

- MATERIAL DESIGN STRENGTHS:
CAST IN PLACE CONCRETE:
ALL CONCRETE (NORMAL WEIGHT) F'C = 4,000 PSI
REINFORCING STEEL- DEFORMED (ASTM A615, GR. 60) F_y = 60,000 PSI
SOIL BEARING CAPACITY 3,000 PSF
- LATERAL LOADS:
EARTH LOAD, EQUIVALENT FLUID PRESSURES.
ACTIVE SOIL.60 PCF/FT
- SEE ARCHITECTURAL DRAWINGS FOR SIZES AND/OR LOCATION OF EMBEDMENTS IN CONCRETE.
- ALL INFORMATION ON EXISTING CONDITIONS IS OBTAINED FROM BEST AVAILABLE SOURCES. THE ACTUAL AS-BUILT CONSTRUCTION MAY POSSIBLY DIFFER FROM WHAT IS ASSUMED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS NOTED ON THE CONTRACT DOCUMENTS, AND SHALL NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL REQUEST IN WRITING AND HIGHLIGHT ON THE SHOP DRAWINGS ANY PROPOSED CHANGES IN THE MATERIALS, DETAILS, ETC. INDICATED ON THE DRAWINGS OR SPECIFICATIONS. ANY CHANGES MUST BE APPROVED BY THE ENGINEER IN WRITING.
- THE DESIGN, ADEQUACY, AND SAFETY OF BRACING, SHORING, TEMPORARY SUPPORTS, ETC. IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

FOUNDATIONS

- FOOTING ELEVATIONS SHOWN REPRESENT THE MINIMUM DEPTH TO WHICH FOOTINGS SHALL BE CARRIED. IF FOOTING EXCAVATIONS REVEAL DISTURBED, UNSTABLE, OR UNSUITABLE SOIL, THE ENGINEER SHALL BE NOTIFIED. CONTRACTOR SHALL OBTAIN THE SERVICES OF A SOILS ENGINEER OR TESTING FIRM TO VERIFY BEARING CAPACITY OF SOIL AND LATERAL LOAD FROM BACKFILL MATERIALS. ALL UNSUITABLE FOUNDATION MATERIAL SHALL BE REMOVED AND FOOTINGS SHALL REST ON UNDISTURBED SOIL OR PRE-ENGINEERED FILL USING SUITABLE MATERIAL OR COMPACTED STONE BASE COURSE WITH A MINIMUM BEARING CAPACITY OF 3,000 PSF. COMPACT EACH LAYER OF FILL OR BACKFILL TO 95% OF THE MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D 698. DO NOT DISTURB EXISTING FOUNDATIONS.

