STRUCTURAL NOTES

GENERAL

THESE DRAWINGS, AS INSTRUMENTS OF PROFESSIONAL SERVICE, ARE THE PROPERTY OF LYSAGHT & ASSOCIATES, P.A., FOR USE SOLELY WITH THIS PROJECT AND SHALL NOT BE REPRODUCED FOR OTHER PURPOSES.

THE PROFESSIONAL ENGINEER WHOSE SEAL APPEARS ON THESE DRAWINGS IS THE PROJECT STRUCTURAL ENGINEER-OF-RECORD (SER) WHO BEARS LEGAL RESPONSIBILITY FOR THE PERFORMANCE OF NEW LIGHT GAGE METAL FRAMING RELATING TO PUBLIC HEALTH, SAFETY, AND WELFARE. NO OTHER PARTY, WHETHER OR NOT A PROFESSIONAL ENGINEER, MAY COMPLETE, CORRECT, REVISE, DELETE, OR ADD TO THESE CONSTRUCTION DOCUMENTS OR PERFORM INSPECTIONS OF THE WORK WITHOUT THE WRITTEN PERMISSION OF THE SER.

USE STRUCTURAL DRAWINGS IN CONJUNCTION WITH JOB SPECIFICATIONS, AND OTHER DRAWINGS.

SECTIONS AND DETAILS SHOWN SHALL BE CONSIDERED TYPICAL FOR ALL SIMILAR

ALL NON-STRUCTURAL ELEMENTS INDICATED ON THE STRUCTURAL DRAWINGS HAVE BEEN SHOWN IN GENERAL RELATIONSHIP TO THE STRUCTURAL ELEMENTS. THEY SHALL NOT BE ASSUMED TO BE ACCURATE AND REFERENCE MUST BE MADE TO THE APPROPRIATE CONSULTANT(S) PLANS AND SPECIFICATIONS.

CONTRACTOR SHALL VERIFY ALL CONDITIONS IN THE FIELD AND TAKE ALL NECESSARY FIELD MEASUREMENTS.

CONTRACTOR SHALL TAKE SUCH ACTION AS NECESSARY TO PREVENT MOVEMENT OF OR DAMAGE TO THE EXISTING STRUCTURE DURING CONSTRUCTION.

THE STRUCTURE SHOWN ON THESE DRAWINGS IS STRUCTURALLY SOUND ONLY IN ITS COMPLETED FORM. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BRACING TO STABILIZE THE BUILDING DURING CONSTRUCTION.

SCOPE OF STRUCTURAL ENGINEERING SERVICES

LYSAGHT & ASSOCIATES, P.A. HAS PERFORMED THE STRUCTURAL DESIGN AND PREPARED THE STRUCTURAL WORKING DRAWINGS FOR THIS PROJECT. "CONSTRUCTION REVIEW" SERVICES ARE NOT A PART OF THIS CONTRACT. CONSTRUCTION MUST BE PERFORMED IN STRICT ACCORDANCE WITH THE STRUCTURAL DRAWINGS. ANY DEVIATION FROM THE DRAWINGS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER. ERRORS AND/OR OMISSIONS FOUND ON THE STRUCTURAL DRAWINGS MUST BE BROUGHT TO THE STRUCTURAL ENGINEER'S ATTENTION IMMEDIATELY.

THE STRUCTURAL ENGINEER IS RESPONSIBLE FOR THE DESIGN OF THE PRIMARY STRUCTURAL SYSTEM, EXCEPT FOR THE COMPONENTS NOTED ABOVE. RESPONSIBILITY FOR ANY SECONDARY STRUCTURAL AND NON-STRUCTURAL SYSTEMS NOT SHOWN ON THE STRUCTURAL PLANS RESTS WITH SOMEONE OTHER THAN THE STRUCTURAL ENGINEER.

THE STRUCTURAL ENGINEER HAS NOT DONE A SUBSURFACE INVESTIGATION (HE IS NOT A SOILS SPECIALIST). THE FOUNDATION DESIGN IS BASED UPON AN ASSUMED ALLOWABLE BEARING PRESSURE AS SHOWN IN THE "FOUNDATION" STRUCTURAL NOTES. THIS ALLOWABLE BEARING PRESSURE MUST BE VERIFIED BY THE CONTRACTOR OR OWNER. IF PROBLEMS ARE ENCOUNTERED, A SOILS ENGINEER SHOULD BE RETAINED TO EVALUATE THE CONDITIONS AND RECOMMEND THE APPROPRIATE FOUNDATION SYSTEM.

THE STRUCTURAL ENGINEER HAS NOT DESIGNED THE STRUCTURE FOR SPECIFIC VIBRATION LIMITS. VIBRATION LIMITATIONS ARE BASED ON STANDARD ENGINEERING PRACTICES AND PAST EXPERIENCE WITH SIMILAR CONSTRUCTION.

THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK; NOR WILL HE BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE

FIELD MEASUREMENTS AND THE VERIFICATION OF FIELD DIMENSIONS ARE NOT PART OF THE STRUCTURAL ENGINEER'S RESPONSIBILITY. THE CONTRACTOR MUST CHECK ALL (ASSUMED) EXISTING CONDITIONS SHOWN ON THESE DRAWINGS FOR ACCURACY AND NOTIFY THE STRUCTURAL ENGINEER OF ANY DISCREPANCIES.

ABBREVIATIONS

A.B.	ANCHOR BOLT
A.F.F.	ABOVE FINISH FLOOR
D.J.	DOUBLE JOIST
E.J.	EXPANSION JOINT
E.W.	EACH WAY
J.B.E.	JOIST BEARING ELEVATION
N.T.S.	NOT TO SCALE

ON CENTER

POWDER ACTUATED FASTENER SOUTHERN YELLOW PINE LUMBER

TOP OF FOOTING T.O.S. TOP OF STEEL

U.N.O. UNLESS NOTED OTHERWISE W.W.F. WELDED WIRE FABRIC

CODE

NORTH CAROLINA STATE BUILDING CODE - 2012 EDITION

BUILDING OCCUPANCY CATEGORY

DESIGN LOADS		
FLOOR LIVE LOAD (Lower Level) FLOOR LIVE LOAD (Upper Level Office, Un FLOOR LIVE LOAD (Upper Level Office, Co FLOOR LIVE LOAD (Upper Level Corridor)	form) 5 centrated) 200	O PSF O PSF O LBS O PSF
SEISMIC LOAD DATA: SEISMIC IMPORTANCE FACTOR MAPPED SPECTRAL RESPONSE ACCELERATION MAPPED SPECTRAL RESPONSE ACCELERATION SITE CLASS SPECTRAL RESPONSE COEFFICIENT SPECTRAL RESPONSE COEFFICIENT SEISMIC DESIGN CATEGORY	I 1.0 Ss 0.18 S1 0.07 D SDS 0.20 SD1 0.12	9 5 2 0
BASIC STRUCTURAL SYSTEM SEISMIC RESISTING SYSTEM	Bearing Light Framed W	Wall System alls w/ Shear Panels
RESPONSE MODIFICATION COEFFICIENT SYSTEM OVERSTRENGTH FACTOR DEFLECTION AMPLIFICATION FACTOR	R 2.0 Omega 2.5 Cd 2.0	Ō
SEISMIC RESPONSE COEFFICIENT ANALYSIS PROCEDURE	Cs 0.07 Equival	4 ent Lateral Force

