General Notes:

1. Design Specifications: International Building Code (2009 Edition).
   Design Loads:
   Roof live load: 16 PSF pitched
   Snow load: 10 PSF
   Floor live load: Private rooms & corridors serving them: 40 PSF
   Public rooms & corridors serving them: 100 PSF
   Catwalks: 40 PSF
   Dead load: Actual
   Wind Velocity: 95 MPH
   Exposure Category: B
2. In case of a discrepancy in dimensions or details, between Architectural and Structural Drawings, not affecting strength, the Architect's plans shall govern. For dimensions and details not shown, see Architect's plans.
3. The construction falsework design (if any) is the responsibility of the Contractor. The design shall be Sealed & Signed by a Engineer Registered in South Carolina and shall be submitted for approval before commencing of the work.
4. Where a detail is shown on Structural Drawings for one condition, it shall apply to all similar or like conditions, unless noted or shown otherwise on plans.
5. All items shall be tightly anchored or attached square, plumb, and true, or in other planes and shapes as shown on the drawings. Joints shall be tight, even,and free of offsets. No field altering of any members will be allowed that will cause them not to be in accordance with the drawings and specifications, without written approval of the Project Engineer.
6. The dimensions shown with a suffix "±" are approximate and shall be verified by the Contractor before fabrication.
7. If the Contractor finds a difference between these drawings & existing conditions, or finds any other conditions which prohibit execution of the work as directed in these drawings, the Contractor shall notify the Engineer immediately.
8. The Contractor shall employ a laboratory to perform the quality assurance, sampling, testing and/or inspection at his expense. Final selection of such laboratory shall be approved by the Engineer.
9. The foundation is designed based on the assumed allowable soil bearing pressure of 2 KSF. The foundation excavation shall be verified by a Geotechnical Engineer before the placement of foundation. All fill soil shall be compacted at 8" lift in loose thickness. All subgrade of foundation shall be compacted to 95% standard proctor density as a minimum or as directed by soil report.
10. Any revision/modification to the original design during the shop drawing process, the Contractor shall clearly cloud line all the changes and shall receive approval from the Engineer in writing before fabrication. Any costs associated with correcting the unapproved change shall be at the Contractor's expense.

Structural and Miscellaneous Steel

1. All structural and miscellaneous steel shall conform to the Thirteenth Edition of the AISC "Specification for the Design, Fabrication & Erection of Structural steel for Buildings" and all its supplements, and to the AISC "Code of Standard Practice for Steel Buildings and Bridges".
2. All structural steel shall conform to ASTM A-36, FY=36,000 PSI unless otherwise noted.
3. All welded connections shall be performed with E70XX electrodes with 3/16" min. material. All welding shall comply with AWS D1-1 structural welding code the latest edition.
4. All bolts shall be A325 bolts, unless otherwise noted.
5. The use of a gas-cutting torch in the field for cutting holes or for correcting fabrication errors will not be permitted on structural framing members except w/ the written approval of the Engineer for each specification.

Helical Pier:

1. The helical foundation piers shall be installed at locations shown on Plans.
2. All steel plates shall conform to ASTM A-36, FY=36,000 PSI (as a minimum).
3. Steel tubes shall conform to ASTM A500 grade B, FY=46,000 PSI.
4. All steel shall be hot-dipped galvanized according to ASTM 123. All connections, hardware shall be hot-dipped galvanized according to ASTM 153. All galvanizing damaged by welding shall be repaired by Z.R.C. cold galvanizing paint.
5. Contractor shall locate all underground structures and utilities. Any such underground structures and utilities in and nearby areas of the helical foundation installations will be clearly marked prior to helical foundation installation work.
6. Loads shown on the Plans are design allowable loads. A Minimum Factor of Safety of 2.0 shall be used to determine the required ultimate capacity of the helical foundations.
7. Manufacturer's recommendations should be followed regarding the torque and bearing capacity relationship for the particular helical foundations selected.
8. Bolts used to join helical foundation sections at the couplings shall be of the grade and size specified by the helical foundation manufacturer. All helical foundation bolts shall be securely tightened as recommended by the Manufacturer.
9. Cutting of manufactured helical foundation blades is prohibited and shall not be performed without first consulting the Structural Engineer.
10. Installation of helical foundations shall be certified by a Geotechnical Engineer to verify the depth and installation torque. The contractor shall employ an independent Inspector to observe the installations and document the Contractor's method and materials used. The Inspector shall maintain a record of depth and torque readings and provide the information to the Architect. The Contractor shall provide the Inspector with recent calibration information for the instrument used to measure torque. The Contractor shall notify Inspector at least 24 hours prior to installation work.
11. Contractor shall submit for approval, the Helical pier , bracket hardware, and additional required hardware, pier allowable capacity, minimum final installation torque, and a planned installation depth, prior to installation.

