GENERAL NOTES

1. GENERAL:
   A. APPLICABLE STRUCTURAL CODE: NORTH CAROLINA BUILDING CODE - 2018 EDITION (BASED ON THE 2015 IBC), IN CONJUNCTION WITH ASCE 7-10 AND LOCAL AMENDMENTS.
   B. THE STRUCTURAL CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. EXCEPT WHERE NOTED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. THE STRUCTURAL ENGINEER OF RECORD SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES FOR PROCEDURE OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENT THERETO (NOR SHALL OBSERVATION VISITS TO THE SITE INCLUDE INSPECTION OF THESE ITEMS).
   C. WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE REFERENCED EDITION AND/OR ADDENDA. ANY ENGINEERING DESIGN, PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW, SHALL BEAR THE SEAL OF A REGISTERED ENGINEER RECOGNIZED BY THE BUILDING CODE JURISDICTION OF THIS PROJECT.
   D. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPENCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES AND SPECIFICATIONS, THE GREATER REQUIREMENTS SHALL GOVERN.
   E. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH CIVIL, ARCHITECTURAL, MECHANICAL, PLUMBING, FIRE SPRINKLER, AND ELECTRICAL DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL REQUIREMENTS INTO THE SHOP DRAWINGS AND CONSTRUCTION.
   F. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
   G. CONNECTIONS OF ALL ITEMS SUPPORTED BY THE STRUCTURE ARE THE RESPONSIBILITY OF THE DISCIPLINES WHO ARE MAKING THESE ATTACHMENTS. THESE ATTACHMENTS SHALL BE DESIGNED TO RESIST ALL GRAVITY, WIND, WIND UPLIFT, THERMAL LOADS, ETC.
   H. WHERE A DETAIL, TYPICAL DETAIL, SECTION, TYPICAL SECTION OR A NOTE IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
   I. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS & FIELD CONDITIONS. BUILDING DIMENSIONS AND ELEVATIONS, WHERE SHOWN, WERE PROVIDED BY THE ARCHITECT AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND COORDINATE ALL DIMENSIONS PRIOR TO PROCEEDING WITH THE WORK. ANY DISCREPANCIES SHALL BE RESOLVED THROUGH THE ARCHITECT. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, CIVIL MECHANICAL, PLUMBING AND ELECTRICAL ITEMS WITH THE APPROPRIATE TRADE DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION.
   J. ENGINEER'S REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC. DOES NOT RELIEVE THE CONTRACTOR FROM MEETING THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY SPECIFIC DEVIATIONS AND OBTAIN ENGINEER'S WRITTEN APPROVAL FOR THE SPECIFIC DEVIATION.
   K. UNLESS NOTED, SUBMIT SHOP DRAWINGS OF ALL FABRICATED MATERIALS FOR REVIEW. DESIGN DRAWINGS SHALL NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS. SHOP DRAWINGS WILL NOT BE REVIEWED UNLESS THEY WERE CHECKED, BEAR THE INITIAL OF THE CHECKER AND ARE STAMPED "APPROVED" BY THE GENERAL CONTRACTOR.
   L. ALL REQUIRED TESTING REPORTS SHALL BE AVAILABLE AT THE JOB SITE.
   M. JOHNSTON BURKHOLDER ASSOCIATES, LLC, ITS EMPLOYEES, AND REPRESENTATIVES SHALL NOT BE RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS AND METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH CONSTRUCTION; NOR WILL THEY BE RESPONSIBLE FOR ANY FAILURE BY THE CONTRACTOR TO PERFORM OR COMPLETE CONSTRUCTION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. JOBSITE VISITS BY JOHNSTON BURKHOLDER ASSOCIATES, LLC SHALL NOT CONSTITUTE APPROVAL, AWARENESS, OR LIABILITY FOR ANY HAZARDOUS CONDITIONS.

