ROOF STABILIZATION
627 MARKET STREET
OSAGE CITY, KANSAS

LIST OF DRAWINGS

CVR	COVER SHEET
GN	GENERAL NOTES
S-1	EXISTING ROOF FRAMING PLAN
S-2	PROPOSED PLAN
S-3	SECTION & DETAILS
S-4	SECTION & DETAILS
S-5	MISC., DETAILS & NOTES

CONTACT INFORMATION

QUINTIN ROBERT
1028 CALIFORNIA STREET
OSAGE CITY, KANSAS 66523
785.220.1720

GENERAL NOTES

1. CONTRACTOR SHALL VERIFY ALL CONDITIONS IN THE FIELD PRIOR TO PROCEEDING WITH THE WORK. ANY DESCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER OR ENGINEER.

2. GENERAL CONSTRUCTION SHALL EQUAL OR EXCEED THE MINIMUM REQUIREMENTS OF THE 2009 INTERNATIONAL BUILDING CODE.

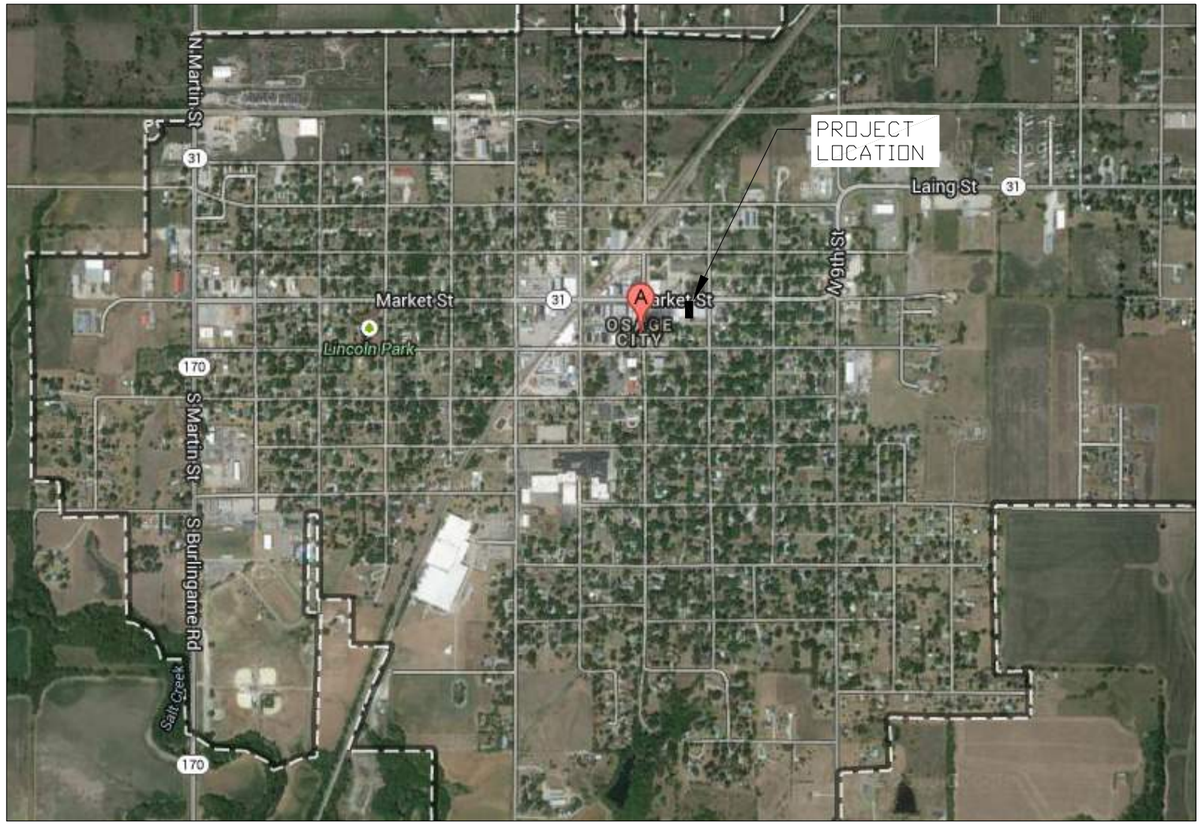
APPLICABLE CODES

IBC 2009 INTERNATIONAL BUILDING CODE
IMC 2009 INTERNATIONAL MECHANICAL CODE
IPC 2009 INTERNATIONAL PLUMBING CODE
NEC 2005 NATIONAL ELECTRICAL CODE