Masonry:

1. Masonry materials and workmanship shall comply with "Building code requirements for masonry structures" (ACI 530-05/ASCE 5-05).
2. Clay masonry units shall be 4" nominal solid units with minimum net compressive strength of 6000 PSI, as determined by the manufacturer.
3. Masonry mortar:
   A. Concrete masonry mortar from foundation to roof shall be type S with full mortar bedding from foundation to roof.
   B. Mortar types are as noted above and called for in the specifications. ASTM C-780. Copies of all reports shall be submitted to the owner or his representatives.
4. Provide horizontal joint reinforcing at 16" vertical spacing unless notes otherwise. Provide ladder type horizontal reinforcing.

Timber:

1. All lumber shall be #2 southern pine. All pieces shall bear the grade mark of a recognized agency or independent inspection service certified by the board of review, american lumber standard committee.
2. Metal timber connectors shall be galvanized, and shall be installed in strict accordance with the manufacturer's specification.
3. Metal timber connector designation as by Simpson's strong tie. Product substitutions shall be permitted only if submitted in advance, as outlined in specifications, and approved by the engineer as an equal.
4. Nails shall be commercial grade common wire nails, hot-dipped galvanized in accordance with ASTM A153. Nail spacing shall be sufficient to develop maximum connection strength without splitting the members. All split members shall be replaced.
5. All bolts used in connections shall be ASTM A307 bolts in sizes as indicated in the plan. All bolts shall be installed with 1-1/2"Ø 1/8" galvanized washers under the head and nut,and shall be torqued until the wood just begins to yield under the washers. Bolts shall not be overtorqued so as to deform the washers or damage the lumber, hole size shall not exceed bolt diameter by more than 1/16".
6. All 3/4" APA structural panel sheathing shall be fastened to joists w/ 10d nails 6" on center at diaphragm boundaries and panel edges. 12" o.c. at intermediate members.
7. Where noted as treated, timber materials shall conform to the approved standards of the American Wood Preservers' Association. Each piece shall be treated in accordance with AWPA standards, and certified by an approved inspection agency. Any timber in contact with the soil shall be treated for ground contact, and shall be so indicated with the treated quality stamp on each piece. Any timber in contact with masonry or steel shall be treated. All cuts, holes, and machine areas shall be liberally brushed with a solution of copper naphtenate containing a min. of 2% metallic copper in accordance with AWPA standard M4.

Concrete:

1. Concrete: concrete minimum compressive strength at 28 days shall be 4,000 PSI.
2. Reinforcement: all mild reinforcement bar shall be A615 grade 60 steel. All welded wire fabric shall conform to ASTM A185, grade 65. All welded wire fabric shall be in sheets and shall be supported on chairs.
3. Bending dimensions & tolerances for reinforcing bar shall conform to current CRSI Manual of Standard Practice.
4. Lap splices shall conform to the current CRSI Manual of Standard Practice unless otherwise noted.
5. Horizontal construction joints to be scrubbed with a coarse wire brush at the approximate time of initial set to remove all laitance and to produce a roughened surface.
6. Concrete work shall comply with ACI "Specifications for Structural Concrete" (ACI 301-05) and applicable provisions of ACI 318-05, keep a copy of ACI Field Reference Manual(ACI SP-15-05) Which includes ACI 301 and other ACI and ASTM references on the job.
7. Detailing, fabricating, and placing of reinforcing steel and accessories shall be in accordance with ACI "Details and Detailing of Concrete Reinforcement" (ACI 315-99) and shall comply with (ACI 318-05) and with (ACI 301-05).
8. The contractor shall select the testing laboratory & employ the laboratory at the contractor's expense to perform concrete strength testing per ACI 318-05. Final selection of testing laboratory shall be approved by engineer.
9. Epoxy for reinforcing bar connection to existing brick masonry shall be Hilti HY-20 or equal, unless noted otherwise.
10. Provide control joints in concrete slab on grade with joints spaced to satisfy the following criteria:
    a. Maximum spacing of joints is 12 foot on center.
    b. Length to width ratio does not exceed 1.5 (2 to 1).

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C&A job# 392810B

Partner In Charge: DL
Project Architect:
Drawn By: TKS
Date Drawn: 12/6/11

Revisions
No.____ Date ____
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SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION
CHAO & ASSOCIATES No. C00357

JHS Architecture :- Integrated Design

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No.19832 12-1-12 DEONNE E. LONG