2. DESIGN CRITERIA:
   A. DEAD LOADS
      - ROOF = N/A
   B. LIVE LOADS
      - ROOF = N/A
   C. RISK CATEGORY = II
   D. SNOW LOADS
      1. GROUND SNOW LOAD = 10 PSF
   E. WIND LOADS
      1. CODE MINIMUM ULTIMATE WIND SPEED = 120 MPH
      2. WIND LOAD IMPORTANCE FACTOR = 1.0
      3. WIND EXPOSURE CATEGORY = C FOR MAIN WIND FORCE-RESISTING SYSTEM
      4. WIND EXPOSURE CATEGORY = C FOR COMPONENTS AND CLADDING
   F. SEISMIC LOADS
      1. SEISMIC IMPORTANCE FACTOR, I = 1.0
      2. MAPPED SPECTRAL RESPONSE ACCELERATIONS
      - Ss = 0.182
      - S1 = 0.086
      3. SITE CLASS = D
      4. DESIGN SPECTRAL RESPONSE PARAMETERS
      - Sds = 0.195
      - Sd1 = 0.137
      5. SEISMIC DESIGN CATEGORY = C
   G. DESIGN LOAD COMBINATIONS (ASD)
      1. D
      2. D + (Lr OR S OR R)
      3. D + (0.6W OR 0.7E)
      4. D + 0.75(Lr OR S OR R) + 0.75(0.6W OR 0.7E)
      5. 0.6D + 0.6W
      6. 0.6D + 0.7E
      STRESS INCREASES: INCREASES IN ALLOWABLE STRESSES SPECIFIED IN THE APPROPRIATE MATERIAL CHAPTER OR THE REFERENCED STANDARDS SHALL NOT BE USED WITH THE LOAD COMBINATIONS, EXCEPT THAT A DURATION OF LOAD INCREASE SHALL BE PERMITTED IN ACCORDANCE WITH CHAPTER 23.

3. SHALLOW FOUNDATIONS AND BUILDING PAD:
   A. IT SHALL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE FOLLOWING BEARING CAPACITIES. ALL FOUNDATIONS ARE DESIGNED TO BEAR ON NATURALLY OCCURRING SOILS OR ENGINEERED FILL CAPABLE OF SAFELY SUSTAINING 2500 PSF MINIMUM NET ALLOWABLE BEARING PRESSURE AT A DEPTH OF 12 INCHES BELOW GRADE.
   B. A SITE INVESTIGATION AND GEOTECHNICAL REPORT WAS PREPARED BY UNIVERSAL ENGINEERING SCIENCES, DATED JULY 30, 2025. THE CONTRACTOR SHALL READ AND BECOME FAMILIAR WITH THE REPORT PRIOR TO BIDDING. ALL SITE WORK SHALL CONFORM TO SOILS REPORT AND/OR SPECIFICATIONS.
   C. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REPORT ADVERSE SOIL CONDITIONS.
   D. THE SITE SHALL BE PREPARED UNIFORMLY IN ACCORDANCE WITH CIVIL DRAWINGS.
   E. WHERE FILL IS REQUIRED IT SHALL BE PLACED IN ACCORDANCE WITH RECOMMENDATIONS AND UNDER THE OBSERVATION OF A QUALIFIED GEOTECHNICAL ENGINEER.
   F. FOOTING ELEVATIONS GIVEN ARE FOR PURPOSE OF CONTRACT AND SHALL BE ADJUSTED (LOWERED) AT TIME OF EXCAVATION TO MEET SOIL CONDITIONS. ENGINEER SHOULD BE CONSULTED.
   G. THE CONTRACTOR SHALL BRING TO THE ATTENTION OF THE ARCHITECT THE LOCATION OF EXISTING UTILITIES AND PROCEED WITH THE WORK ONLY AFTER WRITTEN APPROVAL FROM THE ARCHITECT.
   H. EXCAVATIONS FOR CONTINUOUS FOOTINGS SHALL BE MADE TRUE TO LINE AND GRADE. THE SIDES OF THE FOOTINGS SHALL BE FORMED, EXCEPT WHERE SOIL CONDITIONS ARE SUCH THAT THE SIDES OF THE EXCAVATION STAND FIRM AND SQUARE. EXCAVATIONS SHALL BE MADE TO FIRM, CLEAN BEARING SOIL.
   I. EXCAVATIONS FOR FOOTINGS AND FOUNDATIONS, WHICH ARE TO SERVE AS FORMS, SHALL BE THOROUGHLY WET PRIOR TO PLACING CONCRETE.