FOUNDATIONS

SEISMIC BASE SHEAR

LATERAL DESIGN CONTROL

ALL FOOTINGS SHALL REST ON SOIL CAPABLE OF SAFELY SUPPORTING 2500 PSF. CONTACT STRUCTURAL ENGINEER IF UNSATISFACTORY SUBSURFACE CONDITIONS ARE **ENCOUNTERED.**

20.5 KIPS

WIND

FOOTINGS SHALL BE CARRIED TO A LOWER ELEVATION THAN THOSE INDICATED ON THESE DRAWINGS IF NECESSARY TO REACH FIRM UNDISTURBED SOIL

CONCRETE

CONCRETE SHALL BE PROPORTIONED, MIXED AND PLACED IN ACCORDANCE WITH ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", AND ACI 301, SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS". ANY ADMIXTURES MUST BE APPROVED BY THE STRUCTURAL ENGINEER.

ADMIXTURES CONTAINING CHLORIDE SALTS ARE NOT PERMITTED.

MINIMUM 28 DAY COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 4000 PSI. USE NORMAL WEIGHT CONCRETE FOR FOOTINGS AND SLABS ON GRADE.

CONCRETE EXPOSED TO EXTERIOR CONDITIONS SHALL BE AIR-ENTRAINED WITH A TOTAL AIR CONTENT OF 6 PERCENT (+/-1.5%).

DO NOT CAST CONCRETE IN WATER OR ON FROZEN GROUND. FOR SLABS ON GRADE, LIGHTLY DAMPEN THE SUBGRADE BEFORE PLACING CONCRETE TO PREVENT THE SUBGRADE FROM ABSORBING WATER FROM THE CONCRETE MIX. APPLY WATER AT NEARLY THE SAME RATE IT SOAKS INTO THE SUBGRADE SURFACE.

START CURING FOR SLABS ON GRADE AS SOON AS THE FINISHERS ARE DONE APPLY THE CURING COMPOUND IN TWO COATS AT RIGHT ANGLES TO EACH OTHER AND NOT MORE THAN 300 SQUARE FEET PER GALLON, ABOUT 15 MINUTES APART. DURING HOT WEATHER, USE A FOG SPRAY TO KEEP THE SURFACE DAMP BEFORE APPLYING A CURING COMPOUND.

STRUCTURAL STEEL

FABRICATE AND ERECT ALL STRUCTURAL STEEL IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (ANSI/AISC 360-05)".

STRUCTURAL STEEL SHALL RECEIVE ONE SHOP COAT OF RUST-INHIBITIVE PAINT. STEEL COLUMNS BELOW GRADE THAT ARE NOT ENCASED IN CONCRETE SHALL BE FIELD PAINTED WITH A WATERPROOF MASTIC COMPOUND TO PREVENT CORROSION.

THE STEEL USED SHALL HAVE THE FOLLOWING MINIMUM YIELD STRESS:

CHANNELS, ANGLES, PLATES, MISC. SHAPES 46 KSI (A500, B)

USE F1554 (GRADE 36) BOLTS FOR ALL ANCHOR BOLTS U.N.O. USE E-70 ELECTRODES FOR ALL SHOP AND FIELD WELDING.

ALL EXPANSION ANCHORS SHALL BE INSTALLED WITH STANDARD EMBEDMENT DEPTH (4-3/4" FOR 3/4" DIA. ANCHORS, 3-1/2" FOR 1/2" DIA. ANCHORS). EXPANSION ANCHORS MUST BE LOCATED 1-3/8" MINIMUM FROM VERTICAL MORTAR JOINTS.

THE STEEL SUPPLIER SHALL DESIGN ALL STEEL STAIRS AND LADDERS IN ACCORDANCE WITH THE N.C. STATE BUILDING CODE. STAIR SHOP DRAWINGS SHALL BE SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN NORTH CAROLINA.

FOR MISCELLANEOUS STEEL NOT SHOWN ON THESE DRAWINGS, SEE ARCHITECTURAL AND OTHER ENGINEERING DRAWINGS.

CONNECTIONS BETWEEN STRUCTURAL STEEL MEMBERS SHALL BE AS SHOWN ON STRUCTURAL DRAWING DETAILS. ALTERNATE CONNECTION DETAILS MUST BE APPROVED IN WRITING, BY THE STRUCTURAL ENGINEER OF RECORD, PRIOR TO THE SUBMITTAL OF SHOP DRAWINGS.

SUBMIT ERECTION AND SHOP DRAWINGS TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION.

LIGHT GAGE STRUCTURAL STEEL FRAMING

LIGHT GAGE STRUCTURAL STEEL INCLUDES ALL AXIALLY OR WIND LOADED LIGHT GAGE STEEL STUDS, TRACK, JOISTS, BRIDGING AND RELATED ACCESSORIES AS INDICATED ON THE DRAWINGS.

DESIGN, FABRICATION AND ERECTION OF LIGHT GAGE STRUCTURAL STEEL FRAMING SHALL BE IN ACCORDANCE WITH THE AMERICAN IRON AND STEEL INSTITUTE SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS' THE STEEL USED SHALL HAVE THE FOLLOWING MINIMUM YIELD STRESS:

LIGHT GAGE STEEL STUDS TRACKS FOR STEEL STUDS 33 KSI LIGHT GAGE STEEL JOISTS & HEADERS 33 KSI

THE MEMBER DESIGNATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE FROM THE DIETRICH "CURTAIN WALL AND LIGHT GAGE STRUCTURAL" DESIGN MANUAL. ANY MANUFACTURER SUBSTITUTIONS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER IN WRITING. THE CONTRACTOR SHALL SUBMIT THE PROPOSED MATERIAL SUPPLIER'S PHYSICAL STRUCTURAL PROPERTIES AND LOAD TABLES FOR REVIEW.

ALL LIGHT GAGE STRUCTURAL STEEL FRAMING SHALL BE GALVANIZED, IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

SPLICES IN STEEL STUDS, JOISTS, AND HEADERS SHALL NOT BE PERMITTED EXCEPT WHERE SPECIFICALLY SHOWN ON THE DRAWINGS.

FASTENING OF COMPONENTS SHALL BE WITH SELF TAPPING SCREWS OR WELDS. WELDING SHALL BE IN ACCORDANCE WITH SECTION 6.0 OF THE AMERICAN WELDING SOCIETY'S "STRUCTURAL WELDING CODE - SHEET METAL" (AWS D1.3-8). ALL WELDS SHALL BE TOUCHED UP WITH A ZINC RICH PAINT.

LIGHT GAGE METAL STUD WALL CONSTRUCTION NOTES:

THE TYPICAL WALL STUD SPACING SHALL BE 16" O.C. UNLESS NOTED OTHERWISE. AT LOAD BEARING WALLS AND SHEAR WALLS, STUDS MUST BE SEATED SQUARELY AGAINST THE WEB PORTION OF TOP & BOTTOM TRACKS.

