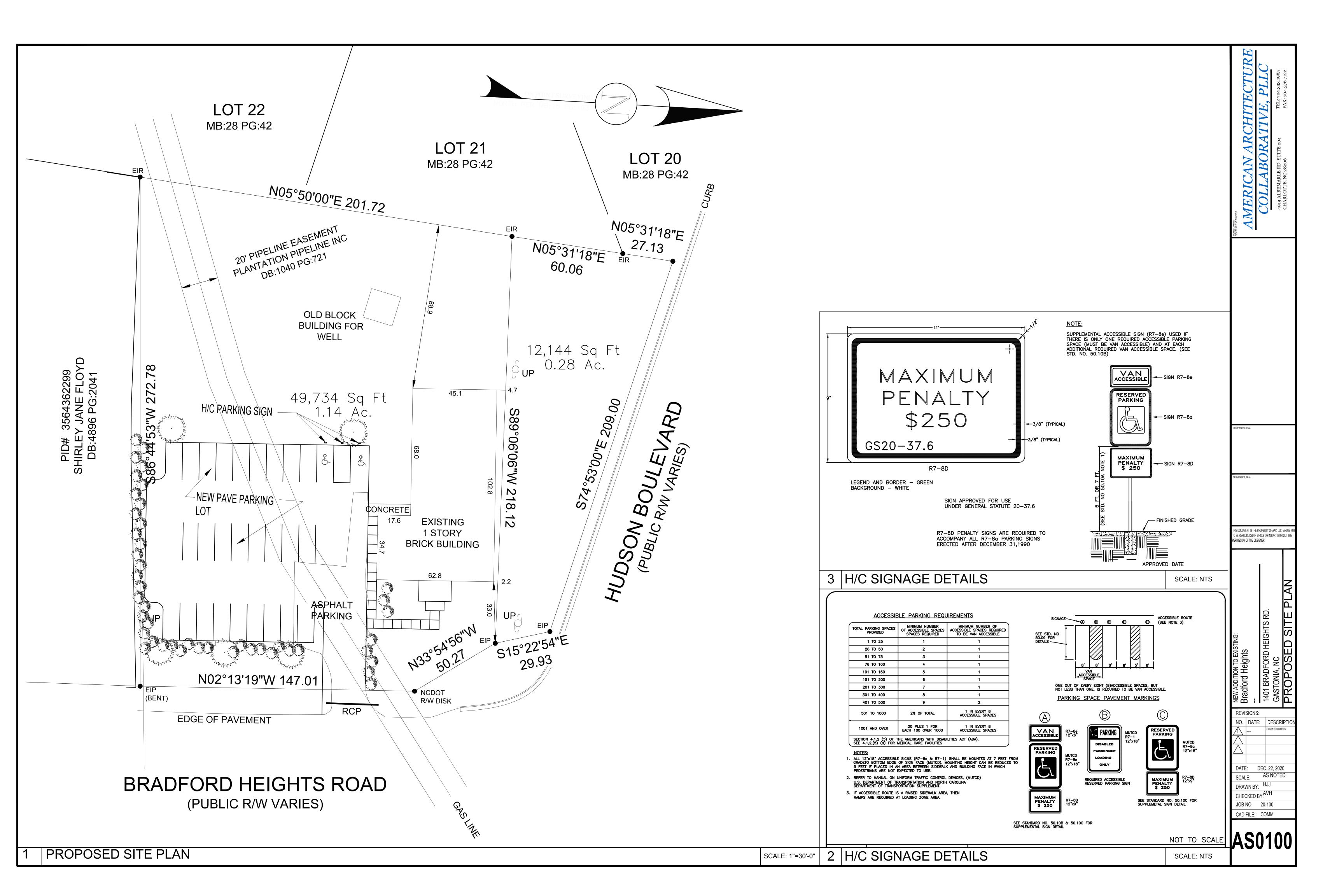
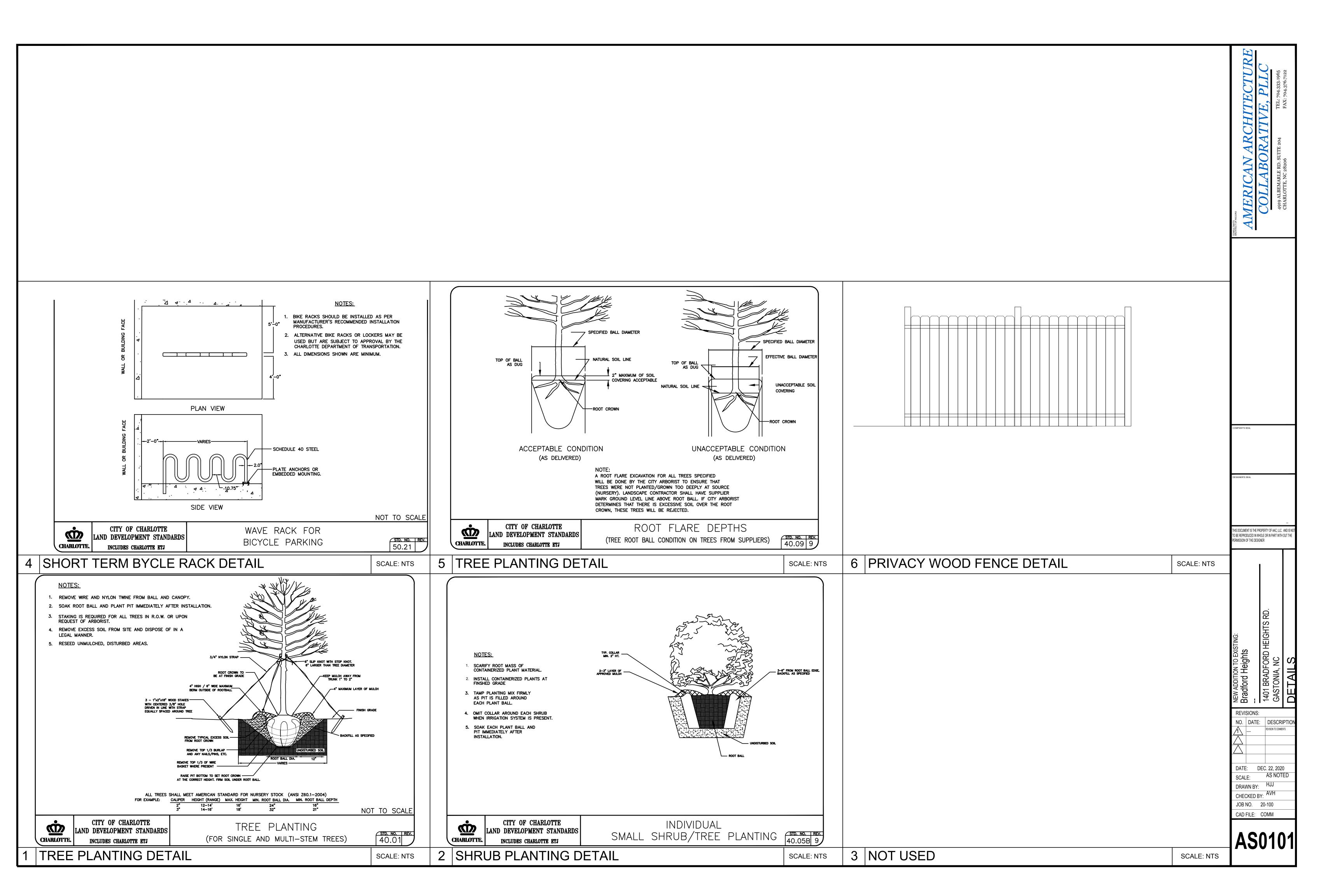
				PROJECT TITLE			
2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS (EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES) (Reproduce the following data on the building plans sheet 1 or 2)	BASIC BUILDING DATA  Construction Type:   1-A		FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES (FEET) FROM PROPERTY LI	BRADFORD HEIGHTS PROJECT  1401 BRADFORD HEIGHTS RD.			
ect: 1401 Bradford Heights  1 Bradford Heights RD, Gastonia, NC Zip Code 28054  ized Agent: _Omar PharrPhone # ( 336 ) 399-3299	Gross Building Area:  FLOOR EXISTING (SQ NEW (SQ FT) RENO/ALTER SUB-TOTAL  FT) (SQ.FT)	STORY DESCRIPTION AND NO. USE BLDG AREA PER STORY (ACTUAL) AREA INCREASE STORY OR UNLIMITED STORY OR UNLIMIT	Emergency Lighting: Yes Exit Signs: Yes Fire Alarm: No Smoke Detection Systems: No Carbon Monoxide Detection: No	INDEX OF DRAWINGS  DWG. DESCRIPTION REV. NO. DATE COMMENTS			
pipe	6 <sup>th</sup> Floor 5 <sup>th</sup> Floor 4 <sup>th</sup> Floor 3 <sup>rd</sup> Floor 2 <sup>nd</sup> Floor Mezzanine 1 <sup>st</sup> Floor 5265 SQ FT 193 SQ FT  Basement TOTAL	<sup>1</sup> Frontage area increases from Section 506.3 are computed thus:  a. Perimeter which fronts a public way or open space having 20 feet minimum width = (F)  b. Total Building Perimeter = (P)  c. Ratio (F/P) = (F/P)  d. W = Minimum width of public way = (W)  e. Percent of frontage increase I <sub>F</sub> = 100 [F/P - 0.25] x W/30 = (%) <sup>2</sup> Unlimited area applicable under conditions of Section 507.	LIFE SAFETY PLAN REQUIREMENTS  Life Safety Plan Sheet #:  Fire and/or smoke rated wall locations (Chapter 7)  Assumed and real property line locations (if not on the site plan)  Exterior wall opening area with respect to distance to assumed property lines (705.8)  Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)	LS0100 APPENDIX B PLAN  ARCHITECTURAL			
OR: New Construction Addition Renovation  1st Time Interior Completion Shell/Core Phased Construction – Shell/Core Renovation  GBUILDING CODE: Prescriptive Repair Chapter 14 Alteration: Level I Level II Level III	ALLOWABLE AREA  Primary Occupancy Classification: SELECT ONE  Assembly A-1 A-2 A-3 A-4 A-5  Business Educational Factory F-1 Moderate F-2 Low  Hazardous H-1 Detonate H-2 Deflagrate H-3 Combust H-4 Health H-5 HPM	3 Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2). 4 The maximum area of open parking garages must comply with Table 406.5.4 5 Frontage increase is based on the unsprinklered area value in Table 506.2.  ALLOWABLE HEIGHT  ALLOWABLE SHOWN ON PLANS CODE REFERENCE (TABLE 503)	<ul> <li>○ Occupant loads for each area</li> <li>○ Exit access travel distances (1017)</li> <li>○ Common path of travel distances (Tables 1006.2.1 &amp; 1006.3.2(1))</li> <li>○ Dead end lengths (1020.4)</li> <li>○ Clear exit widths for each exit door</li> <li>○ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)</li> <li>○ Actual occupant load for each exit door</li> <li>○ A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation</li> </ul>	A0000 ARCHITURAL SITE PLAN A0200 FLOOR PLAN	ULTANTS		
Historic Property Change of Use.    Change of Use.	Hazardous H-1 Detonate H-2 Deflagrate H-3 Combust H-4 Health H-5 HPM Institutional I-1 Condition I 2	Building Height in Feet (Table 504.3)  Building Height in Stories (Table 504.4)  Provide code reference if the "Show on Plans" quantity is not based on Table 504.3 or 504.4.  The maximum height of air traffic control towers must comply with Table 412.3.1  The maximum height of open parking garages must comply with Table 406.5.4	Location of doors with panic hardware (1010.1.10)  Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)  Location of doors with electromagnetic egress locks (1010.1.9.9)  Location of doors equipped with hold-open devices  Location of emergency escape windows (1030)  The square footage of each fire area (202)  The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)  Note any code exceptions or table notes that may have been utilized regarding the items above	A0400 ROOF PLAN A0500 BUILDING EXTERIOR ELEVATION A0600 SECTION CUTS A1200 SCHEDULES	ISNOO		
cription: ght is an existing building, built in the 1960's that is currently a shell. Scope of work consist the tentrance. No work on the interior of the building.	Incidental Uses (Table 509):  Special Uses (Chapter 4 – List Code Sections)  Special Provisions: (Chapter 5 – List Code Sections):  Mixed Occupancy: No Yes Separation: Hr. Exception:  Non-Separated Use (508.3)  The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.			STRUCTURAL			
e Code and Policies Appendix B for Building	Section/Table/Note Separated Use (508.4) - 2018 NC Administrative Code and Policies Appendix B for Building	2018 NC Administrative Code and Policies Appendix B for Building	2018 NC Administrative Code and Policies  Slab Heated:	S2100 FOUNDATION FLOOR PLAN S2200 FRAMING PLAN			
PERCENTAGE OF WALL OPENING CALCULATIONS  FANCE DEGREE OF OPENINGS ALLOWABLE AREA (%) PROTECTION (%) (%) (TABLE 705.8) enings. Unlimited Unlimited No changes to existing	ACCESSIBLE DWELLING UNITS- N/A (SECTION 1107)  TOTAL ACCESSIBLE ACCESSIBLE TYPE A TYPE B TYPE B TOTAL UNITS UNITS UNITS UNITS UNITS UNITS ACCESSIBLE UNITS REQUIRED PROVIDED REQUIRED PROVIDED REQUIRED PROVIDED PROVIDED	ENERGY SUMMARY  ENERGY REQUIREMENTS: The following data shall be considered minimum and any special attribute required to meet the North Carolina Energy Conservation Code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.  Existing building envelope complies with code:  No Yes (The remainder of this section is not applicable)	2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS STRUCTURAL DESIGN (PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)				