4. CONCRETE:
   A. CONCRETE SHALL CONFORM WITH ACI BUILDING CODE (ACI-318) AND SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH, AND DENSITY, AND WATER/CEMENT IN ACCORDANCE WITH THE FOLLOWING:

LOCATION	STRENGTH, PSI	DENSITY, PCF	MAX W/C RATIO
EXTERIOR SLABS	3000	145	0.55
FOUNDATIONS	3000	145	0.55
ALL OTHER CONCRETE (UNO)	3000	145	0.55

   NOTE: DESIGN STRENGTH BASED ON 2,500 PSI CONCRETE
   B. UNLESS NOTED, CEMENT SHALL CONFORM TO ASTM C150, TYPE I OR II. AGGREGATES SHALL BE NORMAL WEIGHT CONFORMING TO ASTM C33. ADMIXTURES CONTAINING CHLORIDES SHALL NOT BE USED.
   C. CONCRETE EXPOSED TO WEATHER (I.E., EXPOSED EXTERIOR SLABS, CONCRETE WALLS, RETAINING WALLS, ETC.) SHALL BE AIR-ENTRAINED IN ACCORDANCE WITH ACI 318.
   D. UNLESS NOTED, MAXIMUM SLUMP FOR CONCRETE SHALL BE 4 INCHES (PLUS OR MINUS ONE INCH) AT POINT OF PLACEMENT. WHERE APPROVED BY THE ENGINEER OF RECORD, LARGER SLUMP IS PERMITTED WITH THE ADDITION OF HIGH RANGE WATER REDUCING ADMIXTURE.
   E. CONCRETE CURING SHALL COMPLY WITH ACI 308. CURING PROCESS SHALL START IMMEDIATELY FOLLOWING INITIAL SET. CONCRETE SHALL BE MAINTAINED IN MOIST CONDITION FOR AT LEAST 7 DAYS AFTER PLACEMENT UNLESS PROVISIONS OF ACI-318 ARE FOLLOWED.
   F. HOT WEATHER CONCRETING: SPECIAL PRECAUTIONS RECOMMENDED BY ACI 305 SHALL BE TAKEN WHEN THE AMBIENT TEMPERATURE IS ABOVE 80 DEGREES FAHRENHEIT OR WHEN MAXIMUM RATE OF EVAPORATION IN THE CONCRETE EXCEEDS 0.2 LBS/FT²/HR. THIS RATE IS AFFECTED BY AIR TEMPERATURE, RELATIVE HUMIDITY, CONCRETE TEMPERATURE AND WIND VELOCITY. AFTER FINISHING CONCRETE, USE LIGHT FOG SPRAY UNTIL CURING COMPOUND IS USED, OR WET CURING METHOD IS IMPLEMENTED.
   G. COLD WEATHER CONCRETING: WHEN, FOR MORE THAN THREE (3) CONSECUTIVE DAYS, THE MEAN DAILY TEMPERATURE DROPS BELOW 40 DEGREES FAHRENHEIT, SPECIAL MATERIALS AND PROCEDURES SHALL BE PROVIDED DURING PLACING AND CURING OF CONCRETE PER ACI 306.