ALL LOWER LEVEL LOAD BEARING WALLS SHALL BE CONSTRUCTED WITH 362S162-54 STUDS BY DIETRICH INDUSTIRES (OR APPROVED EQUAL). UPPER LEVEL LOAD BEARING WALLS SHALL BE CONSTRUCTED WITH 362S162-43 STUDS. THE NET PHYSICAL PROPERTIES FOR STUDS ARE AS FOLLOWS:

362S162-54 3-5/8", 16 GAGE STUD W/ 1-5/8" FLANGE & 1/2" RETURN $A = 0.422 \text{ in}^2 \quad Sx = 0.482 \text{ in}^3 \quad Ix = 0.873 \text{ in}^4$ 362S162-43 3-5/8", 18 GAGE STUD W/ 1-5/8" FLANGE & 1/2" RETURN A = 0.340 in^2 Sx = 0.392 in^3 Ix = 0.710 in^4

AT LOAD BEARING WALLS WITH GYPSUM SHEATHING ON BOTH SIDES OF STUDS, PROVIDE COLD—ROLLED BRIDGING CHANNELS AT THE THIRD POINTS OF THE STUD HEIGHT. BRIDGING CHANNELS SHALL BE ATTACHED AT EACH STUD BY WELDING OR WITH CLIP ANGLES & SCREWS.

AT LOAD BEARING WALLS THAT RECEIVE GYPSUM SHEATHING ON ONLY ONE FACE OF THE WALL, BRIDGING SHALL BE INSTALLED AT THE THIRD POINTS OF THE STUD HEIGHT AND SHALL CONSIST OF CONTINUOUS 2"x16 GAGE FLAT STRAPPING ATTACHED TO THE FLANGES OF STUDS THAT WILL NOT BE SHEATHED. INSTALL FULL DEPTH BLOCKING BETWEEN STUDS AT EACH BRIDGING LINE IN EVERY FOURTH STUD SPACE.

AT LOAD BEARING WALLS AND SHEAR WALLS, GYPSUM SHEATHING SHALL BE ATTACHED TO STUDS WITH #6 x 1-1/4" TYPE S SCREWS SPACED 6" O.C. AT PANEL EDGES AND 12" O.C. IN THE PANEL FIELD. PROVIDE CONTINUOUS 2"x18ga STRAP

STUD SIZE AND OPENING FRAMING FOR INTERIOR PARTITION WALLS SHALL BE BY THE SUPPLIER. INTERIOR PARTITION WALLS SHALL BE BRACED AT THE TOP WITH PROVISIONS FOR VERTICAL DEFLECTION OF THE STRUCTURE. ALL BRACING IS THE RESPONSIBILITY OF THE LIGHT GAGE SUPPLIER.

PROVIDE BRIDGING BETWEEN STUDS AT INTERIOR NON-LOAD BEARING WALLS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

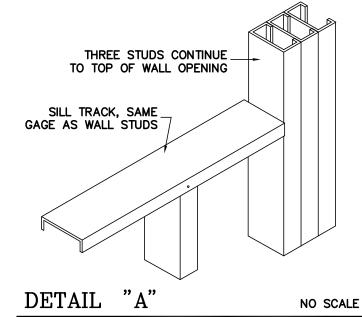
BRIDGING TO FLANGES OF STUDS AT HORIZONTAL JOINTS IN SHEATHING.

FASTEN LIGHT GAGE MATERIAL TO LIGHT GAGE MATERIAL WITH #10 TEK SCREWS. FASTEN LIGHT GAGE MATERIAL TO CONCRETE WITH HILTI X-U 32 P8 S15 POWDER ACTUATED FASTENERS (OR APPROVED EQUAL). SPACE FASTENERS FOR BASE TRACK TO MASONRY OR CONCRETE AT 12" O.C., MAXIMUM.

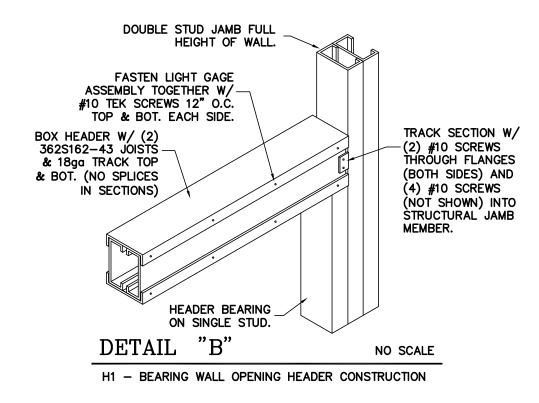
FASTEN LIGHT GAGE MATERIAL TO STRUCTURAL STEEL WITH HILTI X-U 27 P8 S23 POWDER ACTUATED FASTENERS (OR APPROVED EQUAL).

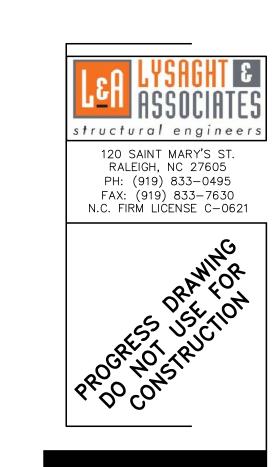
SEE DETAIL "A", AT RIGHT, FOR CONSTRUCTION OF SILLS AT BEARING WALL OPENINGS. SEE DETAIL "B", AT RIGHT, FOR CONSTRUCTION OF HEADERS AT OPENINGS IN LOAD BEARING WALLS AT HEADER MARK L1.

SEE DETAIL "C", BELOW, FOR CONSTRUCTION OF HEADERS AT OPENINGS IN LOAD BEARING WALLS AT HEADER MARK L2.



