4" SCH40 SOLID PVC AT THE FITTING AT THE END OF THE ESTATE WALL.



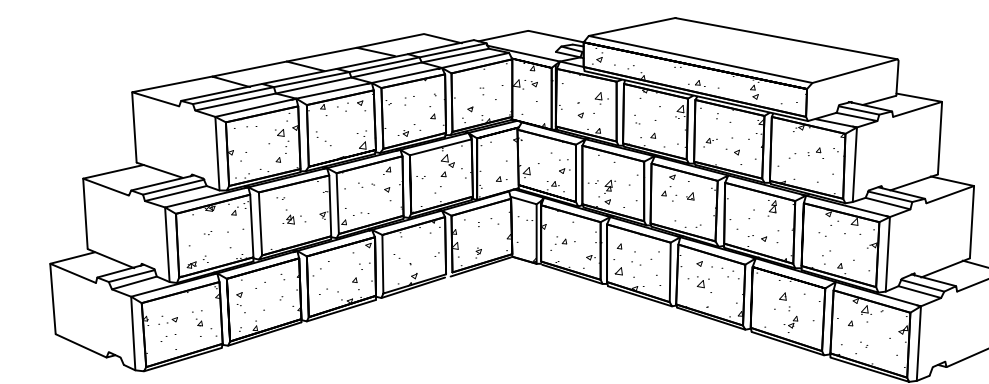
NOTES:
1. REFER TO RETAINING WALL NOTES, THIS SHEET.

SEGMENTAL RETAINING WALL DETAIL - GRAVITY WALL SECTION
NOT TO SCALE



NOTES:
1. REFER TO RETAINING WALL NOTES, THIS SHEET.

SEGMENTAL RETAINING WALL DETAIL - 90° INSIDE CORNER
NOT TO SCALE



DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	04/28/2020	NO CHANGE THIS SHEET	MAB				



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CONSTRUCTION DETAILS
3 WATER STREET SITE PLAN

3 WATER STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-38-170722

JOB #: 2020:013
DATE: 3/31/2020
SCALE: AS SHOWN
TITLE: CD-2
SHEET: 6 OF 6