LIFE SAFETY SYSTEM REQUIREMENTS	ACCESSIBLE PARKING- NO CHANGES TO PARKING. (SECTION 1106)  LOT OR PARKING TOTAL # OF PARKING SPACES # OF ACCESSIBLE SPACES PROVIDED TOTAL #	Exempt Building: No Yes (Provide Code or Statutory reference):  Climate Zone: 3A 5A  Method of Compliance: Energy Code Performance Prescriptive ASHRAE 90.1 Performance Prescriptive (If "Other" specify source here)  THERMAL ENVELOPE (Prescriptive method only)	DESIGN LOADS:    Importance Factors:				
g: No Yes No Head No Yes No Head	AREA REQUIRED PROVIDED REGULAR WITH VAN SPACES WITH ACCESSIBLE  5' ACCESS 132" ACCESS 8' ACCESS AISLE AISLE  TOTAL  PLUMBING FIXTURE REQUIREMENTS- EXISTING NO CHANGE.	Roof/ceiling Assembly (each assembly)  Description of assembly: continuous insulation above roof deck.  U-Value of total assembly: R-value method to be used, per TABLE C402.1.3  R-Value of insulation: 25 CI  Skylights in each assembly: None  U-Value of skylight: No Skylight.  Total square footage of skylights in each assembly: Not Applicable.  Exterior Walls (each assembly)	Ground Snow Load:psf  Wind Load: Ultimate Wind Speed mph (ASCE-7)  Exposure Category  SEISMIC DESIGN CATEGORY:				
t#:  oke rated wall locations (Chapter 7)  real property line locations (if not on the site plan)  pening area with respect to distance to assumed property lines (705.8)  ses for each area as it relates to occupant load calculation (Table 1004.1.2)  s for each area  vel distances (1017)  of travel distances (1006.2.1 & 2006.3.2(1))	TABLE 2902.1)  USE WATERCLOSETS URINALS LAVATORIES SHOWERS PRINKING FOUNTAINS MALE FEMALE UNISEX MALE FEMALE UNISEX / TUBS REGULAR ACCESSIBLE  SPACE EXIST'G NEW REQ'D SPECIAL APPROVALS	Description of assembly: (Mass Wall) U-Value of total assembly: R-value method to be used, per TABLE C402.1.3 R-Value of insulation: Openings (windows or doors with glazing) U-Value of assembly: Solar heat gain coefficient: Door R-Values: OMB Wall, continues insulation, airspace, with brick exterior airspace. R-value method to be used, per TABLE C402.1.3 R-value finsulation: 7.6 Continuous Rigid Insulation. 9.45 Solar heat gain coefficient: 2.5 Projection factor: Door R-Values: 7.77 (U- Factor)	Spectral Response Acceleration S <sub>s</sub> %g S <sub>1</sub> %g  Site Classification (ASCE 7)				
ths (1020.4) this for each exit door culated occupant load capacity each exit door can accommodate based on egress width (1005.3) nt load for each exit door ematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of aration and supporting construction for a fire barrier/fire partition/smoke barrier. ors with panic hardware (1010.1.10) ors with delayed egress locks and the amount of delay (1010.1.9.7) ors with electromagnetic egress locks (1010.1.9.9)	Special approval: (Local Jurisdiction, Department of Insurance, SCO, DPI, DHHS, ICC, etc., describe below)	Walls below grade (each assembly)  Description of assembly:  U-Value of total assembly:  R-Value of insulation:  Floors over unconditioned space (each assembly)  Description of assembly:  U-Value of total assembly:  R-Value of insulation:	SOIL BEARING CAPACITIES:  Field Test (provide copy of test report) psf Presumptive Bearing capacity psf Pile size, type, and capacity		TI TO PE		
ors equipped with hold-open devices lergency escape windows (1030) stage of each fire area (202) stage of each smoke compartment for Occupancy Classification I-2 (407.5) exceptions or table notes that may have been utilized regarding the items above a Code and Policies  Appendix B for Building	2018 NC Administrative Code and Policies Appendix B for Building	Floors slab on grade  Description of assembly: U-Value of total assembly: R-Value of insulation: Horizontal/Vertical requirement:  2018 NC Administrative Code and Policies  Appendix B for Building	2018 NC Administrative Code and Policies Appendix B for Building				
2018 APPENDIX B IG CODE SUMMARY FOR ALL COMMERCIAL PROJECTS MECHANICAL DESIGN (PROVIDE ON THE MECHANICL SHEETS IF APPLICABLE)	2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS ELECTRICAL DESIGN (PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)						
MECHANICAL SUMMARY  STEMS, SERVICE SYSTEMS AND EQUIPMENT  one ter dry bulb:  ign conditions ter dry bulb:	ELECTRICAL SUMMARY  ELECTRICAL SYSTEM AND EQUIPMENT  Method of Compliance: Energy Code: Prescriptive Performance ASHRAE 90.1: Prescriptive Performance  Lighting schedule (each fixture type) lamp type required in fixture number of lamps in fixture						
mer dry bulb: tive humidity:  ating load:  Dling load:  Spacing Conditioning System  tary description of unit:	ballast type used in the fixture number of ballasts in fixture total wattage per fixture total interior wattage specified vs. allowed (whole building or space by space) total exterior wattage specified vs. allowed  Additional Efficiency Package Options (When using the 2018 NCECC; not required for ASHRAE 90.1)  C406.2 More Efficient Mechanical Equipment  C406.3 Reduced Lighting Power Density						
heating efficiency:  cooling efficiency:  size category of unit:  ler  Size category. If oversized, state reason.:  ller  Size category. If oversized, state reason.:	C406.3 Reduced Lighting Power Density  C406.4 Enhanced Digital Lighting Controls  C406.5 On-Site Renewable Energy  C406.6 Dedicated Outdoor Air System  C406.7 Reduced Energy Use in Service Water Heating						