5. REINFORCING STEEL:
   A. REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60 (U.N.) AND GRADE 40 FOR #3 AND SMALLER BARS. GRADE 60 REINFORCING MAY NOT BE RE-BENT OR FIELD BENT WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.
   B. REINFORCING THAT IS WELDED SHALL BE WELDABLE TYPE, ASTM A-706.
   C. NO TACK WELDING OF REINFORCING IN THE FIELD WILL BE PERMITTED.
   D. ALL DETAILING, FABRICATION AND PLACING OR REINFORCING BARS, UNLESS OTHERWISE NOTED, SHALL CONFORM TO ACI 318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" AND THE LATEST ACI "MANUAL OF STANDARD PRACTICE FOR DETAIL REINFORCED CONCRETE STRUCTURES".
   E. MINIMUM LAP SPLICE AND TENSION DEVELOPMENT DIMENSION TABLE BASED ON 3000 PSI NORMAL WEIGHT CONCRETE, Fy = 60 KSI, NON-COATED BARS, LAP CLASS B, WITH 3" MIN CLR:

BAR	TOP BAR SPLICE	DEVELOPMENT	BAR	OTHER BAR SPLICE	DEVELOPMENT
#3	21"	16"	#3	16"	12"
#4	23"	18"	#4	18"	14"
#5	28"	22"	#5	22"	17"
#6	34"	26"	#6	26"	20"

   WHEN LAPPING TWO DIFFERENT SIZE BARS, USE THE LAP DIMENSION OF THE SMALLER BAR OR THE ANCHORAGE DIMENSION OF THE LARGER BAR. USE WHICHEVER DIMENSION IS LARGER.
   F. MINIMUM CONCRETE COVER FOR REINFORCING
   CONCRETE REINFORCING SHALL BE PLACED PER THE TOLERANCES OF ACI 117 AND ACI 318

LOCATION	MINIMUM COVER
FOOTINGS, GRADE BEAMS AND SLABS	
CAST AGAINST & PERMANENTLY EXPOSED TO EARTH	3"
SLABS ON GRADE	MID-DEPTH
INTERIOR SLABS AND STAIRS	1"
EXTERIOR SLABS AND STAIRS #5 AND SMALLER	1 1/2"
EXTERIOR SLABS AND STAIRS #6 AND LARGER	2"
WALLS INTERIOR FACE	1"
WALLS INTERIOR FACE #5 AND SMALLER	1 1/2"
WALLS INTERIOR FACE #6 AND LARGER	2"

   *VERIFY W/ ENVIRONMENTAL CONDITIONS PER ACI 318, CHAPTER 19.

6. SLABS:
   A. MAXIMUM SLUMP WITHOUT A PLASTICIZER AT POINT OF PLACEMENT SHALL BE 5 INCHES. MIX DESIGNS SHALL TAKE CARE TO PROVIDE THE LARGEST POSSIBLE SIZE OF COARSE AGGREGATE WHILE MAINTAINING CONCRETE WORKABILITY. NOMINAL MAXIMUM AGGREGATE SIZE SHALL NOT BE LESS THAN 3/4 INCH NOR MORE THAN 1/3 THE DEPTH OF THE SLAB.
   B. REF ARCHITECTURAL AND CIVIL DRAWINGS FOR SIDEWALKS, EXTERIOR SLABS, AND ELEVATIONS.

