

SOIL AND SUBSURFACE CONDITIONS

D SUBSURFACE CONDITION	ONS	
ARING CAPACITY SHALL BE VERIFIED BY A NORTH JNDATION HAS BEEN DESIGNED IN ACCORDANCE CHNICHNOLOGIES, INC. PROJECT NO. 1-18-04-08-EA JNDATIONS HAVE BEEN DESIGNED BASED ON THE FOOTING BEARING PRESSURE ON SOIL 3,000 PSI DTECHNICAL REPORT FOR ADDITIONAL REQUIREM NTRACTOR SHALL VERIFY WITH THE GEOTECHNIC COMMENDATIONS OF THE GEOTECHNICAL REPOR THE BEARING STRATUM AT EACH FOUNDATION IS THE ALLOWABLE BEARING PRESSURE MEETS OR I ENGINEERED FILL IS INSTALLED IN ACCORDANCE V THE INSTALLATION OF THE FOUNDATION IS AS ASS MATERIALS SHALL BE APPROVED BY THE GEOTEC ATION PERIMETER SHALL BE COMPACTED TO 95% GS SHALL BE COMPACTED TO 98% OF STANDARD G BEARING ELEVATIONS SHALL BE ADJUSTED AT T	CAROLINA GEOTECHNIC WITH THE REPORT OF G A DATED 6/12/2018. FOLLOWING DESIGN VA F MENTS AND INFORMATIO CAL ENGINEER THAT THE EXCEEDS THE REQUIRE WITH THE REQUIREMENT SUMED IN THE REPORT. CHNICAL ENGINEER. ALL OF STANDARD PROCTOF PROCTOR.	EOTECHNICAL EXPLORATION PREPARED BY ALUES FROM THE GEOTECHNICAL REPORT: N. FOLLOWING ARE IN CONFORMANCE WITH PORT D VALUE IS OF THE REPORT. FILL WITHIN 10'-0" OF THE BUILDING R. THE TOP 12" BELOW FLOOR SLABS AND
ACTI PASS FRIC BASS UNIT	REST = 0.56 IVE = 0.39 SIVE = 2.56 CTION ANGLE = 26° E FRICTION = 0.3	
LING OF RETAINING WALLS SHALL BE PLACED SO NTIL THE LOWER GRADE IS REACHED. E POSITIVE DRAINAGE AWAY FROM BUILDING FOU N STABILITY OF EXCAVATIONS UNTIL PROPERLY B ER EXCAVATIONS AND REMOVE ANY WET MATERIA 3" THICKNESS "MUDMAT" OF CONCRETE IN THE E EQUIPMENT USED FOR PLACING OR COMPACTING GHT OF THE BACKFILL ABOVE THE TOP OF FOOTIN ENT SHALL BE USED FOR COMPACTION OPERATIC SHALL BE SUCH THAT THE THICKNESS OF ANY FO INDICATED. TION BRACING SHALL BE THE RESPONSIBILITY OF	INDATIONS BOTH DURING BACKFILLED. KEEP EXCAN AL PRIOR TO PLACING CO BOTTOM OF FOOTINGS TI BACKFILL SHALL NOT BE NG, (1 HORIZONTAL TO 1 DNS IN THIS AREA. UNDATION OR SLAB ON (G CONSTRUCTION AND PERMANENTLY. VATIONS FREE OF LOOSE MATERIAL. DNCRETE. HAT WILL BE EXPOSED TO RAIN. E OPERATED WITHIN A DISTANCE EQUAL TO VERTICAL). HAND OPERATED COMPACTION GRADE IS NOT REDUCED BY MORE THAN 5%
L LOADING RESULTING FROM AN EQUIVALENT FLU		FAND A SURFACE SURCHARGE OF 250 PSF.
MIX DESIGNS FOR EACH TYPE OF CONCRETE SPE DATA FOR ALL ADMIXTURES, CURING COMPOUND & LABORATORY SHALL SAMPLE AND TEST CONCRI MPLES IN ACCORDANCE WITH ASTM C31. SAMPLE R FOR EACH PLACEMENT OF EACH TYPE OF CONC EPORTS SHALL BE SENT TO THE STRUCTURAL END ETE SHALL HAVE THE MINIMUM 28 DAY COMPRESS LOCATION FOUNDATIONS AND SLAB ON GRADE ELEVATED SLAB ON DECK ETE WORK SHALL CONFORM TO ACI 318. RCING BARS SHALL CONFORM TO ASTM A615 GRA RCING BARS TO BE WELDED SHALL CONFORM TO	DS AND HARDENERS THA ETE AS FOLLOWS: E 4 CYLINDERS FOR EAC CRETE PLACED IN ANY OF GINEER AND SHALL BE A SIVE STRENGTH AND WE 28 DAY STRENGTH 3,000 PSI 4,000 PSI	H 100 CUBIC YARDS, 5000 SF OF SURFACE NE DAY. VAILABLE AT THE JOBSITE
D WIRE FABRIC SHALL CONFORM TO ASTM A82 AN ONE FULL SQUARE PLUS 2" AT ALL SHEET EDGES. N GRADE DOWELS SHALL BE SMOOTH RODS CONF RCING BAR SUPPORT DEVICES SHALL CONFORM T ETE CLEAR COVER ON EMBEDDED REINFORCING S DN GS	D A185. PROVIDE MATER FORMING TO ASTM A36 V TO CRSI MANUAL OF STA	VITH ENDS SMOOTH CUT. NDARD PRACTICE. MINIMUM CLEAR COVER 3" BOTTOM AND SIDES,
ETE EXPOSED TO EARTH OR WEATHER	#5 AND SMALLER #6 THROUGH #18	2" TOP 1 1/2" 2"
ETE NOT EXPOSED TO EARTH OR WEATHER WALLS	#6 THROUGH #18 #11 AND SMALLER #14 AND #18	2" 3/4" 1 1/2"
ALS Y REINFORCING, STIRRUPS AND TIES NTINUOUS BARS SHALL HAVE A CLASS B TENSION UOUS BARS AT ALL FOUNDATION AND WALL CORN ND. E (2) #5 x4' - 0" LONG TOP DIAGONAL BARS AT ALL I	ALL LAP SPLICE AT ALL SPLIC NERS AND INTERSECTION	1 1/2" CES UNO. PROVIDE CORNER BARS FOR ALL NS. LAP CORNER BARS 48 BAR DIAMETERS

PROVIDE (2) #5 x4' - 0" LONG TOP DIAGONAL BARS AT ALL REENTRANT CORNERS IN ALL SLABS ON GRADE AND ELEVATED PROVIDE DOWELS TO FOOTINGS TO MATCH ALL WALL, PIER AND COLUMN VERTICAL REINFORCING UNO. EMBED DOWELS IN

FOOTING WITH HOOK TO WITHIN 3" OF BOTTOM OF FOOTING. EXTEND DOWELS ABOVE FOOTING FOR 48 BAR DIAMETER LAP SPLICE WITH VERTICAL REINFORCING UNO. CONSTRUCTION OR CONTRACTION JOINTS SHALL BE INSTALLED IN SLABS ON GRADE AT A SPACING NOT TO EXCEED 12'-0" OC EACH DIRECTION UNO ON FOUNDATION PLAN. ASPECT RATIO OF SLAB AREAS BETWEEN JOINTS (RATIO OF LONG SIDE TO SHORT SIDE) SHALL NOT EXCEED 1.5. SAW CUT JOINTS SHALL BE MADE AS SOON AS SLABS WILL SUPPORT MEN AND EQUIPMENT. EMBEDDED EDGE ANGLES SHALL BE DISCONTINUOUS AT SLAB JOINT LOCATIONS. CONSTRUCTION AND CONTRACTION JOINTS IN WALLS SHALL BE LOCATED AT 100'-0" OC MAXIMUM AND 25'-0" MAXIMUM FROM WALL CORNERS. ALIGN JOINTS IN WALLS WITH JOINTS IN SLABS AT LOCATIONS WHERE SLABS ARE CONNECTED TO WALLS. CONFORM TO ACI 306 FOR COLD WEATHER CONCRETE AND ACI 305 FOR HOT WEATHER CONCRETE WORK WHEN ANY COMBINATION OF TEMPERATURE, HUMIDITY OR WIND SPEED RESULTS IN CONDITIONS THAT WOULD IMPAIR THE QUALITY OF CONCRETE. CONCRETE IS TO BE REJECTED IF ITS TEMPERATURE AT TIME OF PLACEMENT IS 90 DEGREES F OR ABOVE. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" UNO. SEE ARCHITECTURAL DRAWINGS FOR DETAILS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL EMBEDDED ITEMS IN CONCRETE WORK. COORDINATE WITH THE FOLLOWING: CIVIL, ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS, PRECAST SHOP DRAWINGS, MECHANICAL, ELECTRICAL AND PLUMBING EQUIPMENT AND FIXTURE REQUIREMENTS

CONCRETE MASONRY

UNO HOLLOW MASONRY UNITS SHALL CONFORM TO ASTM C90, LIGHTWEIGHT, WITH A MINIMUM COMPRESSIVE STRENGTH F'm = 1.500 PSI ON THE NET BLOCK AREA. MORTAR SHALL CONFORM TO ASTM C270 CEMENT-LIME TYPE M OR S. MINIMUM COMPRESSIVE STRENGTH TO BE 1,800 PSI. COURSE MASONRY GROUT SHALL CONFORM TO ASTM C476 WITH MAXIMUM AGGREGATE SIZE OF 3/8". MINIMUM COMPRESSIVE TRENGTH SHALL BE 2,000 PSI AT 28 DAYS. PROVIDE CLEAN OUT OPENINGS WHERE GROUT POUR EXCEEDS 5'-0". PROVIDE MINIMUM REINFORCING FOR ALL CONCRETE MASONRY WALLS UNO ON PLANS: PROVIDE W1.7 HORIZONTAL JOINT REINFORCING AT 16" OC WITH FORMED "L" AND "T" SECTIONS AT WALL CORNERS AND

INTERSECTIONS. REINFORCE VERTICALLY WITH 1 #5 CENTERED IN GROUT FILLED CELL FULL HEIGHT OF WALL WITH DOWEL TO FOUNDATION AT WALL CORNERS, ENDS, INTERSECTIONS, OPENING JAMBS, EACH SIDE OF CONTROL JOINTS AND SPACED AT 48" OC MAXIMUM. LAP VERTICAL REINFORCING 52 BAR DIAMETER AT ALL SPLICES UNO. MINIMUM MASONRY WALL FOOTINGS SHALL PROJECT 4" MINIMUM ON EACH SIDE OF WALL AND BE 12" DEEP WITH (2) #5 BOND BEAMS SHALL BE REINFORCED WITH (2) #5 CONTINUOUS. LAP 32" AT ALL SPLICES. PROVIDE CORNER BARS AT ALL WALL

CORNERS AND INTERSECTIONS. PROVIDE DOWELS TO MATCH VERTICAL BARS AT THE BASE OF ALL WALLS. LAP 52 BAR DIAMETERS MINIMUM WITH VERTICAL

STRUCTURAL STEEL

RAL STEEL CONSTRUCTION DETAILING, FABRICATI	ON AND ERECTION SHALL CONFORM TO THE AISC "SPECIFICATION
ICTURAL STEEL BUILDINGS".	
RAL STEEL MEMBERS SHALL CONFORM TO THE FO IDE FLANGE SHAPES IGLE, CHANNELS AND PLATES ICHOR RODS <= 3/4"Ø ICHOR RODS >= 7/8"Ø PE	DLLOWING STANDARDS:
IDE FLANGE SHAPES	ASTM A992
IGLE, CHANNELS AND PLATES	ASTM A36
ICHOR RODS <= 3/4"Ø	ASTM F1554 GRADE 36
ICHOR RODS >= 7/8"Ø	ASTM F1554 GRADE 55
PE	ASTM A53 GRADE B 35 ksi
ECTANGULAR HSS	ASTM A500 GRADE C, 50 ksi
DUND HSS	ASTM A500 GRADE B, 42 ksi
EADED STUDS	ASTM A108, GRADE 1015-1020
_ EXPOSED TO WEATHER SHALL BE HOT DIPPED G	
OF STRUCTURAL STEEL MEMBERS IS PROHIBITED I AND TYPE OF SPLICE.	WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER FOR THE
BEAMS WHERE INDICATED. WHERE NO CAMBER IS I, ANY NATURAL CAMBER IS UPWARD.	INDICATED, BEAMS SHALL BE FABRICATED SO THAT AFTER
	RED IN STRUCTURAL STEEL MEMBERS FOR ERECTION OR THE
	OP DRAWINGS AT TIME OF SUBMITTAL FOR REVIEW.
	WITHOUT PRIOR WRITTEN APPROVAL OF THE STRUCTURAL
R OF RECORD.	WITHOUT FRIOR WRITTEN AFFROVAL OF THE STRUCTURAL
	RAL STEEL AND SHALL INDICATE COMPLETE CONNECTION
FION, BOTH SHOP AND FIELD.	
A SHOP COAT OF FABRICATOR'S STANDARD RUST	INHIBITIVE PRIMER TO ALL STEEL LINO
	TERIAL APPLIED TO STRUCTURAL STEEL. DO NOT PRIME STEEL
	ATERIAL. DO PRIME STEEL WHICH IS TO RECEIVE INTUMESCENT
TECTIVE COATING.	
WITH NON-SHRINK GROUT UNDER ALL BASE AND	BEARING PLATES
	MS SUPPORTING COMPOSITE FLOOR SYSTEMS UNO.
ION NOTES:	
	LLY DETAILED ON THE STRUCTURAL DRAWINGS SHALL BE
	BER REACTION INDICATED. REACTIONS INDICATED ARE SERVICE
	JATIONS. WHERE NO REACTION IS INDICATED PROVIDE A
	HEAR REACTION OF 80% OF THE MAXIMUM TOTAL UNIFORM LOAD
	S DETERMINED PER THE MAXIMUM TOTAL UNIFORM LOAD TABLES
THE AISC MANUAL.	
	FOLLOWING STANDARDS AND MATERIAL PROPERTIES:
	ASTM A36
T	ASTM A992
ATES	ASTM A36
DLTS	ASTM A325 OR ASTM A490
JTS	ASTM A563

ASTM F436 WELDING ELECTRODES E70XX STANDARD SHEAR CONNECTIONS SHALL BE DETAILED AS DOUBLE ANGLE OR SINGLE PLATE CONNECTIONS IN ACCORDANCE WITH THE CONNECTION TABLES IN THE AISC "MANUAL OF STEEL CONSTRUCTION ALLOWABLE STRESS DESIGN". BOLTED CONNECTIONS SHALL BE DETAILED USING TYPE N BOLTS INSTALLED IN SNUG TIGHTENED JOINTS

BRACED FRAME CONNECTIONS, MOMENT CONNECTIONS AND COLLECTOR ELEMENT CONNECTIONS SHALL BE DESIGNED BY A NORTH CAROLINA STRUCTURAL ENGINEER. STRUCTURAL CALCULATIONS FOR THESE CONNECTIONS SHALL BE SUBMITTED AND SHALL BE SEALED BY THE ENGINEER RESPONSIBLE FOR THE DESIGN. PROVIDE STIFFENERS, CONTINUITY PLATES, DOUBLER PLATES OR OTHER ADDITIONAL MEMBER LOCAL STRENGTHENING MEASURES AS REQUIRED FOR THE CONNECTION DESIGN. BOLTED CONNECTIONS SHALL BE MADE WITH A MINIMUM OF (2) 3/4"Ø BOLTS AND HAVE A MINIMUM SHEAR CAPACITY OF 10 KIPS.

BOLTED CONNECTIONS SHALL CONFORM TO THE PROVISIONS OF THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS." WELDED CONNECTIONS SHALL BE MADE WITH CONTINUOUS FILLET WELDS UNO. MINIMUM WELD SIZE SHALL BE 1/4" OR AS REQUIRED BY AISC SPECIFICATION, WHICHEVER IS LARGER. MINIMUM WELD LENGTH SHALL BE 2". ALL WELDS SHALL BE MADE BY CERTIFIED WELDERS. BOLTED CONNECTIONS OF MOMENT CONNECTIONS, TENSION CONNECTIONS, BRACED FRAME CONNECTIONS.

MOMENT FRAME CONNECTIONS, COLLECTOR ELEMENT CONNECTIONS AND AS INDICATED SHALL BE SLIP-CRITICAL

STEEL JOISTS

CONNECTIONS.

- STRUCTURAL STEEL JOIST AND JOIST GIRDER DESIGN, FAE JOIST INSTITUTE "STANDARD SPECIFICATION AND LOAD TA
- SUPPORT ADDITIONAL CONCENTRATED LOADS, END MOME MOMENTS WHERE INDICATED ON THE DRAWINGS. JOIST BRIDGING SHALL BE PROVIDED AND INSTALLED IN A
- INSTALLED AND ANCHORED AT ENDS OF ALL BRIDGING RU ROOF DECK. PROVIDE BOLTED "X" BRIDGING IN ACCORDAN JOIST MANUFACTURER SHALL DESIGN JOISTS FOR THE NE
- PRESSURE IS INDICATED DESIGN JOISTS FOR A MINIMUM N BRIDGING AS REQUIRED
- CAMBER JOISTS IN ACCORDANCE WITH SJI SPECIFICATIONS. JOISTS SHALL BE FASTENED TO SUPPORTING STEEL WITH A MINIMUM OF 1/8" FILLET WELD x 2" LONG EACH SIDE
- WITH OSHA STANDARDS.
- REINFORCED TO SUPPORT THE CONCENTRATED LOAD.
- SPECIFICALLY NOTED OTHERWISE.
- REQUEST. CALCULATIONS SHALL INCLUDE LOAD DIAGRAMS FOR EACH MEMBER INDICATING UNIFORM AND CONCENTRATED LOADS. PROVIDE ELEVATION OF EACH JOIST INDICATING GEOMETRY, MEMBERS USED, AND

LIGHT GAGE METAL FRAMING

- LIGHT GAGE METAL FRAMING INDICATED ON THE DRAWINGS INDICATES TYPICAL CONDITIONS AND MINIMUM REQUIREMENTS.
- CALCULATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER OF RECORD FOR
- REVIEW. SHOP DRAWINGS SHALL INCLUDE LAYOUT OF ALL LIGHT GAGE METAL FRAMING INCLUDING ARRANGEMENT DIMENSIONS, MATERIALS, STRESS VALUES, CONNECTORS, ANCHORAGE, AND RELATION TO ADJACENT WORK.
- SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS.
- ALL LIGHT GAGE METAL STUDS, TRUSSES, TRACK, BRIDGING AND ACCESSORIES SHALL BE FORMED FROM STEEL HAVING A G-60 GALVANIZED COATING CONFORMING TO ASTM A653 AND C955.
- AND CONCENTRATED LOADS (NO PUNCHING HOLES OF ANY SIZE IS PERMITTED IN THESE 10 INCHES). NO CUTTING OF THE STUD FLANGES IS PERMITTED.
- SPLICES IN LOAD BEARING STUDS IS NOT PERMITTED.
- SHALL BE CUT SQUARE
- LENGTH OF ALL BRIDGING LINES AND EACH SIDE OF WALL OPENINGS. BRIDGING IS TO BE SPACED AT 4' - 0" OC VERTICALLY.
- 12 OC. WITH 1 1/2" MINIMUM PENETRATION INTO CONCRETE.
- APPROVAL FROM THE ENGINEER OF RECORD.
- SCREWS SPACED AT 6" OC AT ALL PANEL EDGES AND PANEL INTERIOR. REFER TO ARCHITECTURAL DRAWINGS FOR NON-LOAD BEARING WALLS AND ALL WALL DIMENSIONS.

METAL ROOF DECK

- THE ANSI/SDI "STANDARD FOR STEEL ROOF DECK". PROVIDE ROOF DECK OF TYPE, DEPTH AND MINIMUM THICKNESS INDICATED. ROOF DECK SHALL BE INSTALLED IN LENGTHS TO PROVIDE 3 CONTINUOUS SPANS MINIMUM.
- INSTALL ROOF DECK WITH A MINIMUM END BEARING LENGTH OF 1 1/2".

COMPOSITE FLOOR DECK

- WITH THE ANSI/SDI "STANDARD FOR COMPOSITE STEEL FLOOR DECK". PROVIDE COMPOSITE FLOOR DECK OF TYPE, DEPTH AND MINIMUM THICKNESS INDICATED. RELEVANT FACTORS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
- THE PLANNED CONCRETE PLACEMENT METHODS. ADDITIONAL CONCRETE WEIGHT DUE TO DECK DEFLECTION. MINUS ANY INDICATED CAMBER.
- DECK FROM ACTING AS A TIGHT AND SUBSTANTIAL FORM. COMPOSITE FLOOR DECK SHALL BE INSTALLED IN LENGTHS TO PROVIDE 3 CONTINUOUS SPANS MINIMUM
- MAXIMUM INSTALL COMPOSITE FLOOR DECK WITH A MINIMUM END BEARING LENGTH OF 1 1/2".
- NECESSARY TO CONTAIN CONCRETE DURING PLACEMENT. DECK FROM ACTING AS A TIGHT AND SUBSTANTIAL FORM.
- 10. IS ONLY REQUIRED AT SINGLE (SIMPLE) SPAN CONDITIONS. DECK SHOP DRAWINGS SHALL INDICATE SINGLE SPAN CONDITIONS REQUIRING SHORING. 11.
- SLAB THICKNESS SHALL MATCH THAT INDICATED WITHIN A TOLERANCE OF +1/4" / -1/4".