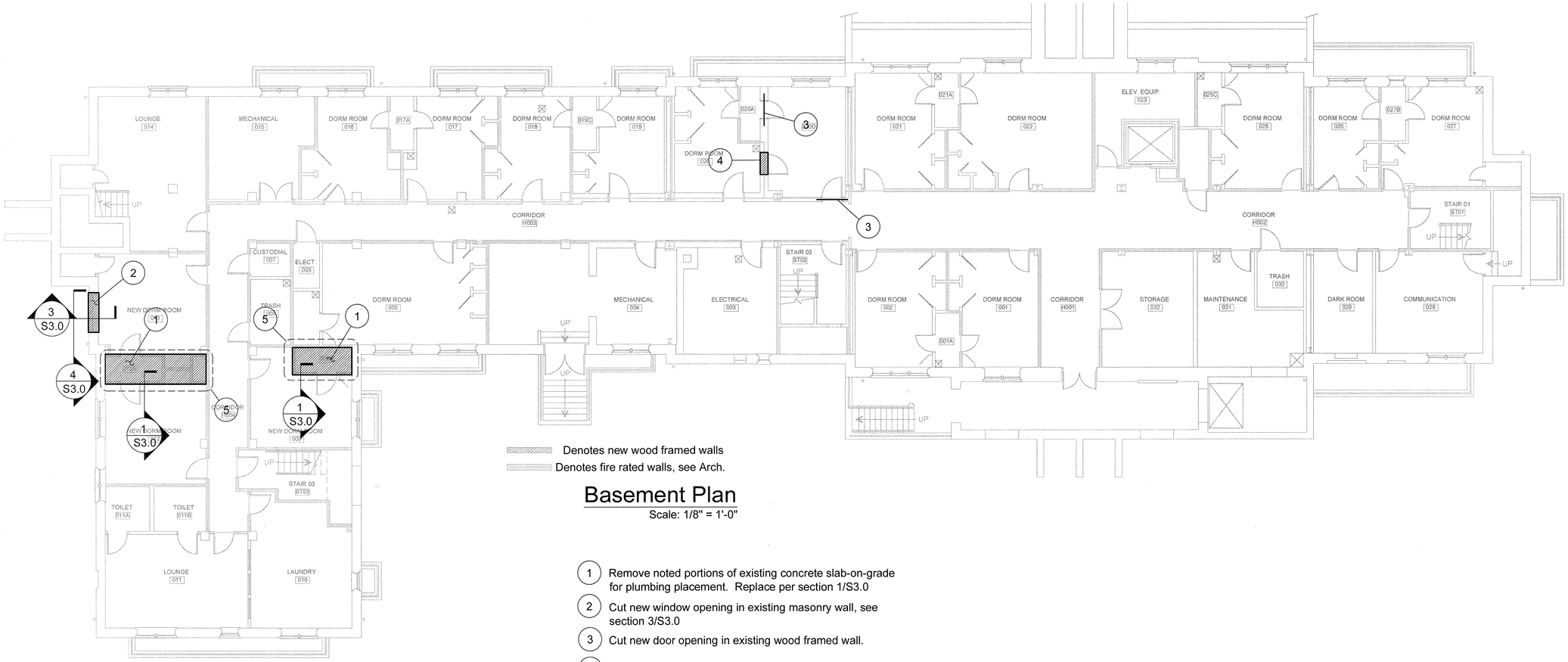
Project: MAXCY COLLEGE RENOVATION
PROJECT # H27-6073-AC

Sheet Title: NOTES

jhs Architecture› Integrated Design
1812 LINCOLN STREET
THIRD FLOOR
COLUMBIA, SC 29201-2310
PHONE: 1.803.252.2400
FAX: 1.803.252.1630

Project Number: H27-6073-AC

Sheet: S1.0



Basement Plan

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

1. Remove noted portions of existing concrete slab-on-grade for plumbing placement. Replace per section 1/S3.0
2. Cut new window opening in existing masonry wall, see section 3/S3.0
3. Cut new door opening in existing wood framed wall.
4. Infill existing door opening in wood framed wall.
5. New wood framed walls to be constructed per locations shown on architectural plans.

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Partner In Charge: DL
Project Architect:
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Date Drawn: 12/6/11

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JHS Architecture :- Integrated Design

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No.19832 2-1-12 DEBORAH E. LONG