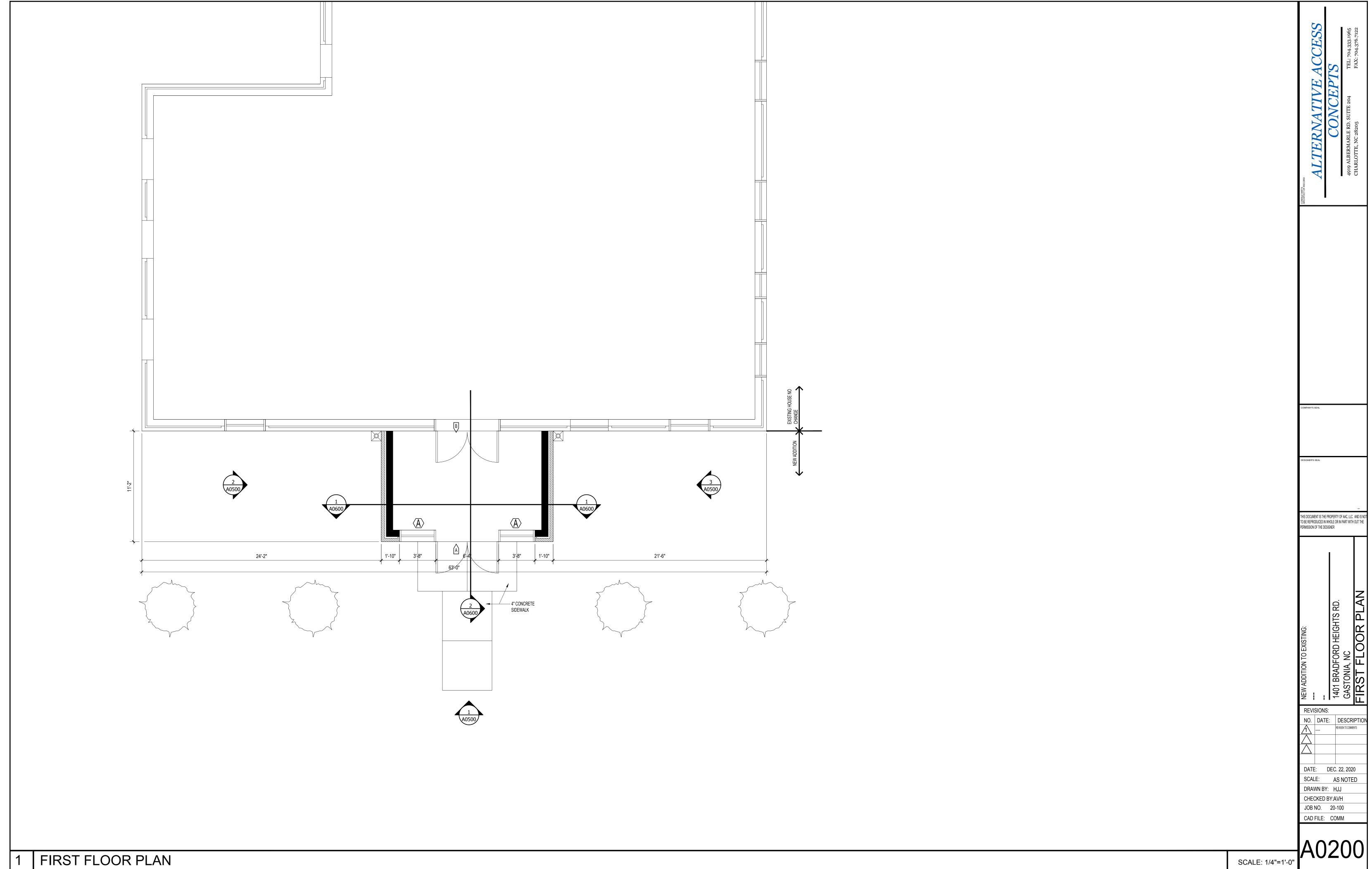
Appendix B for Building



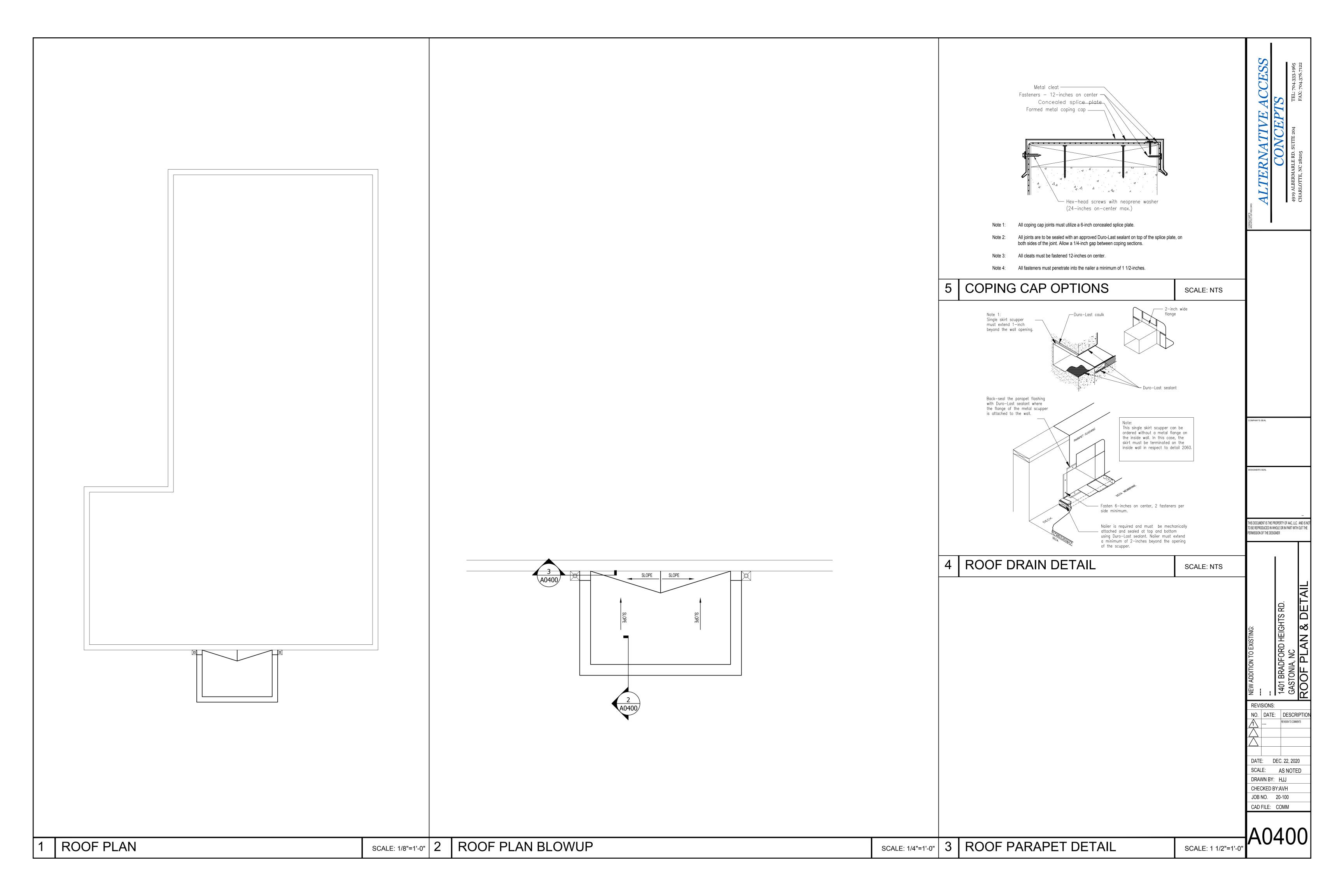
LS0100

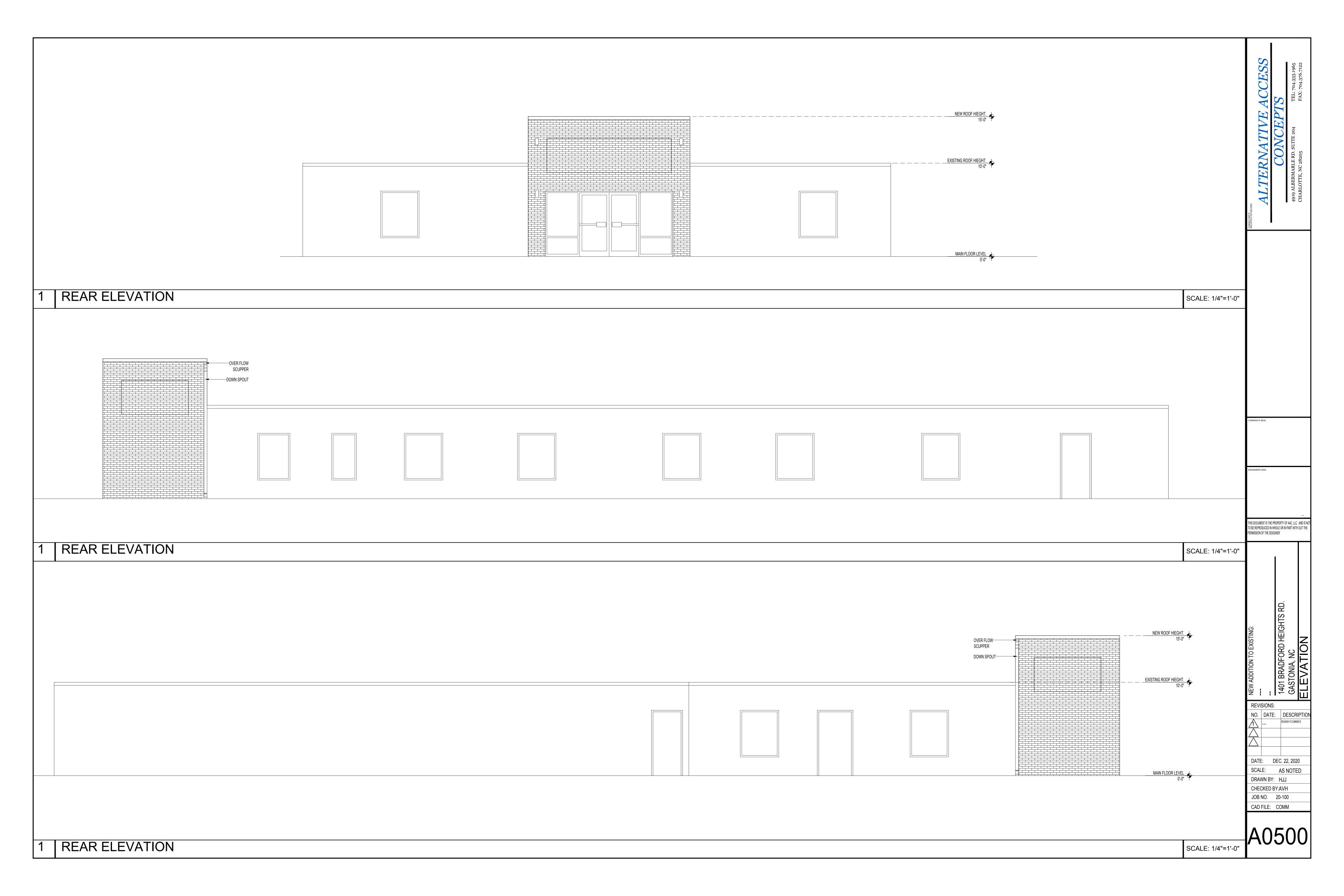


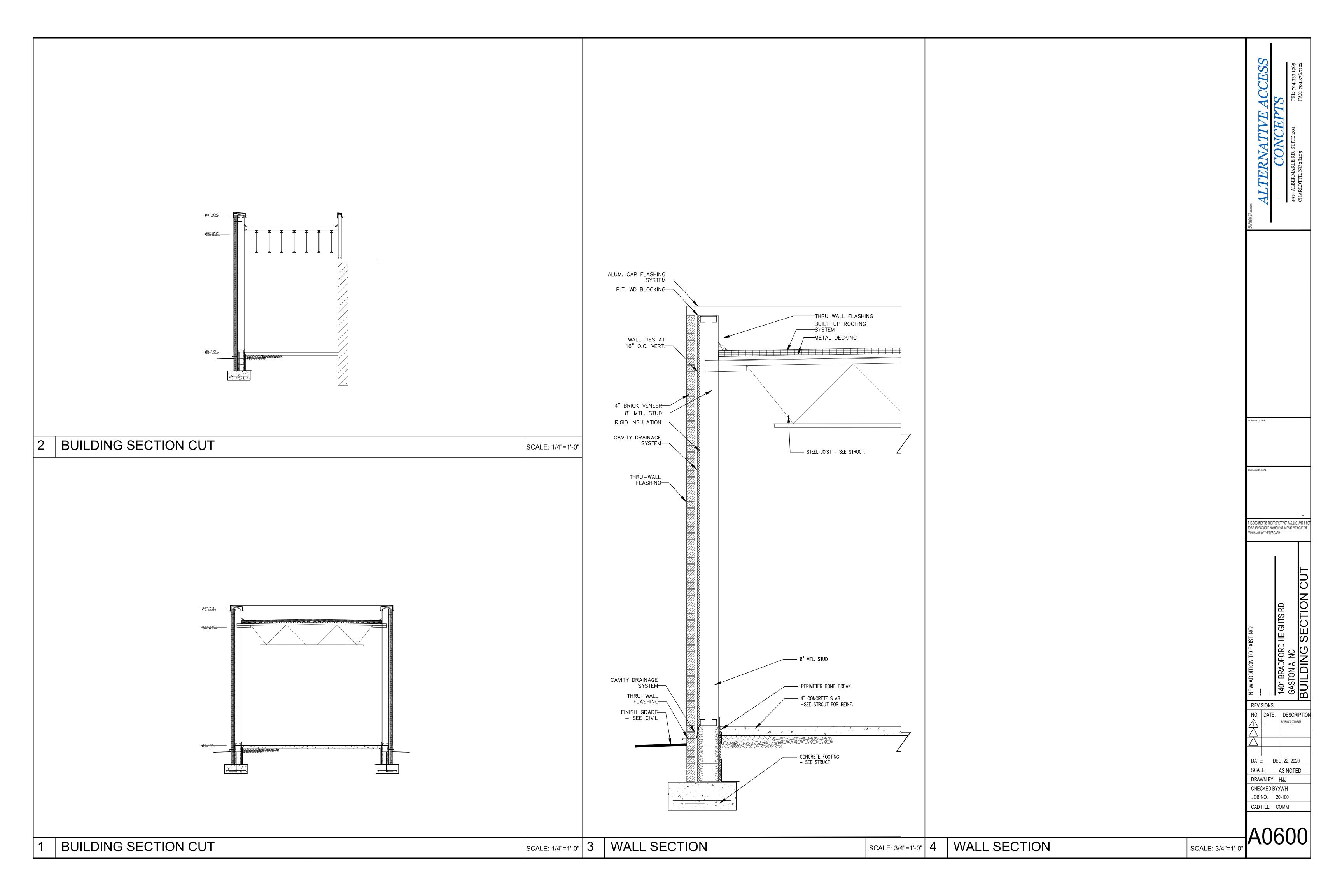




SCALE: 1/4"=1'-0"







### 1.0. GENERAL NOTES

- 1.1. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE DRAWINGS OF ALL OTHER DISCIPLINES AND THE SPECIFICATIONS. THE CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF OTHER TRADES AS TO SLEEVES, CHASES, HANGERS, INSERTS, ANCHORS, HOLES AND OTHER ITEMS TO BE PLACED OR SET IN STRUCTURAL WORK.
- 1.2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL SAFETY PRECAUTIONS AND REGULATIONS DURING THE WORK. THE ENGINEER WILL NOT ADVISE ON NOR ISSUE DIRECTION AS TO
- 1.3. THE STRUCTURAL DRAWINGS HEREIN REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY GUYING AND BRACING REQUIRED TO ERECT AND HOLD THE STRUCTURE IN PROPER ALIGNMENT UNTIL ALL STRUCTURAL WORK AND CONNECTIONS HAVE BEEN COMPLETED. THE INVESTIGATION, DESIGN, SAFETY, ADEQUACY AND INSPECTION OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC. IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 1.4. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE METHODS, TECHNIQUES AND SEQUENCES OF PROCEDURES TO PERFORM THE WORK. THE SUPERVISION OF THE WORK IS THE SOLE RESPONSIBILITY OF