MANUFACTURED STEEL STAIRS

- SEE ARCHITECTURAL DRAWINGS FOR STEEL STAIR LOCATIONS AND DIMENSIONS. STEEL STAIR STRUCTURE AND CONNECTIONS TO THE BUILDING STRUCTURE SHALL BE DESIGNED BY A NORTH WITH THE REQUIREMENTS OF NC STATE BUILDING CODE SECTION 1607. RAILINGS, POSTS AND THEIR CONNECTIONS SHALL BE DESIGNED FOR UNIFORM AND CONCENTRATED LOADS IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE BUILDING CODE SECTION 1607.7.4.
- REINFORCING REQUIREMENTS. CONTRACTOR SHALL COORDINATE STAIR OPENING DIMENSIONS AND CONNECTION MATERIAL EMBEDDED IN THE BUILDING STRUCTURE WITH THE STAIR MANUFACTURER.

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POST-INSTALLED ANCHORS

BRICATION AND ERECTION SHALL CONFORM TO THE STEEL ABLES". JOISTS AND JOIST GIRDERS SHALL BE DESIGNED TO IENTS AND REACTIONS RESULTING FROM THE SPECIFIED END
CCORDANCE WITH SJI SPECIFICATIONS. BRIDGING SHALL BE JNS TO WALLS OR STEEL FRAMES PRIOR TO PLACEMENT OF NCE WITH OSHA STANDARDS.
ET UPLIFT PRESSURE INDICATED. WHERE NO NET UPLIFT NET UPLIFT OF 15 PSF (ASD, 0.6W). PROVIDE ADDITIONAL UPLIFT

PROVIDE BOLTED CONNECTIONS AT SUPPORTS AND BOTTOM CHORD STABILIZER PLATES AT COLUMNS IN ACCORDANCE CONCENTRATED LOADS SHALL BE PERMITTED TO BE ATTACHED TO JOISTS AT JOIST PANEL POINTS ONLY. WHERE IT IS NECESSARY TO ATTACH A CONCENTRATED LOAD TO THE JOIST BETWEEN PANEL POINTS THE JOIST SHALL BE JOIST AND JOIST GIRDER BOTTOM CHORD EXTENSIONS SHALL NOT BE WELDED TO STABILIZER PLATES UNLESS

JOIST SUPPLIER SHALL BE PREPARED TO SUBMIT CALCULATIONS FOR ALL JOISTS AT ARCHITECT OR ENGINEER'S

LIGHT GAGE METAL FRAMING SHALL BE DESIGNED BY A NORTH CAROLINA STRUCTURAL ENGINEER. DESIGN

LIGHT GAGE METAL FRAMING DESIGN AND CONSTRUCTION SHALL CONFORM TO THE AISI NORTH AMERICAN MINIMUM GAGE OF MEMBERS PROVIDING LATERAL SUPPORT FOR MASONRY VENEER SHALL BE 18 GAGE (43 MILS). LIMIT LATERAL DEFLECTION OF STUDS PROVIDING LATERAL SUPPORT FOR MASONRY VENEER TO H/600 MINIMUM YIELD STRENGTH (Fy) FOR LIGHT GAGE METAL FRAMING MEMBERS SHALL BE 33,000 PSI FOR 18 GAGE (43 MILS) AND THINNER. MINIMUM YIELD STRENGTH (Fy) FOR MEMBERS SHALL BE 50,000 PSI FOR 16 GAGE (54 MILS) AND A MINIMUM OF 10" LENGTH OF UN-PUNCHED STEEL IS REQUIRED AT ENDS OF STUDS AND AT ALL BEARING POINTS

LOAD BEARING STUDS SHALL HAVE FULL BEARING AGAINST THE INSIDE TRACK WEB TOP AND BOTTOM. STUD ENDS LATERAL BRIDGING SHALL BE USED TO PROVIDE LATERAL STABILITY OF LOAD BEARING STUDS. BRIDGING SHALL BE (2) 1 1/2" - 18 GA (43 MILS) FLAT STRAP (ONE EACH SIDE OF WALL). FASTEN BRIDGING TO EACH STUD FLANGE WITH (1) #10 SCREW. PROVIDE TRACK BLOCKING BETWEEN STUDS IN LINE WITH BRIDGING SPACED AT 10'-0" MAXIMUM ALONG

MINIMUM TRACK FASTENING AT FOUNDATION SHALL BE 0.177"Ø POWDER ACTUATED FASTENERS (PAF) SPACED AT 8" CUTTING OF LOAD BEARING METAL STUDS, TRACK, BRIDGING OR BRACING IS NOT PERMITTED WITHOUT SPECIFIC ATTACH ALL EXTERIOR SHEATHING AND INTERIOR SHEATHING AT BEARING WALLS TO METAL STUDS WITH #6

THE DESIGN, MANUFACTURE AND ERECTION OF STEEL ROOF DECK AND ITS ANCHORAGE SHALL BE IN ACCORDANCE WITH

ROOF DECK SHALL BE FASTENED TO SUPPORTS AS INDICATED ON THE DRAWINGS. FASTEN TO SUPPORTS AT DECK PERIMETER WITH A MINIMUM OF 5/8" DIAMETER WELDS SPACED AT 6" OC.

THE DESIGN, MANUFACTURE AND ERECTION OF COMPOSITE FLOOR DECK AND ITS ANCHORAGE SHALL BE IN ACCORDANCE VERIFY DECK PROVIDED WILL SUPPORT THE CONSTRUCTION LOADS DURING CONCRETE PLACEMENT. ACCOUNT FOR

ADDITIONAL CONCRETE WEIGHT DUE TO DEFLECTION OF BEAMS AND GIRDERS EQUAL TO SPAN DIVIDED BY 240 INSPECT FLOOR DECK PRIOR TO CONCRETE PLACEMENT AND NOTIFY ENGINEER OF ANY DAMAGE THAT WOULD PREVENT

COMPOSITE FLOOR DECK SHALL BE FASTENED TO SUPPORTS A MINIMUM OF 5/8" DIAMETER WELDS SPACED AT 30" OC MAXIMUM. DECK SPANS GREATER THAN 5' - 0" SHALL HAVE SIDE LAPS FASTENED WITH #10 SCREWS SPACED AT 36" OC

INSTALL FLOOR DECK CLOSURES AT COLUMNS, OPEN ENDS OF RIBS, SIDES OF DECKING AND OTHER LOCATIONS

INSPECT FLOOR DECK PRIOR TO CONCRETE PLACEMENT AND NOTIFY ENGINEER OF ANY DAMAGE THAT WOULD PREVENT COMPOSITE SLABS HAVE BEEN DESIGNED AS "UNSHORED CONSTRUCTION". SHORING OF DECK DURING CONCRETE POURS

THE CONCRETE SLABS AT FLOORS SHALL BE PLACED PER THE "LEVEL SLAB" METHOD, THAT IS TO COMPENSATE FOR DEFLECTION OF THE STRUCTURE UNDER THE LOAD OF FRESHLY PLACED CONCRETE, THE SLAB THICKNESS SHALL BE INCREASED ACCORDINGLY TO PROVIDE A LEVEL SURFACE WITHIN TOLERANCE. ADDITIONAL CONCRETE SHALL BE PLACED AT NO ADDITIONAL COST TO THE OWNER. A FIELD SURVEY MUST BE PERFORMED AND SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD (1) WEEK BEFORE PLACING CONCRETE. THE SURVEY SHALL INDICATE THE IN-PLACE TOP OF STEEL ELEVATIONS FOR ALL BEAMS AT EACH END AND MIDPOINTS. THE CONCRETE SLAB PLACEMENT AT ROOFS SHALL BE "UNIFORM THICKNESS" METHOD, THAT IS THE CONCRETE SLAB SHALL FOLLOW THE SHAPE OF THE BEAM FRAMING. THE

CAROLINA STRUCTURAL ENGINEER. DESIGN STAIRS FOR UNIFORM LOADS AND CONCENTRATED LOADS IN ACCORDANCE

SUBMIT SHOP DRAWINGS FOR STAIRS INDICATING ALL STAIR MEMBER SIZES, CONNECTIONS AND CONNECTIONS TO THE BUILDING STRUCTURE. SHOP DRAWINGS SHALL INDICATE STAIR TREAD AND LANDING CONCRETE FILL THICKNESS AND

EXCEP	T WHE	RE INDICATED ON THE DRAWINGS, POST-INSTALLED ANCHORS SHALL CONSIST OF THE FOL
TYPES	AS PR	OVIDED BY HILTI, INC. CONTACT HILTI AT (800) 879-8000 FOR PRODUCT RELATED QUESTIONS
A.		ORAGE TO CONCRETE
	a.	ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
	•	HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HIT-Z ROD PER ICC ESR-3187.
		HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT (TE-CD OR TE-YI
		VACUUM (VC 150 OR VC 300) SYSTEM WITH HAS-E THREADED ROD PER ICC ESR-3
		HILTI HIT-RE 500-v3 SAFE SET EPOXY ADHESIVE ANCHORING SYSTEM WITH HILTI H
		(TE-CD OR TE-YD) AND VC 150/300 VACUUM (VC150 OR VC 300) WITH HAS-E THREA
		ESR-3814 FOR SLOW CURE APPLICATIONS.
		 HILTI HIT-RE 500 V3 SAFE SET SYSTEM WITH HILTI ROUGHENING TOOL (TE-YRT) WI
		THREADED ROD PER ICC ESR-3814 FOR DIAMOND CORED HOLES
	b.	MEDIUM DUTY MECHANICAL ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
	υ.	HILTI KWIK HUS-EZ AND KWIK HUS EZ-1 SCREW ANCHORS PER ICC ESR-3027
		HILTI KWIK BOLT-TZ EXPANSION ANCHORS PER ICC ESR-1917
		HILTI KWIK-BOLT 3 EXPANSION ANCHORS (UNCRACKED CONCRETE ONLY) PER ICC
	C.	HEAVY DUTY MECHANICAL ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
	0.	HILTI HDA UNDERCUT ANCHORS PER ICC ESR 1546
		HILTI HSL-3 EXPANSION ANCHORS PER ICC ESR 1545
В.	RFBA	R DOWELING INTO CONCRETE
	a.	ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
		HILTI HY-200 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT (TE-CD OR TE-YD) A
		VACUUM (VC105 OR VC 300) SYSTEM WITH CONTINUOUSLY DEFORMED REBAR PE
		HILTI HIT-RE 500-v3 SAFE SET EPOXY ANCHORING SYSTEM WITH HILTI HOLLOW DR
		TE-YD) AND VC150/300 VACUUM (VC 150 OR VC 300) SYSTEM WITH CONTINUOUSLY
		PER ICC ESR-3814
		 HILTI HIT-RE 500 V3 SAFE SET SYSTEM WITH HILTI ROUGHENING TOOL (TE-YRT) WI
		DEFORMED REBAR PER ICC ESR-3814 IN DIAMOND CORED HOLES.
C.	ANCH	ORAGE TO SOLID GROUTED MASONRY
-	a.	ADHESIVE ANCHORS USE:
		 HILTI HIT-HY 270 MASONRY ADHESIVE ANCHORING SYSTEM PER ICC ESR-4143
		• STEEL ANCHOR ELEMENT SHALL BE HILTI HAS-E CONTINUOUSLY THREADED ROD
		DEFORMED STEEL REBAR
	b.	MECHANICAL ANCHORS USE:
		HILTI KWIK BOLT-3 EXPANSION ANCHORS PER ICC ESR-1385
D.	ANCH	ORAGE TO HOLLOW / MULTI-WYTHE MASONRY
	a.	ADHESIVE ANCHORS USE:

HILTI HIT-HY 270 MASONRY ADHESIVE ANCHORING SYSTEM PER ICC ESR-4144 STEEL ANCHOR ELEMENT SHALL BE HILTI HAS-E CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR THE APPROPRIATE SIZE SCREEN TUBE SHALL BE USED PER ADHESIVE MANUFACTURER'S RECOMMENDATION ALL ANCHOR BASE PLATES, PRESSURE TREATED WOOD SILLS, OR EXTERIOR APPLICATIONS SHALL BE GALVANIZED OR STAINLESS STEEL

ANCHOR CAPACITY USED IN DESIGN SHALL BE BASED ON THE TECHNICAL DATA PUBLISHED BY HILTI OR SUCH OTHER METHOD AS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR SHALL PROVIDE CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE SPECIFIED PRODUCT. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC ESR SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE AND INSTALLATION TEMPERATURE.

INSTALL ANCHORS PER THE MANUFACTURER INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING. OVERHEAD ADHESIVE ANCHORS MUST BE INSTALLED USING THE HILTI PROFI SYSTEM. THE CONTRACTOR SHALL ARRANGE AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION FRAINING FOR ALL OF THEIR ANCHORING PRODUCTS SPECIFIED. THE STRUCTURAL ENGINEER OF RECORD MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS ARE TRAINED PRIOR

TO THE COMMENCEMENT OF INSTALLING ANCHORS. ANCHOR CAPACITY IS DEPENDANT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON DRAWINGS. EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. EXISTING REBAR AND STANDS MUST NOT BE CUT OR DAMAGED. UNLESS NOTED ON THE DRAWINGS THAT THE BARS CAN BE CUT. THE CONTRACTOR SHALL REVIEW THE EXISTING STRUCTURAL DRAWINGS AND SHALL UNDERTAKE TO

CEILING DESIGN NOTE

CHIPPING OR OTHER MEANS.

ALL SUSPENDED CEILING FRAMING SYSTEMS SHALL BE DESIGNED BY THE SUPPLIER TO CONFORM WITH LOCAL SEISMIC REQUIREMENTS. CEILING WEIGHT SHALL INCLUDE ALL LIGHT FIXTURES AND OTHER EQUIPMENT THAT IS LATERALLY SUPPORTED BY THE CEILING. FOR PURPOSES OF DETERMINING THE LATERAL FORCE, A CEILING WEIGHT OF NOT LESS THAN 4 PSF SHALL BE USED. SUPPLIER SHALL SUBMIT A LETTER OF CERTIFICATION SIGNED BY A PROJECT STATE STRUCTURAL FNGINFFR



S001

	Project: HARNETT C Location: 307 W CO Owner's Representa Owner's Address: 70 Architect of Record:	COUNTY GOVERNME RNELIUS HARNETT tive: STEVE WARD; s	VAY, LILLINGTON, NC 27546 , AIA	
	(Chapter 17) of the Ir	nternational Building C	ode. The Statement includes a	t issuance in accordance with the Special Inspection requirements Schedule of Special Inspections applicable to this project as well as the nspector to perform on this project.
F		r shall keep records o	. .	on reports, and identify discrepancies as detailed by project
I			umenting the completion of all rec suance of a Certificate of Use and	quired Special Inspections and confirming the correction of any docupancy.
	The Special Inspection construction are sole	ons program does not ly the responsibility of	relieve the Contractor of his or h the Contractor.	er responsibilities. Job Site safety and means and methods of
	SCHEDUL	E OF SPE	CIAL INSPECTION	NC
	The following sheets inspections for this p		schedule of special inspections	for this project. The construction divisions which require special
	 ☑ Soils □ Special Foundation ☑ Cast-in-Place Cond □ Structural Load Be □ Post Tensioned Composition 	crete aring Precast Concret increte	⊠ Miscel ⊠ Quality e ⊡ Wall P ⊡ Spraye	etaining Walls laneous Inspections in High Seismic Conditions / assurance in High Wind Conditions anels and Veneers ed Fire Resistant Materials
	 □ Structural Masonry □ Structural Steel □ Steel Bar Joists 	– Level 1		or Insulation & Finish System (EIFS) essive Collapse Resistance
	Seismic Design Cate Basic Wind Speed: 1		□ Quality	/ Assurance for Progressive Collapse
	Wind Exposure Cate	gory: B	by (Structural Engineer of Reco	rd).
				iu).
Е	Signature Owner's Authorizatio	n	Date	Accepted for the Building Official by:
	Signature		Date	Signature Date
	Signature			Signature Date Date Date
D	certification or license	e as indicated below, s for (SI) shall be a lice Structural Engine Geotechnical Engine design of building Geotechnical Engine design of building Geotechnical Engine soil mechanics a Geotechnical Ter Soils certification Geotechnical Ter Geotechnical Ter Geotechnical Engine Concrete Technic Grade I Concrete Concrete Technician Technician or ICI Steel Technician Technician ASN ^T Steel Technician Steel Technician Meld inspection of Inspector. Structural Masor ICBO Certified S ICBO Certified P	such designation will appear on the series of the specialization of the special of the specialization of the special of th	n with American Concrete Institute – Grade II Concrete Laboratory Testing Inspector certification. elding Society – Certified Associate Welding Inspector (CAWI) or Non-destructive elding Society – Certified Welding Inspector (CWI) or Non-destructive Testing d Structural Steel and Bolting Special Inspector. rican Welding Society – Certified Welding Inspector (CWI) with a minimum of 10 years of Testing Technician AST-TC-1A Level III or ICBO Certified Structural Welding Special Inced masonry inspector who is an ICBO Certified Structural Masonry Special Inspector. I Inspector.
	(Special Inspection o	f soils is only required	for subgrade and fill placement	under structures requiring Special Inspections.)
	Item		Qualifications	Scope
С	1. Site Prepara		SI, G-TECH, S-EIT, G-EIT, GE, SE	 Collect testing agency's field and laboratory test reports during site preparation and verify the following complies with the project specifications/geotechnical report: Site stripping and subgrade preparation Fill material (on-site and/or imported) classification Fill material placement (lift thickness, moisture content and compaction) Allowable bearing capacity for footings and foundations Periodic inspection of testing of fill material placement including periodic observation of testing agency's density testing methods and frequency of testing to verify compliance with project specifications/geotechnical report. Continuous inspection of density and lift thicknesses during placement and compaction of controlled fills within the building footprint. Continuous verification for the use of proper fill materials during placement within the building footprint.



Α

CAST-IN-PLACE CONCRETE

ltem		Qualifications	Scope
1.	Mix Design Verification	SI, C-TECH 1, C-TECH 2, S-EIT, SE	Collect accepted mix designs and verify appropriate mix is used during specific installation
2.	Reinforcement Installation	SI, C-TECH 2, S-EIT, SE	 Periodic inspection of reinforcing steel and welded wire fabric to confirm size, spacing and details conform to contract documents at the following minimum frequency, distributed throughout construction: Footings and foundations Foundation walls and pedestals Slabs on metal deck
3.	Welding Reinforcing	SI, S-TECH 1, S-TECH 2, S-TECH 3	 Continuous inspection of all reinforcing, noted to be welded Verify reinforcing meets ASTM requirements for weldablity
4.	Concrete Placement/Monitoring Fresh Concrete, Sampling & prep of test samples	SI, C-TECH 2, S-EIT, SE	 Continuous inspection of cast-in-place concrete placement Continuous monitoring of sampling of fresh concrete, slump test, air content test, temperature of concrete and creation of strength test specimens
5.	Bolting	SI, C-TECH 2, S-EIT, SE	 Continuous inspection of bolts placed or cast into concrete Periodic (min. 20%, distributed throughout construction) inspection of expansion anchor installation or other type anchor Periodic (min.75%, distributed throughout construction) inspection of epoxy anchor installation
6.	Curing & Protection	SI, C-TECH 2, S-EIT, SE	 Periodic inspections of curing techniques Periodic inspections of cold and hot weather concreting techniques

SITE RETAINING WALLS

All site retaining walls retaining more than 5'-0" require special inspections. This includes footings and walls. See appropriate material Special Inspection schedules for specific requirements.