7. CONCRETE MASONRY:
   A. ALL MASONRY CONSTRUCTION SHALL BE PER REFERENCED ACI 530/530.1 AND TMS 402/602, BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES.
   B. CONCRETE MASONRY ASSEMBLY SHALL HAVE A NET COMPRESSIVE STRENGTH OF f'm = 2,000 PSI AND BE COMPRISED OF THE FOLLOWING COMPONENTS: MEDIUM WEIGHT, HOLLOW CONCRETE MASONRY UNITS PER ASTM C90 WITH A NET COMPRESSIVE STRENGTH OF 2,000 PSI. MORTAR SHALL BE TYPE S PER ASTM C270 WITH A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI GROUT SHALL BE PER ASTM C476 WITH A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI. DETERMINATION OF COMPRESSIVE STRENGTH FOR EACH CONCRETE MASONRY ASSEMBLY SHALL BE PER THE UNIT STRENGTH METHOD OR THE PRISM TEST METHOD PER TMS 602. PRISIM TESTING IS NOT REQUIRED IF THE UNIT STRENGTH METHOD IS USED.
   C. UNLESS NOTED, LAY MASONRY IN RUNNING BOND. USE TWO (2) CELL UNITS, OPEN BOTTOM AND 2 1/2" MIN RECESSED TOP WEB BOND BEAM UNITS WITH METAL LATH WHERE REQUIRED. USE CLOSED END UNITS AT CORNERS, OPENINGS AND END WALLS.
   D. CONCRETE MASONRY UNITS SHALL BE CUT BELOW CONCRETE BEAMS OR BOND BEAMS AS REQUIRED IN ORDER TO GET CONTINUOUS BEAM OR BOND BEAM AT THE PROPER ELEVATION.
   E. HORIZONTAL BEAMS, BOND BEAMS AND REINFORCING SHALL BE DISCONTINUOUS AT CONTROL JOINTS.
   F. UNLESS NOTED, CONTROL JOINT SHALL NOT BE LOCATED AT A WALL OPENING. LOCATION SHALL CONFORM TO THE FOLLOWING CRITERIA:
      1. MAXIMUM WALL CONTROL JOINT SPACING 16'-0" (UNO).
      2. MINIMUM DISTANCE FROM EDGE OF OPENING TO WALL JOINT SHALL BE EQUAL TO THE JAMB WIDTH SHOWN ON THE JAMB SCHEDULE.
      3. WHERE POSSIBLE, LOCATE WALL JOINTS WHERE WALL HEIGHT CHANGES.
      4. WHERE POSSIBLE, MAXIMUM RATIO OF WALL JOINT SPACING TO WALL HEIGHT SHALL BE 2:1
   G. UNLESS NOTED, DO NOT WET CONCRETE MASONRY UNITS BEFORE LAYING.
   H. UNLESS NOTED, VERTICAL AND HORIZONTAL REINFORCING, TIES AND EMBEDDED ITEMS SHALL BE IN PLACE PRIOR TO GROUTING. USE POSITIONERS TO HOLD VERTICAL REINFORCING IN PLACE. SPACING OF POSITIONERS SHALL NOT EXCEED 200 BAR DIAMETERS. UNLESS NOTED. VERTICAL AND HORIZONTAL REINFORCING LAP SPLICE SHALL BE AS FOLLOWS BUT NOT LESS THAN 12":

BAR SIZE	LOCATION	LAP
#3 & #4	CENTER OF WALL	15"
#5	CENTER OF WALL	23"
#5	EDGE (2" CLR)	35"
#6	CENTER OF WALL	33"
#6	EDGE (2" CLR)	50"

      * TABLE BASED ON 8" CMU, F'm = 1900 PSI AND Fy = 60 KSI BARS.
   I. JOINT REINFORCING - TRUSS TYPE, 9 GAUGE SPACED VERTICALLY AT 8" BELOW SLAB AND AT 16" UNLESS NOTED OTHERWISE AND CONFORM TO ASTM A82.
   J. PROVIDE JOINT REINFORCING ON TOP OF FIRST COURSE, 2 ROWS AT 8" AT TOP AND BOTTOM OF OPENINGS, (EXTEND 24" EACH SIDE) AND AT 8" AT BOND BEAMS.
   K. 16" DEEP BOND BEAMS MAY BE CONSTRUCTED OF 8" U BLOCK BELOW AND 8" STANDARD BLOCK ABOVE WITH BREAK AWAY (TOP PART) OF WEB.
   L. HORIZONTAL STEEL REINFORCING IN BOND BEAMS SHALL BE ANCHORED AROUND VERTICAL REINFORCING AT CORNERS AND ENDS OF WALLS AND AT ANY OTHER DISCONTINUITY IN LENGTH OF CMU WALL.
   M. CORNERS SHALL BE FULLY GROUTED WITH MINIMUM OF 1-#6 VERTICAL BAR AT (3) CORNER CELLS.
   N. FILL ALL CMU CELLS SOLID WITH GROUT FROM 1 BLOCK ABOVE THE HIGHEST GRADE DOWN TO THE TOP OF THE FOUNDATION.