Project: MAXCY COLLEGE RENOVATION
PROJECT # H27-6073-AC

Sheet Title: BASEMENT PLAN

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1812 LINCOLN STREET
THIRD FLOOR
COLUMBIA, SC 29201-2310
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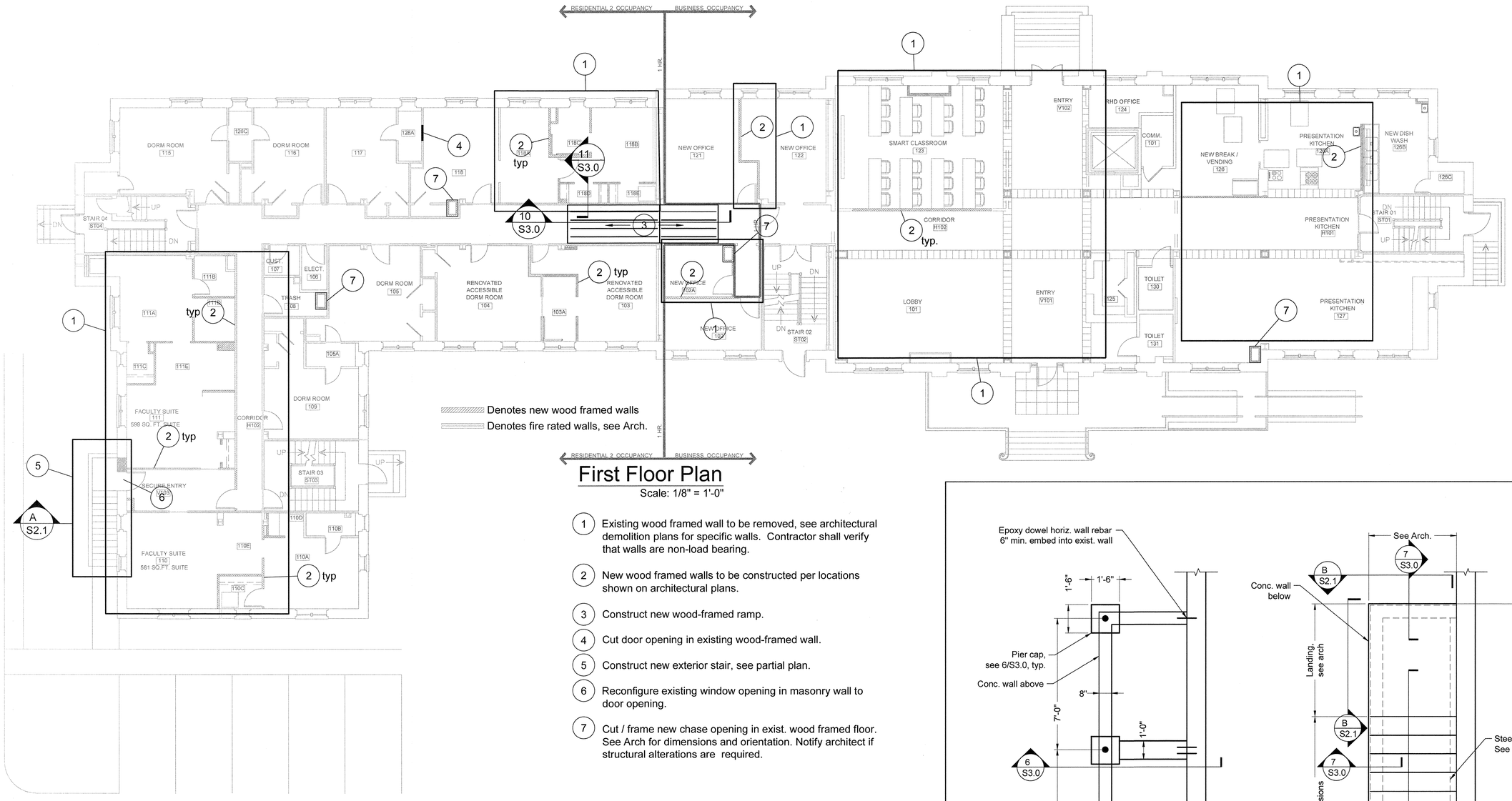
Project Number: H27-6073-AC

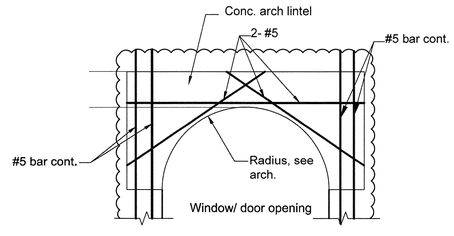
Sheet: S2.0



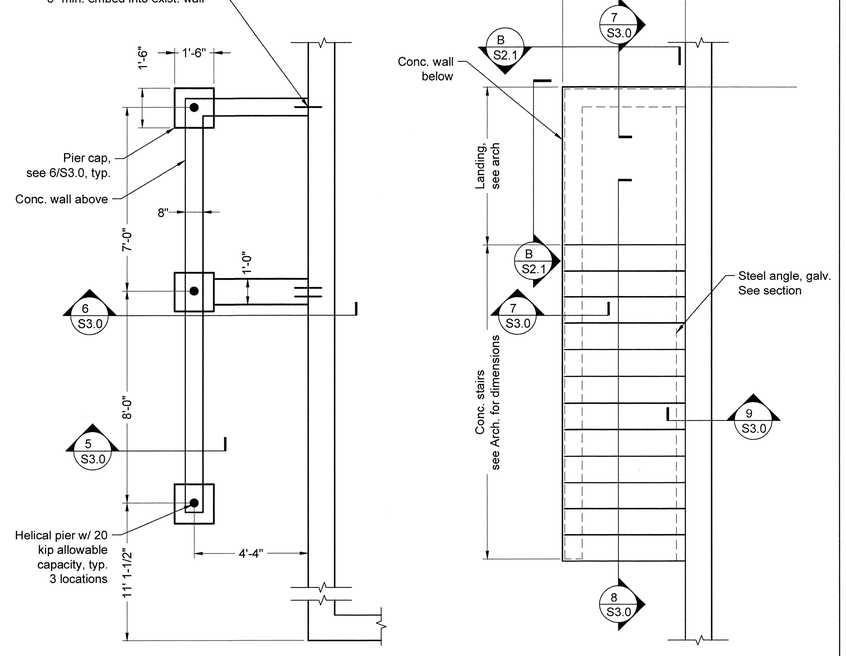
First Floor Plan

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

1. Existing wood framed wall to be removed, see architectural demolition plans for specific walls. Contractor shall verify that walls are non-load bearing.
2. New wood framed walls to be constructed per locations shown on architectural plans.
3. Construct new wood-framed ramp.
4. Cut door opening in existing wood-framed wall.
5. Construct new exterior stair, see partial plan.
6. Reconfigure existing window opening in masonry wall to door opening.
7. Cut / frame new chase opening in exist. wood framed floor. See Arch for dimensions and orientation. Notify architect if structural alterations are required.