MISCELLANEOUS INSPECTIONS IN HIGH SEISMIC CONDITIONS

ltem		Qualifications	Scope
1.	Mechanical and electrical components (C)	SI	 Periodic inspection during the anchorage of electrical equipment used for emergency power systems Periodic inspection of piping systems intended to carry flammable, combustible, or highly toxic contents and their associated mechanical units. Periodic inspection of HVAC ductwork that will contain hazardous materials
2.	Component and attachment testing	SI	 Periodic inspection of components with importance factor of 1.0 or 1.5 Verify quality control plan Inspect each piece of equipments label to ensure permanent identification of quality control program Collect certificate of compliance for components with importance factor of 1.0 or 1.5
3.	Seismic isolation system	SI	Inspection of isolar units and energy dissipation devices during fabrication and installation

QUALITY ASSURANCE IN HIGH WIND CONDITIONS

ltem		Qualifications	Зсоре
1.	Roofing cover, Roof deck, and Roof framing connections	S-EIT, SE, SI	Inspect size and spacing for fasteners
2.	Exterior wall covering and wall connections to roof and floor diaphragms	S-EIT, SE, SI	Inspect size and spacing for fasteners

STRUCTURAL STEEL

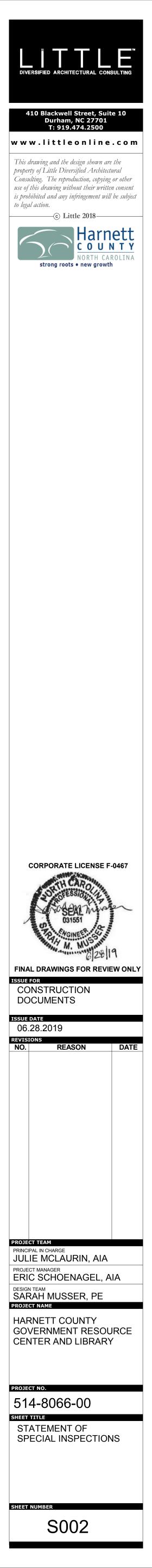
ltem	
1.	Fabricator Certific Control Procedure
2.	Welding
3.	Structural Details
4.	Bolting
5.	Material Certificati
6.	Connectors

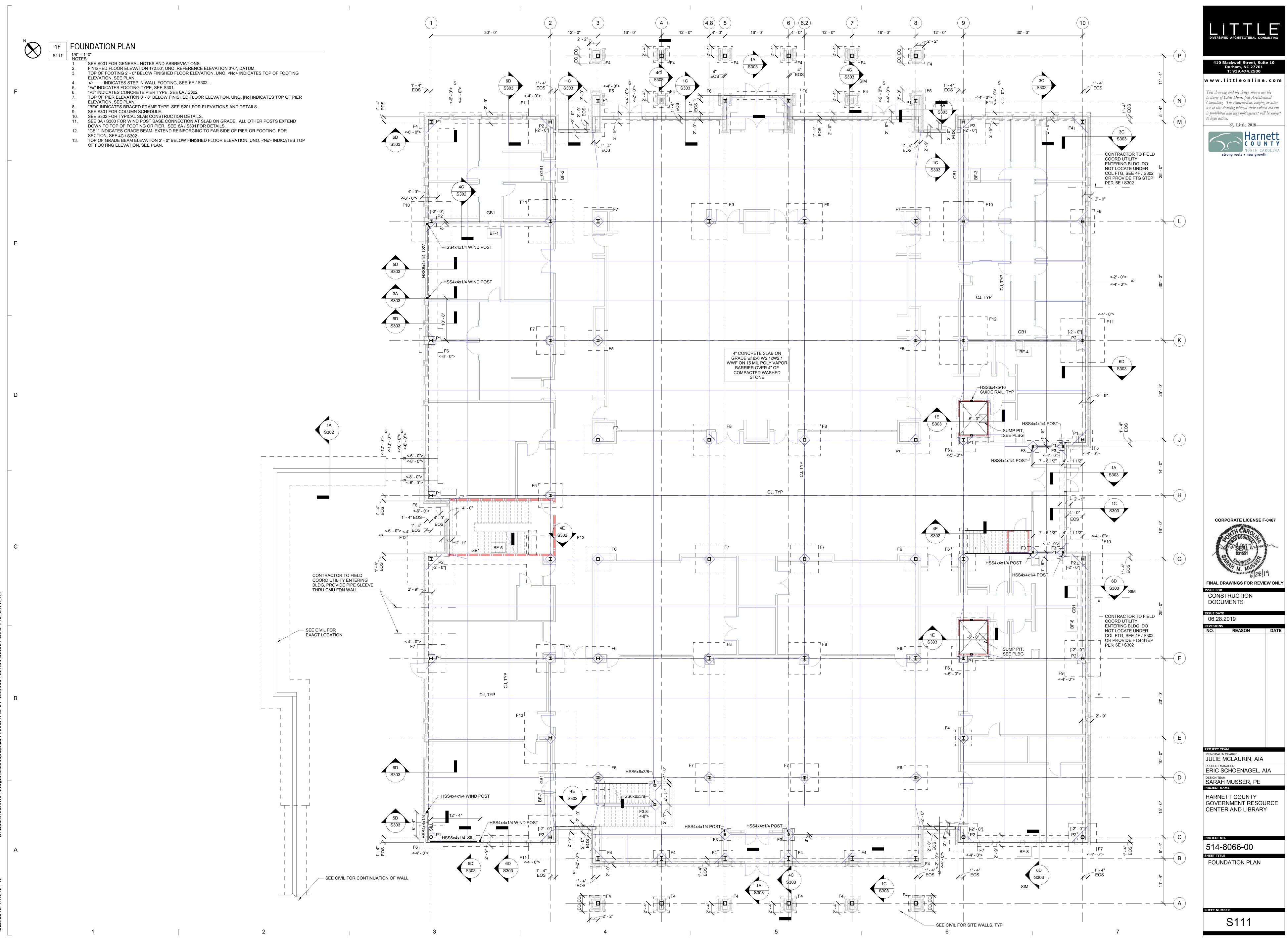
STEEL BAR JOISTS

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Installation of ope bar joists

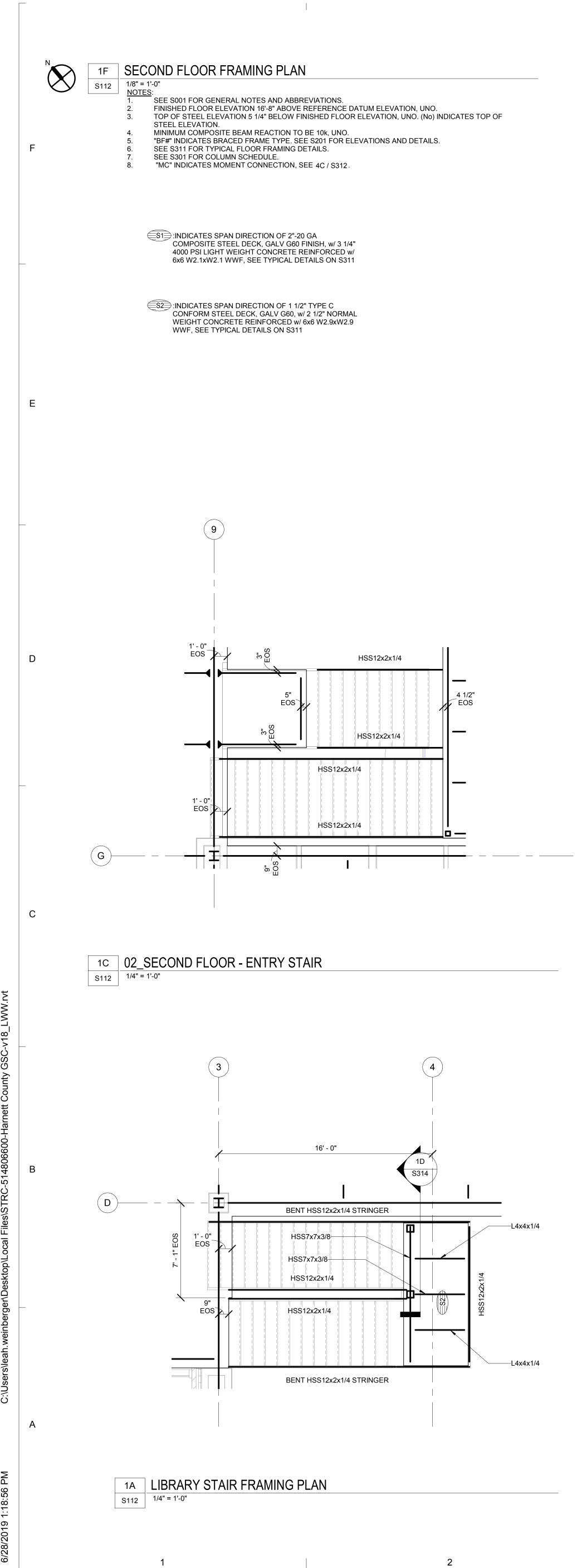
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	Qualifications	Scope
ification/Quality ures	S-TECH 1, S-TECH 2, S-TECH 3, S-EIT, SE, SI	 Ensure fabricator is AISC certified per contract documents to satisfy requirements of AISC 360 Chapter N Collect Certificate of Compliance from fabricator at completion of fabrication
	S-TECH 1, S-TECH 2, S-TECH 3, S-EIT, SE, SI	Perform welding inspections per AISC 360, Table N5.4-1, N5.4-2, and N5.4-3
ils	S-TECH 1, S-TECH 2, S-TECH 3, S-EIT, SE, SI	 Periodic inspection of steel framing joint details to confirm member sizes and connection details at the following minimum frequency, distributed throughout construction: 10% of all beam to beam connections 25% of all beam to column connections 50% of all column splice connections 100% of all connections of members within lateral resisting system
	S-TECH 1, S-TECH 2, S-TECH 3, S-EIT, SE, SI	Perform bolting inspections per AISC 360 Table N5.6-1, N5.6-2, and N5.6-3
cation	S-TECH 1, S-TECH 2, S-TECH 3, S-EIT, SE, SI	 Collect Certified mill test reports for all types of structural steel specified in the contract documents and confirm compliance with contract documents Periodic (min 5%, distributed throughout construction) inspection of steel identification markings to comply with applicable material standards.
	S-TECH 1, S-TECH 2, S-TECH 3, S-EIT, SE, SI	 Periodic (min 25%, distributed throughout construction) visual inspection of shear stud welds to confirm 360° flash Periodic (min 10%, distributed throughout construction) inspection of shear stud welds by 15° bend test Periodic (min 25%, distributed throughout construction) inspection of composite beams to confirm number of shear studs installed conforms to contract documents

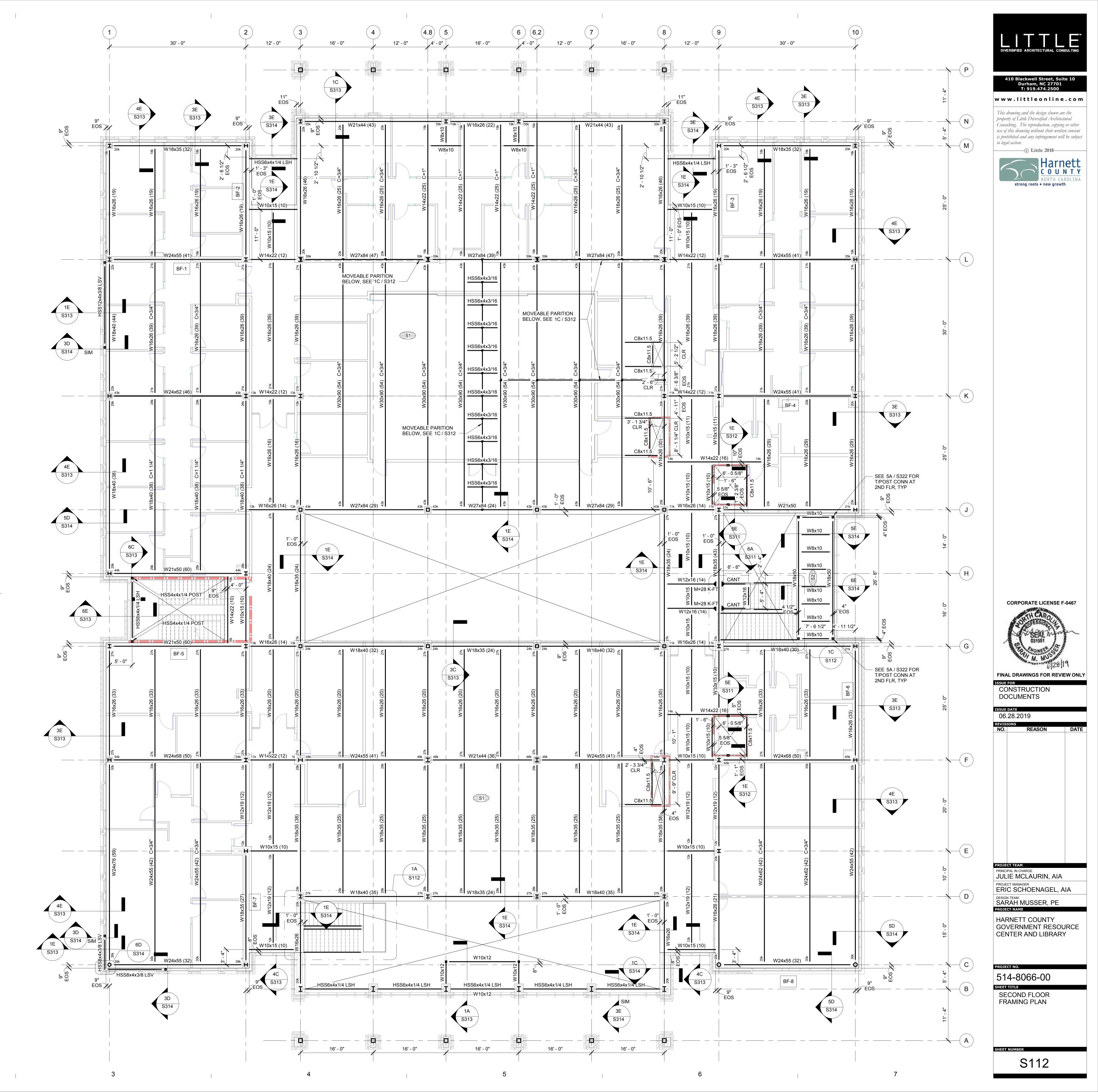
	Qualifications	Scope
pen-web steel	S_TECH 1, S-TECH 2, S_TECH 3, SI, SE, S-EIT	 Periodic visual inspection of end connections - welding or bolted Periodic visual inspection of bridging - horizontal or diagonal 1. Standard bridging 2. Special bridging and bracing





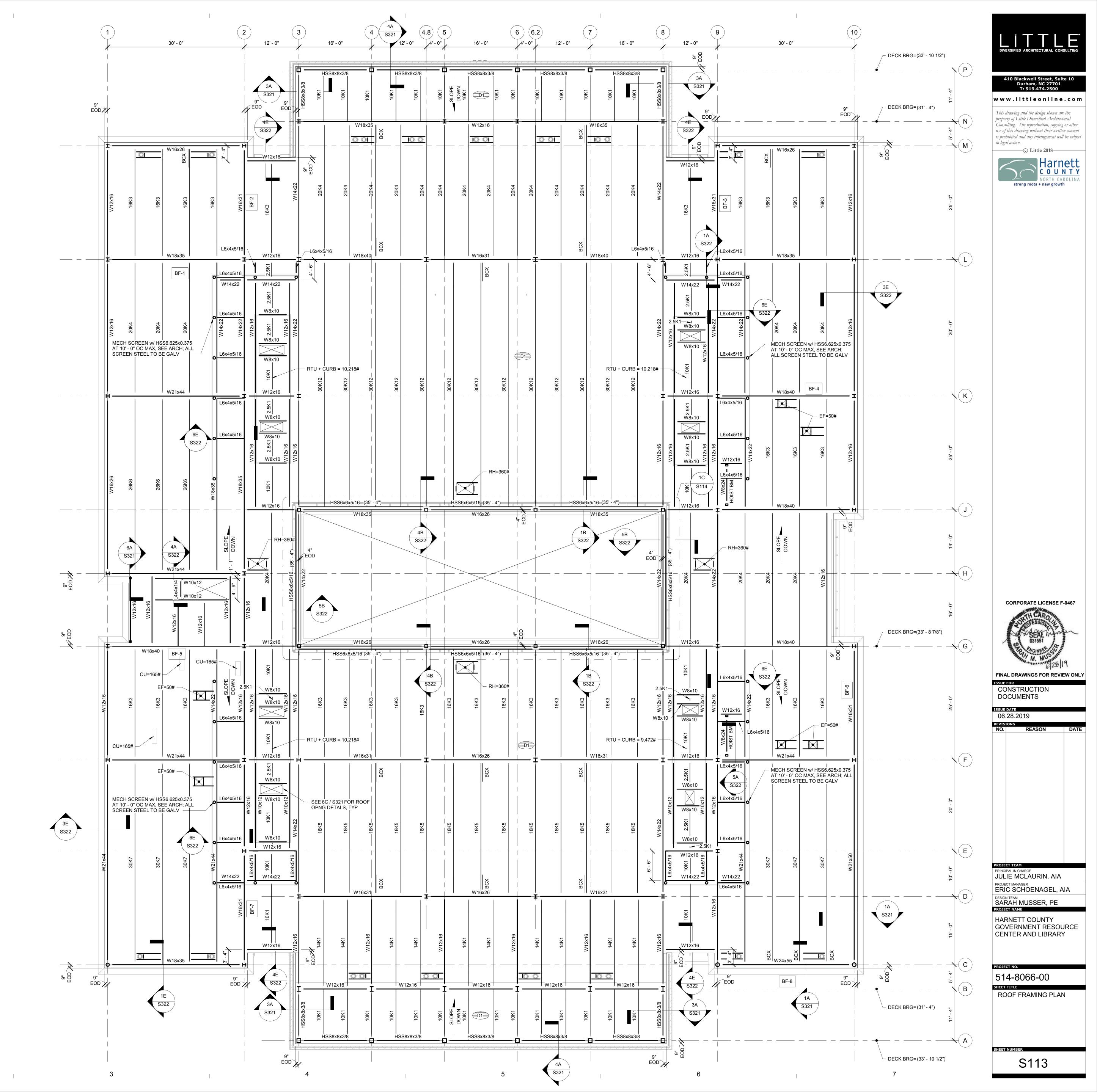
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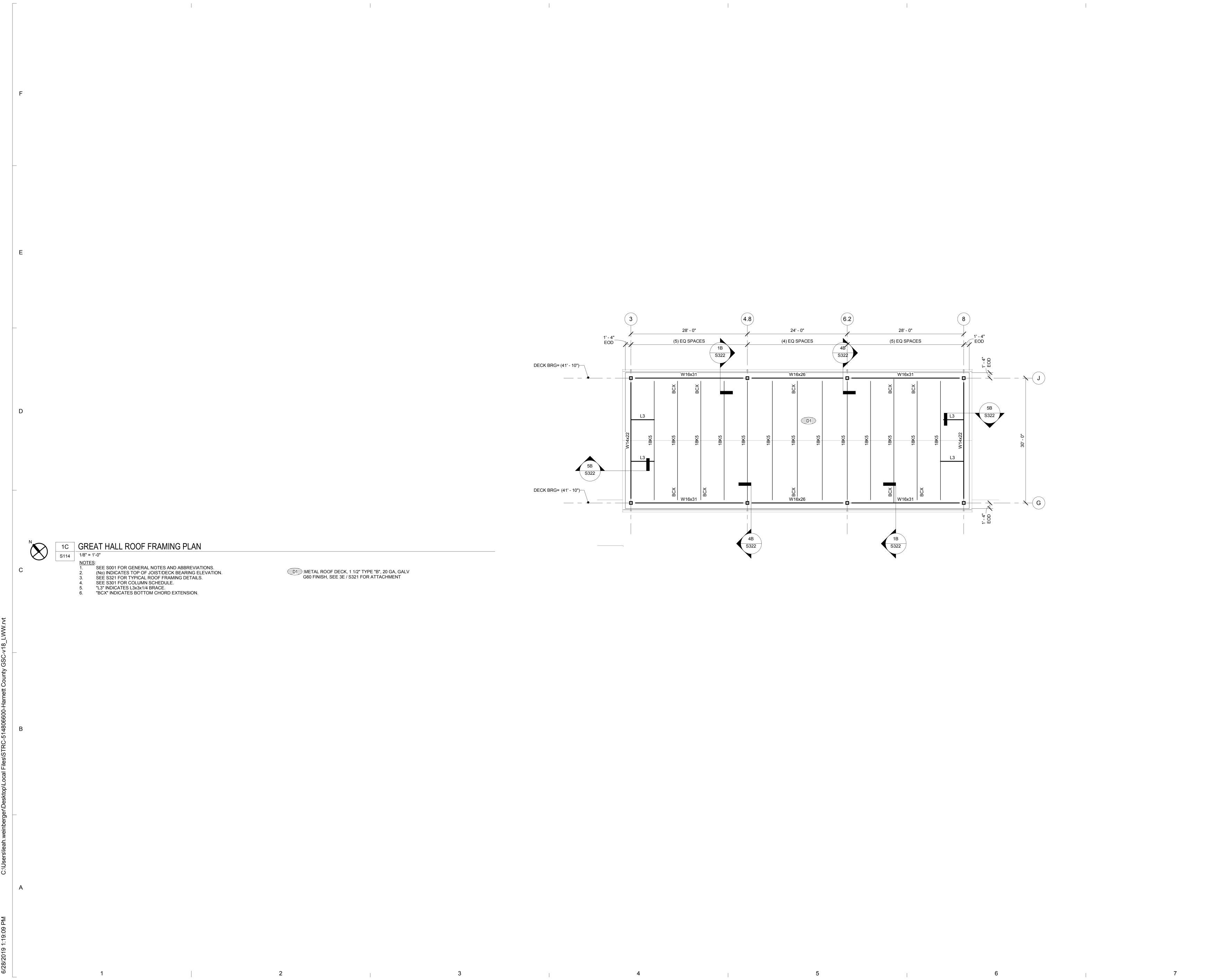


