



GILES-FLYTHE ENGINEERS
 7334 CHAPEL HILL RD., SUITE 200
 RALEIGH, NC 27607 (919) 465-3801
 NC LICENSE NO. C-2871

CONCRETE RETAINING WALLS

DATE: 8/20/2020
 SHEET: S2.0
 SCALE: 1/4" = 1'-0"

JARCO SUPPLY
 30 JARCO DRIVE
 FUQUAY VARINA, NC

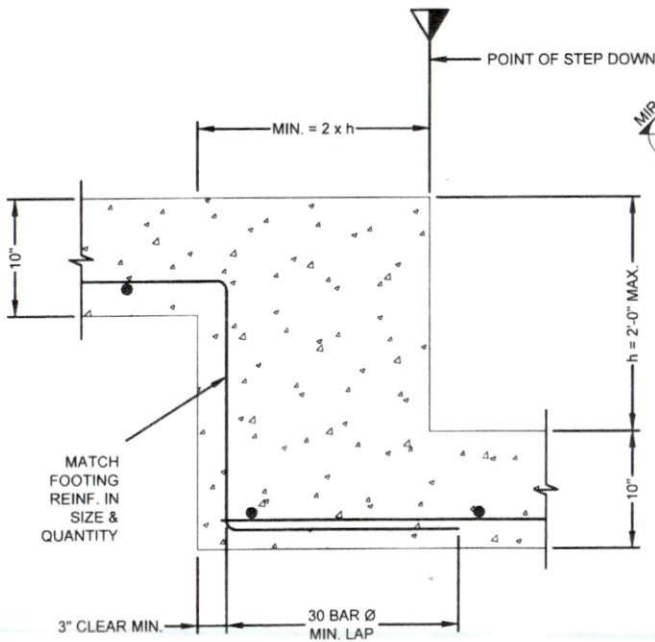


TYPICAL ABBREVIATIONS

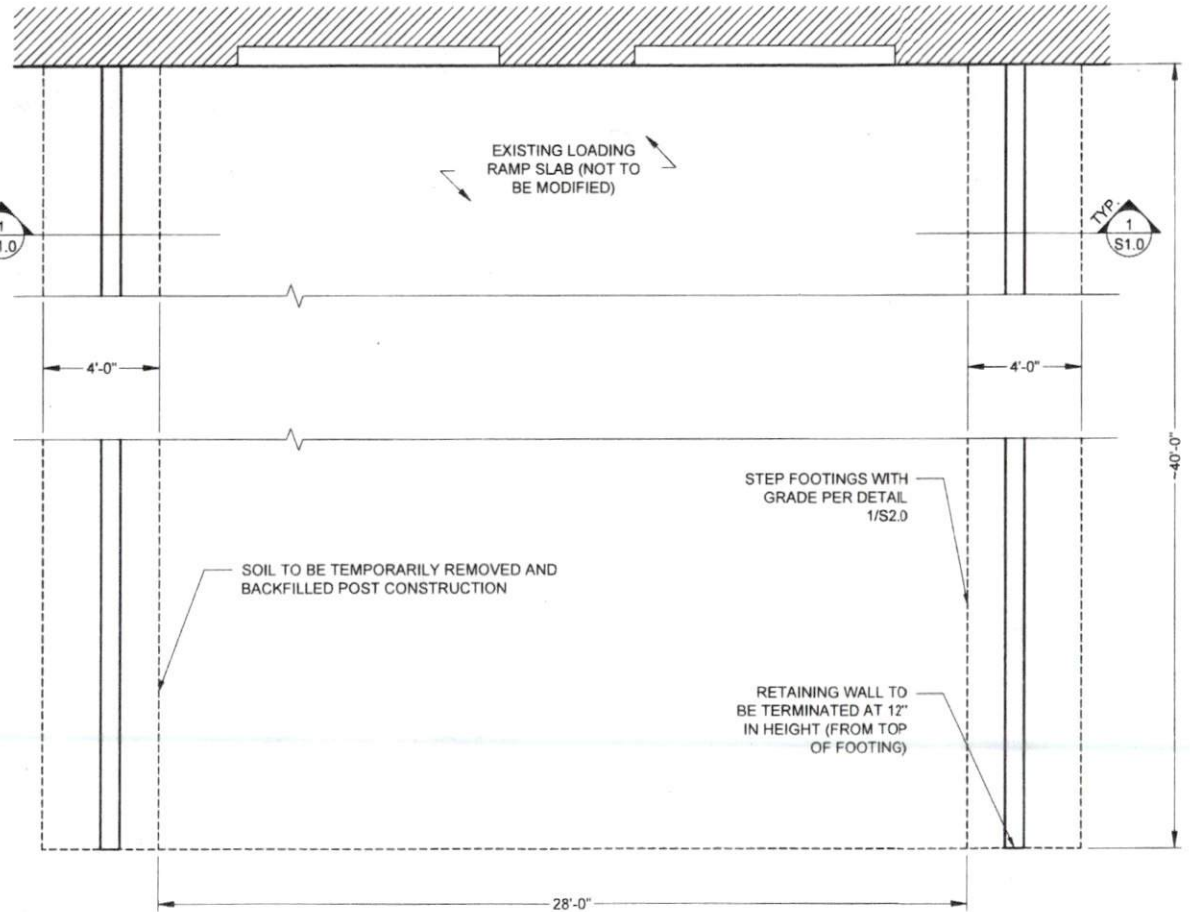
&	= AND	ENGR.	= ENGINEER
@	= AT	E.C.S.	= EDGE OF SLAB
±	= PLUS OR MINUS	MAX.	= MAXIMUM
ARCH.	= ARCHITECTURAL	MIN.	= MINIMUM
B.O.	= BY OTHERS	N.T.S.	= NOT TO SCALE
CONT.	= CONTINUOUS	O.C.	= ON CENTER
C.C.	= CONCRETE COVER	TYP.	= TYPICAL
CONC.	= CONCRETE	U.N.O.	= UNLESS NOTED OTHERWISE
		W/	= WITH