CODE ANALYSIS

OCCUPANCY	S-2
TYPE OF CONSTRUCTION	III-B
ALLOWABLE AREA	26,000 SF
ACTUAL AREA	5,000 SF
ALLOWABLE HEIGHT	55 FEET
ALLOWABLE STORIES	3
ACTUAL HEIGHT	18 FEET
ACTUAL STORIES	1
OCCUPANT LOAD	25
NO OF EXIT REQUIRED	2
NO OF EXITS PROVIDED	2
SPRINKLED	NA

NORTH ELEVATION



CITY OF OSAGE CITY KANSAS
OSAGE COUNTY KANSAS

LOCATION MAP
NOT TO SCALE

SCHMIDT Engineering Consultants, Inc.
CIVIL, STRUCTURAL, AND ARCHITECTURAL ENGINEERING
311 Cottonwood, Strong City, Kansas 66869 / 816 Graham St., Emporia, Kansas 66801 / 620-343-0302

TECH CAD SERVICES, LLC
Building Designer
CAD Drafting Services
Factory Built Consulting

SHEET TITLE: COVER SHEET
PROJECT: 627 MARKET STREET, OSAGE CITY, KANSAS
ROOF STABILIZATION
REVISION

REF:
PROJECT NO: 2013.009
DATE: FEB 16, 2014
DRAWN BY: K. Hector Girardin
CHK'D BY: M.L. SCHMIDT
DRAWING
CVR

DRAWING2.DWG

DESIGN:

1. CODES, SPECIFICATION AND STANDARDS (LATEST EDITIONS, U.N.O.)

   ALL CONSTRUCTION SHALL COMPLY WITH THE PROVISIONS OF THE FOLLOWING CODES, SPECIFICATIONS AND STANDRAD'S, EXCEPT WHERE NOTED TO THE CONTRARY ON THE DRAWINGS AND SPECIFICATIONS OR WHERE MORE STRINGENT REQUIREMENTS ARE SPECIFIED OR SHOWN

   MCIB "SPECIFICATIONS FOR CONCRETE WORK"

2. ALL DESIGN AND CONSTRUCTION SHALL CONFORM TO THE FOLLOWING

   - 2009 INTERNATIONAL BUILDING CODE (IBC)

3. ALL STRUCTURAL LUMBER SHALL BE S4S #2 SOUTH PINE (SP) (OR BETTER) WITH A MAXIMUM MOISTURE CONTENT OF NINETEEN (19) PERCENT.

4. ALL NON-STRUCTURAL LUMBER SHALL BE SPF #2 (OR BETTER).

5. ALL MATERIAL IN CONTACT WITH THE EARTH OR CONCRETE SHALL BE ACQ TREATED OR EQUAL.

6. ALL WOOD STRUCTURAL PANELS SHALL BE IDENTIFIED WITH THE APPRORIATE GRADE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION (APA) AND SHALL MEET THE REQUIREMENTS OF PS-1 OR PS-2, RESPECTIVELY, UNLESS NOTED OTHERWISE ON THE DRAWINGS, WALL PANELS TO BE USED ON THE EXTERIOR SHALL BE COMPATIBLE WITH THE ARCHITECTURAL EXTERIOR FINISH MATERIAL.

7. ALL BOLTS FOR CONSTRUCTION SHALL BE ASTM A325, HIGH STRENGTH.

8. ALL NAILS SHALL BE COMMON WIRE NAILS, UNLESS NOTED OTHERWISE ON THE DRAWINGS

9. ALL METAL FRAMING ACCESSORIES ARE STANDARDS OF SIMPSON STRONG-TIE AND ARE TO BE ATTACHED AS PER SIMPSON STRONG-TIE RECOMMENDATIONS.

10. HEADERS, BEAMS AND LINTELS SHALL BE CONSTRUCTED AS PER THE DRAWINGS WITH A MINIMUM OF (2) BEARING STUDS AND (1) FULL HEIGHT STUD AT ALL OPENINGS UNLESS OTHERWISE NOTED ON THE DRAWINGS.

11. STRUCTURAL PANELS SHALL BE PLACED WITH THE FACE GRAIN PERPENDICULAR TO THE SUPPORTING MEMBERS WITH THE END JOINTS STAGGERED FOUR (4) FEET, TYPICALLY.