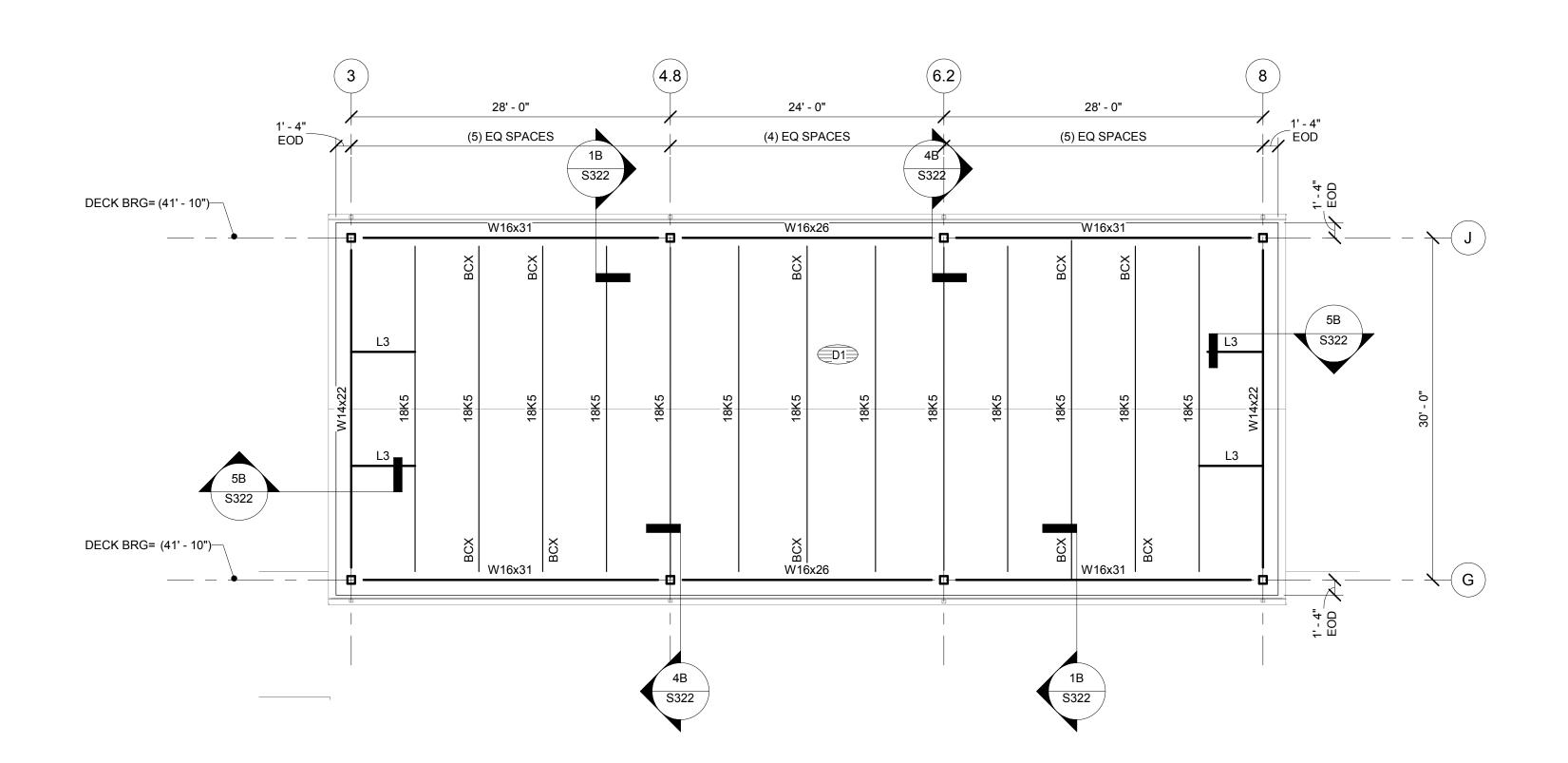


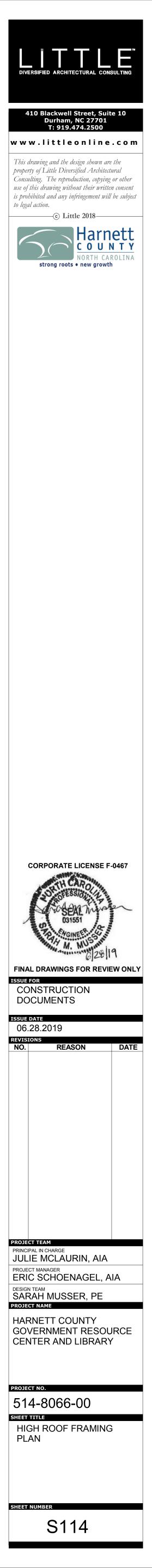
\smile	S113 1/8" = 1'-0" NOTES: 1. SEE S	001 FOR GENERAL NOTES AND ABBRE	VIATIONS.	
	3. "HSS" 4. W-" IN	IDICATES TOP OF JOIST/DECK BEARIN INDICATES HSS-x-x- BEAM. DICATES W-x- BEAM.		_
=	6. SEE S	NDICATES BRACED FRAME TYPE. SEE 321 FOR TYPICAL ROOF FRAMING DET 301 FOR COLUMN SCHEDULE.	S201 FOR ELEVATIONS AND DETAIL AILS.	δ.
		AL ROOF DECK, 1 1/2" TYPE "B", 20 GA	GALV	
	G60	FINISH, SEE 3E / S321 FOR ATTACHMEI	NT	
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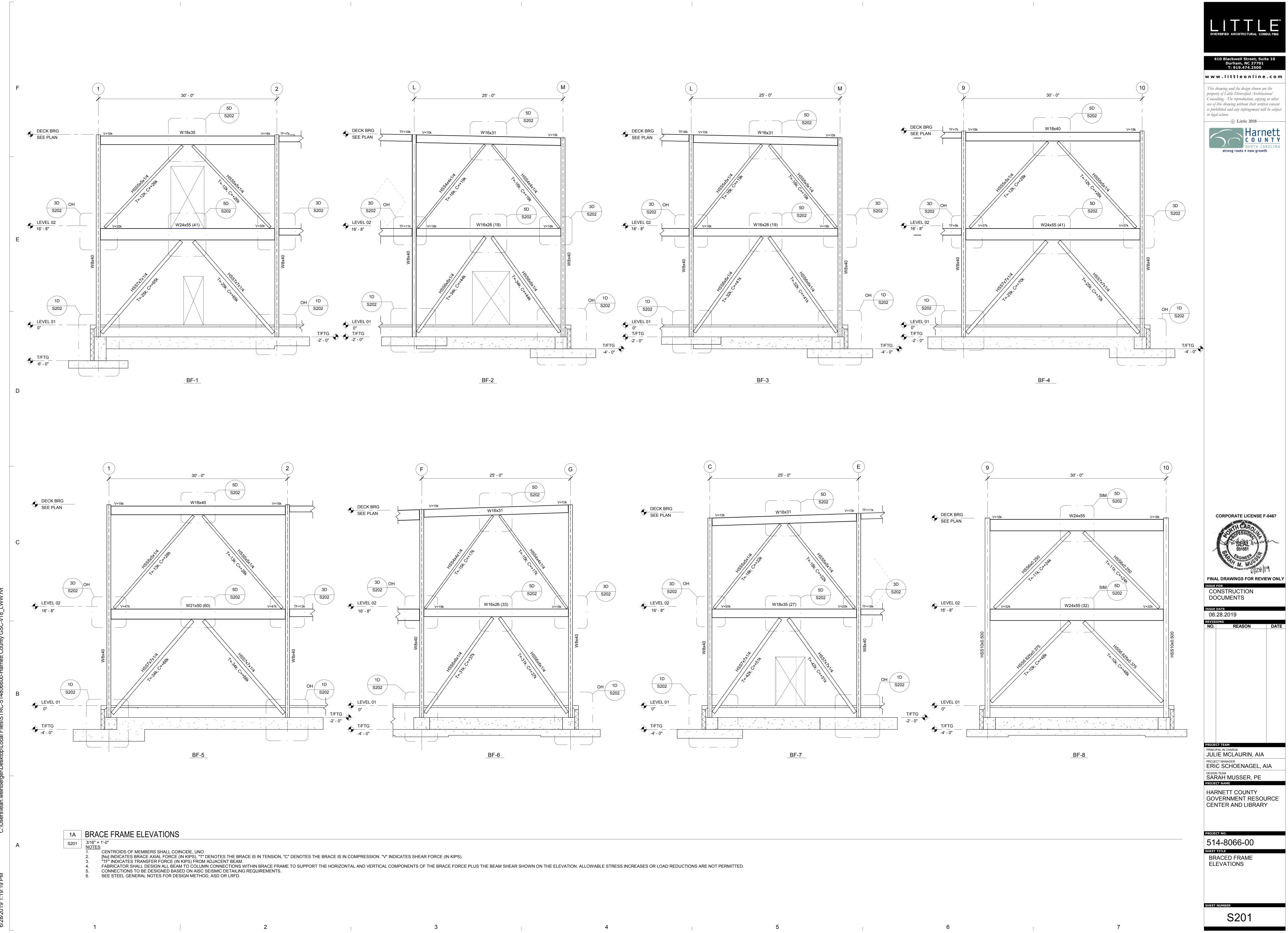
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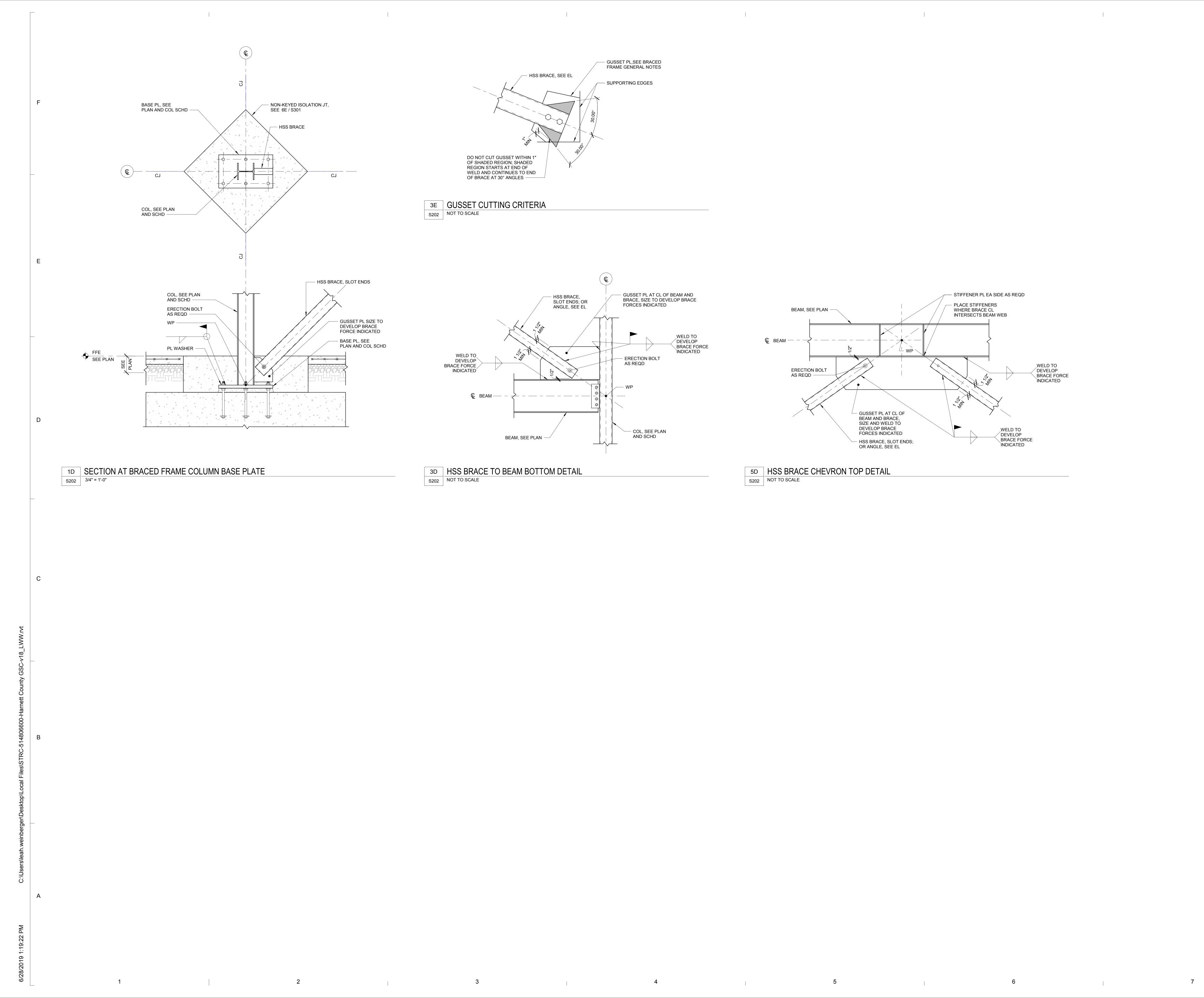


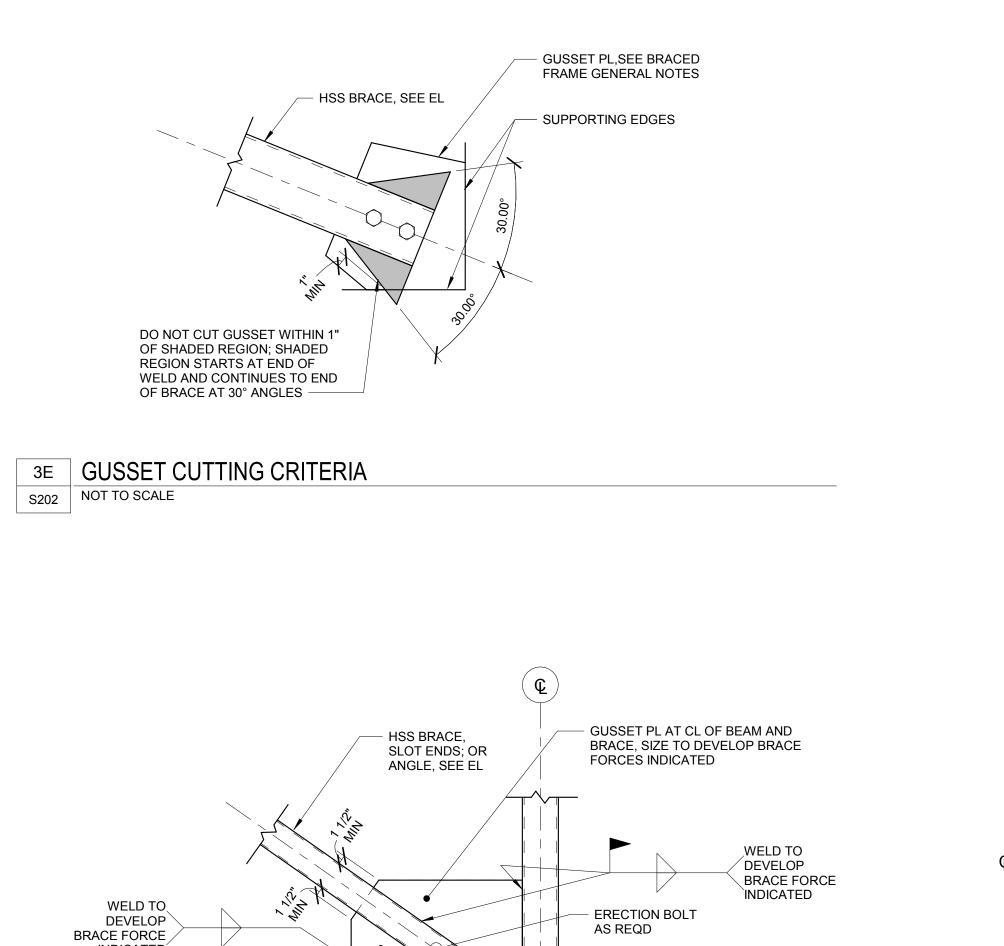












- ERECTION BOLT

— COL, SEE PLAN AND SCHD

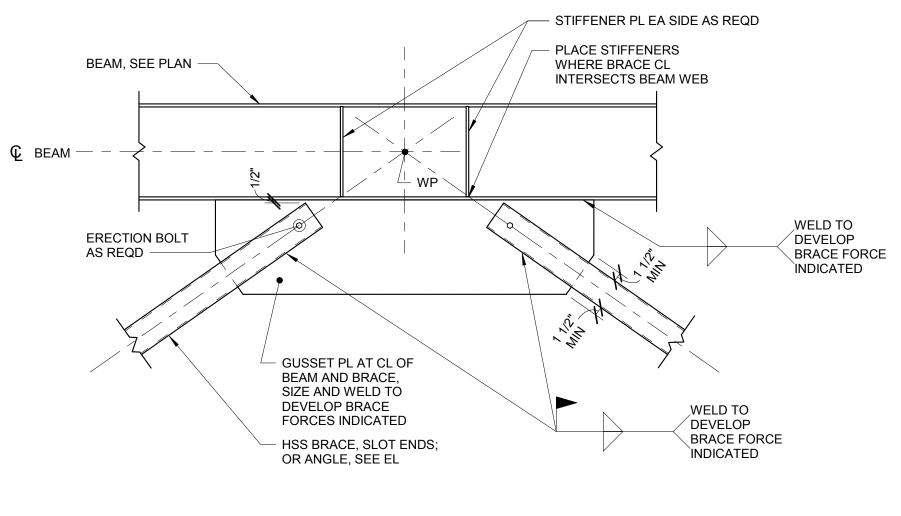
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BEAM, SEE PLAN -

3D HSS BRACE TO BEAM BOTTOM DETAIL S202 NOT TO SCALE



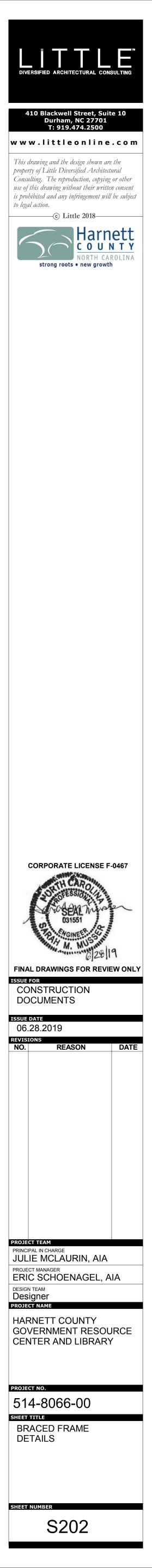
S202 NOT TO SCALE

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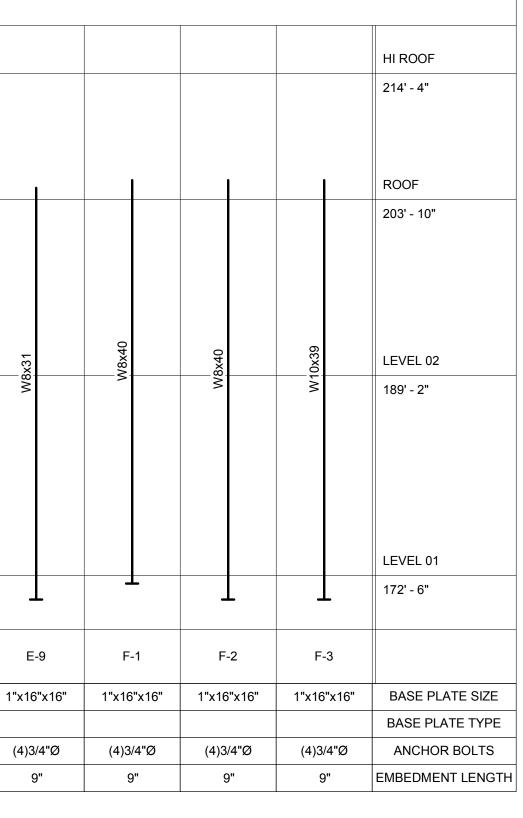
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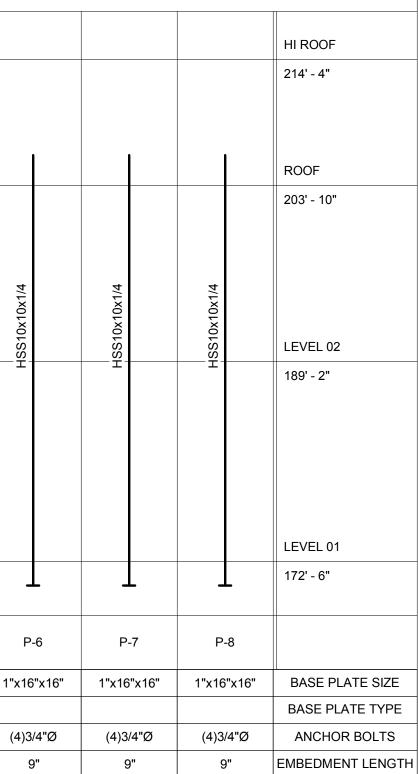
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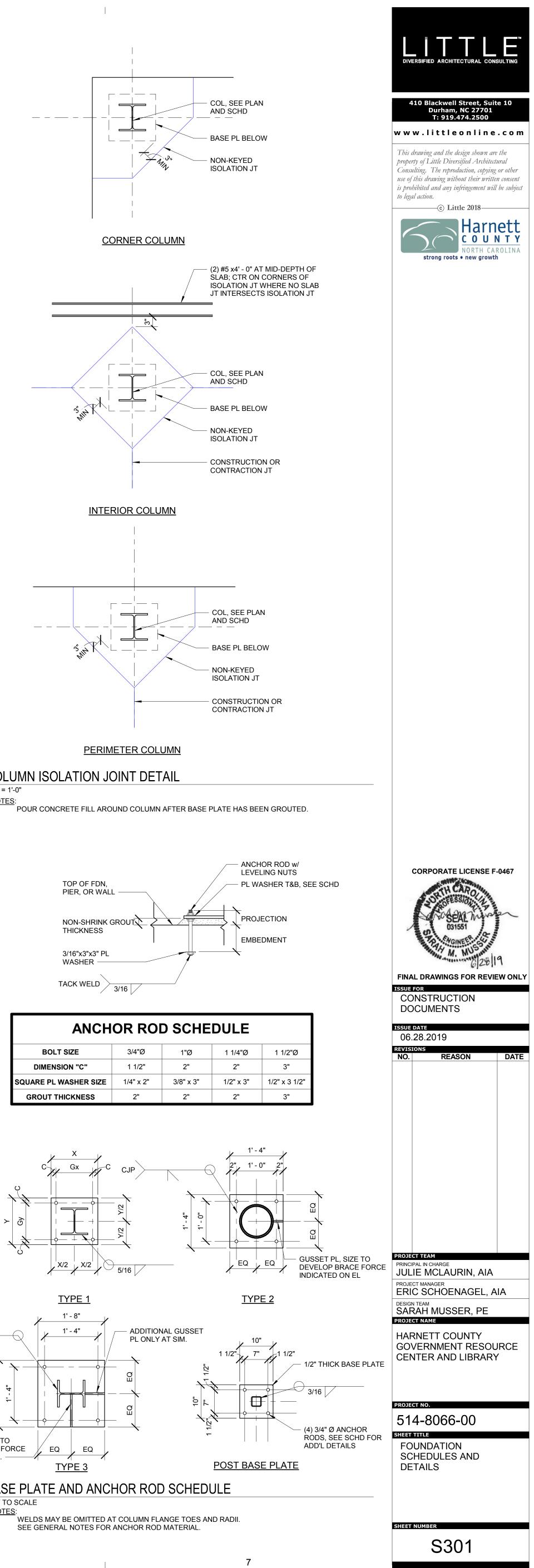
5D HSS BRACE CHEVRON TOP DETAIL