- 1.5. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO APPROVAL BY THE
- 1.6. ALL STRUCTURAL SYSTEMS WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTED IN
- ACCORDANCE WITH THE SUPPLIER'S INSTRUCTIONS AND REQUIREMENTS 1.7. LOADING APPLIED TO THE STRUCTURE DURING THE PROCESS OF CONSTRUCTION IS THE CONTRACTOR'S SOLE RESPONSIBILITY AND SHALL NOT EXCEED THE SAFE LOAD - CARRYING CAPACITY OF THE STRUCTURAL MEMBERS. THE LIVE LOADINGS USED IN THE DESIGN OF THIS STRUCTURE ARE INDICATED IN THE "DESIGN CRITERIA NOTES". DO NOT APPLY ANY CONSTRUCTION LOADS UNTIL STRUCTURAL FRAMING IS PROPERLY CONNECTED TOGETHER AND UNTIL ALL TEMPORARY BRACING IS IN PLACE.
- 1.8. ALL ASTM AND OTHER REFERENCES ARE PER THE LATEST EDITIONS OF THESE STANDARDS, UNLESS OTHERWISE NOTED.
- 1.9. UNLESS OTHERWISE INDICATED, ALL ITEMS NOTED TO BE DEMOLISHED SHALL BECOME THE CONTRACTOR'S PROPERTY AND BE REMOVED FROM THE SITE.
- 1.10. CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID TO ASCERTAIN CONDITIONS WHICH MAY ADVERSELY AFFECT THE WORK OF COST THEREOF.
- 1.11. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PROTECTION OR PERSONS AND PROPERTY EITHER ON OR ADJACENT TO THE PROJECT AND SHALL PROTECT SAME AGAINST INJURY, DAMAGE OR LOSS. 1.12. FIREPROOFING OF STRUCTURAL ELEMENTS IS NOT SHOWN ON THE STRUCTURAL DRAWINGS. REFER TO