CONCRETE

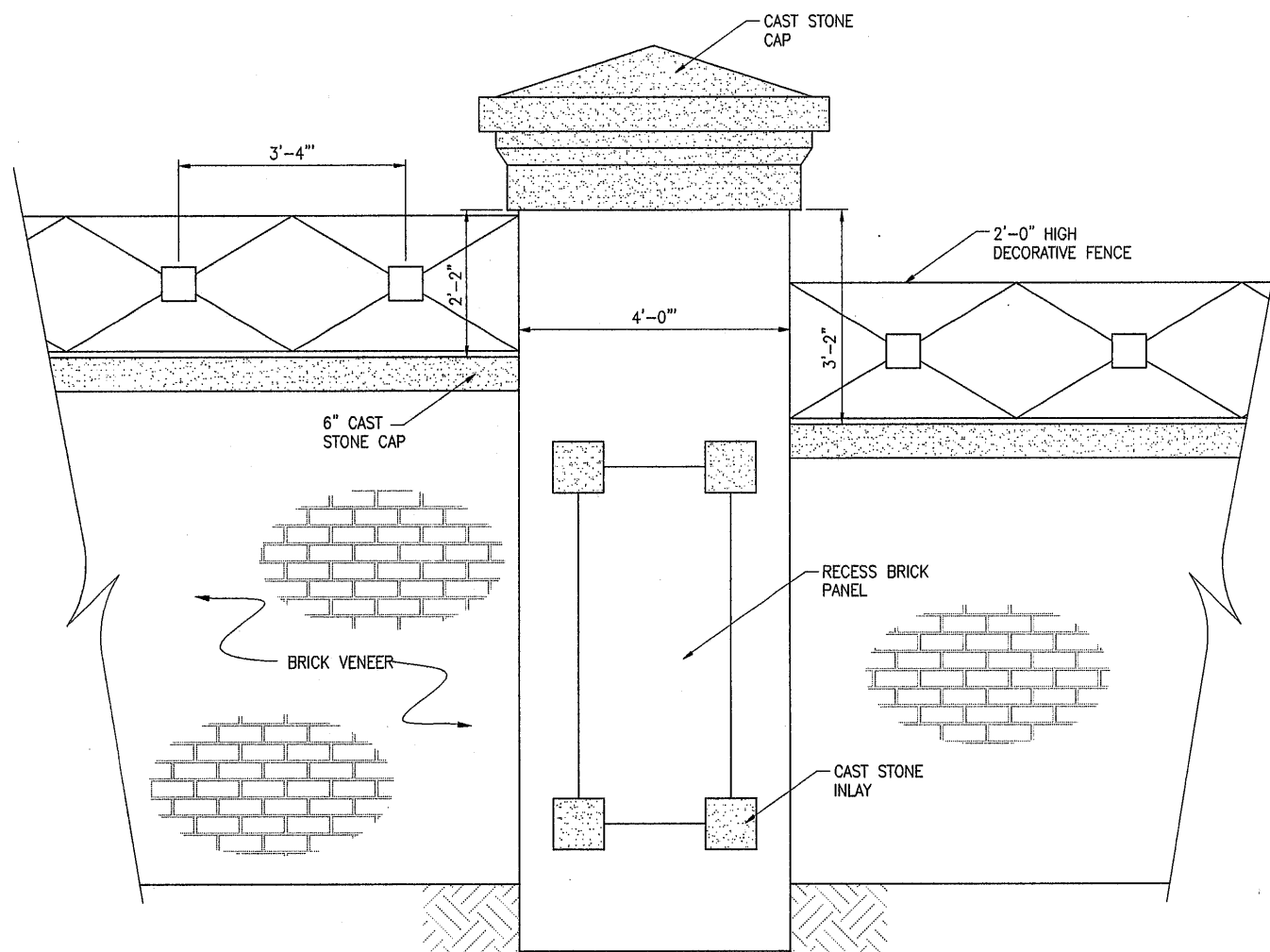
- ALL REINFORCING SHALL BE DETAILED, FABRICATED, AND PLACED IN ACCORDANCE WITH ACI 315 (LATEST EDITION) UNLESS OTHERWISE NOTED. ALL SPLICES SHALL BE CLASS B TENSION WITH ALL APPLICABLE MODIFICATION FACTORS, UNLESS OTHERWISE NOTED. SPLICES NOT INDICATED MAY BE PROVIDED IF PROPERLY DETAILED ON SHOP DRAWINGS AND APPROVED BY THE ENGINEER. SPLICES OF HORIZONTAL BARS SHALL BE STAGGERED UNLESS OTHERWISE NOTED. EMBEDMENT LENGTHS SHALL BE EQUAL TO TENSION DEVELOPMENT LENGTHS UNLESS OTHERWISE NOTED. STANDARD HOOKS CONFORMING TO ACI 318 SHALL BE USED UNLESS OTHERWISE NOTED. DOWELS IN WALLS SHALL MATCH SIZE AND SPACING OF MAIN REINFORCING BARS UNLESS OTHERWISE NOTED. SPREAD REINFORCING AT OPENINGS AND SLEEVES UNLESS OTHERWISE DETAILED. DO NOT CUT REINFORCING BARS. CONCRETE PROTECTION FOR REINFORCEMENT SHALL BE AS INDICATED ON THE DRAWING AND SHALL BE INDICATED ON THE SHOP DRAWINGS. ALL SPICE LENGTHS AND EMBEDMENT LENGTHS, BENDING DIAGRAMS, AND ASSEMBLY DIAGRAM SHALL BE INDICATED ON THE SHOP DRAWINGS. PROVIDE 2-#5 CONTINUOUS AT THE TOP OF ALL WALLS.
- CONCRETE SHALL BE NORMAL WEIGHT, AIR ENTRAINED, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. THE MAXIMUM WATER-CEMENT RATIO SHALL NOT EXCEED 0.5. SLUMP AT POINT OF PLACEMENT SHALL BE NO MORE THAN 4 INCHES.
- MAJOR CONSTRUCTION JOINTS ARE SHOWN. INTERMEDIATE JOINTS IN WALLS ARE NOT SHOWN UNLESS REQUIRED BY THE DESIGN. ALL CONSTRUCTION AND CONTROL JOINTS SHALL BE SHOWN ON THE SHOP DRAWINGS. CONSTRUCTION JOINTS MAY BE OMITTED OR RELOCATED IF PROPERLY DETAILED ON THE SHOP DRAWINGS AND APPROVED BY THE ENGINEER. (JOINT LOCATIONS MUST BE APPROVED BY THE ENGINEER BEFORE SUBMITTING REINFORCING STEEL SHOP DRAWINGS).
- THE UNIT OF OPERATION OF CONCRETE PLACEMENT SHALL NOT EXCEED 40 FEET IN ANY DIRECTION. THE DISTANCE BETWEEN EXPANSION JOINTS SHALL NOT EXCEED 40 FEET. AT LEAST 72 HOURS SHALL ELAPSE BEFORE CONCRETE IS PLACED ADJACENT TO PREVIOUSLY CAST CONCRETE. BACKFILLING ADJACENT TO CANTILEVER RETAINING WALLS SHALL NOT OCCUR UNTIL WALL CONCRETE HAS REACHED ITS 28-DAY DESIGN COMPRESSIVE STRENGTH.
- CHAMFER ALL EXPOSED EDGES OF CONCRETE 3/4 INCH.
- CONCRETE SHALL BE PLACED IN LAYERS NOT OVER 18 INCHES DEEP AND EACH LAYER SHALL BE COMPACTED BY MECHANICAL INTERNAL-VIBRATING EQUIPMENT SUPPLEMENTED BY HAND SPAULDING, RODDING AND TAMPING. VIBRATORS SHALL NOT BE INSERTED INTO LOWER COURSES THAT HAVE BEGUN TO SET. CONCRETE SHALL BE PLACED BY CHUTES OR ELEPHANT TRUNKS WHEN THE VERTICAL DROP EXCEEDS 4'-0".
- CONTRACTOR SHALL NOTIFY ENGINEER 48 HOURS PRIOR TO PLACING ANY CONCRETE SO THAT REINFORCEMENT, SLEEVES, PIPES, INSERTS, HANGERS, ETC., CAN BE INSPECTED FOR CONFORMANCE WITH PLANS AND SPECIFICATIONS.