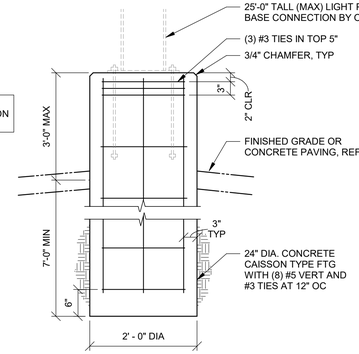
8. MASONRY MORTAR AND GROUT:
   A. PORTLAND CEMENT SHALL MEET ASTM C150 TYPE I OR III.
   B. UNLESS NOTED, MORTAR SHALL BE TYPE S (PROPERTY SPECIFICATIONS), CONFORMING TO ASTM C270. MIX MORTAR INGREDIENTS BETWEEN 3-5 MINUTES IN A MECHANICAL BATCH MIXER. MAINTAIN WORKABILITY BY REMIXING OR RETEMPERING. DISCARD ALL MORTAR WHICH HAS BEGUN TO STIFFEN OR IS NOT USED WITHIN 2-1/2 HOURS AFTER INITIAL MIXING.
   C. UNLESS NOTED, GROUT SHALL BE COARSE GROUT (PEA GRAVEL) WITH COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS. MAXIMUM DENSITY SHALL BE 105 PCF. GROUT SHALL CONFORM TO ASTM C476. SLUMP AT POINT OF PLACEMENT SHALL BE 9" ± 1". PLACE GROUT WITHIN 1-1/2 HOURS FROM INTRODUCING WATER INTO THE MIXTURE.
   D. ANY ADMIXTURES CONTAINING CHLORIDES SHALL NOT BE USED IN MORTAR NOR IN GROUT.
   E. MORTAR IN HOLLOW UNITS SHALL BE PLACED AS FOLLOWS:
      1. AT ALL FACE CELL JOINTS (HORIZONTAL).
      2. AT WEBS AT PIERS, COLUMNS, PILASTERS, STARTING COURSE AND AT EACH SIDE OF CELLS RECEIVING GROUT.
      3. AT HEAD JOINT (VERTICAL) EQUAL TO FACE SHELL THICKNESS.
      4. GROUTED CELLS SHALL BE ALIGNED WITHOUT OBSTRUCTIONS.
   F. MINIMUM CLEARANCE BETWEEN REINFORCING BAR AND FACE OF MASONRY SHALL BE 1/4" FOR FINE GROUT AND 1/2" FOR COARSE GROUT.
   G. REMOVE MORTAR PROTRUSIONS EXTENDING 1/2" OR MORE INTO CELLS RECEIVING GROUT. PROTRUSIONS SHALL NOT BE ALLOWED TO FALL INTO CELLS UNLESS CLEANOUTS ARE PROVIDED.
   H. MAXIMUM TOTAL GROUT POUR (MAY CONSIST OF SEVERAL GROUTING LIFTS) HEIGHT SHALL BE 12 FEET, WHERE GROUT POUR EXCEEDS FOUR (4) FEET, PROVIDE MINIMUM 3"X3" CLEANOUTS AT THE BOTTOM OF THE LIFT, ADJACENT TO VERTICAL BARS AND MAXIMUM 32" WHERE ALL CELLS ARE GROUTED. AFTER CLEANING, CLOSE CLEANOUTS WITH CLOSURES AND BRACE TO RESIST GROUT PRESSURE.
   I. GROUT SHALL BE PLACED IN MAXIMUM LIFTS (GROUTING INCREMENTS) OF FOUR (4) FEET.