THE SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR FIRE RATING REQUIREMENTS, MATERIALS AND

- 1.13. THE CONTRACTOR SHALL INFORM THE STRUCTURAL ENGINEER, CLEARLY AND EXPLICITLY IN WRITING, OF ANY DEVIATION OR SUBSTITUTION OF REQUIREMENTS OF THE CONTRACT DOCUMENTS. CONTRACTOR IS NOT RELIEVED OF ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS BY VIRTUE OF THE STRUCTURAL ENGINEER'S REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC., UNLESS THE CONTRACTOR HAS CLEARLY AND EXPLICITLY INFORMED THE STRUCTURAL ENGINEER IN WRITING OF ANY DEVIATIONS OR SUBSTITUTIONS AT TIME OF SUBMISSION, AND THE STRUCTURAL ENGINEER HAS GIVEN WRITTEN
- APPROVAL FOR THE SPECIFIC DEVIATIONS OR SUBSTITUTIONS. 1.14. ALL THINGS WHICH, IN THE OPINION OF THE CONTRACTOR, APPEAR TO BE DEFICIENCIES, OMISSIONS, CONTRADICTIONS OR AMBIGUITIES IN THE DRAWINGS OR SPECIFICATIONS, THEN THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE STRUCTURAL ENGINEER. CORRECTIONS OR WRITTEN
- INTERPRETATIONS SHALL BE ISSUED BEFORE AFFECTED WORK MAY PROCEED. 1.15. IF THE CONTRACTOR CANNOT CONSTRUCT ANY PORTION OF THE WORK IDENTIFIED IN THE DRAWINGS IN ACCORDANCE WITH THESE DRAWINGS AND SPECIFICATIONS, THEN THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE STRUCTURAL ENGINEER PRIOR TO PROCEEDING WITH THE WORK. WORK THAT DOES NOT COMPLY WITH THE DRAWINGS MAY REQUIRE REMOVAL, TESTING, OR ENGINEERING EVALUATION AT THE CONTRACTOR'S EXPENSE
- 1.16. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO ORDERING MATERIALS OR PROCEEDING WITH NEW WORK IN AREAS AFFECTED BY EXISTING CONDITIONS. STRUCTURAL ENGINEER SHALL BE INFORMED IN WRITING OF CONFLICTS BETWEEN EXISTING AND PROPOSED NEW CONSTRUCTION.
- 1.17. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL DIMENSIONS SHOWN ON THE CONTRACT DOCUMENTS, INCONSISTENCIES ON THE STRUCTURAL DRAWINGS OR BETWEEN THE STRUCTURAL DRAWINGS AND ANY OTHER CONTRACT, SHOP, FABRICATION, OR OTHER DRAWINGS OR INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER PRIOR TO PROCEEDING WITH AFFECTED WORK.

## 2.0. CODES AND STANDARDS

- 2.1. NORTH CAROLINA BUILDING CODE 2012 (NCBC 2012)
- 2.2. INTERNATIONAL BUILDING CODE 2009 (IBC 2009).
- 2.3. "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES", (ASCE 7-05).
- 2.4. "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", (ACI 318-08).
- 2.5. "STEEL CONSTRUCTION MANUAL", (AISC 360 13TH EDITION) 2.6. "MANUAL OF STANDARD PRACTICE", CONCRETE REINFORCING STEEL INSTITUTE (CRSI).
- 2.7. "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION", (NDS 2005). 2.8. "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES", (ACI 530-08).
- 3.0. DESIGN LOADS

DEAD AND LIVE LOADS (PSF)								
COMPONENT DEAD LOAD	ROOF	SLAB ON GRADE						
SHEATHING/ROOFING		-						
STEEL BEAMS/JOISTS		-						
4" SLAB ON GRADE	-	50						
COLLATERAL	2	-						
TOTAL DEAD LOAD	10	50						
TOTAL LIVE LOAD	20	100						
TOTAL LOAD	30	150						

ASCE 7-10			
ITEM	SYMBOL	VALUE	REFERENCE
GROUND SNOW LOAD	pg	10	FIGURE 7-1
SNOW EXPOSURE FACTOR	C <sub>e</sub>	1.0	TABLE 7-2
THERMAL FACTOR	C <sub>t</sub>	1.0	TABLE 7-3
SNOW LOAD IMPORTANCE FACTOR	Is	1.0	TABLE 7-4
RAIN ON SNOW SURCHARGE	Rs	-	SECTION 7.10
SLOPE FACTOR	Cs	1.0	FIGURE 7-2
FLAT-ROOF SNOW LOAD	p <sub>f</sub>	7.0	EQUATION 7-1
SLOPED-ROOF SNOW LOAD	ps	7.0	EQUATION 7-2
MINIMUM FLAT-ROOF SNOW LOAD	p <sub>f-min</sub>	10.0	SECTION 7.3.4
DESIGN ROOF SNOW LOAD	p <sub>f-design</sub>	10.0	

WIND AND SEISMIC LOADS ASCE 7-10				
WIND LOADS				
ITEM	SYMBOL	VALUE	REFERENCE	
BASIC WIND SPEED (3 SEC GUST)	V	115MPH	FIGURE 26.5-1A	
WIND LOAD IMPORTANCE FACTOR	I <sub>w</sub>	1.0	TABLE 1.5-2	
WIND LOAD EXPOSURE CATEGORY		В	SECTION 26.7.2	
ANALYSIS PROCEDURE	MWFRS (LC	MWFRS (LOW-RISE BUILDING)		FIGURE 28.4-1
	V <sub>x</sub>	2.0K		
WIND BASE SHEAR	V <sub>y</sub>	2.5K		-
SEISMIC LOADS				
ITEM	SYMBOL	VALUE	REFERENCE	
SEISMIC LOAD IMPORTANCE FACTOR	I <sub>E</sub>	1.0	SECTION 1.5-2	
SHORT PERIOD SPECTRAL ACCELERATION	S <sub>s</sub>	0.24	SECTION 11.4.1	FIGURE 22.1
(1) SECOND PERIOD SPECTRAL ACCELERATION	S <sub>1</sub>	0.102	SECTION 11.4.1	FIGURE 22.2
MAPPED LONG PERIOD TRANSITION PERIOD	T <sub>L</sub>	8	SECTION 11.4.5	FIGURE 22-12
RISK CATEGORY	ОС	II	TABLE 1-1	
SEISMIC DESIGN CATEGORY	SDC	С	SECTION 11.6	
SITE CLASSIFICATION	-	D	SECTION 20.1	TABLE 20.3-1
BASIC STRUCTURAL SYSTEM	-	BEARING WALL SYSTEMS	TABLE 12.2-1	
BASIC SEISMIC-RESISTING SYSTEM	-	Light Framed Wood Structural Panels	TABLE 12.2-1	
RESPONSE MODIFICATION FACTOR	R	3	TABLE 12.2-1	
SYSTEM OVERSTRENGTH FACTOR	Ωο	3	TABLE 12.2-1	
DEFLECTION AMPLICATION FACTOR	C <sub>d</sub>	3	TABLE 12.2-1	
ANALYSIS PROCEDURE	-	EQUIVALENT LATERAL FORCE	SECTION 12.8	
SEISMIC BASE SHEAR	V <sub>x</sub>	1.5K	EQUATION 12.8-1	
	V <sub>y</sub>	1.5K	12.	O-T

### 4.0 SITE PREPARATION NOTES

- 4.1. WITHIN A MINIMUM AREA OF 5 FEET BEYOND THE STRUCTURE LIMITS, EXCAVATE A MINIMUM OF 3 FEET OF EXISTING SOIL.
- REMOVE ALL ORGANICS, PAVEMENT, ROOTS, DEBRIS AND OTHERWISE UNSUITABLE MATERIAL. 4.2. THE SURFACE OF THE EXPOSED SUBGRADE SHALL BE INSPECTED BY PROBING OR TESTING TO CHECK FOR POCKETS OF SOFT OR
- UNSUITABLE MATERIAL. EXCAVATE UNSUITABLE SOIL AS DIRECTED BY THE GEOTECHNICAL ENGINEER AND/OR TESTING AGENCY. 4.3. PROOFROLL THE SURFACE OF THE EXPOSED SUBGRADE WITH A LOADED TANDEM AXLE DUMP TRUCK. REMOVE ALL SOILS
- WHICH PUMP OF DO NOT COMPACT PROPERLY AS DIRECTED BY THE GEOTECHNICAL ENGINEER AND/OR TESTING AGENCY. 4.4. FILL ALL EXCAVATED AREAS WITH APPROVED CONTROLLED FILL. PLACE IN 8 INCH LOOSE LIFTS AND COMPACT TO A MINIMUM
- OF 95% OF THE MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-698. 4.5. ALL CONTROLLED FILL MATERIAL SHALL BE A SELECT GRANULAR MATERIAL FREE FROM ALL ORGANICS OR OTHERWISE DELETERIOUS MATERIAL WITH NOT MORE THAN 20% BY WEIGHT PASSING A NO. 200 SIEVE (CLASSIFIED AS SC, SM, SP OR BETTER
- IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM) AND WITH A PLASTICITY INDEX NOT EXCEEDING 6%. 4.6. PROVIDE FIELD DENSITY TEST FOR EACH 3000 S.F. OF BUILDING AREA FOR EACH LIFT OF CONTROLLED FILL.