B - Cast in Place Conc. Arch — Scale: 3/8"=1'-0"



Foundation Plan

Stair Plan

A - Stair Partial Plan — Scale: 3/8"=1'-0"

Scale: 3/8"=1'-0"

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C&A job# 392810B

Partner In Charge: DL
Project Architect:
Drawn By: TKS
Date Drawn: 12/6/11

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JHS Architecture :- Integrated Design

SOUTH CAROLINA — LICENSED PROFESSIONAL ENGINEER — No.19832 — 2-1-12 — GLENNIE E. LONG

Project: MAXCY COLLEGE RENOVATION
PROJECT # H27-6073-AC

Sheet Title: FIRST FLOOR PLAN

jhs Architecture: Integrated Design
1812 LINCOLN STREET
THIRD FLOOR
COLUMBIA, SC 29201-2310
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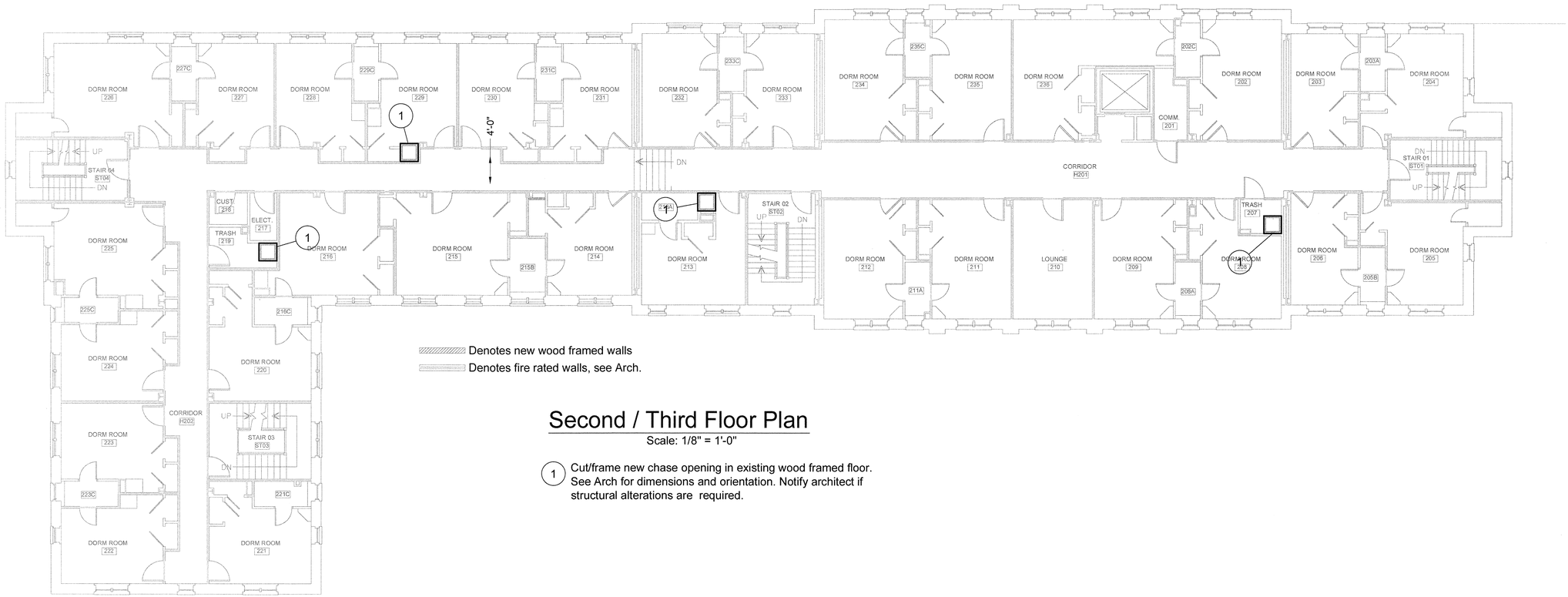
Project Number: H27-6073-AC

Sheet: S2.1



Denotes new wood framed walls

Denotes fire rated walls, see Arch.

Second / Third Floor Plan

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

(1) Cut/frame new chase opening in existing wood framed floor. See Arch for dimensions and orientation. Notify architect if structural alterations are required.