12. THE QUALITY AND SIZE OF FASTENERS SHALL BE IN ACCORDANCE WITH THE CODE OF RECORD, UNLESS OTHERWISE NOTED ON THE DRAWINGS.

FOUNDATION:

1. ALL FOOTING FOUNDATIONS HAVE A DESIGN ALLOWABLE PRESSURE OF 2,000 PSF.

2. ZONES OF SOIL ENCOUNTERED AT THE BOTTOM OF THE FOOTING EXCAVATIONS DEEMED INDEQUATE SHALL BE REPLACED OR REMEDIATED AS DIRECTED BY THE ENGINEER.

3. MOISTURE CONTENT OF THE SOIL SHALL NOT BE ALLOWED TO CHANGE AFTER EXCAVATION.

4. CONCRETE SHALL NOT BE PLACED ON FROZEN OR SATURATED GROUND.

5. THE BASE OF THE EXCAVATION SHALL BE FREE OF WATER AND LOOSE SOIL PRIOR TO PLACEMENT OF CONCRETE.

6. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY UNUSAL SOIL CONDITIONS THAT ARE IN VARIANCE WITH THE PLAN DRAWINGS OR WHEN DIFFERENT BEARING MATERIAL IS EVIDENT AND THERE IS A QUESTION OF BEARING CAPACITY.

CONCRETE CONSTRUCTION:

1. CAST-IN-PLACE CONCRETE CONSTRUCTION SHALL CONFORM TO THE LATEST AMERICAN CONCRETE INSTITUTE DOCUMENTS, ACI-301, 304, 305, 306, 315, 318, AND 347 AND CONCRETE REINFORCING STEEL INSTITUTE MANUAL OF STANDARD PRACTICE UNLESS OTHERWISE NOTED IN THESE CONTRACT DOCUMENTS.

2. CONCRETE FOR FOOTINGS: F'c = 4,000 psi (28 DAY)

3. CONCRETE FOR FLATWORK: F'c = 3,500 psi (28 DAY)

4. REINFORCING STEEL:
   A. ASTM A615 GRADE 40 STEEL (MIN.).
   B. MINIMUM SPLICE LAP = 30 BAR DIAMETERS
   C. HORIZONTAL REINFORCING STEEL SHALL BE CONTINUOUS AROUND THE CORNERS AND SHALL MEET THE REQUIREMENTS OF MINIMUM SPLICE LAP.
   D. WELDED WIRE REINFORCEMENT SHALL MEET ASTM A706, GRADE 60.

5. CONCRETE SLUMP SHALL BE A MAXIMUM OF 4" +/- (ASTM C-143) AS DELIVERED IN THE FIELD. THE CONTRACTOR MAY USE CHEMICAL ADMIXTURES TO ATTAIN A MAXIMUM SLUMP OF 8" FOR WORKABILITY.

6. AGGREGATE SIZE = ¾" (MAXIMUM)

7. THERE SHALL BE NO HORIZONTAL CONSTRUCTION JOINTS IN ANY CONCRETE POURS UNLESS SHOWN ON THE PLANS OR APPROVED IN WRITING BY THE ENGINEER.

8. REINFORCING STEEL COVERAGE SHALL BE IN ACCORDANCE WITH ACI 315 UNLESS NOTED OTHERWISE ON THE DRAWINGS.

9. MINIMUM CLEAR COVERAGE OF CONCRETE OVER REINFORCEING STEEL SHALL NOT BE LESS THAN THE FOLLOWING (UNLESS NOTED OTHERWISE).

   A. CONCRETE PLACED AGAINST TRENCHED EARTH 3"
   B. CONCRETE PLACED AGAINST FORM IN EARTH 2"
   C. UN-TIED ELEMENTS (ELEVATED SLABS AND WALLS) 1"
   D. TIED ELEMENTS (COLUMNS AND ELEVATED BEAMS)1½"

10. FLY ASH MAY BE USED AT A RATE NOT TO EXCEED 15% OF THE TOTAL CEMENT CONTENT.

11. CONCRETE EXPOSED TO WEATHER, PARKED VEHICLES, AND/OR DE-ICING CHEMICAL SHALL CONTAIN 6% (±1%) ENTRAINED AIR BY VOLUME.