MASONRY

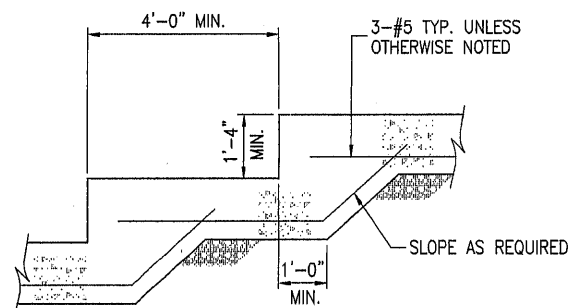
- PROVIDE GALVANIZED HORIZONTAL TRUSS TYPE JOINT REINFORCING WITH 3/16 INCH RODS AND NO. 9 GAGE CROSS RODS AT 16" O/C UNLESS OTHERWISE NOTED.
- REINFORCED MASONRY: ALL CELLS SHALL BE FULLY GROUTED FROM TOP TO BOTTOM OF WALL. THE MASONRY CONTRACTOR SHALL BUILD, REINFORCE, AND GROUT THE WALLS IN 4'-0" LIFTS, VIBRATING GROUT IMMEDIATELY AFTER EACH LIFT. THE REINFORCING STEEL FABRICATOR SHALL PROVIDE REBAR FOR 4'-0" HIGH VERTICAL LIFTS PLUS A BAR LAP OF 36 X BAR DIAMETER. UNLESS OTHERWISE NOTED OR DETAILED, CENTER REINFORCING IN BLOCK CELLS AND TIE IN PLACE AT INTERVALS OF 4'-0" O/C MAXIMUM. IN ADDITION TO REINFORCING SHOWN, PROVIDE ONE #5 VERTICAL BAR EACH SIDE OF ALL OPENINGS, AND AT CORNERS AND INTERSECTIONS UNLESS OTHERWISE NOTED. PROVIDE REBAR DOWELS OF SAME SIZE AND SPACING AS VERTICAL REINFORCING FROM WALL FOOTINGS. DOWELS SHALL HAVE STANDARD ACI HOOKS AND SHALL LAP 36 X BAR DIAMETER WITH FIRST LIFT OF VERTICAL REINFORCING.