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No.19832
2-1-12
DEANNE E. LONG

Project: MAXCY COLLEGE RENOVATION
PROJECT # H27-6073-AC

Sheet Title: SECOND & THIRD FLOOR PLAN

jhs Architecture: Integrated Design
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THIRD FLOOR
COLUMBIA, SC 29201-2310
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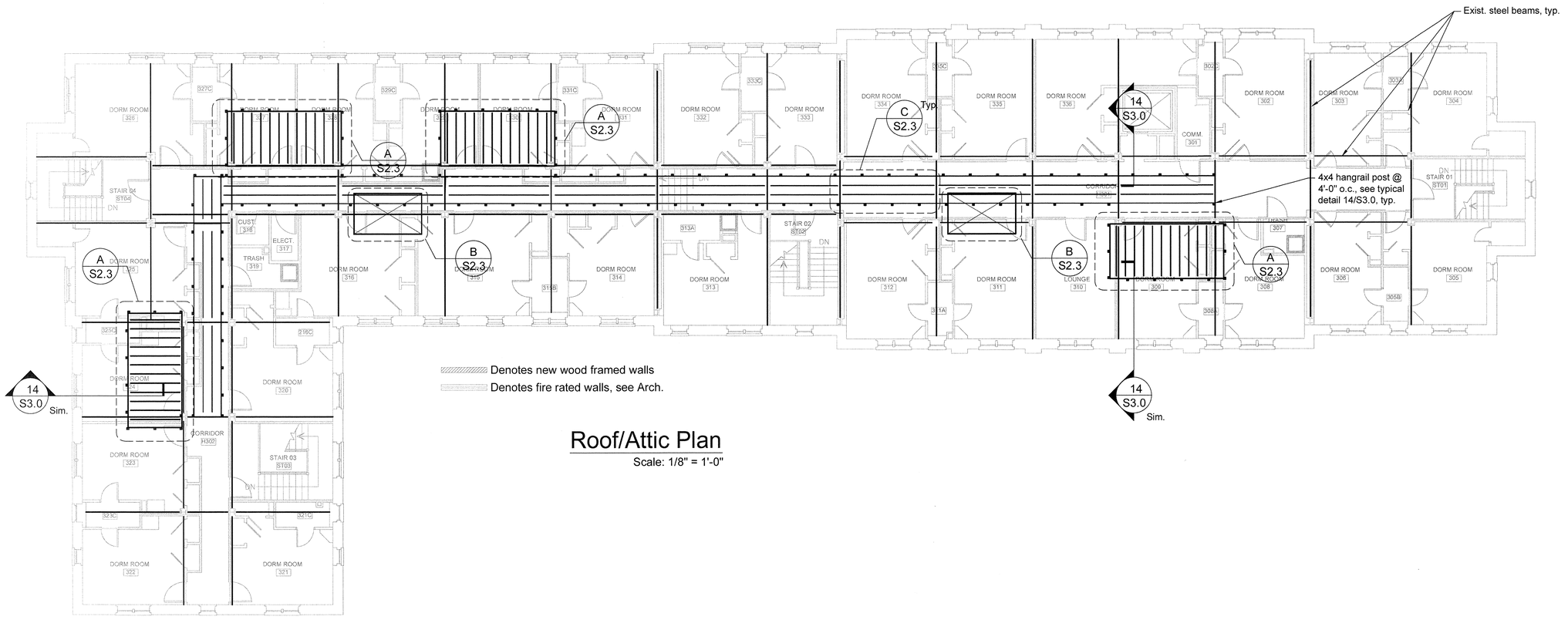
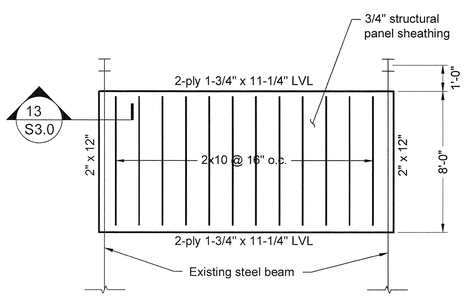
Project Number: H27-6073-AC

Sheet: S2.2



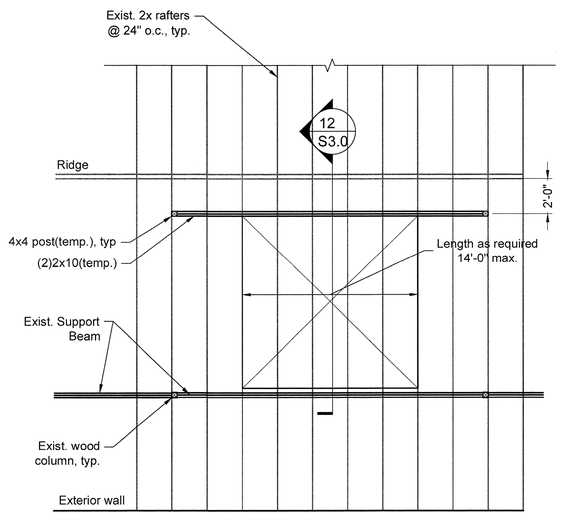
Roof/Attic Plan

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



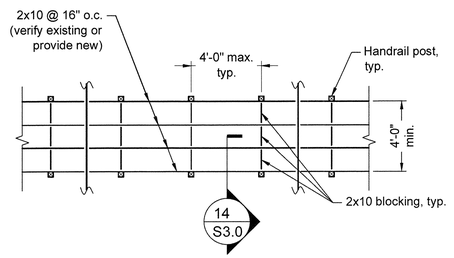
A S2.3 Typical HVAC Equipment Platform

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



B S2.3 Typical HVAC Roof Opening (temporary)