12. STIRRUPS AND TIES SHALL COMPLY WITH CONCRETE REINFORCING STEEL INSTITUTE (CRSI) SUPPLEMNTARY REQUIREMENTS FOR IMPROVED BENDABILITY

13. MINIMUM LAP DISTANCE AND HOOK LENGTHS SHALL BE AS FOLLOWS:

SCHMIDT Engineering Consultants, Inc.
CIVIL, STRUCTURAL, AND ARCHITECTURAL ENGINEERING
311 Cottonwood, Strong City, Kansas 66869 / 815 Graham St., Emporia, Kansas 66801 / 620-343-0302

TECH CAD SERVICES, LLC
Building Designer
CAD Drafting Services
Factory Built Consulting

SHEET TITLE: GENERAL NOTES:

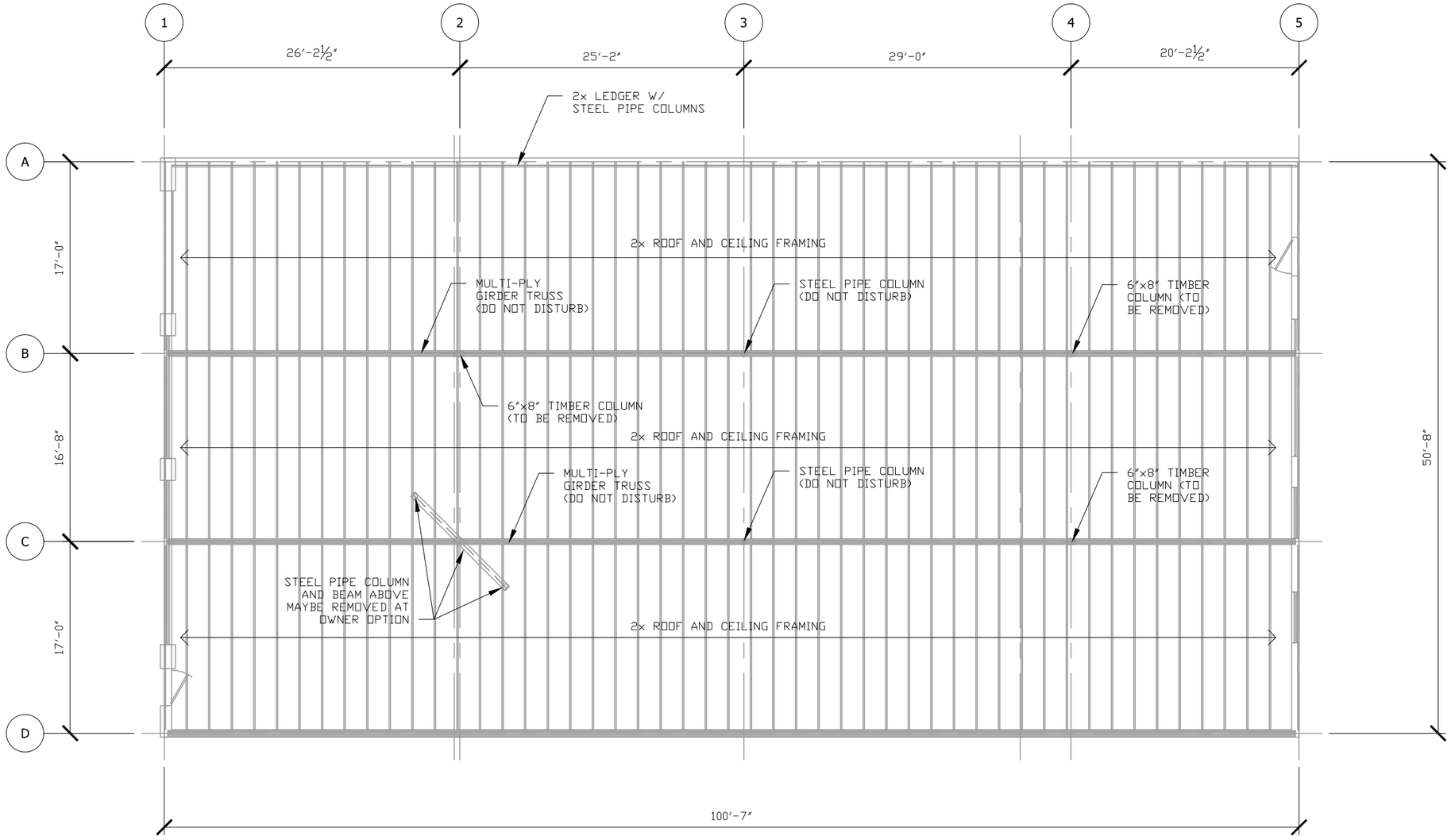
PROJECT: 627 MARKET STREET, OSAGE CITY, KANSAS
ROOF STABILIZATION

REVISION

REF:
PROJECT NO: 2013.009
DATE: FEB. 16, 2014
DRAWN BY: K. Hector Girardin
CHK'D BY: M.L. Schmidt
DRAWING