   J. CONSOLIDATE GROUT POURS EXCEEDING 12" IN HEIGHT BY MECHANICAL VIBRATION AND RECONSOLIDATE BY MECHANICAL VIBRATION AFTER INITIAL WATER LOSS AND SETTLEMENT HAS OCCURRED AND PRIOR TO INITIAL STIFFENING OF GROUT.
   K. VERTICAL REINFORCING IN CONCRETE MASONRY SHALL BE DOWELED INTO THE FOUNDATION FLOOR AND EXTEND TO BOND BEAM AT TOP OF WALL.
   L. STOP GROUT POUR 1-1/2" BELOW MASONRY JOINT.
   M. ALL CELLS CONTAINING VERTICAL REINFORCING AND MASONRY BELOW GRADE AND SLAB ON GRADE SHALL BE GROUTED.
   N. THE TOP OF UNFINISHED MASONRY WORK SHALL BE COVERED TO PROTECT THE MASONRY FROM THE WEATHER.
   O. COLD WEATHER CONSTRUCTION: COLD WEATHER PROCEDURES AS REQUIRED BY TMS 602 SHALL BE IMPLEMENTED WHEN EITHER THE AMBIENT TEMPERATURE FALLS BELOW 40 DEGREES FAHRENHEIT OR TEMPERATURE OF MASONRY UNITS IS BELOW 40 DEGREES FAHRENHEIT.
   P. HOT WEATHER CONSTRUCTION: HOT WEATHER PROCEDURES AS REQUIRED BY TMS 602 SHALL BE IMPLEMENTED WHEN EITHER OF THE FOLLOWING CONDITIONS EXIST:
      1. THE AMBIENT TEMPERATURE EQUALS OR EXCEEDS 100 DEGREES FAHRENHEIT.
      2. THE AMBIENT TEMPERATURE EQUALS OR EXCEEDS 90 DEGREES FAHRENHEIT WITH A WIND VELOCITY GREATER THAN 8 M.P.H.
   Q. QUALITY CONTROL TESTING DURING CONSTRUCTION:
      1. THE OWNER SHALL EMPLOY A TESTING LABORATORY TO PERFORM TESTS AND TO SUBMIT TEST REPORTS.
      2. SAMPLING AND TESTING FOR QUALITY CONTROL DURING PLACEMENT OF MASONRY SHALL, AT A MINIMUM, INCLUDE THE FOLLOWING:
      a. AT THE BEGINNING OF CMU CONSTRUCTION, ONE CMU UNIT AND ONE GROUT SAMPLE SHALL BE TAKEN FOR TESTING. MASONRY UNITS SHALL BE TESTED IN ACCORDANCE WITH ASTM C140 AND GROUT TESTED IN ACCORDANCE WITH ASTM C1019.
      b. DURING CONSTRUCTION, ONE CMU UNIT AND ONE GROUT SAMPLE SHALL BE TAKEN FOR EVERY 2,500 SQUARE FEET OF WALL.
      c. MASONRY MORTAR SAMPLES SHALL OCCUR AT THE BEGINNING OF MASONRY CONSTRUCTION AND DURING CONSTRUCTION AT LEAST ONCE FOR EVERY 1,250 SQUARE FEET OF WALL CONSTRUCTED.