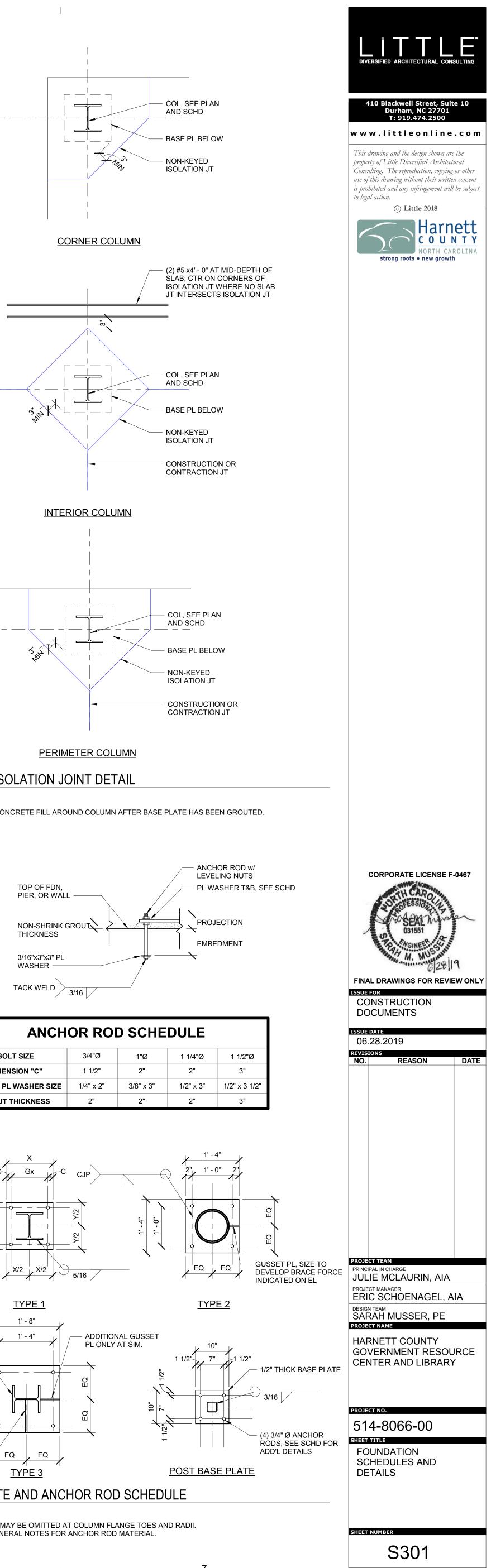


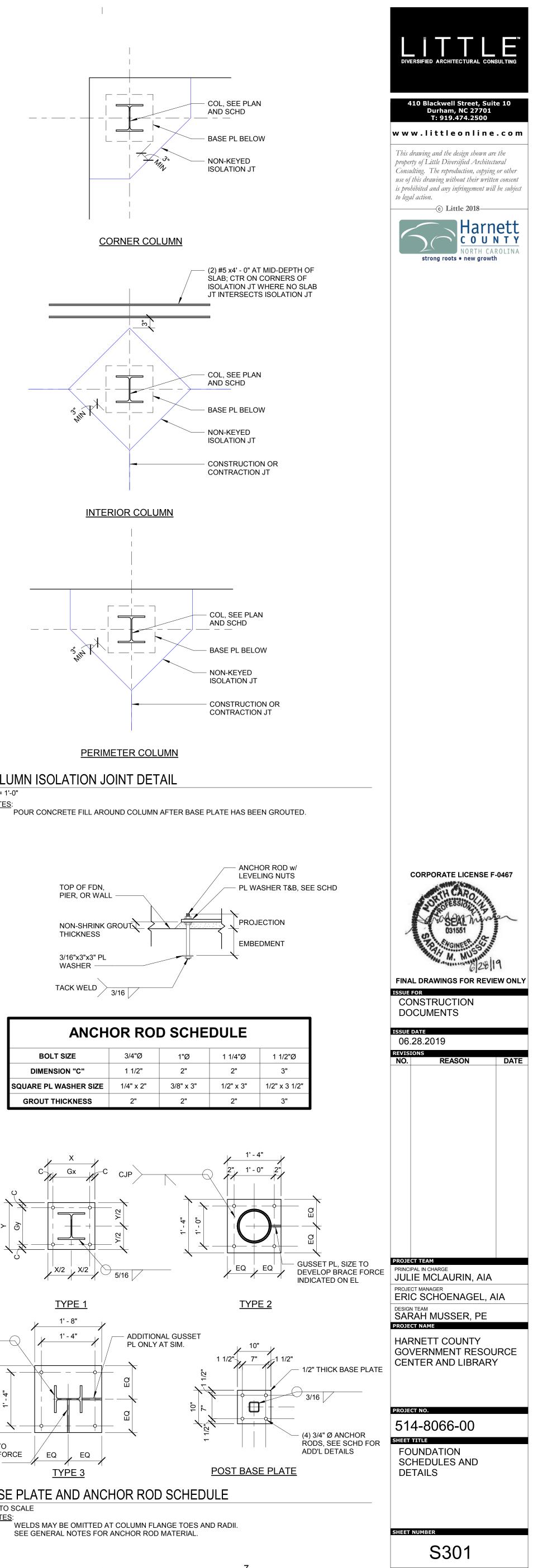
										ST	EEL CO	LUMN \$	SCHEDU	LE											HI ROOF
																									214' - 4"
																									ROOF 203' - 10"
HSS10x10x1/4	HSS10x10x1/4	HSS10x10x1/4	HSS10x10x1/4	HSS10x10x1/4	HSS10x10x1/4	W12x45	W12x45	W12x45	W12x45	W12x45	W12x45	HSS8.625x0.375	W8x40	HSS10x0.500	HSS10x0.500	W8x31	W8×40	W8x40	W8x31	W8x40	W8x31	W8x40	W8x40	W10x39	LEVEL 02 189' - 2"
																						-			LEVEL 01 172' - 6"
A-3	A-4	A-5	A-6 1"x16"x16"	A-7	A-8	B-3 1"x18"x18"	B-4 1"x18"x18"	B-5	B-6	B-7	B-8	C-1	BF-7	C-9 BF-8 1"x16"x16"	C-10 BF-8 1"x14"x14"	D-3 1"x16"x16"	D-4.8	D-6.2	D-8	E-2 BF-7 1 1/2"x20"x20"	E-9	F-1	F-2	F-3	BASE PLA
(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø	(4)3/4"Ø	(4)3/4"Ø	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø	(4)3/4"Ø 9"	TYPE 3 (4)1 1/4"Ø	TYPE 2 (4)3/4"Ø	TYPE 2 (4)3/4"Ø	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø	TYPE 3 (4)1 1/4"Ø	(4)3/4"Ø	(4)3/4"Ø	(4)3/4"Ø	(4)3/4"Ø	BASE PLA ANCHOR EMBEDMEN
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								T	T																HI ROOF 214' - 4"
																									ROOF 203' - 10"
W10x49	W10x49	W10x39	W8x40	W8x40	W8x40	W8x40	HSS8x8x3/8	HSS8x8x3/8	HSS8x8x3/8	HSS8x8x3/8	W8x31	W8x40	W8x31	W8x40	HSS8x8x3/8	HSS8x8x3/8	HSS8x8x3/8	HSS8x8x3/8	W8x31	W8x31	W8x31	W8x40	W8x31	W8x31	LEVEL 02 189' - 2"
																									LEVEL 01 172' - 6"
F-4.8 1"x16"x16"	F-6.2 1"x16"x16"	F-8 1"x16"x16"	F-9 1"x16"x16"	BF-6	BF-5	G-2 BF-5 1 1/2"x20"x20"	G-3 1"x16"x16"	G-4.8 1"x16"x16"	G-6.2 1"x16"x16"	G-8 1"x16"x16"	G-9 1"x16"x16"	BF-6 1 1/2"x20"x20'	H-1 1"x16"x16"	H-2 1"x16"x16"	J-3 1"x16"x16"	J-4.8 1"x16"x16"	J-6.2 1"x16"x16"	J-8 1"x16"x16"	J-9 1"x16"x16"	J-10 1"x16"x16"	K-1 1"x16"x16"	K-2 1"x16"x16"	K-3 1"x16"x16"	K-8 1"x16"x16"	BASE PL
(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	TYPE 3 (4)1"Ø 22"	TYPE 3 (4)1 1/4"Ø 22"	TYPE 3 (4)1 1/4"Ø 14"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	TYPE 3 (4)1"Ø 22"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	(4)3/4"Ø 9"	BASE PLA ANCHOF
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W8x40	W8x40	W8x40	W8x40	W10x49	W10x49	W10x49	W10x49	W8x40	W8x31	W8x31	W8x40	W8x40	W8x31	W8x31	W8x31	W8x31	W8x31	HSS10x10x1/4	HSS10x10x1/4	HSS10x10x1/4	HSS10x10x1/4	HSS10x10x1/4	HSS10x10x1/4	LEVEL 02 189' - 2"	
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K-9 BF-4	BF-4 1 1/2"x20"x20"	BF-1 L-1	L-2 BF-1/BF-2 1 1/2"x20"x20"	L-3 1"x16"x16"	L-4.8 1"x16"x16"	L-6.2 1"x16"x16"	L-8 1"x16"x16"	L-9 BF-3 1 1/2"x20"x20"	L-10 1"x16"x16"	M-1 1"x16"x16"	BF-2 1 1/2"x20"x20"	BF-3	M-10 1"x16"x16"	N-3 1"x16"x16"	N-5 1"x16"x16"	N-6 1"x16"x16"	N-8 1"x16"x16"	P-3 1"x16"x16"	P-4 1"x16"x16"	P-5 1"x16"x16"	P-6 1"x16"x16"	P-7 1"x16"x16"	P-8 1"x16"x16"		0175
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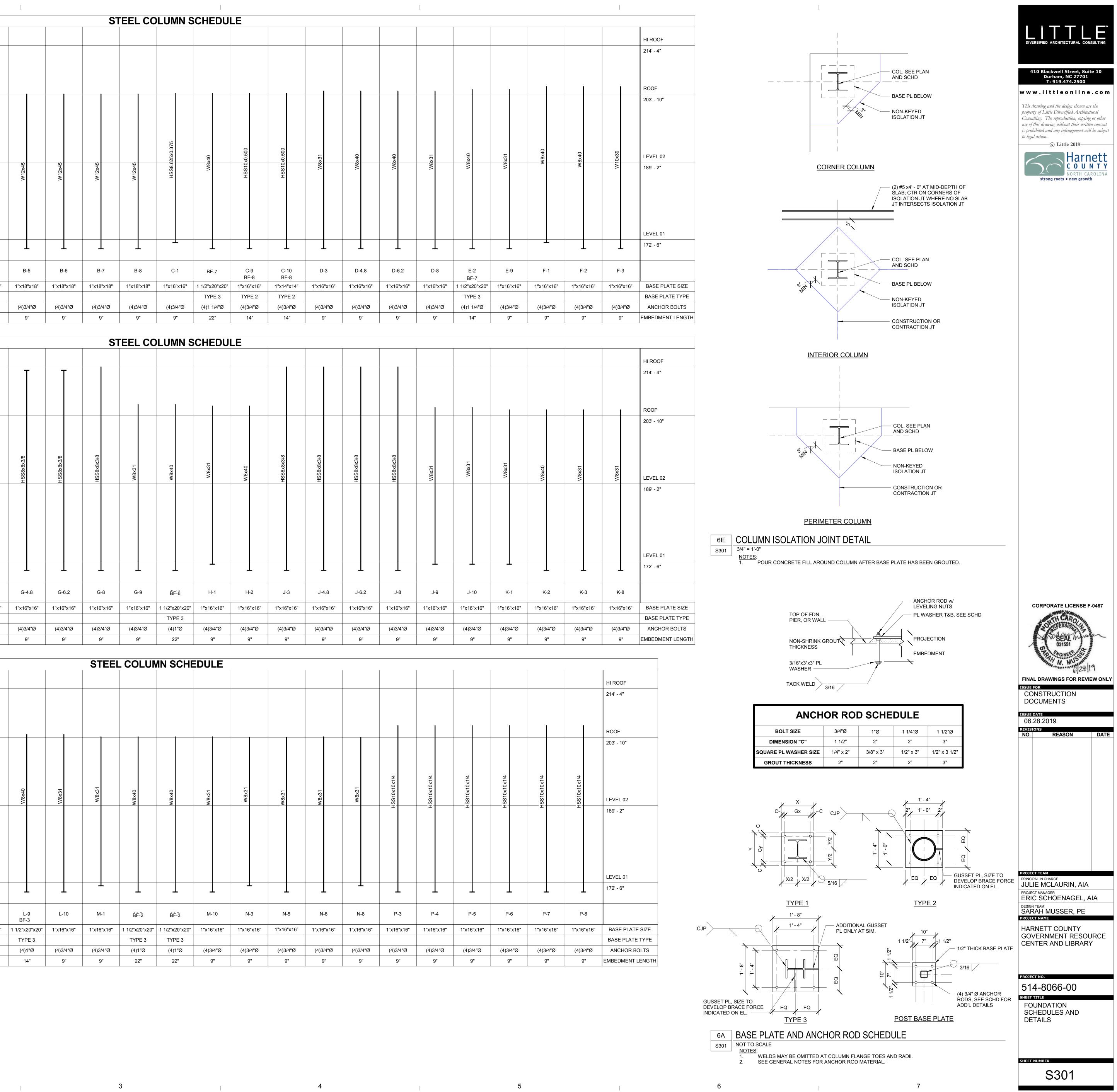