NOTE:

- BUILDING PERMIT WILL BE REQUIRED FOR ALL RETAINING WALLS OVER FOUR (4) FEET TALL.

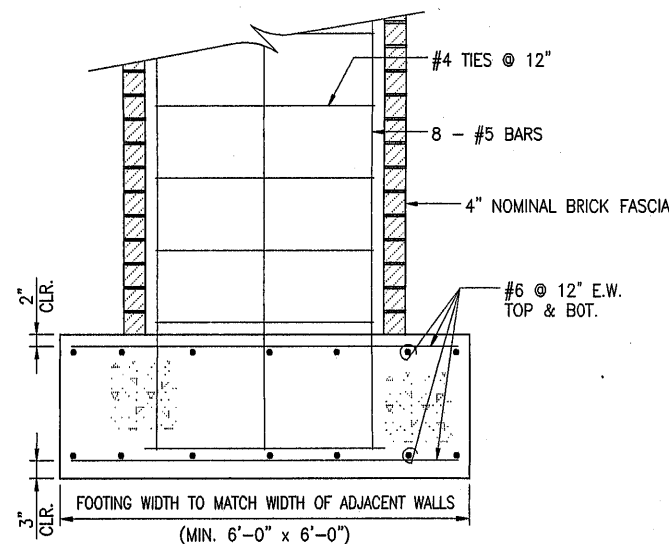


1
C12C12A
PILASTER ELEVATION
SCALE: 3/4" = 1'-0"

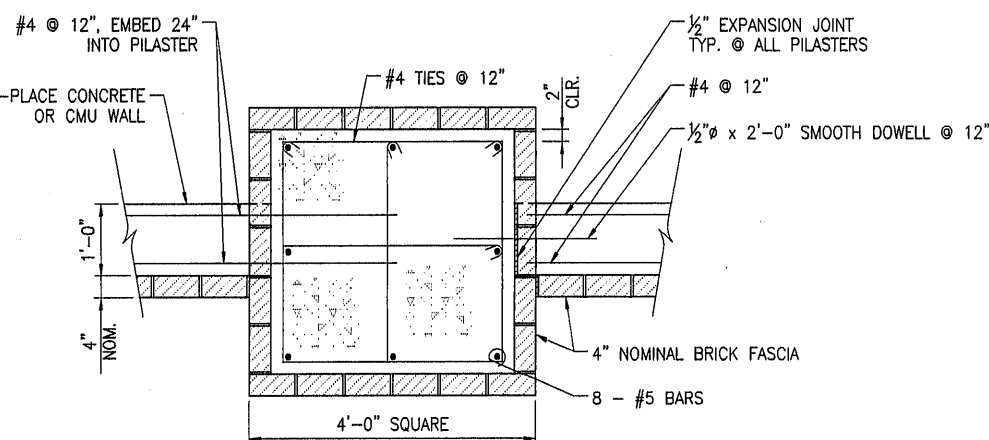


NOTE: SEE PLAN FOR NO. AND LOCATION OF STEPS.
DETAILS FOR SINGLE STEP SIMILAR.

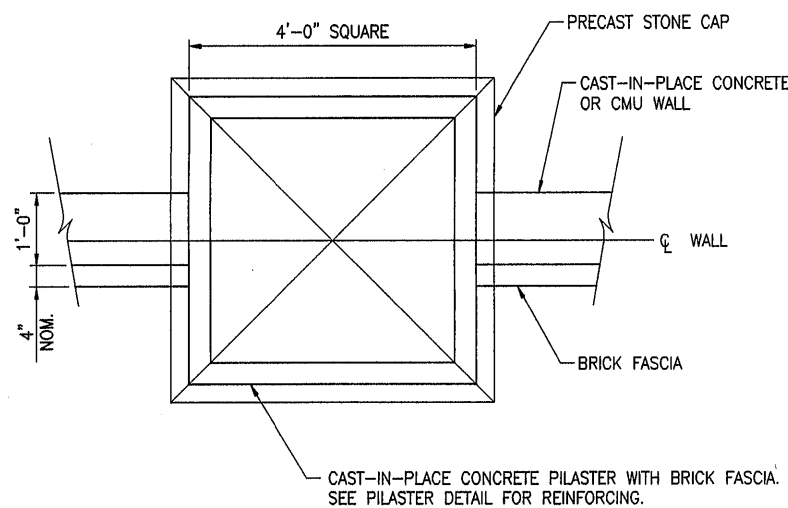
2
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TYPICAL FOOTING STEP DETAIL
NOT TO SCALE