MASONRY SPECIAL INSPECTIONS (2018 NCBC)

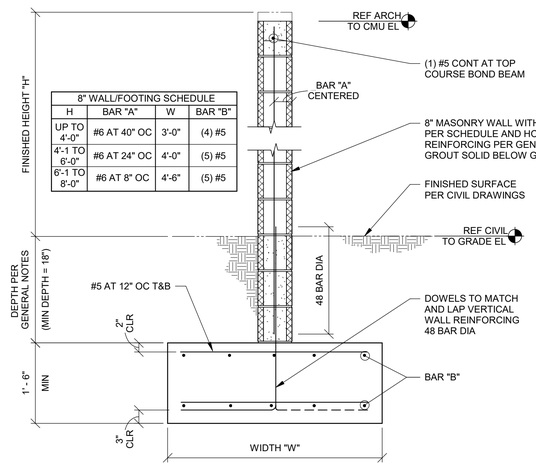
MASONRY CONSTRUCTION (2018 NCBC 1705.4 AND ACI 530/530.1-13):

VERIFICATION AND INSPECTION (LEVEL B)	FREQUENCY	REFERENCED STANDARD
1. PRIOR TO MASONRY CONSTRUCTION, THE FOLLOWING TASKS SHALL BE VERIFIED TO ENSURE COMPLIANCE::		
A. COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED SUBMITTALS SHALL BE VERIFIED.	-	ACI 530.1: ART. 1.5
B. VERIFICATION OF f'_m PRIOR TO CONSTRUCTION EXCEPT WHERE SPECIFICALLY EXEMPTED BY THE IBC.	-	ACI 530.1: ART. 1.4B
C. PROPORTIONS OF SITE-PREPARED MORTAR.	PERIODIC	ACI 530.1: ART. 2.1, 2.6A
D. GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHORS.	PERIODIC	ACI 530: SEC. 6.1 ACI 530.1: ART. 2.4, 3.4
2. PRIOR TO GROUTING, THE FOLLOWING TASKS SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. GROUT SPACE.	PERIODIC	ACI 530.1: ART. 3.2D, 3.2F
B. PLACEMENT OF VERTICAL AND HORIZONTAL REINFORCEMENT SHALL BE OBSERVED PRIOR TO GROUT POUR AT LEAST ONCE FOR EVERY 1,250 SQUARE FEET OF WALL CONSTRUCTED.	PERIODIC	ACI 530: SEC. 6.1, 6.2.1, 6.2.6, 6.2.7 ACI 530.1: ART. 3.2E, 3.4, 3.6A
C. PROPORTIONS OF SITE-PREPARED GROUT.	PERIODIC	ACI 530.1: ART. 2.6B, 2.4G.1.b
3. DURING MASONRY CONSTRUCTION, THE FOLLOWING TASKS SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX AS DELIVERED TO THE SITE FOR SELF-CONSOLIDATING GROUT.	-	ACI 530.1: ART. 1.5B.1.b.3
B. MATERIAL AND PROCEDURES WITH THE APPROVED SUBMITTALS.	PERIODIC	ACI 530.1: ART. 1.5
C. PLACEMENT OF MASONRY UNITS AND MORTAR JOINT CONSTRUCTION.	PERIODIC	ACI 530.1: ART. 3.3B
D. SIZE AND LOCATION OF STRUCTURAL MEMBERS.	PERIODIC	ACI 530.1: ART. 3.3F
E. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES OR OTHER CONSTRUCTION SHALL BE OBSERVED AT LEAST ONCE FOR EVERY 1,250 SQUARE FEET OF WALL CONSTRUCTED.	PERIODIC	ACI 530: SEC.1.2.1(e), 6.1.4.3, 6.2.1
F. PREPARATION, CONSTRUCTION AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40° F) OR HOT WEATHER (TEMPERATURE ABOVE 90° F).	PERIODIC	ACI 530.1: ART. 1.8C, 1.8D
G. GROUT PLACEMENT SHALL BE VERIFIED TO ENSURE COMPLIANCE.	CONTINUOUS	ACI 530.1: ART. 3.5, 3.6C
H. PREPARATION OF ANY REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS SHALL BE OBSERVED.	PERIODIC	ACI 530.1: ART. 1.4B.2.a.3, 1.4B.2.b.3, 1.4B.2.c.3,1.4B.3, 1.4B.4

NOTE:
1. REF CIVIL FOR LOCATION OF LIGHT POLES.



TYP LIGHT POLE FTG | 2
3/4" = 1'-0"



TRASH ENCLOSURE CMU SCREEN WALL | 1
3/4" = 1'-0"

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PROFESSIONAL SEAL

NORTH CAROLINA PROFESSIONAL SEAL 051941 ENGINEER BRIAN W. MAKOVEC

REVISIONS 08/20/26

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NORTH CAROLINA COA #P-0672 EXPIRES: 06/30/27
JBA PROJECT #26194

PROFESSIONAL IN CHARGE
BWM
PROJECT MANAGER
SMK
QUALITY CONTROL
BWM
DRAWN BY
JBA

PROJECT NAME

CIRCLE K STORES, INC.

ERWIN, NC

92 E. JACKSON BLVD,
ERWIN, NC

CIRCLE K STORES, INC.

PROJECT NUMBER: 25330

GENERAL NOTES AND DETAILS

S1.0