GN

2013.009 ROOF CONSTRUCTION 2004.DWG



1 EXISTING ROOF FRAMING PLAN

Scale: 3/32" = 1'-0"

N

SCHMIDT Engineering Consultants, Inc.
CIVIL, STRUCTURAL, AND ARCHITECTURAL ENGINEERING
311 Cottonwood, Strong City, Kansas 66869 / 815 Graham St., Emporia, Kansas 66801 / 620-343-4302

TECH CAD SERVICES, LLC
Building Designer
CAD Drafting Services
Factory Built Consulting

SHEET TITLE
EXISTING ROOF FRAMING PLAN

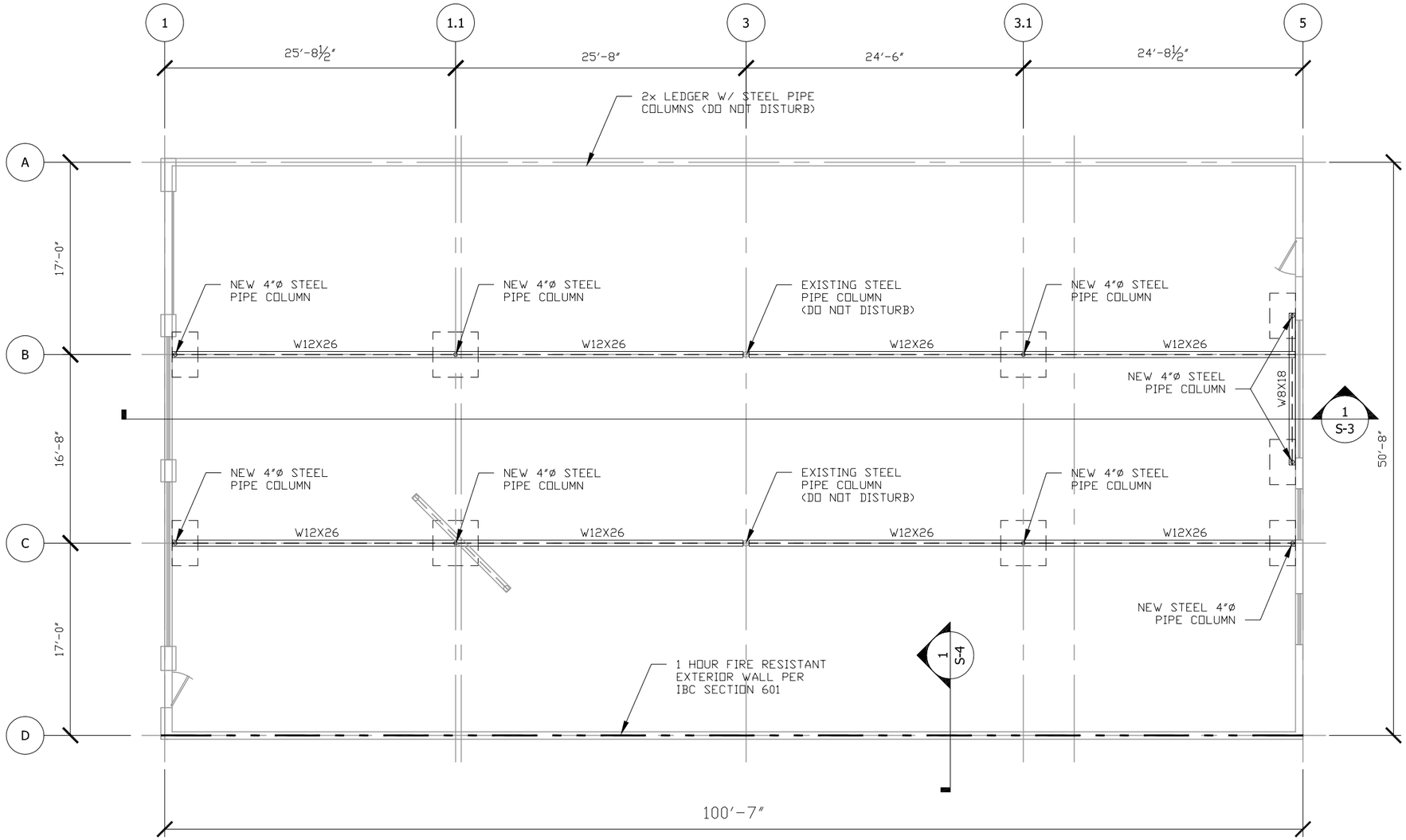
PROJECT
627 MARKET STREET, OSAGE CITY, KANSAS
ROOF STABILIZATION

REVISION

REF:
PROJECT NO: SEC/2013.009
DATE: FEB. 16, 2014
DRAWN BY: K. Hector Girardin
CHK'D BY: M.L. Schmidt

DRAWING
S-1

2013.009 ROOF CONSTRUCTION 2004.DWG



1 PROPOSED PLAN

Scale: 3/32" = 1'-0"

N

NOTES:

1. CONTRACTOR SHALL SHORE EXISTING GIRDER TRUSSES AS REQUIRED DURING CONSTRUCTION.
2. JACK NEW STEEL BEAMS INTO PLACE AND PROVIDE TEMPORARY SUPPORT AS NECESSARY.