SITE PLAN

1/4" = 1'-0"



1 TYP. FOOTING STEP
 S2.0 SCALE: N.T.S.





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GENERAL NOTES

1. CONTRACTORS ASSUME ALL RESPONSIBILITY FOR DEVIATING FROM DEPICTED OR IMPLIED STRUCTURAL INFORMATION. STRUCTURAL ENGINEER/ ARCHITECT MUST BE NOTIFIED IMMEDIATELY ABOUT ALTERNATE CONSTRUCTION OR PROBLEM AREAS BEFORE PROCEEDING.
2. ALL CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL COMPLY WITH THE 2018 NORTH CAROLINA BUILDING CODES AND LOCAL REGULATIONS.
3. ONLY SEALED DRAWINGS WITH MOST RECENT REVISIONS ARE APPLICABLE FOR CONSTRUCTION.
4. DO NOT SCALE DRAWINGS. CONTRACTOR MUST CONTACT ARCHITECT/ENGINEER FOR QUERIES ON NON-LABELED ITEMS.
5. OWNER OR BUILDER IS RESPONSIBLE FOR SOIL BEARING CAPACITY, MIN. VALUE ASSUMED IS 2000 PSF.
6. STRUCTURAL PLANS DO NOT INCORPORATE ADA, PLUMBING, MECHANICAL, ELECTRICAL, OR SITE FEATURES (I.E. WATERPROOFING). ENGINEER'S SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY.
7. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS. IF ANY DISCREPANCY IS NOTICED, IT SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER AND WORK SHALL NOT COMMENCE UNTIL INSTRUCTIONS ARE RECEIVED FROM THE ENGINEER.
8. THE STRUCTURE SHOWN ON THESE DRAWINGS IS STRUCTURALLY SOUND IN ITS COMPLETED FORM ONLY. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BRACING TO STABILIZE THE ADJACENT STRUCTURES DURING CONSTRUCTION.

DESIGN LOAD SPECIFICATIONS

1. PAVEMENTS & RAMP SLABS: NORTH CAROLINA GENERAL STATUE §20-118
 80,000-LB MAX TOTAL TRUCK LOAD
 32,000-LB MAX SINGLE-AXLE LOAD
 38,000-LB MAX TANDEM-AXLE LOAD