EXTERIOR WALL OPENING SILL CONSTRUCTION



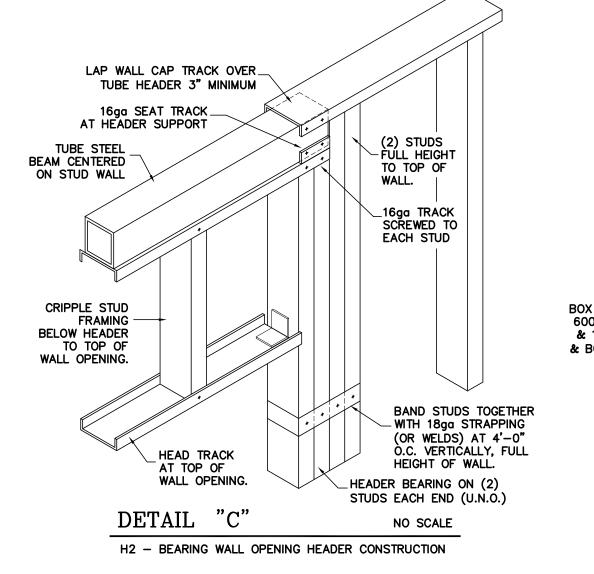


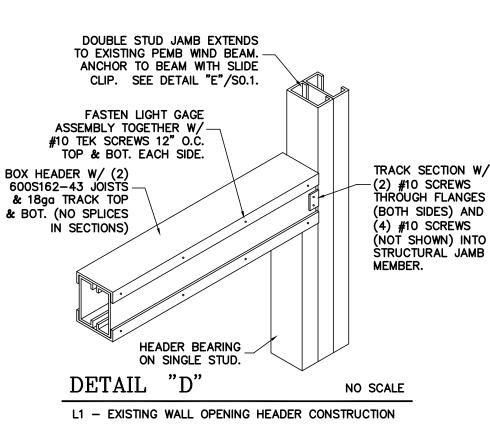
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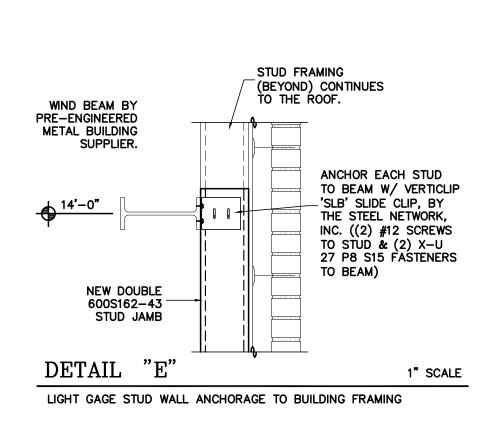
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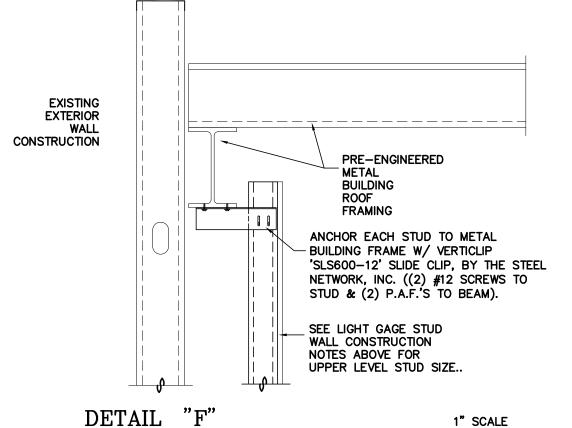
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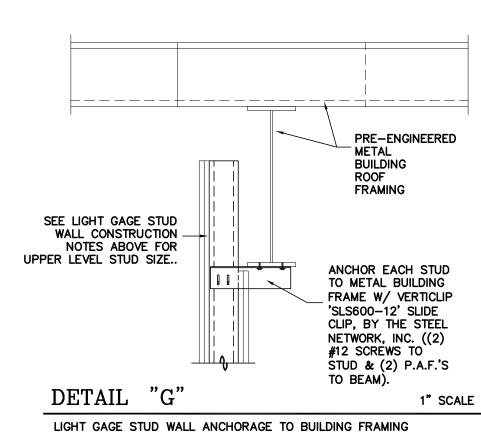








LIGHT GAGE STUD WALL ANCHORAGE TO BUILDING FRAMING



RGETT NORTH (DATE 04/08/14 DR. JES CH. PROJ. # LA-1011 REVISIONS DATE

> STRUCTURAL NOTES

NOTES :

1. THE REFERENCE FINISH MAIN FLOOR ELEVATION = 0'-0".

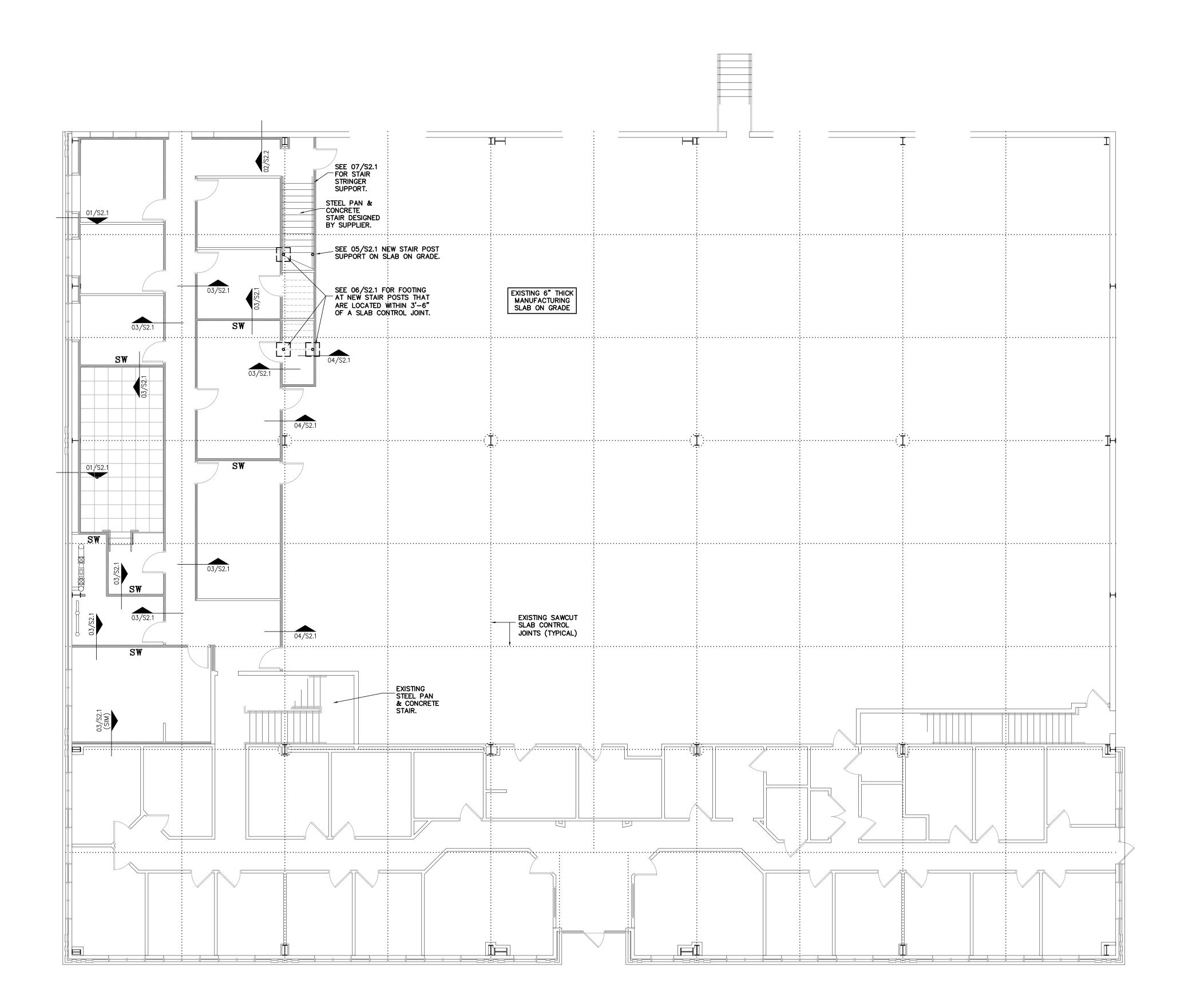
4. SEE SHEET SO.1 FOR ADDITIONAL STRUCTURAL NOTES.