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



C S2.3 Typical Catwalk Framing

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

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SOUTH CAROLINA NO. CERTIFICATE OF AUTHORIZATION
CHAO & ASSOCIATES No. C00357

JHS Architecture :- Integrated Design

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No.19832 2-1-12 GLENNIE E. LONG

Project: MAXCY COLLEGE RENOVATION PROJECT # H27-6073-AC

Sheet Title: ROOF PLAN

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1812 LINCOLN STREET
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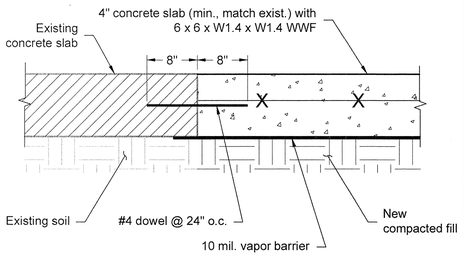
Project Number: H27-6073-AC

Sheet: S2.3



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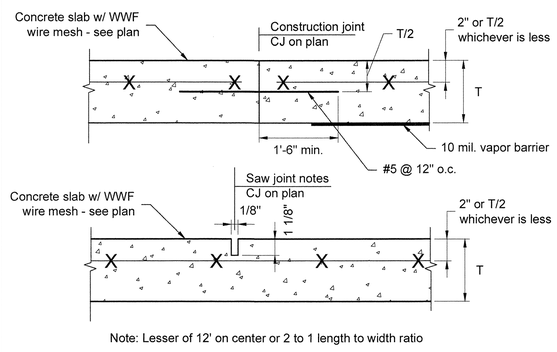
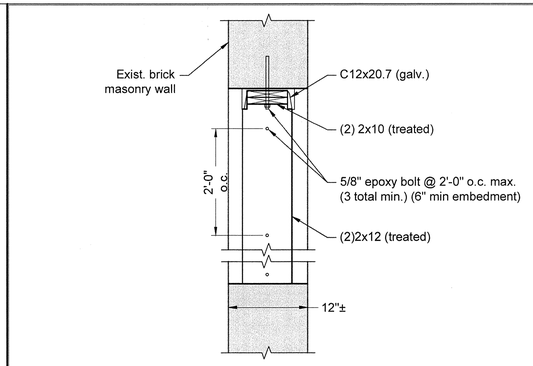


Note: Lesser of 12' on center or 2 to 1 length to width ratio

2 Control Joint — Not To Scale



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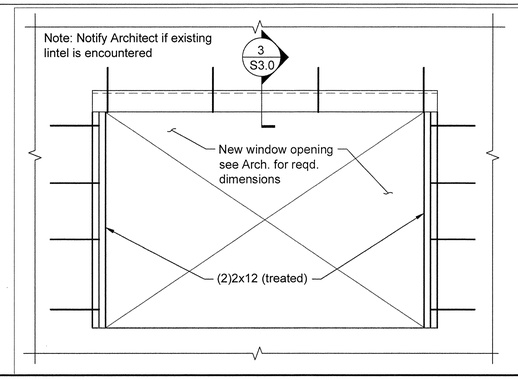

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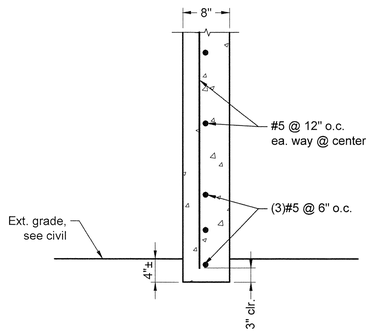

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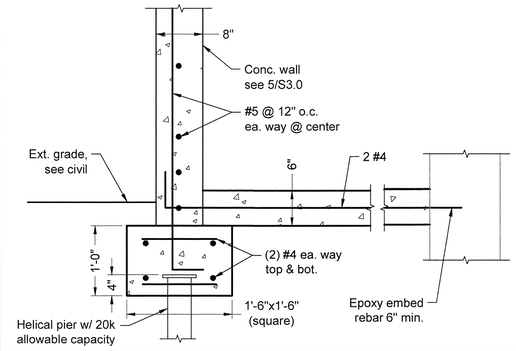

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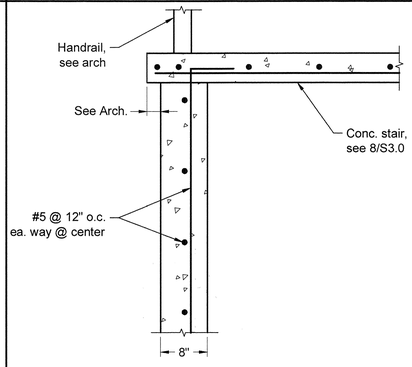