- 5.1. NO GEOTECHNICAL STUDY WAS PERFORMED FOR THIS PROJECT ON THIS SITE. FOUNDATION DESIGN IS BASED UPON CODE
- 5.2. ALL FOOTINGS HAVE BEEN DESIGN UPON A SOIL BEARING PRESSURE OF 2000 PSF PER CODE RECOMMENDED SOIL CRITERIA.
- 5.3. ALL FOOTINGS SHALL BEAR ON UNDISTURBED, FIRM NATURAL SOIL OR COMPACTED FILL. ALL FOOTINGS SHALL BE EVALUATED BY THE GEOTECHNICAL ENGINEER AND/OR TESTING AGENCY, INCLUDING VERIFICATION OF ABOVE ASSUMED SOIL BEARING PRESSURE PRIOR TO POURING FOUNDATION CONCRETE.
- 5.4. UNLESS NOTED OTHERWISE, THE CENTERLINES OF COLUMN FOOTINGS SHALL COINCIDE WITH THE CENTERLINE OF THE SUPPORTED COLUMN.
- 5.5. PRIOR TO COMMENCING ANY FOUNDATION WORK WORK, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR COORDINATING WORK WITH ANY EXISTING UTILITIES. FOUNDATIONS SHALL BE LOWERED WHERE REQUIRED TO AVOID UTILITIES. STRUCTURAL ENGINEER MUST BE NOTIFIED IF FOOTINGS ARE LOWERED MORE THAN 1'-0" RELATIVE TO THAT WHICH IS SHOWN.

# 6.0 SLAB ON GRADE NOTES

- 6.1. PROVIDE CONCRETE SLABS OVER 4 INCHES OF POROUS FILL, REFER TO ARCHITECTURAL DRAWINGS AND/OR SPECIFICATIONS FOR ADDITIONAL MOISTURE/DRAINAGE REQUIREMENTS.
- 6.2. ALL WELDED WIRE FABRIC SHALL BE IN ACCORDANCE WITH ASTM A-185. LAP ADJOINING PIECES AT LEAST ONE FULL MESH AND PLACED 1-1/2" BELOW TOP OF SLAB.
- 6.3. ALL POROUS FILL MATERIAL SHALL BE A CLEAN GRANULAR MATERIAL WITH 100% PASSING A 1-1/2 INCH SIEVE AND NO MORE
- THAN 5% PASSING A NO. 4 SIEVE. POROUS FILL SHALL BE COMPACTED TO 95% MAX DRY DENSITY PER ASTM D-698. 6.4. SLAB JOINTS SHALL BE FILLED WITH APPROVED MATERIAL. THIS SHOULD TAKE PLACE AS LATE AS POSSIBLE, PREFERABLY 4 TO 6 WEEKS AFTER THE SLAB HAS BEEN CAST. PRIOR TO FILLING, REMOVE ALL DEBRIS FROM THE SLAB JOINTS, THEN FILL IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATINONS AS FOLLOWS:
  - a. 6" SLABS FILL WITH EPOXY RESIN B. OTHER SLABS - FILL WITH FIELD MOLDED OR ELASTOMERIC SEALANT.
- 6.5. UNLESS OTHERWISE APPROVED, ALL SLAB REINFORCEMENT SHALL BE SECURED INTO POSITION WITH PLASTIC TIPPED OR
- STAINLESS STEEL BAR SUPPORTS. BRICK OR OTHER MASONRY UNITS ARE NOT PERMITTED FOR USE AS SUPPORTS. 6.6. SLABS TO PERMANENTLY EXPOSED TO WEATHER SHALL BE AIR ENTRAINED TO 5% (+/- 1%) WITH AN ADMIXTURE THAT
- 6.7. SLABS NOT PERMANENTLY EXPOSED TO WEATHER SHALL NOT BE AIR ENTRAINED AND ENTRAPPED AIR SHALL BE LIMITED TO
- 6.8. IN ORDER TO MINIMIZE CONCRETE SHRINKAGE CRACKING, PLACE CONCRETE IN AN ALTERNATING LANE OR CHECKERBOARD PATTERN. THE MAXIMUM LENGTH OF SLAB CAST IN ANY ONE CONTINUOUS POUR IS RECOMMENDED TO BE LESS THAN 100 FEET. THE MAXIMUM SPACING OF JOINTS SHALL BE 15'-0".
- 6.9. THE USE OF POLYPROPYLENE FIBERS IN LIEU OF WELDED WIRE FABRIC IS PROHIBITED WITHOUT THE WRITTEN AUTHORIZATION OF THE ENGINEER.
- 6.10. REFER TO ARCHITECTURAL DRAWINGS FOR DEPRESSED SLAB AREAS AND DRAINS, SLOPE SLAB TO DRAINS WHERE SHOWN. 6.11. SLABS HAVE BEEN DESIGNED BASED ON THE A SUBGRADE MODULUS, K=120 PCI.

# 7.0 PLYWOOD SHEATHING NOTES

7.1. ALL PLYWOOD CONSTRUCTION SHALL BE IN ACCORDANCE WITH AMERICAN PLYWOOD ASSOCIATION (APA) SPECIFICATIONS. 7.2. ALL ROOF PANEL SHEATHING SHALL BE 7/16 INCH (NOMINAL) TYPE CDX, EXP 1 APA RATED 24/16 SHEATHING. SUITABLE EDGE SUPPORT SHALL BE PROVIDED BY USE OF PANEL CLIPS OR BLOCKING BETWEEN FRAMING. UNLESS NOTED OTHERWISE CONNECT ROOF SHEATHING

WITH 6d COMMON NAILS AT 6 INCHES ON CENTER AT SUPPORTED PANEL EDGES AND 12 INCHES ON CENTER AT INTERMEDIATE

- SUPPORTS. 7.3. ALL WALL PANEL SHEATHING, INCLUDING DESIGNATED SHEARWALLS, SHALL BE 7/16 INCHES (NOMINAL) TYPE CDX, EXP 1. APA RATED 24/16 SHEATHING WITH 10d COMMON NAILS SPACED 6 INCHES ON CENTER AT SUPPORTED PANEL EDGES AND 12 INCHES ON CENTER AT INTERMEDIATE SUPPORTS. INSTALL ALL PLYWOOD SHEATHING WITH THE LONG DIMENSION OF THE PANEL ACROSS SUPPORTS AND WITH PANEL CONTINUOUS OVER TWO OR MORE SPANS. STAGGER PANEL END JOINTS. ALLOW 1/8 INCH SPACING AT PANEL ENDS AND EDGES
- UNLESS OTHERWISE RECOMMENDED BY THE SHEATHING MANUFACTURER. 7.4. NAILS SHOULD NOT BE OVERDRIVEN. THE USE OF PNUEMATIC NAIL GUNS IS PERMITTED PROVIDED (1) NAIL IS INSTALLED FOR EVERY OVERDRIVEN NAIL (THOSE SUNK MORE THAN 1/8 INCH INTO SHEATHING). THE USE OF STAPLES IS PROHIBITED.

## 8.0. MASONRY

- 8.1. MASONRY CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR MASONRY STRUCTURES".
- 8.2. HOLLOW LOAD-BEARING MASONRY UNITS SHALL CONFORM TO ASTM C-90, GRADE N-1 AND BE MADE WITH LIGHTWEIGHT AGGREGRATE. THE MINIMUM PRISM COMPRESSIVE STRENGTH (f'm) SHALL BE 1550 PSI AT AN AGE OF 28 DAYS, AS DETERMINED BY THE UNIT STRENGTH
- 8.3. FILL ALL BOND BEAMS AND REINFORCED CELLS SOLIDLY WITH GROUT. GROUT SHALL CONFORM TO ASTM C-476 AND SHALL OBTAIN A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2500 PSI.
- 8.4 REINFORCING STEEL SHALL BE BE IN ACCORDANCE WITH ASTM A-615, GRADE 60. SHOP FABRICATE REINFORCING BARS WHICH ARE SHOWN TO BE HOOKED OR BENT. PROVIDE A MINIMUM LAP SPLICE PER "CMU LAP SPLICE SCHEDULE" (SEE TYPICAL DETAILS) AT ALL
- SPLICES, UNLESS INDICATED OTHERWISE
- 8.5. THE USE OF MASONRY-CEMENT MORTAR IS STRICTLY PROHIBITED. MORTAR SHALL CONFORM TO ASTM C-270, TYPE S. ALL MORTAR SHALL MEET THE "PROPORTION SPECIFICATION" OF ASTM C-270 AND BE MADE WITH PORTLAND CEMENT/LIME (NON AIR-ENTRAINED) 8.6. UNLESS OTHERWISE INDICATED, ALL WALLS SHALL BE LAID IN RUNNING BOND. BOND CORNERS AND INTERSECTIONS OF LOAD-BEARING
- 8.7. PROVIDE VERTICAL REINFORCING BARS AT ALL WALL CORNERS, INTERSECTIONS AND OPENING EDGES. MASONRY WALLS SHALL BE
- 8.8. PROVIDE REBAR DOWELS FROM FOUNDATIONS TO MATCH VERTICAL REINFORCING SIZE. DOWELS SHALL HAVE STANDARD 90 DEGREE HOOKS AND LAP WITH THE FIRST LIFT OF REINFORCING
- 8.9. PROVIDE HORIZONTAL BOND BEAMS WITH CONTINUOUS REINFORCING AS INDICATED. DISCONTINUE ALL HORIZONTAL REINFORCING AT CONTROL JOINTS EXCEPT FOR THE BOND BEAMS AT BEARING ELEVATIONS.
- 8.10. PROVIDE STANDARD 9 GAGE HORIZONTAL JOINT REINFORCING AT 16" ON CENTER IN ALL WALLS. PROVIDE TRUSS TYPE JOINT
- REINFORCEMENT FOR ALL CONCRETE MASONRY. COORDINATE BRICK TIE BACK REQUIREMENTS WITH THE ARCHITECTURAL DRAWINGS. UNLESS NOTED OTHERWISE, STOP ALL HORIZONTAL JOINT REINFORCEMENT AT CONTROL JOINTS. 8.11. PROVIDE BOND BEAM LINTELS AND BRICK SHELF ANGLES ABOVE ALL WALL OPENINGS PER TYPICAL DETAILS. SEE ARCHITECTURAL

CONSTRUCTED IN ACCORDANCE WITH THE "LOW LIFT" DETAILS INDICATED.