SEE SHEET SO.1 FOR LIGHT GAUGE STUD WALL FRAMING NOTES & WALL CONSTRUCTION DETAILS. LOAD BEARING WALLS & SHEAR WALLS ARE SHOWN SHADED ON THE PLAN.

3. SEE THE ARCHITECTURAL DRAWINGS FOR WALL DIMENSIONS NOT NOTED ON THIS PLAN.

DATE 04/01/14
DR. JES
CH. .
PROJ. # LA-10113
REVISIONS DATE

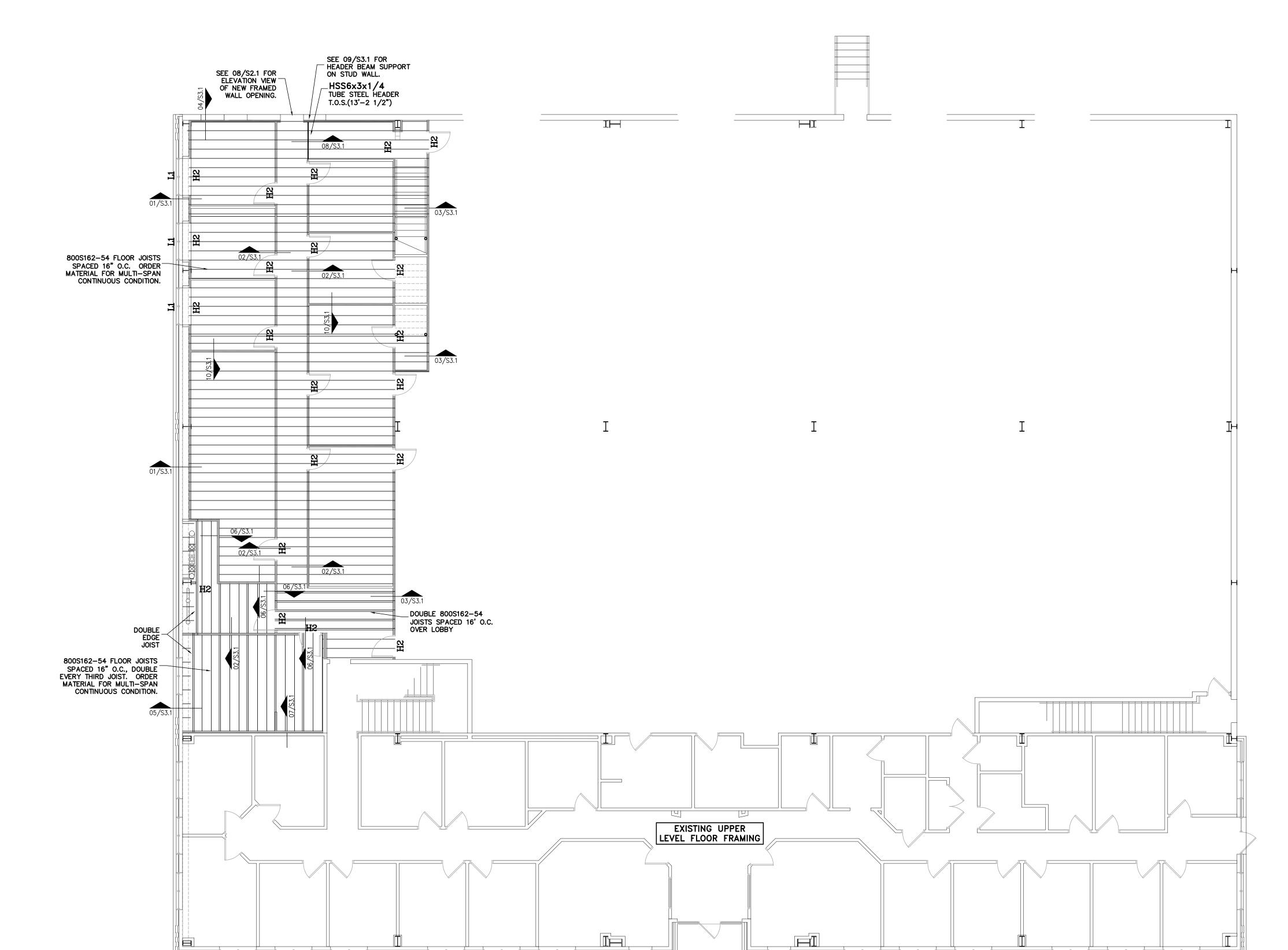
FOUNDATION PLAN



FOUNDATION PLAN SCALE : 1/8" = 1'-0"



FLOOR FRAMING PLAN



FLOOR FRAMING PLAN NOTES:

- THE REFERENCE FINISH UPPER FLOOR ELEVATION (TOP OF GYPCRETE IS AT 14'-0".
 THE TOP OF PLYWOOD FLOOR SHEATHING IS AT 13'-11 1/4".
- 2. FLOOR CONSTRUCTION CONSISITS OF 3/4" OF GYPCRETE OVER 3/4" THICK, 48/24 APA RATED, FIRE-RETARDANT-TREATED, CDX T&G PLYWOOD FLOOR SHEATHING. ATTACH SHEATHING TO FRAMING W/ #12 SCREWS SPACED 6" O.C. AT PANEL EDGES AND 12" O.C. IN THE PANEL FIELD.
- 3. SEE SHEET SO.1 FOR LIGHT GAUGE STUD WALL FRAMING NOTES & WALL CONSTRUCTION DETAILS. LOAD BEARING WALLS & SHEAR WALLS ARE SHOWN SHADED ON THE PLAN.
- 4. STEEL STAIRS ARE TO BE DESIGNED BY THE SUPPLIER AS A SELF-SUPPORTING ELEMENT, INDEPENDENT OF LIGHT GAGE FRAMING.
- 5. REFER TO ARCHITECTURAL DRAWINGS FOR DEMOLITION REQUIREMENTS.
- 6. SEE THE ARCHITECTURAL PLANS FOR DIMENSIONS LOCATING NEW STUD WALLS AND WALL OPENINGS WHERE NOT SHOWN ON THIS PLAN. SEE THE HEADER SCHEDULE ON THIS SHEET FOR HEADER CONSTRUCTION AT NEW WALL OPENINGS. SEE THE LINTEL SCHEDULE THIS SHEET FOR LINTEL CONSTRUCTION AT NEW WALL OPENINGS IN EXISTING EXTERIOR WALLS.
- 7. SEE SHEET SO.01 FOR ADDITIONAL STRUCTURAL NOTES.

LIGHT GAGE FLOOR JOIST CONSTRUCTION NOTES

THE TYPICAL FLOOR JOIST SPACING SHALL BE 16" UNLESS NOTED OTHERWISE.