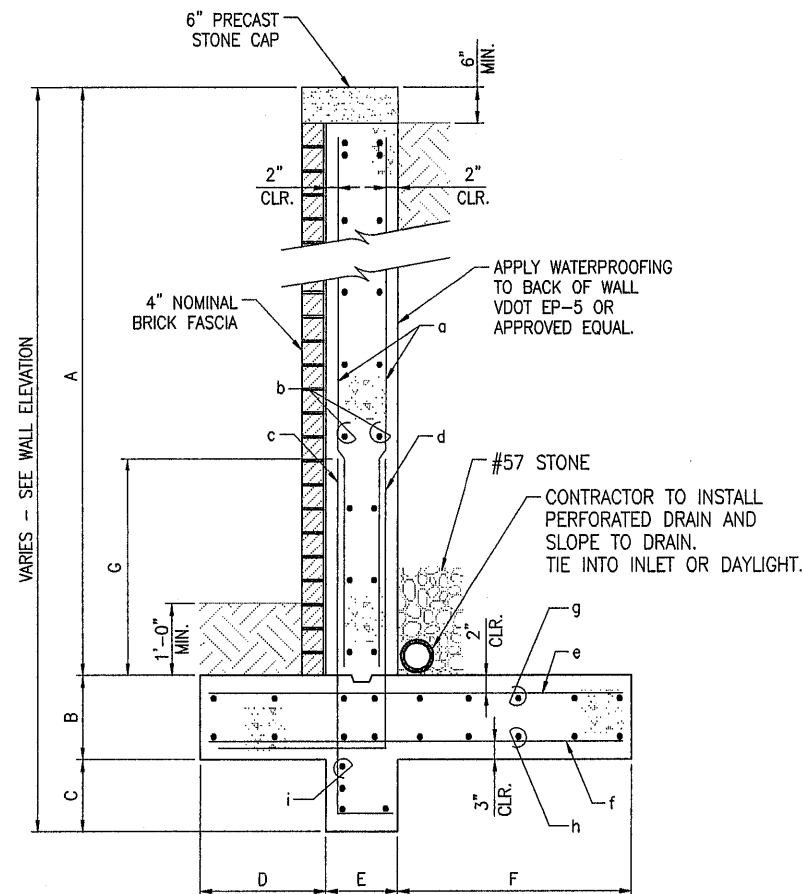
4
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PILASTER FOOTING DETAIL
SCALE: 3/4" = 1'-0"



3
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PILASTER DETAIL
SCALE: 3/4" = 1'-0"