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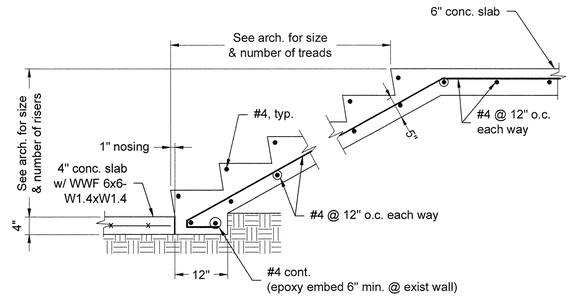

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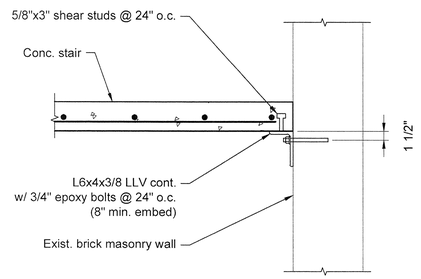

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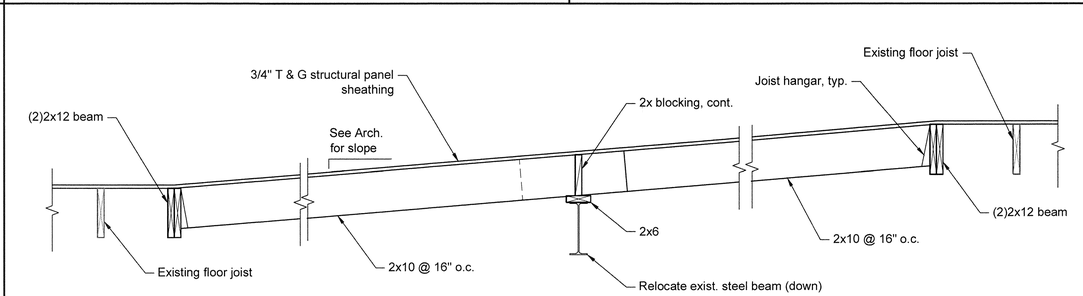

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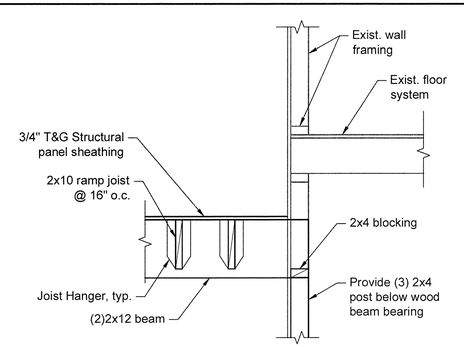

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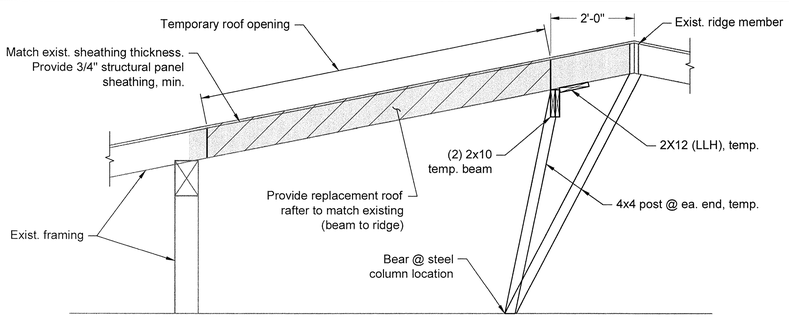

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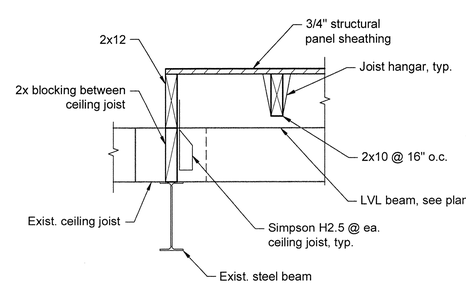

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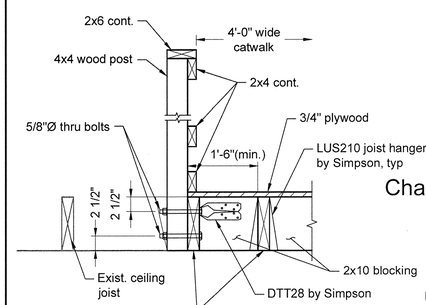

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Partner In Charge: DL
Project Architect:
Drawn By: TKS
Date Drawn: 12/6/11

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CHAO & ASSOCIATES No. C00357

JHS Architecture :- Integrated Design

SOUTH CAROLINA LICENSED PROFESSIONAL No.19832 2-1-12 DESIRNE E. LONG

Project: MAXCY COLLEGE RENOVATION PROJECT # H27-6073-AC

Sheet Title: SECTIONS & DETAILS

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