- DRAWINGS FOR LOCATIONS OF ALL DOOR AND WINDOW OPENINGS. 8.12. THE MASONRY CONTRACTOR SHALL PROVIDE ALL REQUIRED TEMPORARY WALL BRACING DURING CONSTRUCTION (SEE "GENERAL
- 8.13. ALL MASONRY WALLS CELLS OR CAVITIES INDICATED AS REINFORCED SHALL BE GROUTED FOR THE FULL HEIGHT OF THE WALL, UNLESS SPECIFICALLY NOTED OTHERWISE, ON THE DRAWINGS. UN-REINFORCED WALLS INDICATED AS GROUTED SHALL BE GROUTED FULL
- 8.14. ALL MASONRY CELLS OR CAVITIES BELOW GRADE SHALL BE GROUTED SOLID. 8.15. MASONRY CONTRACTOR SHALL PROVIDE FOR AND COORDINATE WITH OTHER TRADES FOR PLACEMENT OF ALL ITEMS TO BE EMBEDDED OF BUILT INTO THE MASONRY.

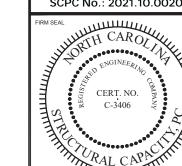
HEIGHT, UNLESS SPECIFICALLY NOTED OTHERWISE.

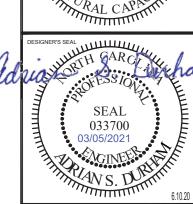
- 9.0 COLD FORMED STEEL (LIGHT GAUGE) 9.1. ALL COLD FORMED STEEL FRAMING MEMBERS, THEIR DESIGN, FABRICATION AND ERECTION SHALL CONFORM TO THE LATEST EDITION OF
- THE "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" OF THE A.I.S.I. 9.2. ALL FRAMING MEMBERS SHALL BE FORMED FROM STEEL CONFORMING TO ASTM A446 WITH A MINIMUM YIELD STRENGTH AS FOLLOWS 12, 14, & 16 GAUGE MEMBERS: Fy = 50KSI.
- 18 & 20 GAUGE MEMBERS: Fy = 33KSI 9.3. ALL FRAMING MEMBERS SHALL BE GALVANIZED WITH A G-60 COATING MEETING THE REQUIREMENTS OF ASTM A525
- 9.4. MEMBERS SHALL BE THE MANUFACTURER'S STANDARD "C" SHAPED STUDS/JOISTS WITH A MINIMUM SIZE, FLANGE WIDTH AND GUAGE AS INDICATED. ALL MEMBERS SHALL HAVE A MINIMUM FLANGE LIP RETURN OF  $\frac{1}{2}$ " AND SATISFY THE MINIMUM PROPERTIES AS PER
- "DIETRICH INDUSTRIES" OR APPROVED EQUAL. 9.5. CONNECTIONS AND MEMBER SIZES SHOWN ON THE DRAWINGS ARE SCHEMATIC AND ARE INTENDED ONLY TO SHOW THE RELATIONSHIP OF THE MEMBERS FOR INFORMATION AND PRICING/BIDDING. ALL MEMBER SIZES AND CONNECTIONS SHALL BE RESPONSIBLEITY OF THE GENERAL CONTRACTOR (GC). GC SHALL PROVIDE MEMBER AND CONNECTION DESIGN BY ENGINEER LICENSED IN THE STATE OF SOUTH
- 9.6. THE GAUGE OF ALL TRACKS SHALL BE NO LIGHTER THAN THE FRAMING BEING CONNECTED, UNLESS NOTED OTHERWISE. CONNECT TRACKS TO CONCRETE WITH A MINIMUM OF (2) 0.145" DIA POWER DRIVEN FASTENERS (WITH 1.125" EMBEDMENT) AT EACH STUD, OR AS
- REQUIRED BY THE LIGHT GAUGE DESIGNER. 9.7. ALL STRUCTURAL MEMBERS SHALL BE PROPERLY CONNECTED TO EACH OTHER AND TO THE SUPPORTING BACK-UP FRAMING. FASTENINGS SHALL BE MADE WITH SELF TAPPING SCREWS OR WELDS OF SUFFICIENT SIZE TO ENSURE THE CONNECTION STRENGTH.
- PROVIDE THE MANUFACTURER'S STANDARD TRACK, CLIP ANGLES, BRACING, REINFORCEMENTS, FASTENERS AND ACCESSORIES AS RECOMMENDED BY THE MANUFACTURER FOR THE APPLICATION INDICATED AND AS NEEDED TO PROVIDE A COMPLETE FRAMING SYSTEM. UNLESS NOTED OTHERWISE, INSTALL THE METAL FRAMING SYSTEM IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN
- INSTRUCTIONS AND RECOMMENDATIONS. 9.9. FABRICATOR IS RESPONSIBLE FOR THE DESIGN AND DETAILING OF ALL LIGHT GAUGE STEEL FRAMING AND SHALL RETAIN A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA. THE ENGINEER SHALL SIGN AND SEAL BOTH CALCULATIONS AND SHOP
- 9.10. CUTTING OF STEEL FRAMING MEMBERS MAY BE DONE WITH A SAW OR CUTTING SHEARS.
- 9.11. COMPLETE, UNIFORM AN LEVEL BEARING SUPPORT SHALL BE PROVIDED FOR THE BOTTOM RUNNER. AT SPLICES WHERE SUPPORT IS NOT COMMON TO BOTH RUNNERS, EITHER PROVIDE BUTT WELDED RUNNERS OR USE OF A STUD SECTION INSERTED IN THE RUNNER AS A
- SPLICING MEMBER ATTACHED PER MANUFACTURER'S RECOMMENDATIONS. RUNNER INTERSECTIONS SHALL BUTT EVENLY. 9.12. SPACING OF STUDS SHALL HAVE A TOLERANCE OF 1/8 INCH FROM THAT SHOWN ON THE DRAWINGS, PROVIDED THAT THE CUMULATIVE ERRORS DOES NOT EXCEED THE REQUIREMENTS OF OTHER MATERIAL OR CONSTRUCTION.
- 9.13. ALIGNMENT OF STUDS (PLUMBNESS) AND WALL STRAIGHTNESS SHALL BE WITHIN  $\frac{1}{960}$  th OF THEIR RESPECTIVE HEIGHTS AND LENGTHS. 9.14. STUDS SHALL BE PLUMBED, ALIGNED AND SECURELY ATTACHED TO BOTH TOP AND BOTTOM RUNNERS, SPLICES IN STUDS ARE NOT
- PERMITTED
- . TEMPORARY BRACING, WHERE REQUIRED, SHALL BE PROVIDED UNTIL ERECTION IS COMPLETED 9.16. WHERE MANUFACTURER'S RECOMMENDATIONS FOR ERECTION, ATTACHMENT, ASSEMBLY, BRACING, ALIGNMENT OR OTHER REQUIREMENTS ARE MORE STRINGENT THAN INDICATED IN THESE DRAWINGS OR THE PROJECT SPECIFICATIONS, THE MANUFACTURER'S RECOMMENDATIONS SHALL APPLY.