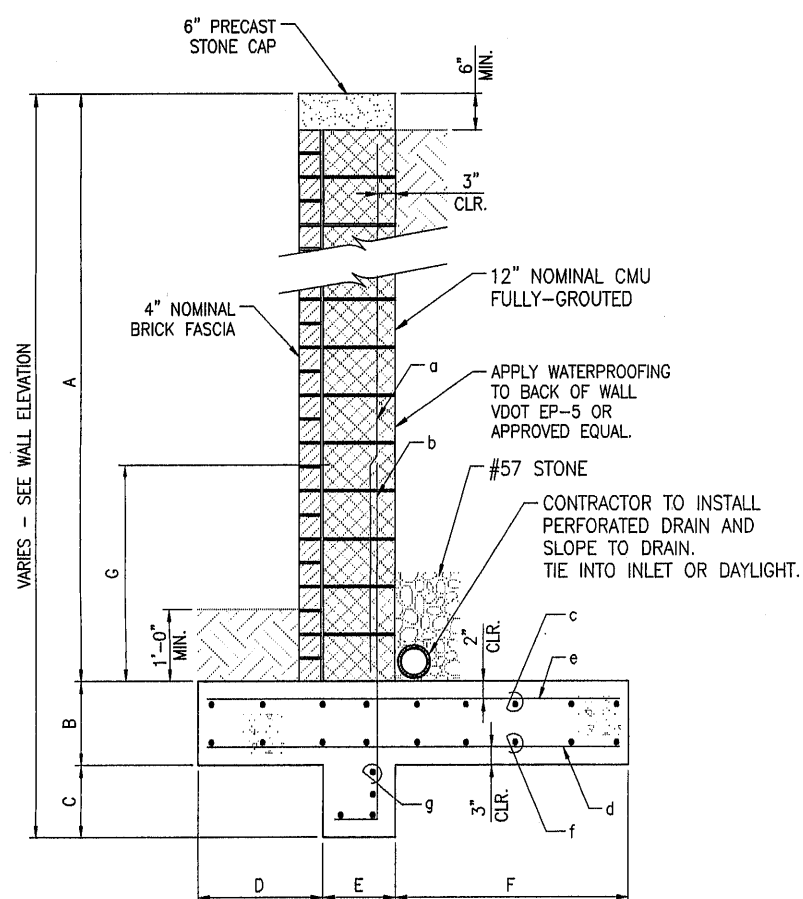


5
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PARTIAL WALL PLAN
SCALE: 3/4" = 1'-0"



NOTE: SECTION SHOWN IS FOR CAST-IN-PLACE WALL OPTION.

6
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OPTION 1: WALL SECTION 1.1
SCALE: 3/4" = 1'-0"



NOTE: SECTION SHOWN IS FOR CMU WALL OPTION.

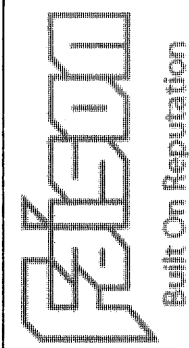
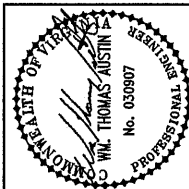
7
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OPTION 2: WALL SECTION 1.1
SCALE: 3/4" = 1'-0"

OPTION 1 WALL SCHEDULE/CAST-IN PLACE CONCRETE

DIMENSIONS							REINFORCING						
A	B	C	D	E	F	G	a	b	c	d	e	f	g
8' TO 12'	1'-2"	3'-0"	2'-0"	1'-0"	5'-6"	3'-6"	#4 @ 6"	#4 @ 12"	#4 @ 6"	#6 @ 6"	#6 @ 12"	#5 @ 12"	#5 @ 12"
4' TO 8'	1'-2"	1'-6"	1'-0"	1'-0"	3'-6"	3'-6"	#4 @ 12"	#4 @ 12"	#4 @ 12"	#6 @ 12"	#5 @ 12"	#4 @ 12"	#4 @ 12"
0' TO 4'	1'-2"	1'-0"	0'-6"	1'-0"	1'-6"	N/A	#4 @ 12"	#4 @ 12"	#4 @ 12"	#4 @ 12"	#4 @ 12"	#4 @ 12"	#4 @ 12"

OPTION 2 WALL SCHEDULE/CONCRETE MASONRY BLOCK

DIMENSIONS							REINFORCING						
A	B	C	D	E	F	G	a	b	c	d	e	f	g
4' TO 6'	1'-2"	1'-6"	1'-0"	1'-0"	3'-6"	3'-6"	#4 @ 8"	#6 @ 8"	#5 @ 12"	#4 @ 12"	#4 @ 12"	#4 @ 12"	4-#4 BARS
0' TO 4'	1'-2"	1'-0"	0'-6"	1'-0"	1'-6"	N/A	#4 @ 24"	#4 @ 24"	#4 @ 12"	#4 @ 12"	#4 @ 12"	#4 @ 12"	4-#4 BARS



Revisions	Date

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THE HOME DEPOT - SITE DEVELOPMENT PLANS
FRANKLIN ROAD AND VALLEY AVENUE
DETAILS AND SECTIONS
WALLS 'A' AND 'B'
CITY OF ROANOKE, VIRGINIA

Vertical Scale: N/A

Horizontal Scale: AS SHOWN

Commission No. 2358-A

Sheet No.:

C-12A