FOOTINGS AND FOUNDATION

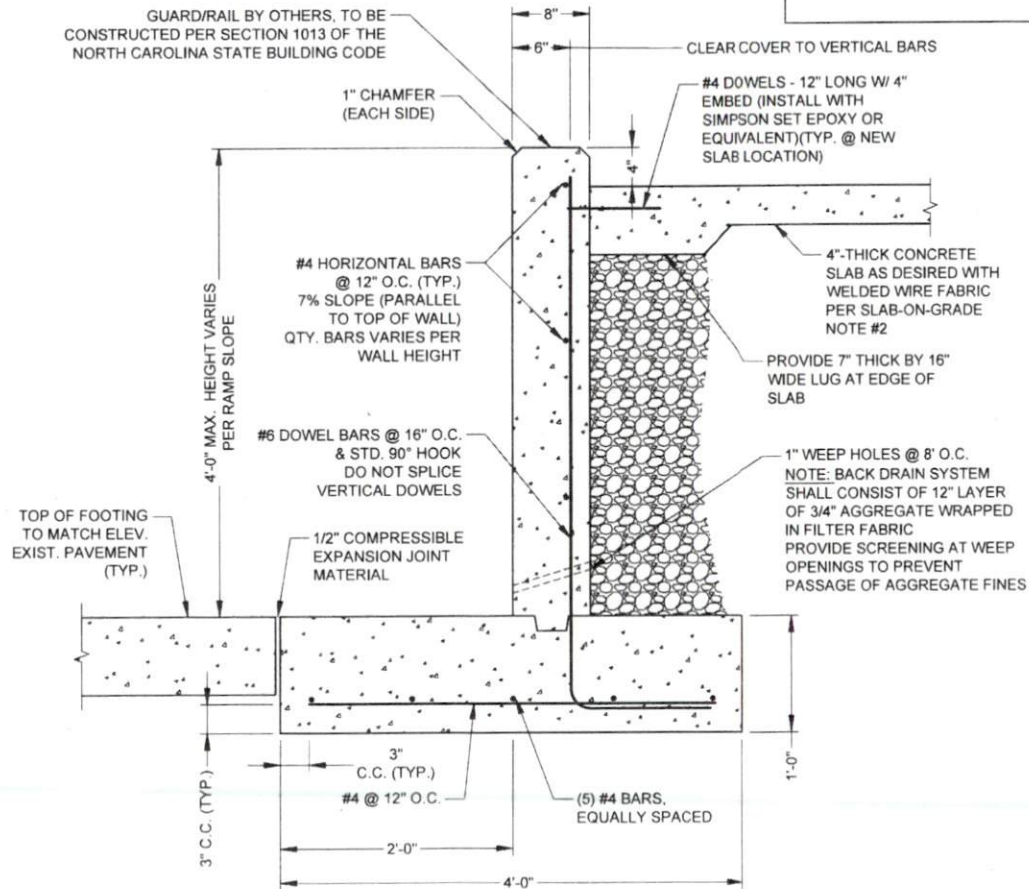
1. MINIMUM 28 DAY CONCRETE STRENGTH = 4000 PSI.
2. ALL FILL SHALL BE PLACED IN 8" MAXIMUM LOOSE LIFTS AND SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D-698 (STANDARD PROCTOR METHOD). THIS REQUIREMENT SHALL BE INCREASED TO 98 PERCENT OF ASTM D-698 IN THE FINAL FOOT BENEATH FLOOR SLABS AND PAVEMENTS.

REINFORCING

1. ALL DETAILING, FABRICATION AND PLACING OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE LATEST "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," ACI 315.
2. CLEAR CONCRETE COVER OVER BARS SHALL BE 3" FOR FOOTINGS AND OTHER CONCRETE CAST AGAINST GROUND.
3. PROVIDE CORNER BARS AT ALL FOOTING STEPS AND CORNERS. THE REINFORCING BARS SHALL BE A MINIMUM OF 2'-6" LONG AND SHALL HAVE THE SAME SIZE AND SPACING AS THE HORIZONTAL REINFORCING.
4. LAP ALL SPLICES IN CONCRETE AS SPECIFICALLY CALLED FOR. BUT AT LEAST 48 BAR DIAMETERS FOR TENSION OR COMPRESSION. UNLESS NOTED OTHERWISE.

SLAB-ON-GRADE CONSTRUCTION:

1. SUPPORT THE 6 X 6 - W1.4 X W1.4 WELDED WIRE MESH AS REQUIRED TO INSURE THAT IT WILL BE LOCATED 1" FROM THE TOP OF SLAB.
2. CONCRETE STRENGTH SHALL BE 4000 PSI AT 28 DAYS. USE A MID-RANGE WATER REDUCING ADMIXTURE TO REDUCE WATER, INCREASE WORKABILITY AND DECREASE SHRINKAGE CRACKS. THE MAXIMUM W/C RATIO SHALL BE 0.44 AND THE MAXIMUM SLUMP SHALL BE 3" PRIOR TO THE ADDITION OF WATER REDUCING ADMIXTURE.
3. EXTERIOR SLABS SHALL HAVE 5% ± 1% AIR ENTRAINMENT.
4. PAVEMENT SLABS SHALL HAVE CONTRACTION JOINTS INSTALLED PER ACI 360. MAXIMUM SPACING OF CONTRACTION JOINTS SHALL BE 15-FEET. DEPTH OF CONTRACTION JOINTS SHALL BE MINIMUM 1/4 THICKNESS OF SLAB.
5. ENGINEERED STRUCTURAL FILL SOILS BELOW NEW PAVEMENT SLABS SHALL CONSIST OF CRUSHED GRAVEL MEETING THE SPECIFICATIONS OF "AGGREGATE BASE COURSE" STONE AS SPECIFIED BY THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION.



1 TYP. RETAINING WALL SECTION
 S1.0 SCALE: N.T.S.