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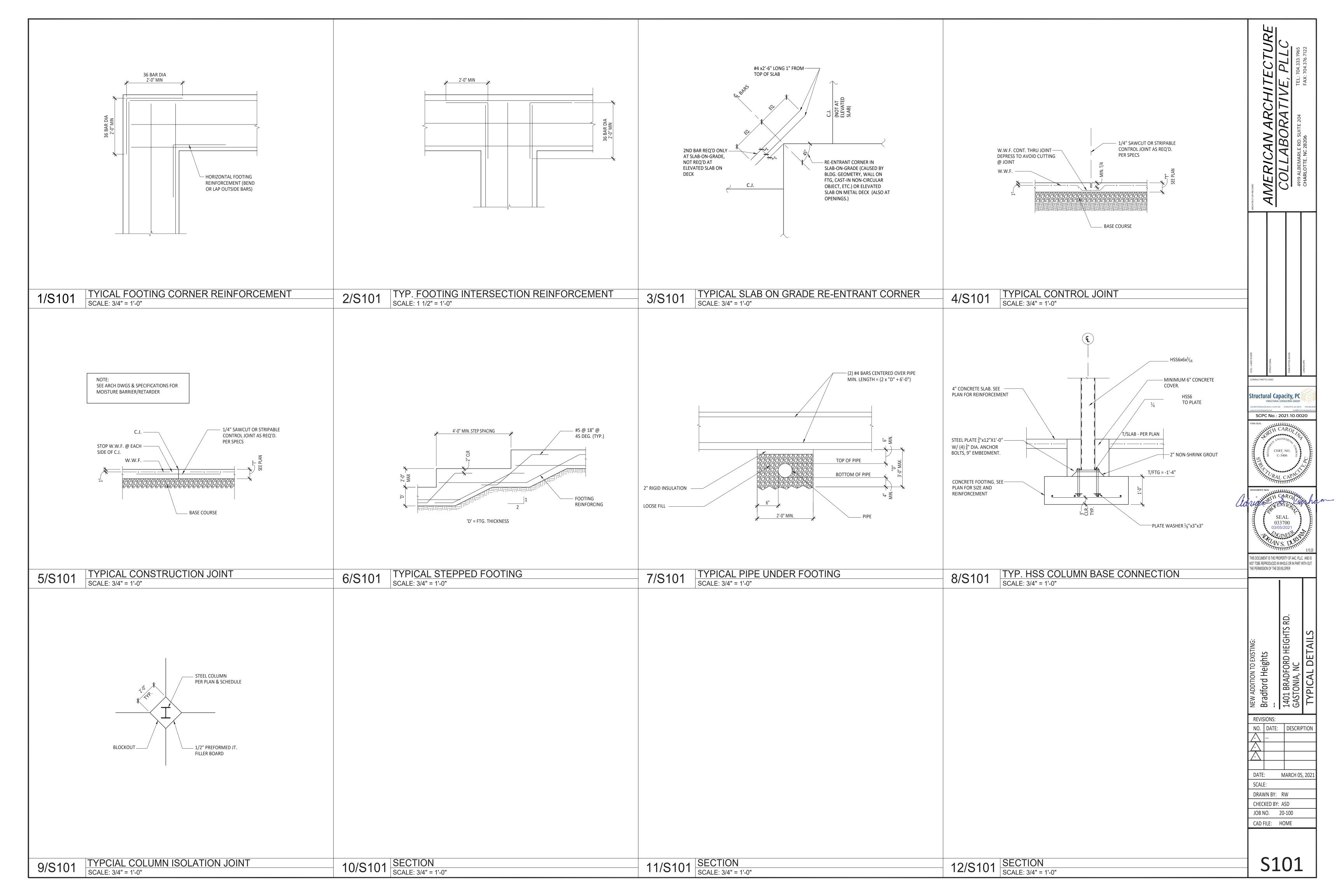
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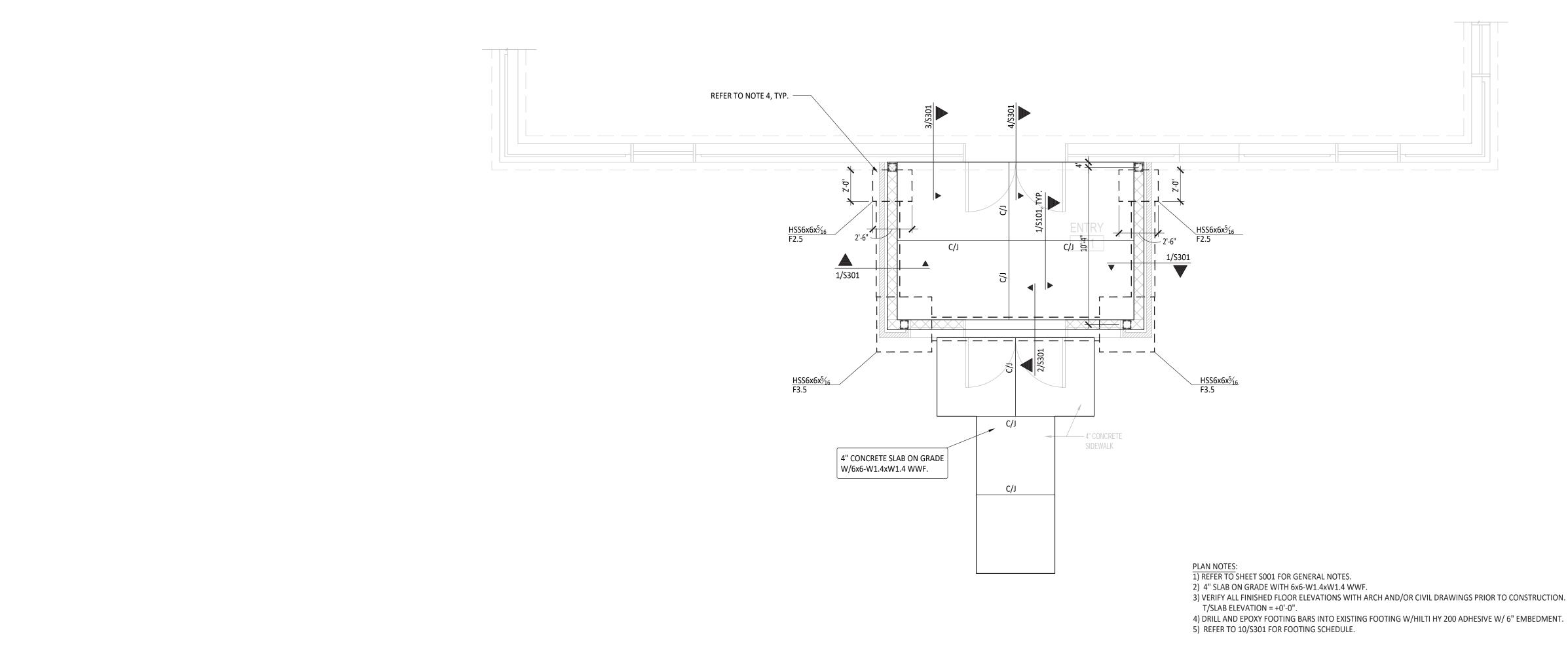
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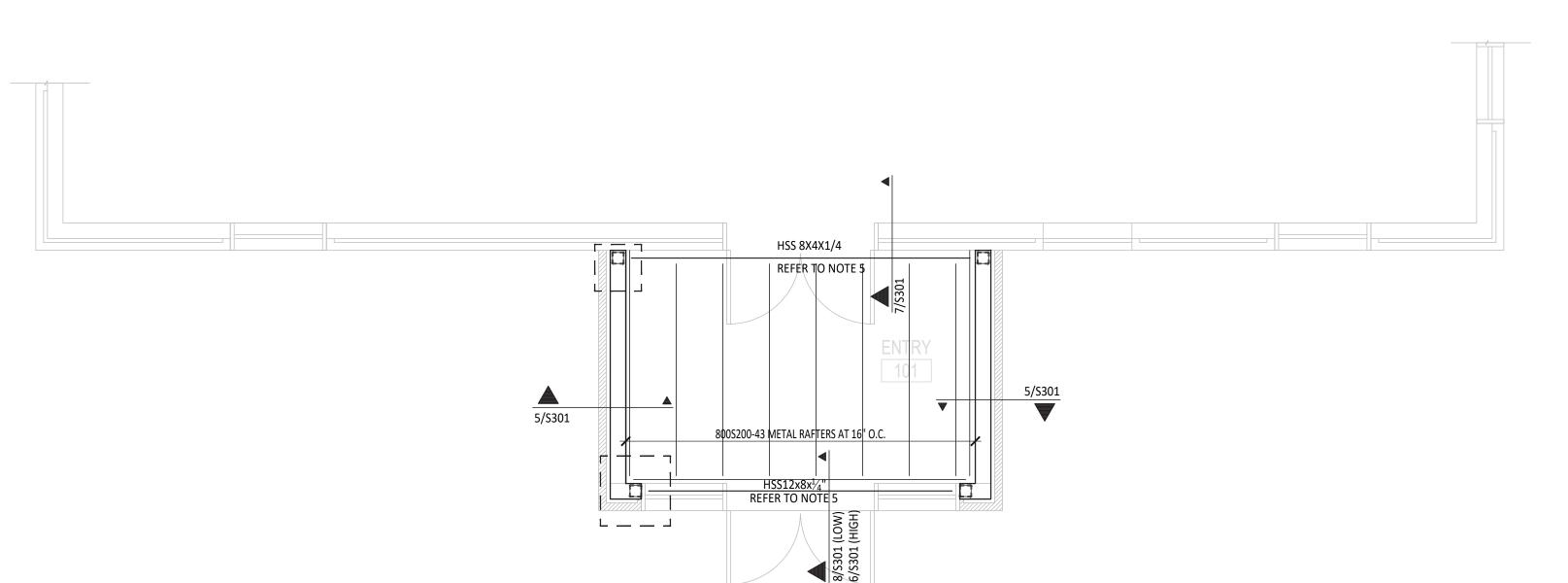
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1/S201 FOUNDATION PLAN SCALE:  $\frac{1}{4}$ " = 1'-0"



PLAN NOTES:
1) FOR GENERAL NOTES REFER TO S001. 2) FOR TYPICAL DETAILS REFER TO \$102. 3) ELEVATIONS SHOWN ON PLAN ARE REFERENCED FROM FINISHED FLOOR ELEVATION (+0'-0"). VERIFY ALL ELEVATIONS AND DIMENSIONS WITH ARCH DWGS. AND EXISTING FIELD CONDITIONS BEFORE CONSTRUCTION. 4) REFER TO 9/S301 FOR SHEATHING SCHEDULE 5) ATTACH BEAM TO COLUMN WITH  $\frac{1}{4}$ " FIELD, FILLET WELD ALL AROUND.

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