PROVIDE CONTINUOUS, FULL DEPTH BLOCKING AT END SUPPORTS OF ALL LIGHT GAGE STEEL JOISTS. FOR ALL JOIST SPANS 16'-0" AND LESS, PROVIDE ONE ROW OF BRIDGE AT MIDSPAN. FOR ALL JOIST SPANS EXCEEDING 16'-0", PROVIDE (2) ROWS OF JOIST BRIDGING AT THIRD POINTS. INSTALL BRIDGING AS FOLLOWS:

USE SOLID, FULL DEPTH BRIDGING IN FIRST TWO JOIST SPACES AND THE LAST TWO SPACES OF JOISTS. ATTACH 2"x14 GAGE FLAT STRAP BRIDGING AT THE BOTTOM FLANGES OF JOISTS FROM THE THIRD JOIST SPACE EXTENDING FOR A 12'-0" RUN. REPEAT SOLID BRIDGING FOR ONE JOIST SPACE AND REPEAT FLAT STRAP BRIDGING FOR ANOTHER 12'-0" RUN. CONTINUE THIS PATTERN FOR THE FULL LENGTH OF THE LIGHT GAGE FRAMING.

FULL DEPTH BLOCKING AND BRIDGING SHALL BE OF THE SAME GAGE MATERIAL AS THE FLOOR JOISTS THEY BRACE.

WEB PUNCHOUTS FOR BRIDGING MUST BE LOCATED A MINIMUM OF 10" FROM BEARING POINTS.

PHYSICAL PROPERTIES FOR LIGHT GAGE JOISTS ARE AS FOLLOWS: 800S162-54 8", 16 GAGE JOIST W/ 1-5/8" FLANGE & 1/2" RETURN A = 0.670 in^2 Sx = 1.435 in^3 Ix = 5.740 in^4

HEADER SCHEDULE				
MARK	SIZE	MAX. SPAN	END BRNG	DETAIL
Н1	BOX HEADER W/ (2) 362S162-43 JOISTS & 18ga TRACK TOP & BOTTOM. SEE "B"/SO.1.	5'-4"	"B"/S0.1	
H2	HSS 3-1/2 x 3-1/2 x 1/4 TUBE STEEL HEADER. SEE DETAIL "C"/S0.1.	5'-4"	"C"/S0.1	

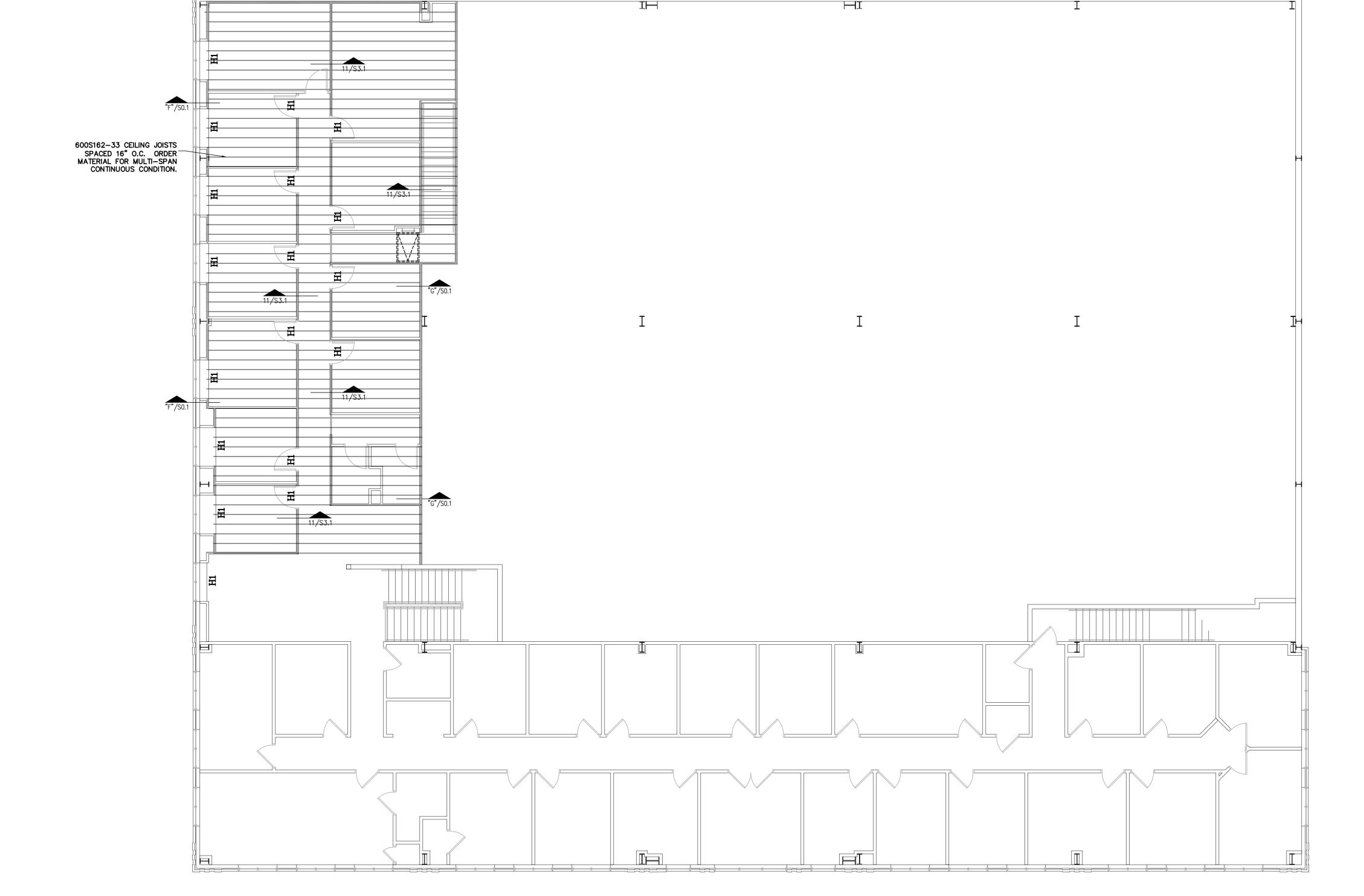
LINTEL SCHEDULE					
MARK	SIZE	MAX. SPAN	END BRNG	DETAIL	
L1	BOX HEADER W/ (2) 600S162-43 JOISTS & 18ga TRACK TOP & BOTTOM. SEE "D"/S0.1. L4x4x1/4 BRICK SHELF ANGLE	5'-4"	"D"/S0.1 6" @ ANGLE		

THE G.C. IS RESPONSIBLE FOR TEMPORARY SHORING OF EXISTING LIGHT GAGE METAL STUD WALL FRAMING AND BRICK VENEER DURING CONSTRUCTION OF NEW WALL OPENINGS.

UPPER LEVEL FLOOR FRAMING PLAN

SCALE : 1/8" = 1'-0"

UPPER FLOOR CEILING FRAMING PLAN



FLOOR FRAMING PLAN NOTES:

- 1. THE REFERENCE FINISH UPPER FLOOR ELEVATION (TOP OF GYPCRETE) IS AT 14'-0".
- 2. INSTALL 1/2" THICK GYPSUM SHEATHING AT THE UNDERSIDE OF ALL CEILING JOISTS. GYPSUM SHEATHING SHALL BE ATTACHED TO FRAMING W/ #6 x 1-1/4" TYPE S SCREWS SPACED 6" O.C. AT PANEL EDGES AND 12" O.C. IN THE PANEL FIELD.
- 3. SEE SHEET SO.1 FOR LIGHT GAUGE STUD WALL FRAMING NOTES & WALL CONSTRUCTION DETAILS. LOAD BEARING WALLS ARE SHOWN SHADED ON THE PLAN.
- 4. REFER TO ARCHITECTURAL DRAWINGS FOR DEMOLITION REQUIREMENTS.
- SEE THE ARCHITECTURAL PLANS FOR DIMENSIONS LOCATING NEW STUD WALLS AND WALL OPENINGS WHERE NOT SHOWN ON THIS PLAN. SEE THE HEADER SCHEDULE ON SHEET S1.2 FOR HEADER CONSTRUCTION AT NEW WALL OPENINGS.
- 6. SEE SHEET SO.01 FOR ADDITIONAL STRUCTURAL NOTES.