3. PROVIDE NEAR FULL CONTACT SUPPORT OF GIRDER TRUSSES TO STEEL BEAMS WITH SHIMS AS NEEDED.

AT OWNER OPTION:

FLOOR SLAB THICKNESS IN LOCATIONS OF NEW COLUMNS MAY BE CONFIRMED BY DRILLING FULL DEPTH TO CONFIRM THICKNESS. IF THE THICKNESS OF THE EXISTING SLAB IS 8″ OR MORE OUT TO THE APPROXIMATE LIMIT OF THE PROPOSED NEW FOOTING, THE OWNER MAY ELECT TO SET THE NEW COLUMNS DIRECTLY ON THE EXISTING FLOOR SLAB WITHOUT CONSTRUCTING THE NEW FOOTINGS AS SHOWN ON THE DRAWINGS.

IF THIS OPTION IS TAKEN , THE OWNER ACKNOWLEDGES THAT FUTURE DAMAGE TO THE BUILDING STRUCTURE CAUSED BY FLOOR SLAB CRACKING AND/OR COLUMN SETTLEMENT AND BEAM DEFLECTIONS ARE AT HIS FULL RESPONSIBILITY, FOR THE FULL EXTENT OF THE DAMAGE.

SCHMIDT Engineering Consultants, Inc.
CIVIL, STRUCTURAL, AND ARCHITECTURAL ENGINEERING
311 Cottonwood, Strong City, Kansas 66869 / 815 Graham St., Emporia, Kansas 66801 / 620-343-0302