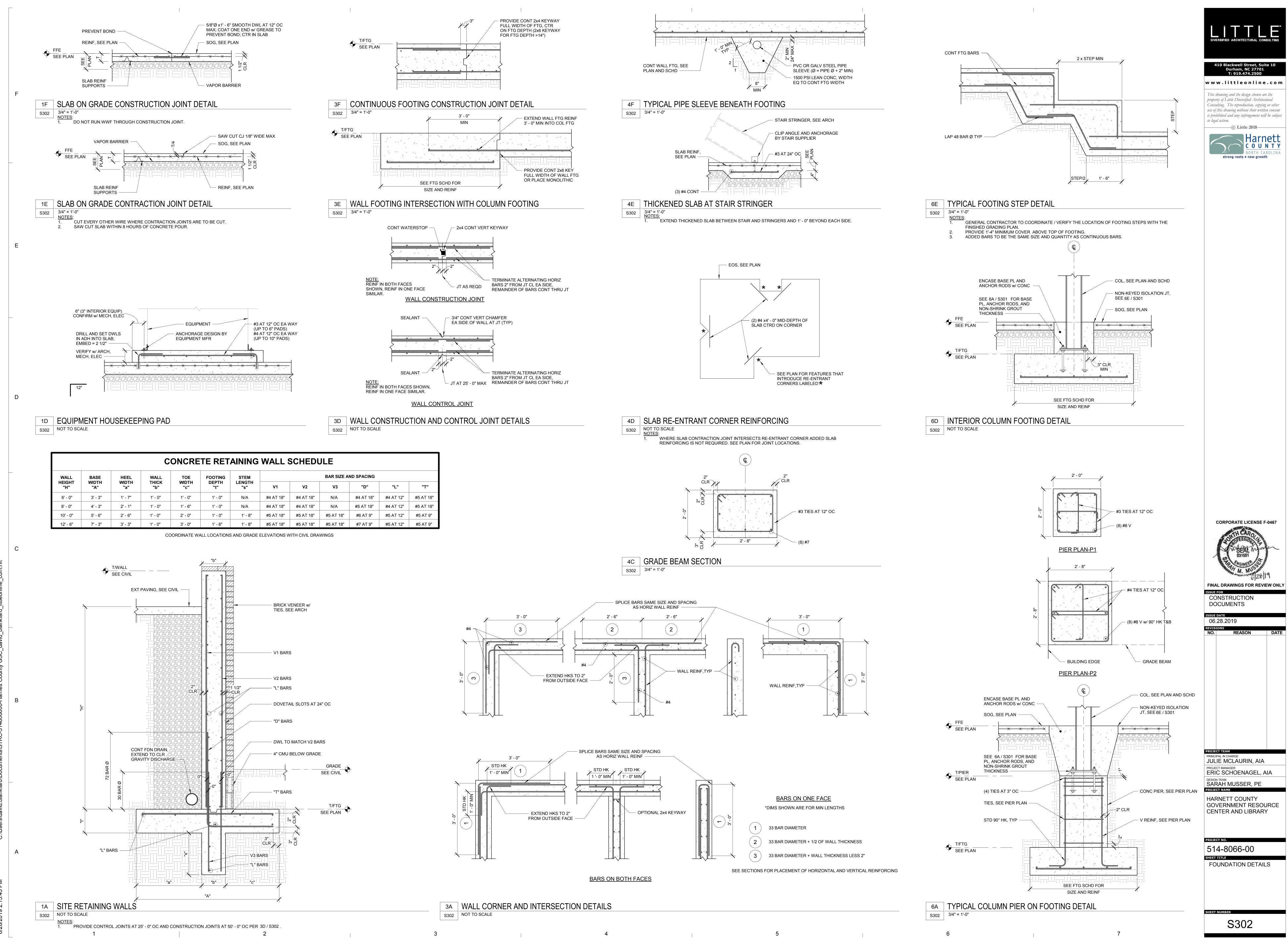


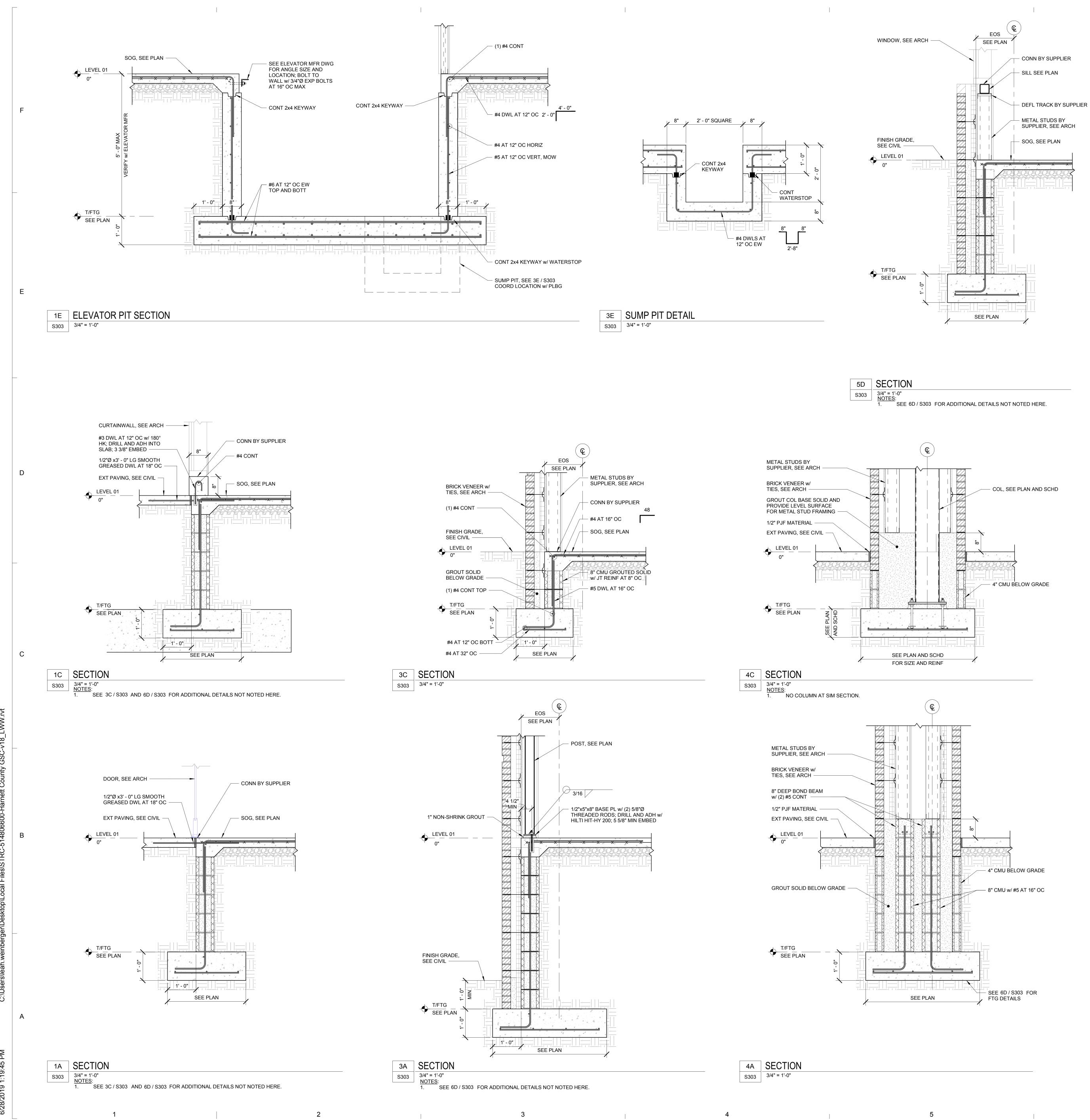


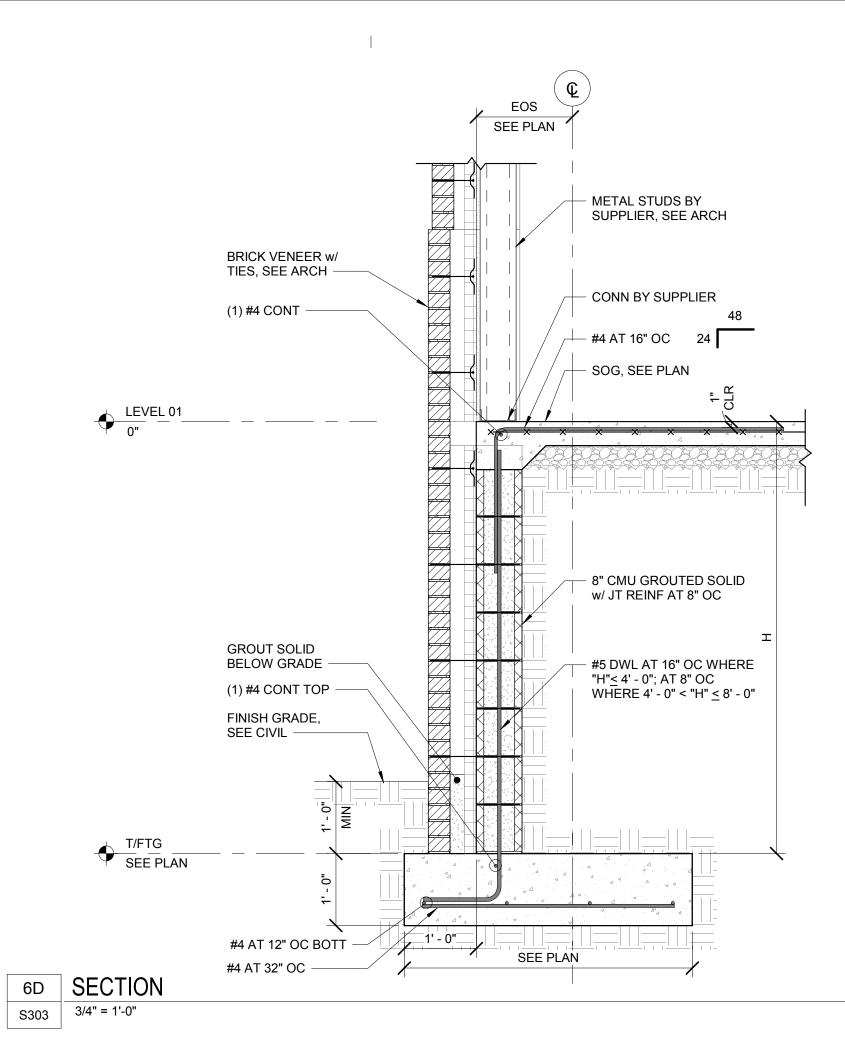


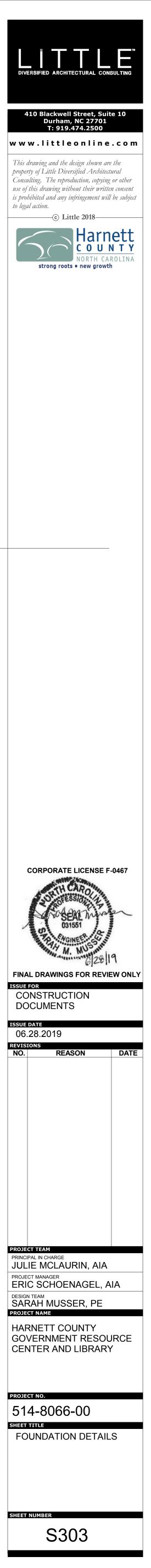


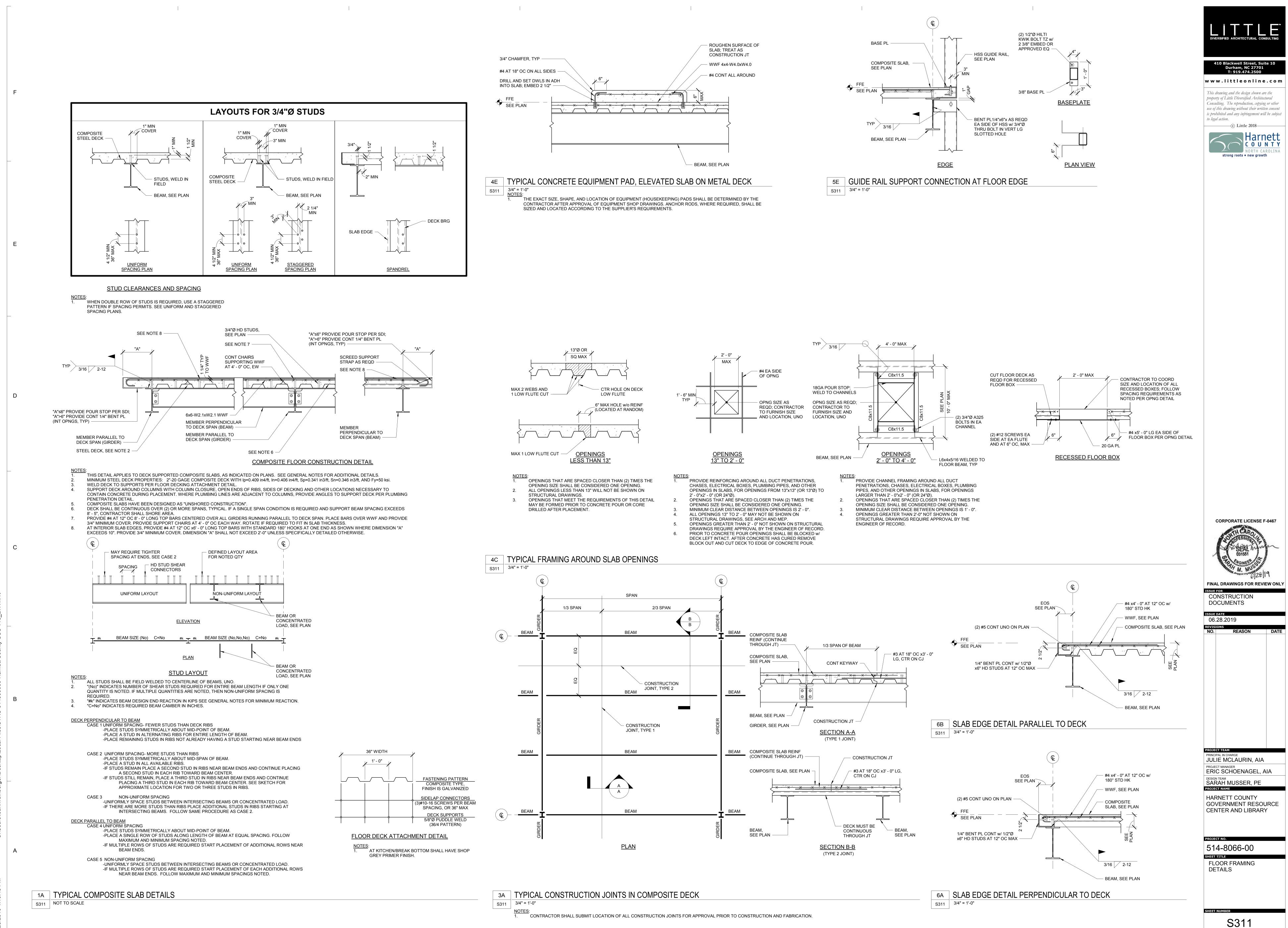


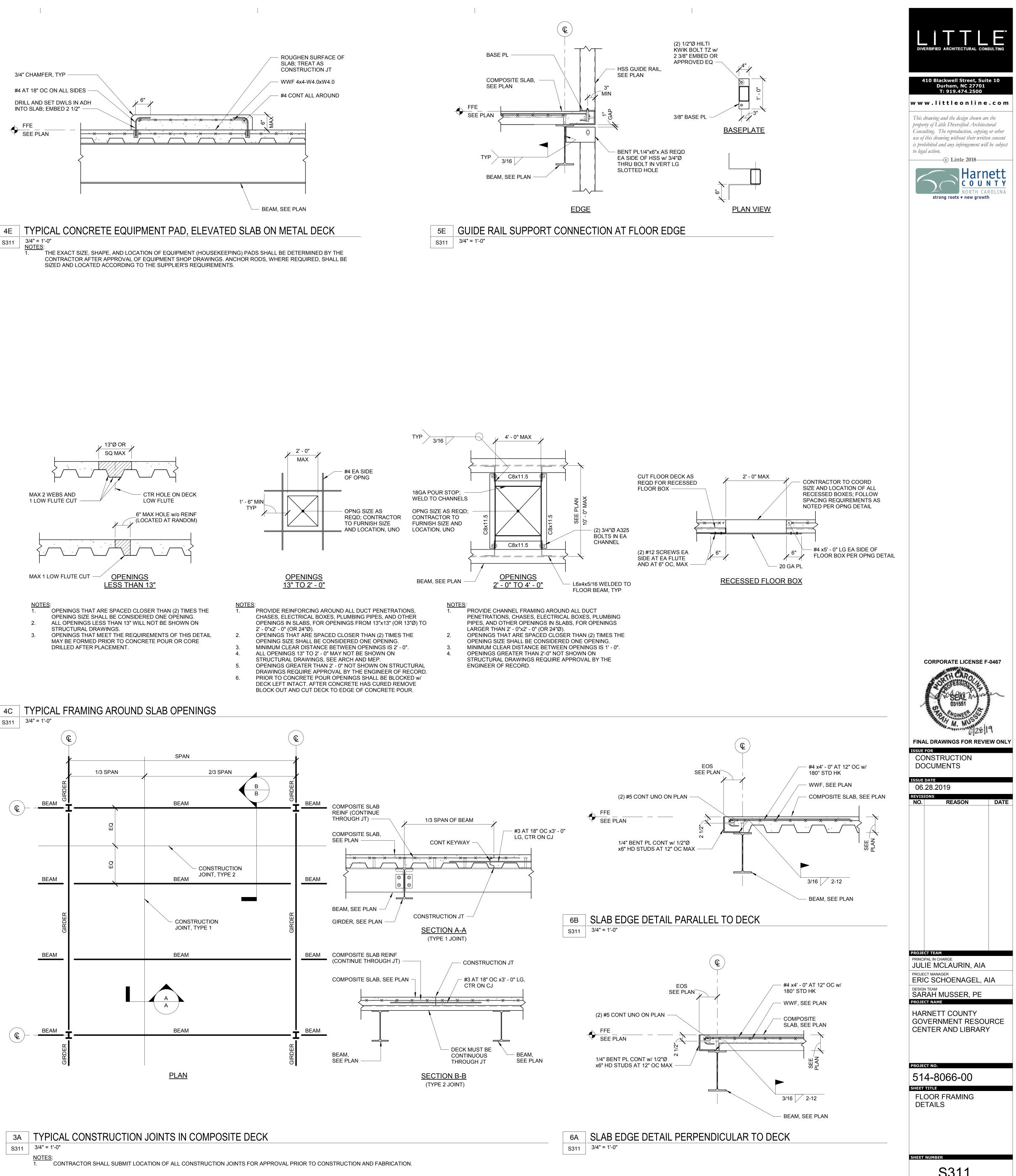


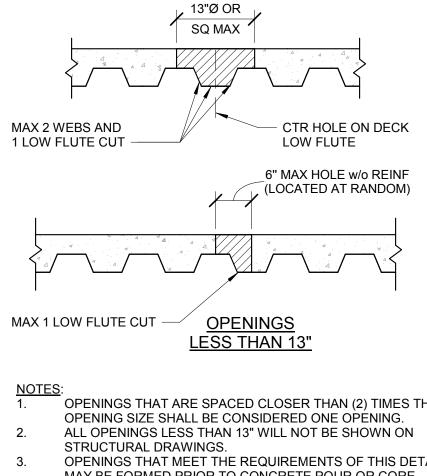


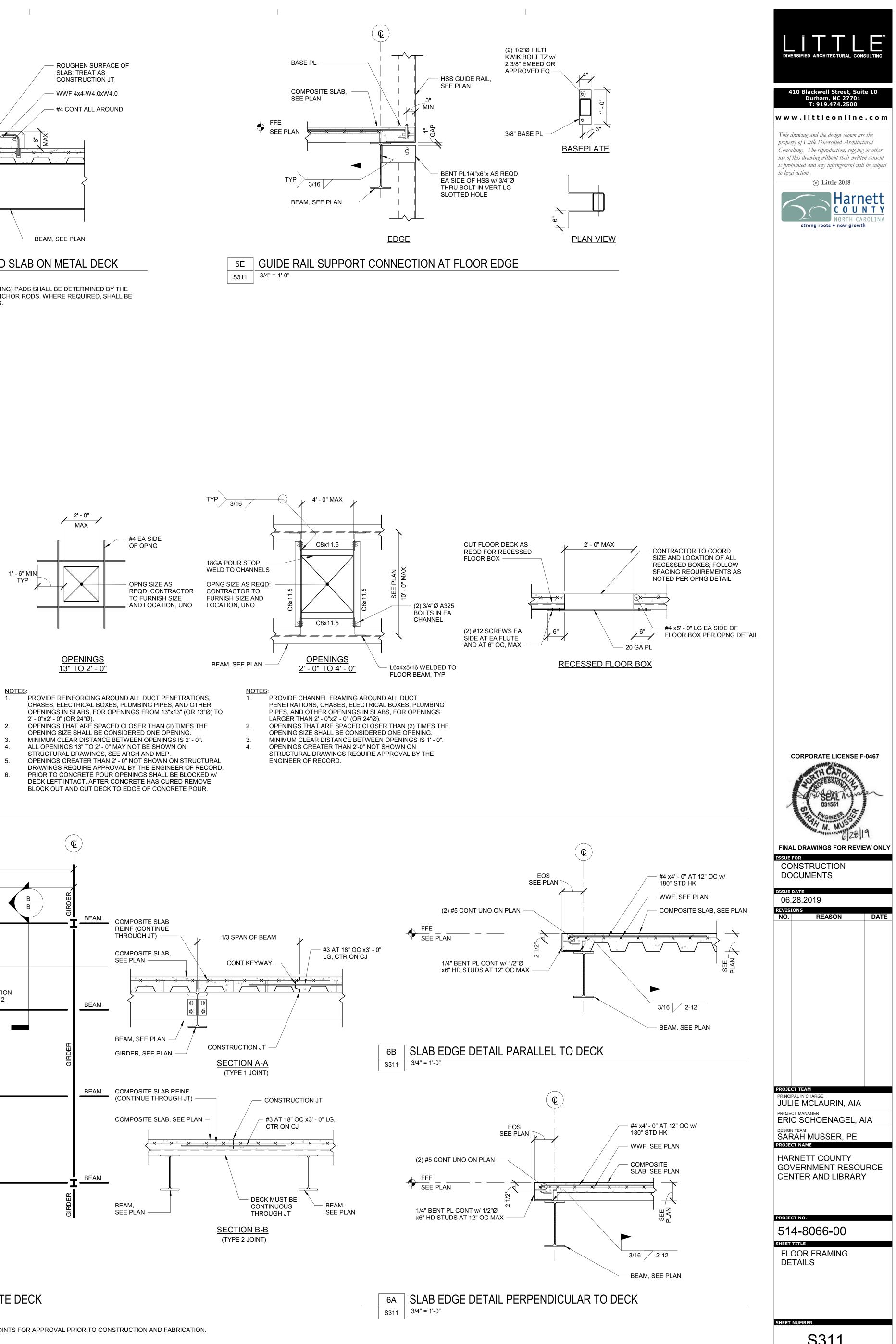




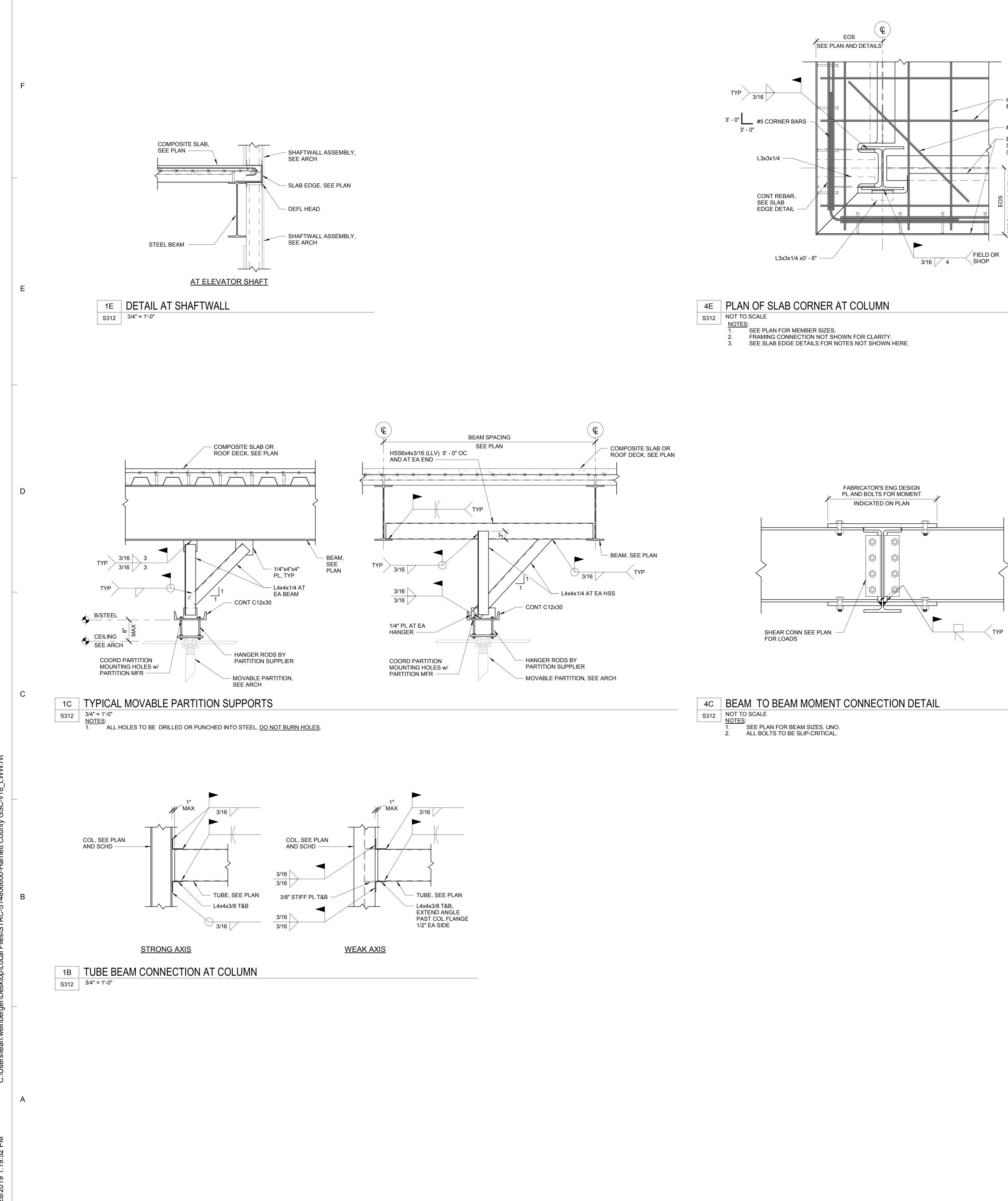




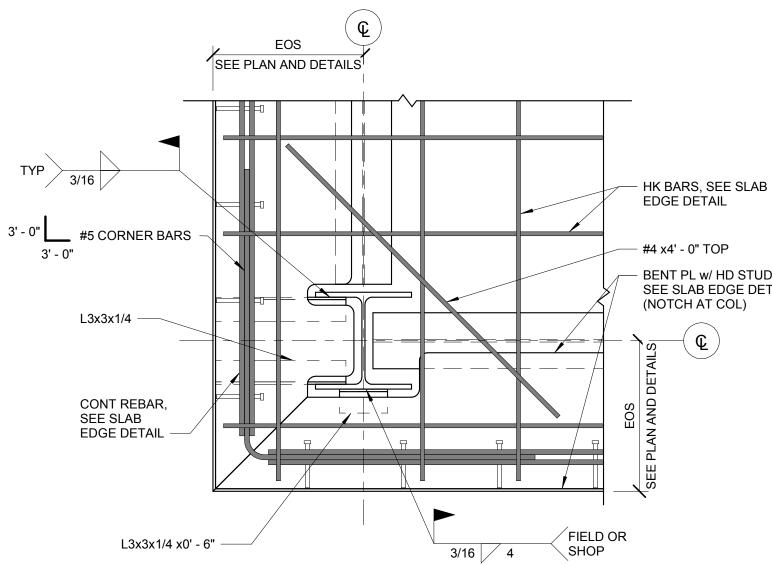


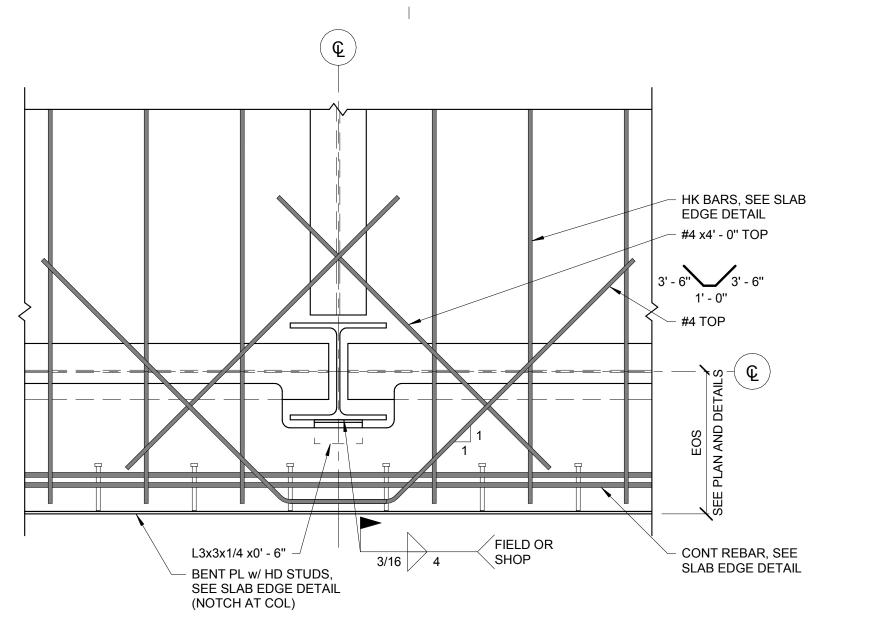


NOTES	<u>)</u> :
1.	PROVIDE REINFORCING AROU
	CHASES, ELECTRICAL BOXES,
	OPENINGS IN SLABS, FOR OPE
	2' - 0"x2' - 0" (OR 24"Ø).
2.	OPENINGS THAT ARE SPACED
	OPENING SIZE SHALL BE CONS
3.	MINIMUM CLEAR DISTANCE BE
4.	ALL OPENINGS 13" TO 2' - 0" MA
	STRUCTURAL DRAWINGS, SEE
5.	OPENINGS GREATER THAN 2' -
	DRAWINGS REQUIRE APPROVA
6.	PRIOR TO CONCRETE POUR O
	DECK LEFT INTACT. AFTER CO



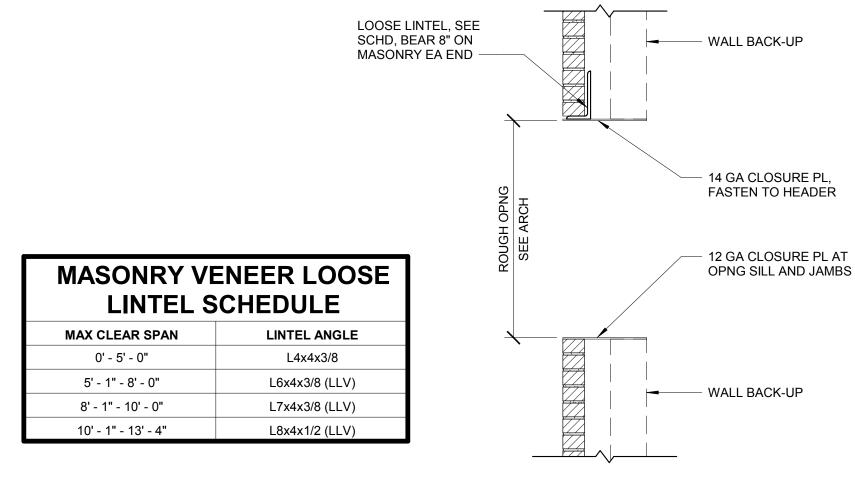
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6E PLAN AT SLAB EDGE REINFORCEMENT S312 NOT TO SCALE NOTES:

SEE PLAN FOR MEMBER SIZES. FRAMING CONNECTION NOT SHOWN FOR CLARITY. SEE SLAB EDGE DETAILS FOR NOTES NOT SHOWN HERE. 3.



6C MASONRY VENEER LOOSE LINTEL SCHEDULE S312 NOT TO SCALE

NOTES USE THIS SCHEDULE AT OPENINGS IN MASONRY VENEER WHERE LINTELS ARE NOT INDICATED ON PLANS OR DETAILS.