LIGHT GAGE CEILING JOIST CONSTRUCTION NOTES

THE TYPICAL CEILING JOIST SPACING SHALL BE 16" UNLESS NOTED OTHERWISE.

PROVIDE CONTINUOUS, FULL DEPTH BLOCKING AT END SUPPORTS OF ALL LIGHT GAGE STEEL JOISTS. FOR ALL JOIST SPANS 16'-0" AND LESS, PROVIDE ONE ROW OF BRIDGING AT MIDSPAN. FOR ALL JOIST SPANS EXCEEDING 16'-0", PROVIDE (2) ROWS OF JOIST BRIDGING AT THIRD POINTS. INSTALL BRIDGING AS FOLLOWS:

PROVIDE ROWS OF CONTINUOUS BRIDGING AS SHOWN ON THE FRAMING PLAN. AT EACH BRIDGING ROW, USE SOLID BRIDGING IN THE FIRST TWO SPACES AND THE LAST TWO SPACES OF JOISTS. ATTACH 2"x16 GAGE FLAT STRAP BRIDGING TO THE TOP FLANGES OF JOISTS FROM THE THIRD JOIST SPACE EXTENDING FOR A 12'-0" RUN. REPEAT SOLID BRIDGING FOR ONE JOIST SPACE AND REPEAT FLAT STRAP BRIDGING FOR ANOTHER 12-0" RUN. CONTINUE FULL LENGTH OF LIGHT GAGE FRAMING.

FULL DEPTH BLOCKING AND BRIDGING SHALL BE OF THE SAME GAGE MATERIAL AS THE CEILING JOISTS THEY BRACE.

PHYSICAL PROPERTIES FOR LIGHT GAGE CEILINT JOISTS ARE AS FOLLOWS:

600S162-33 6", 18 GAGE JOIST W/ 1-5/8" FLANGE & 1/2" RETURN A = 0.670 in^2 Sx = 1.435 in^3 Ix = 5.740 in^4





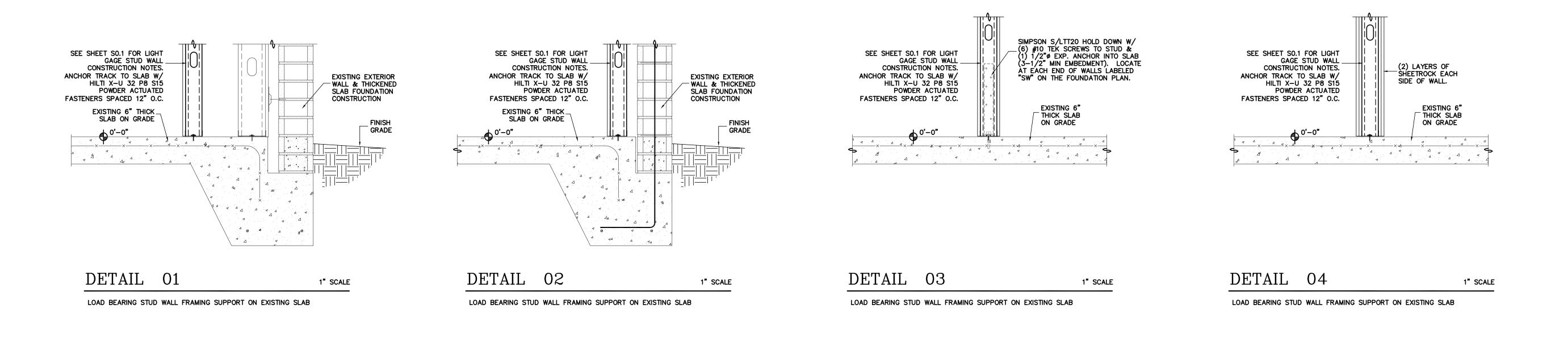
structural engineers 120 SAINT MARY'S ST. RALEIGH, NC 27605 PH: (919) 833-0495 FAX: (919) 833-7630 N.C. FIRM LICENSE C-0621

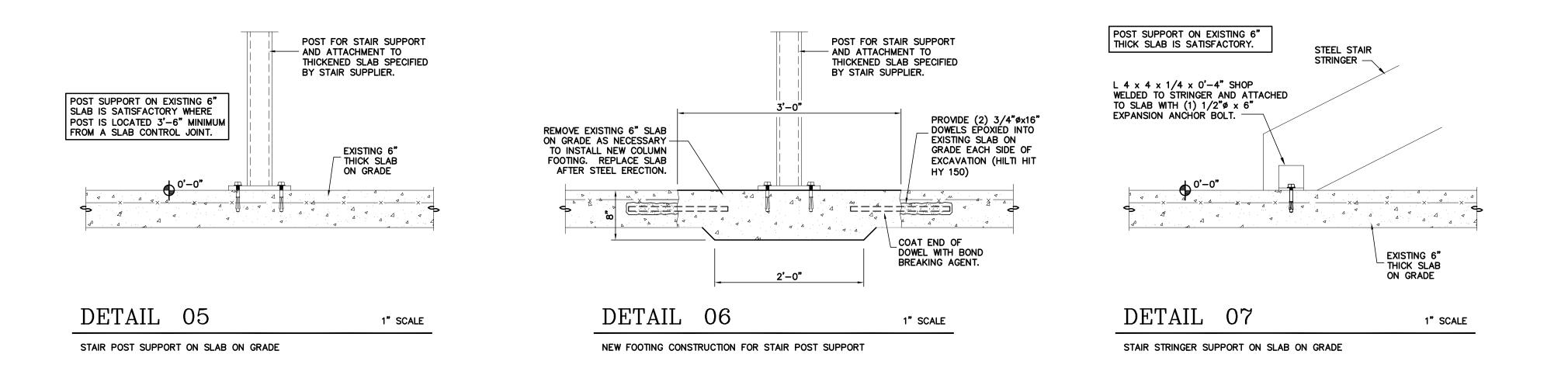
> LURER ARCHITECTURE
>
> EAST HARGETT STREET, SUITE 300
>
> ALEIGH, NORTH CAROLINA 27601
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> TEL. 919-829-4969 FAX. 919-829-0860 AURER