BEAR LINTEL ANGLES 8" MINIMUM ON MASONRY EACH END. ALL EXTERIOR LINTELS TO BE HOT-DIPPED GALVANIZED. SEE ARCHITECTURAL DRAWINGS FOR OPENING LOCATIONS AND DIMENSIONS.

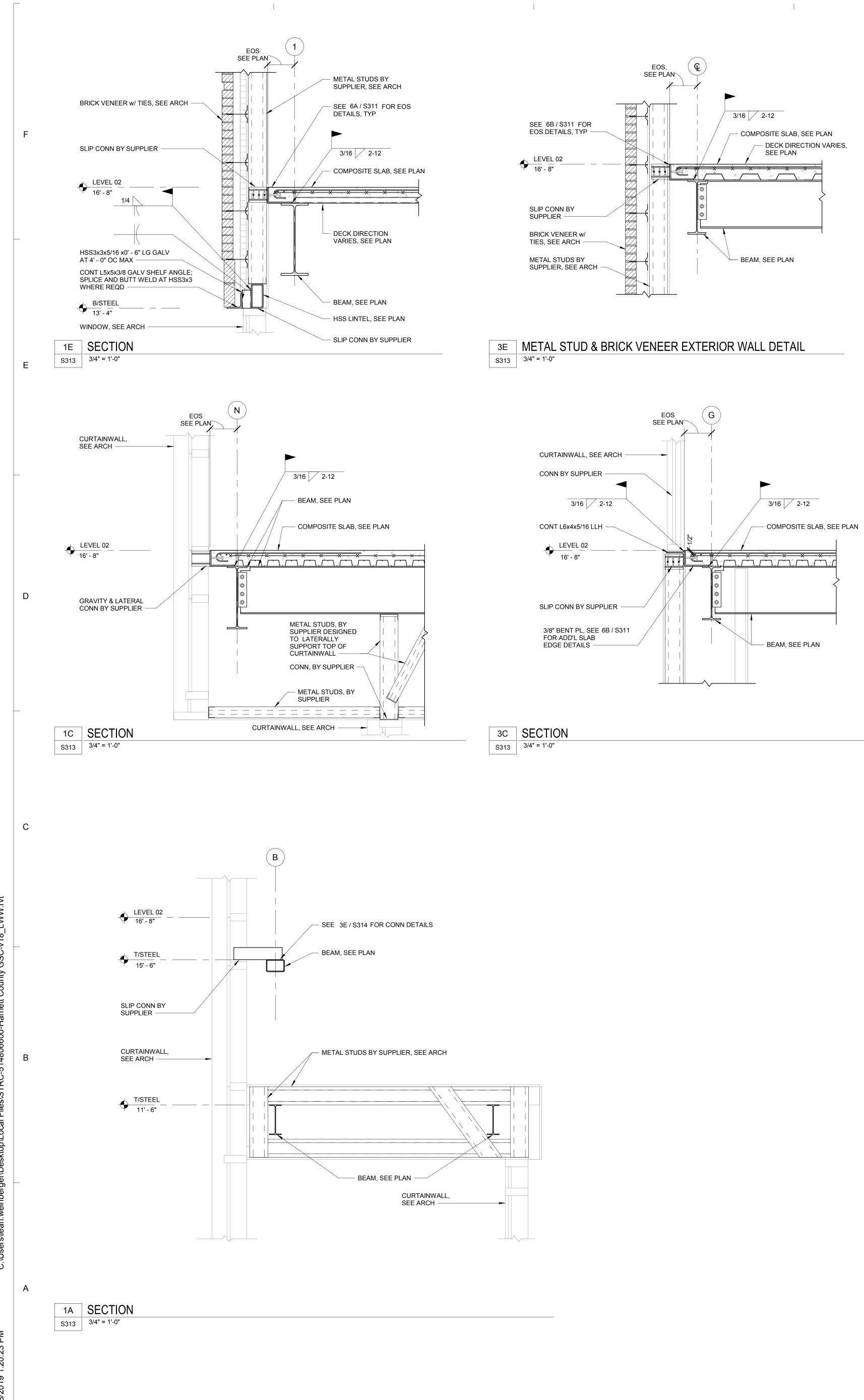
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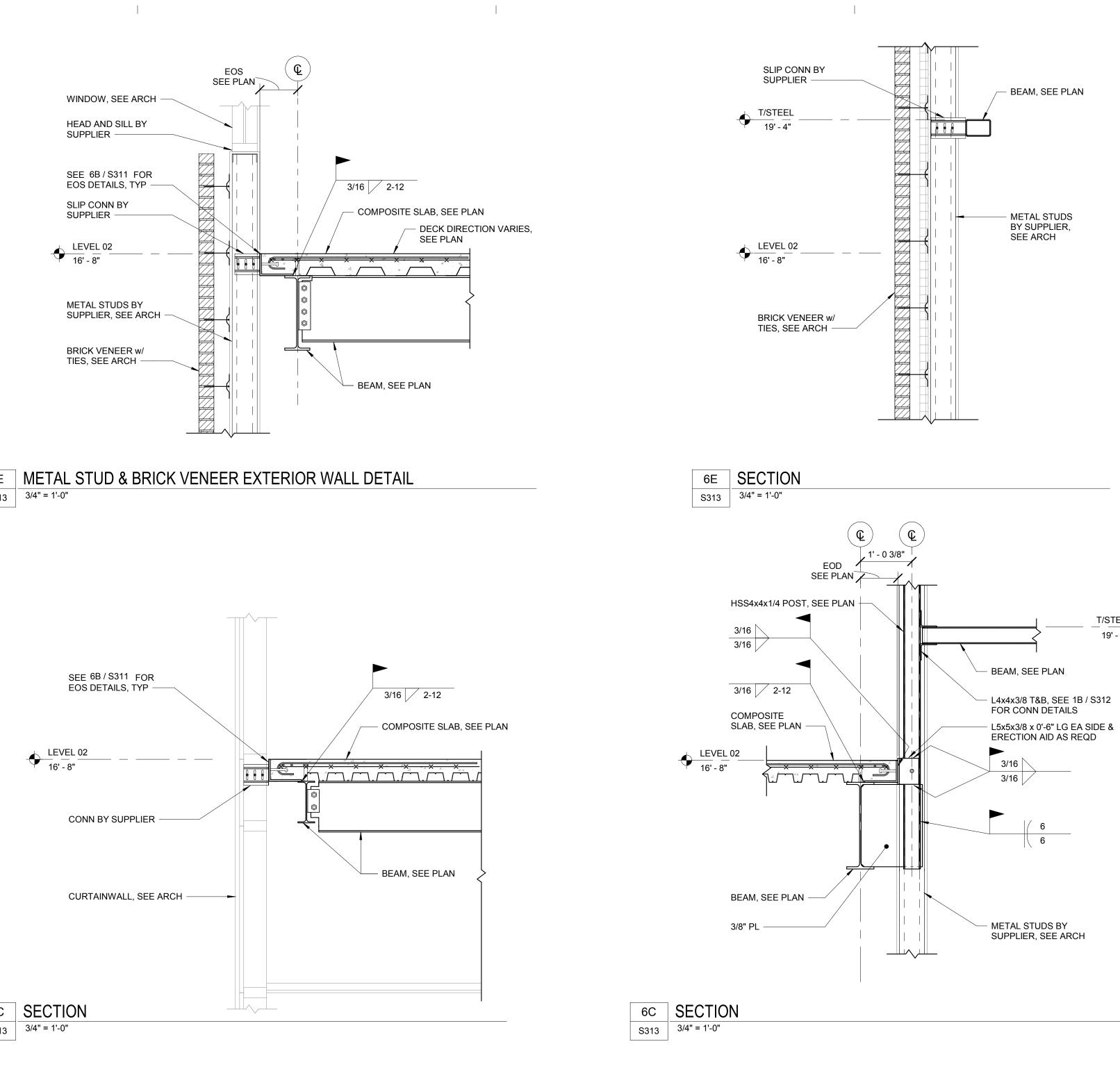
EDGE DETAIL

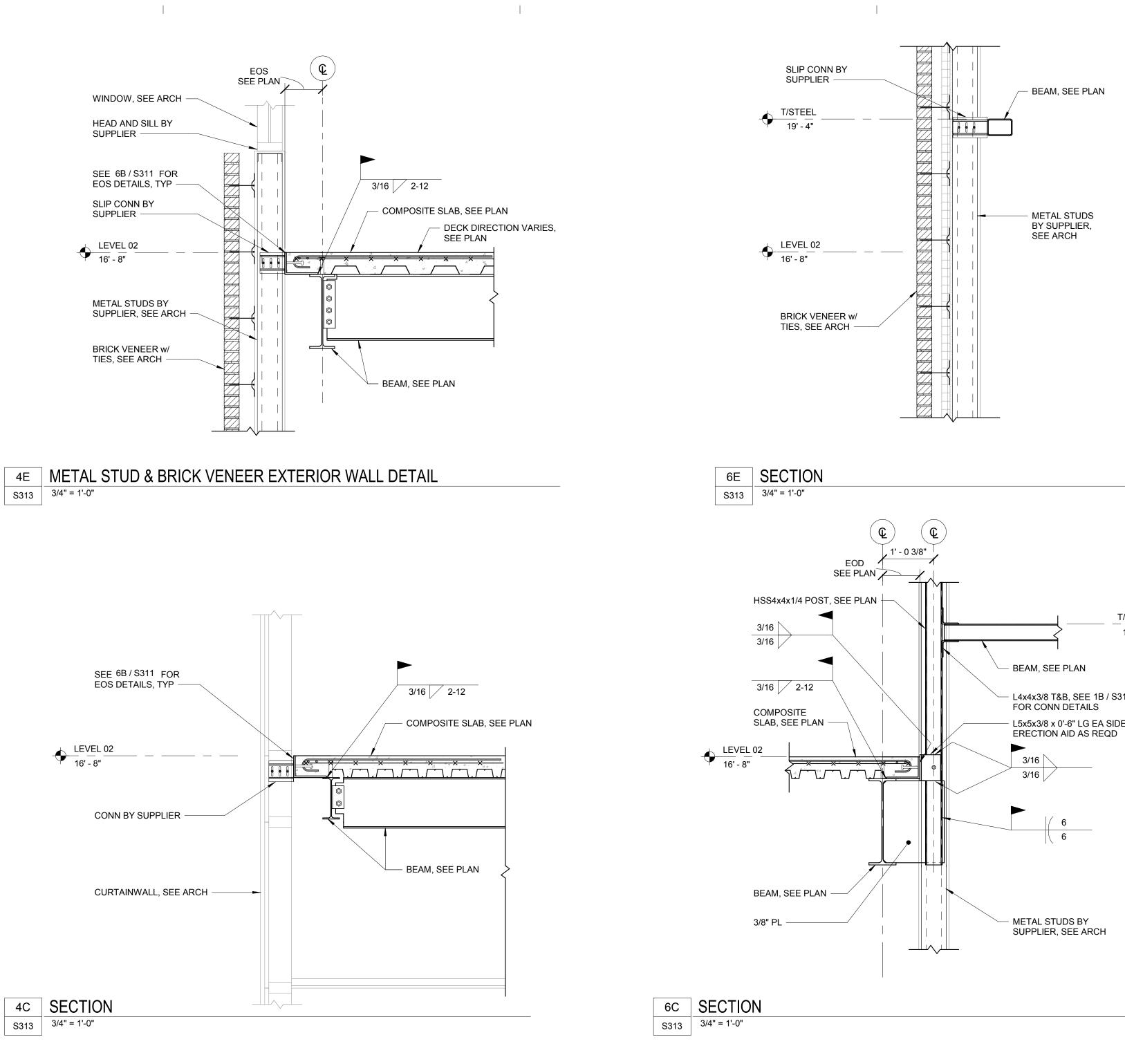
BENT PL w/ HD STUDS, SEE SLAB EDGE DETAIL (NOTCH AT COL)

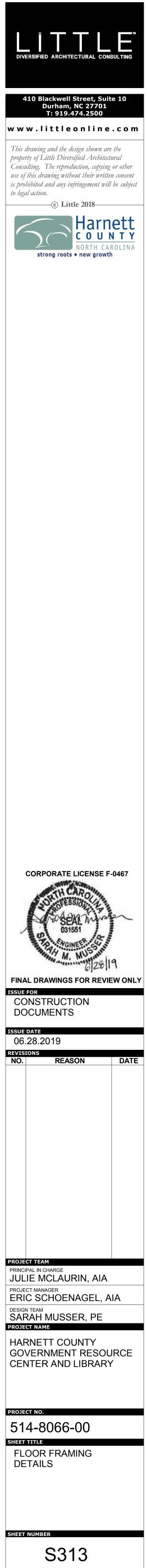
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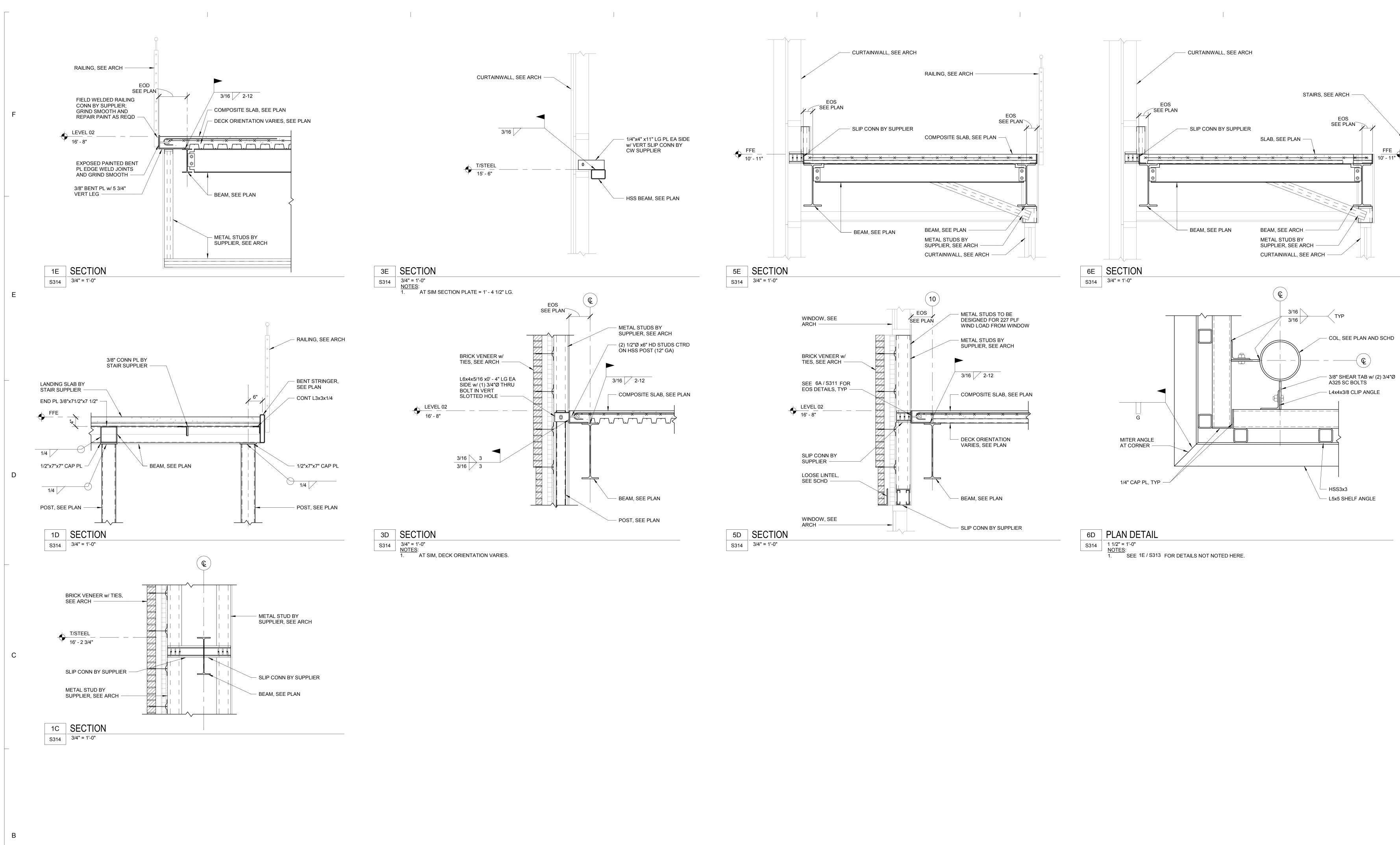
410 Blackwell Street, Suite 10 Durham, NC 27701 T: 919.474.2500 www.littleonline.com This drawing and the design shown are the property of Little Diversified Architectural Consulting. The reproduction, copying or other use of this drawing without their written consent is prohibited and any infringement will be subject to legal action. ______ C Little 2018____ Harnett ORTH CAROLIN strong roots • new growth CORPORATE LICENSE F-0467 FINAL DRAWINGS FOR REVIEW ONLY ISSUE FOR CONSTRUCTION DOCUMENTS ISSUE DATE 06.28.2019 REASON PROJECT TEAM PRINCIPAL IN CHARGE JULIE MCLAURIN, AIA PROJECT MANAGER ERIC SCHOENAGEL, AIA DESIGN TEAM SARAH MUSSER, PE HARNETT COUNTY GOVERNMENT RESOURCE CENTER AND LIBRARY PROJECT NO. 514-8066-00 SHEET TITLE FLOOR FRAMING DETAILS S312