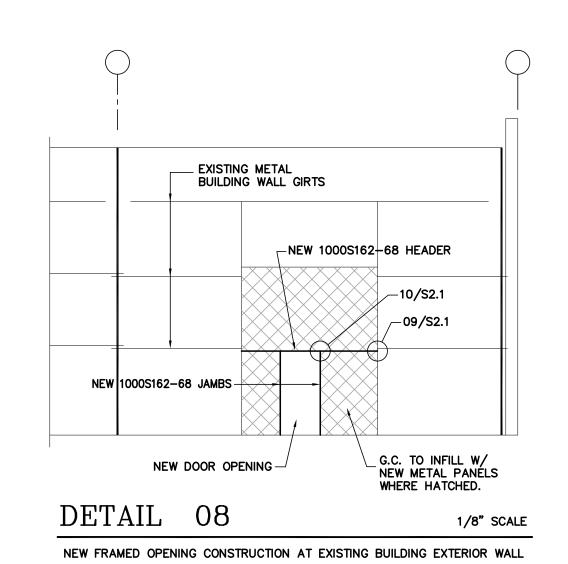
DATE 04/08/14 DR. **JES** CH. PROJ.# LA-1011. REVISIONS DATE

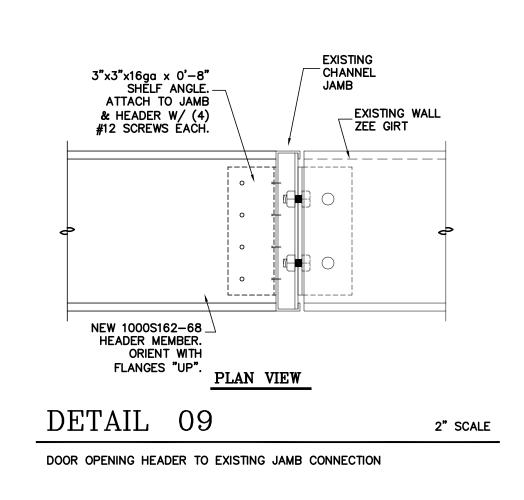
> FOUNDATION **DETAILS**

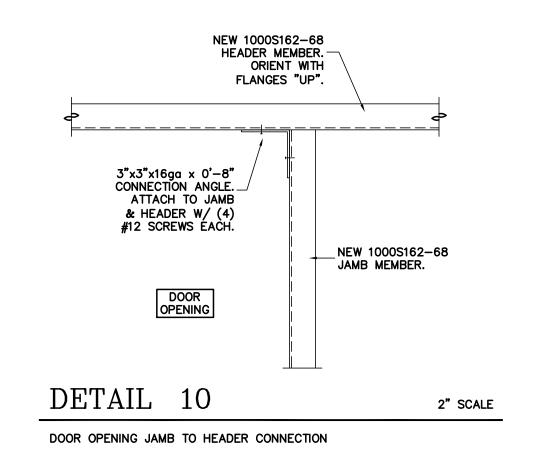
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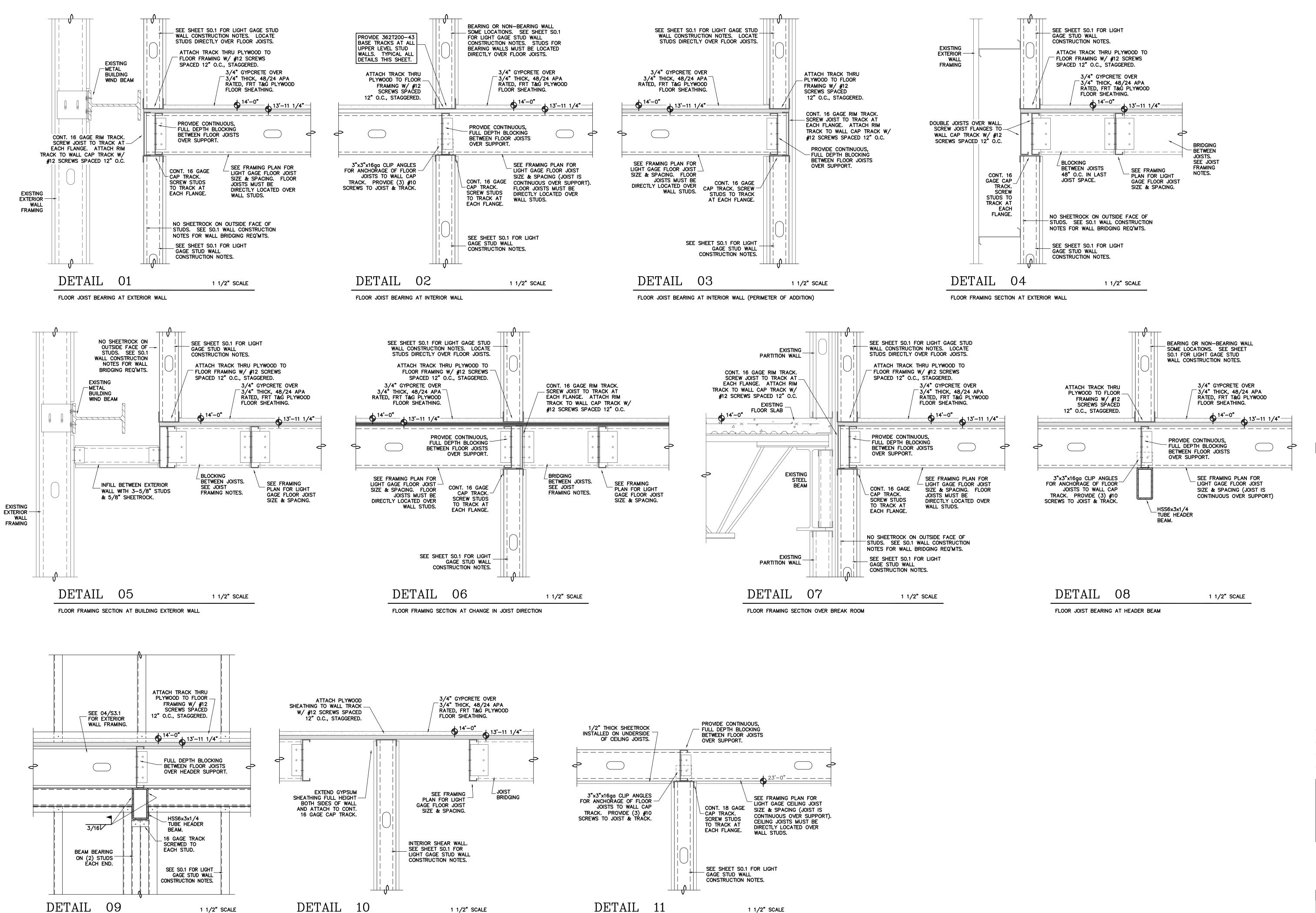












CEILING JOIST BEARING AT INTERIOR WALL

1 1/2" SCALE

1 1/2" SCALE

HEADER BEAM SUPPORT ON STUD WALL

1 1/2" SCALE

FLOOR FRAMING SECTION THROUGH X-X DIRECTION SHEAR WALL

tructural engineers 120 SAINT MARY'S ST. RALEIGH, NC 27605 PH: (919) 833-0495 FAX: (919) 833-7630 N.C. FIRM LIĆENSE C-0621

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DATE 04/08/14 DR. **JES** CH. PROJ.# LA-1011. REVISIONS DATE

> FRAMING **DETAILS**

S3.1