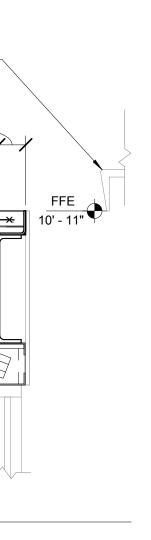


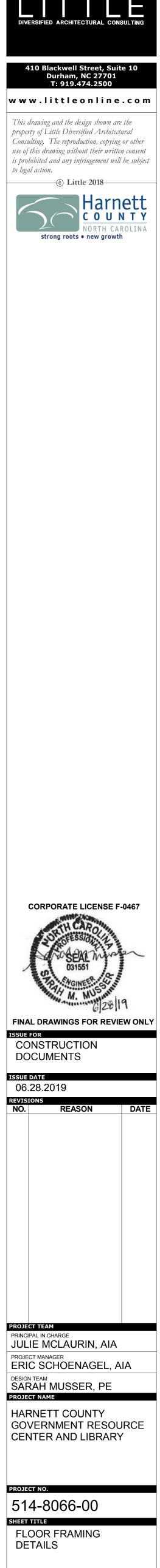




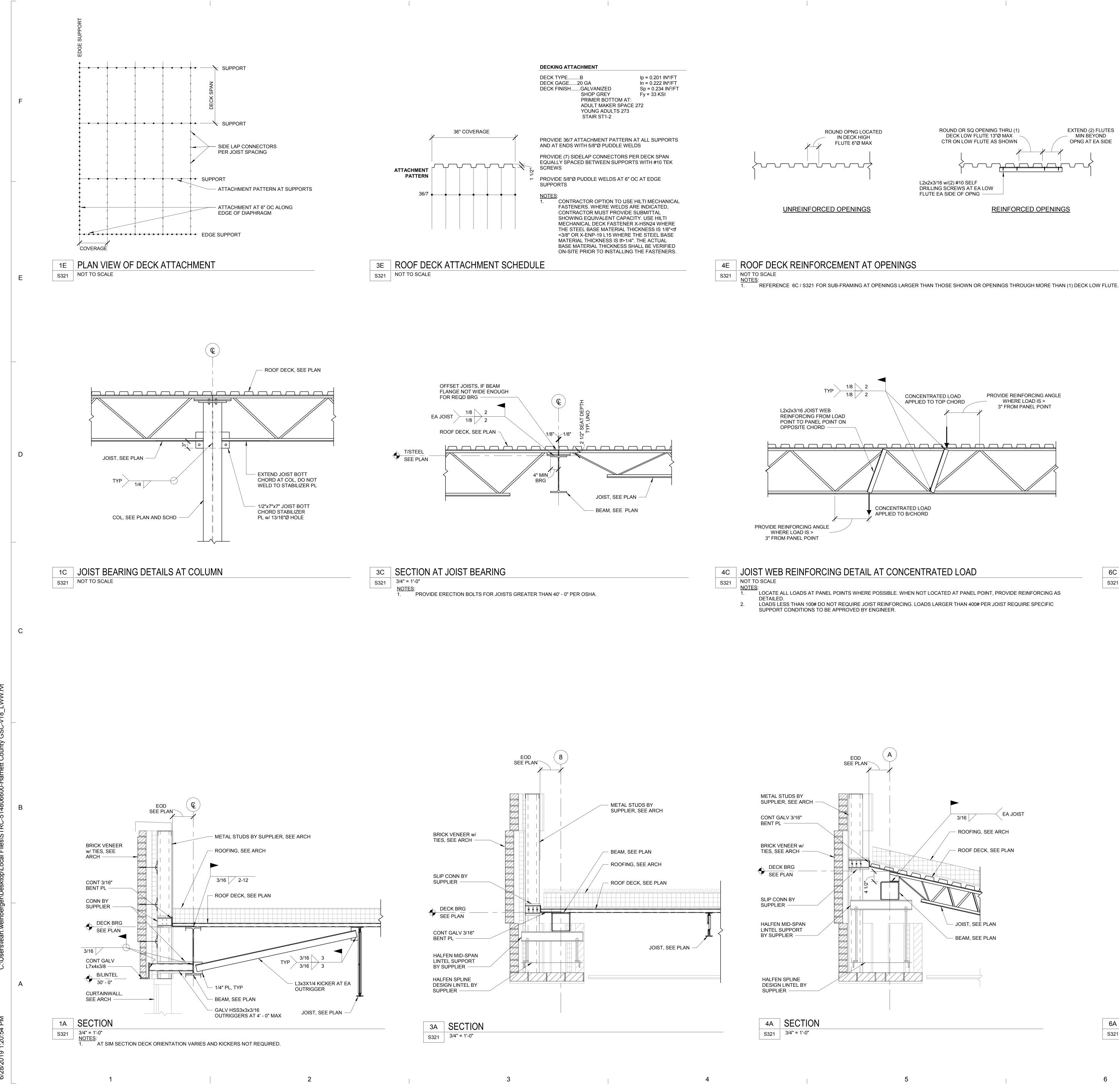


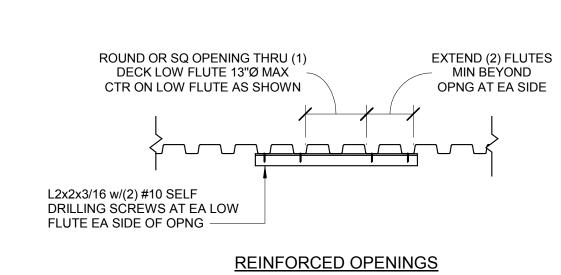


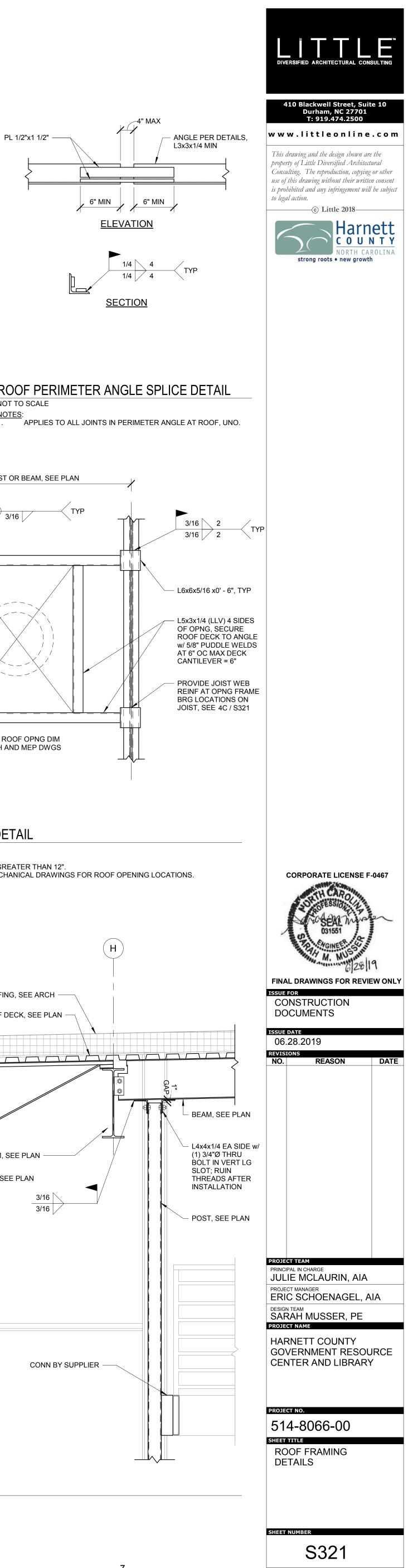


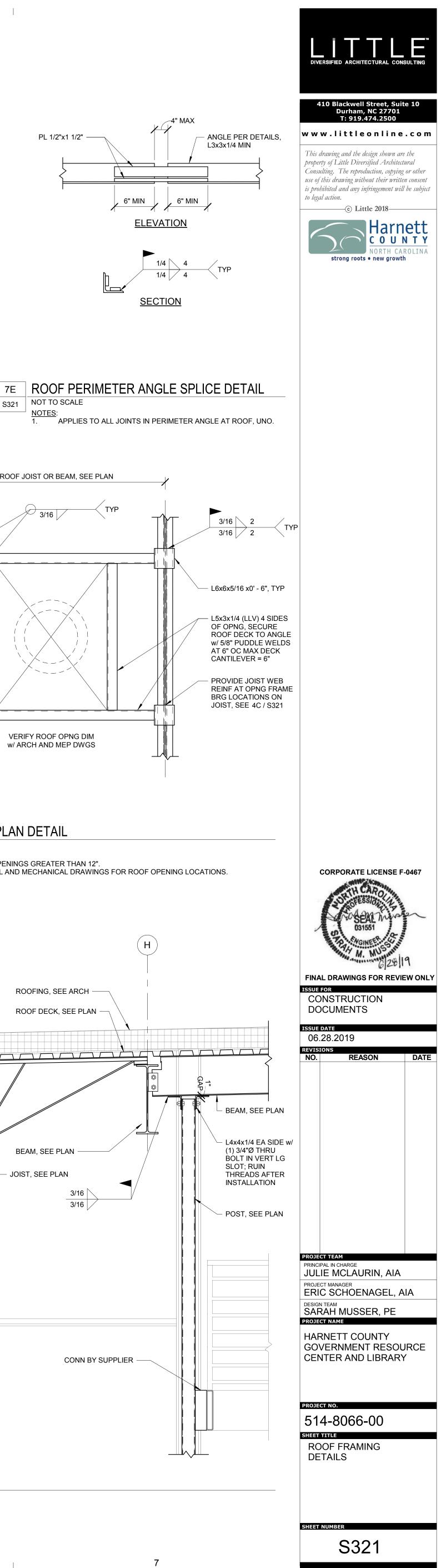


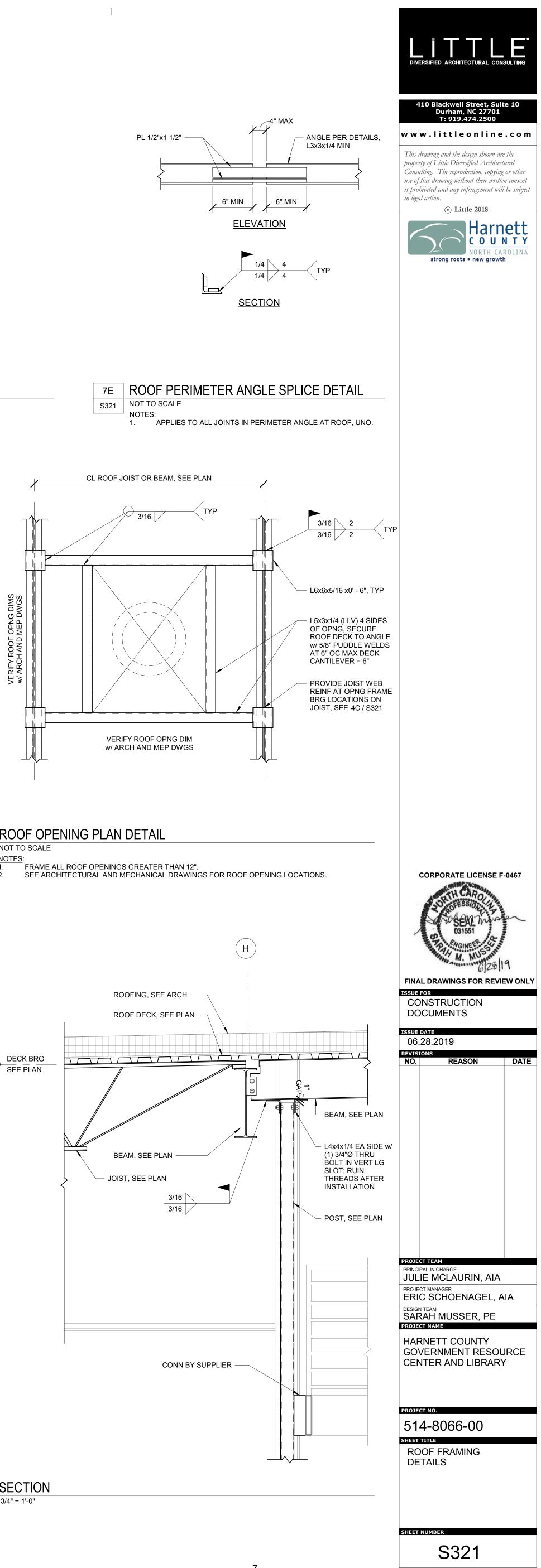
S314

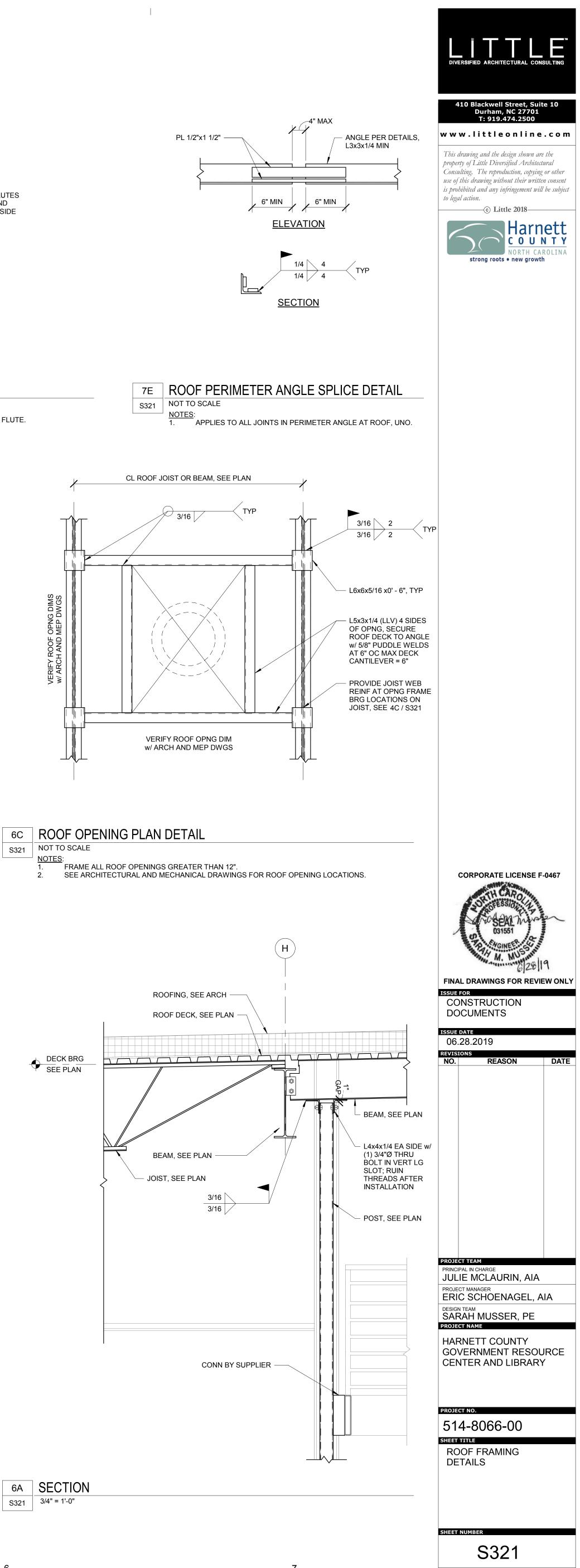


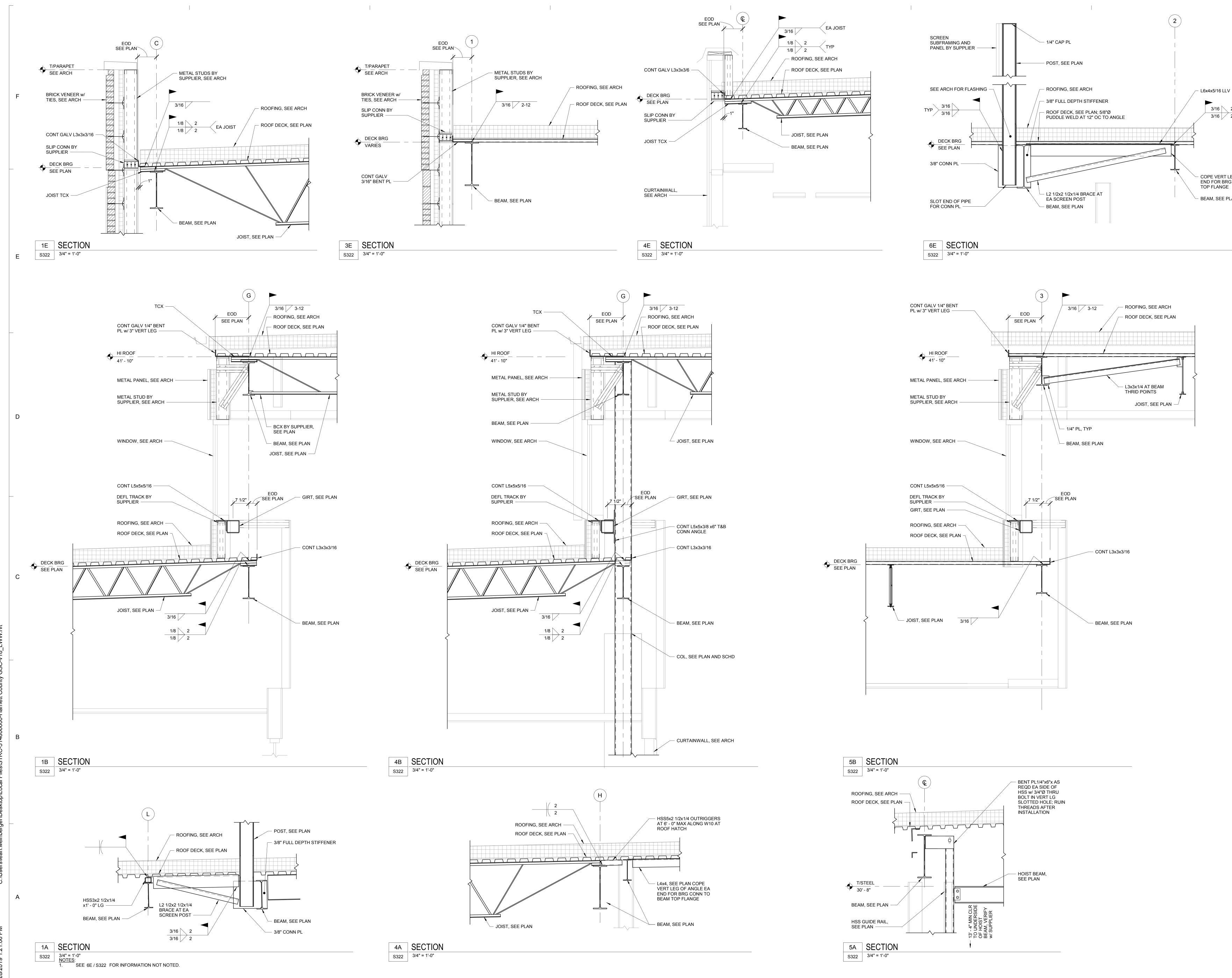












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3/16 🔪 2 TYP 3/16 2

 COPE VERT LEG OF ANGLE EA END FOR BRG CONN TO BEAM TOP FLANGE - BEAM, SEE PLAN