SHEET TITLE: PROPOSED PLAN

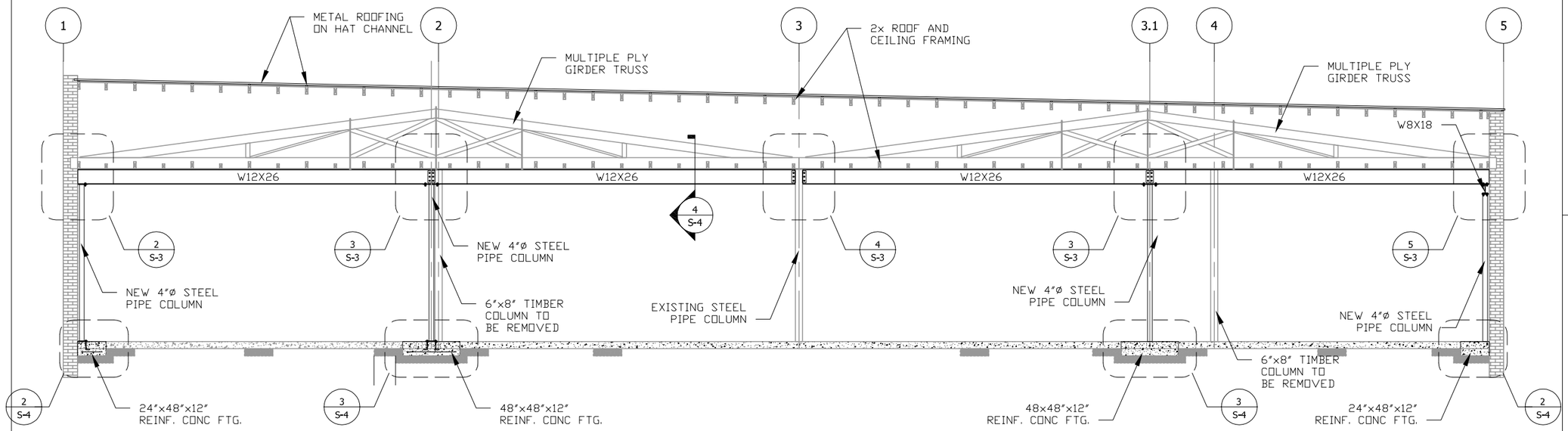
PROJECT: 627 MARKET STREET, OSAGE CITY, KANSAS
ROOF STABILIZATION

REVISION

REF:
PROJECT NO: SEC/2013.009
DATE: FEB. 16, 2014
DRAWN BY: K. Hector Girardin
CHK'D BY: M. L. Schmidt
DRAWING

S-2

2013.009 ROOF CONSTRUCTION 2004.DWG



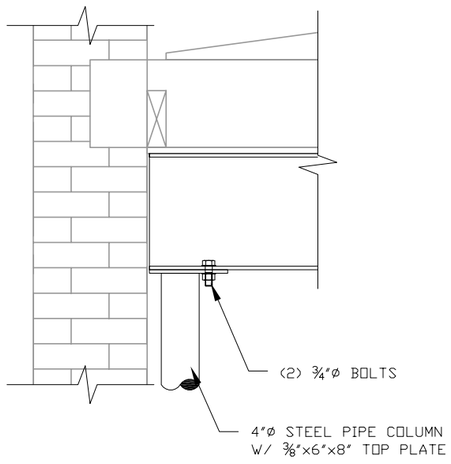
1 **BUILDING SECTION**
Scale: 3/32" = 1'-0"

STRUCTURAL NOTES:

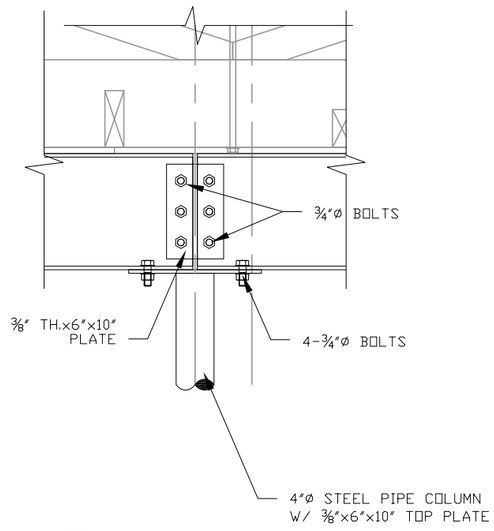
1. REBAR SHALL BE GRADE 40 (MIN.).
2. CONCRETE SHALL BE 4000 PSI.
3. STRUCTURAL STEEL SHALL BE ASTM A992, Fy=50 KSI STEEL.
4. BOLTS SHALL BE ASTM A325 HIGH STRENGTH.
5. ANCHOR BOLTS SHALL BE ASTM A307.
6. STEEL PIPE COLUMNS SHALL BE A53 GRADE B.
7. ALL STEEL PLATES SHALL BE A36.

NOTE:

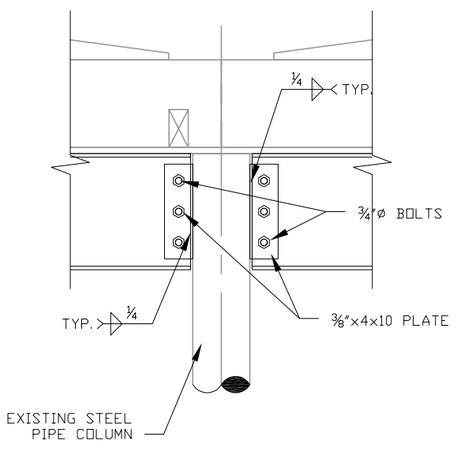
1. SNUG TIGHTEN ALL THREAD ROD BOLTS IN GIRDER TRUSSES



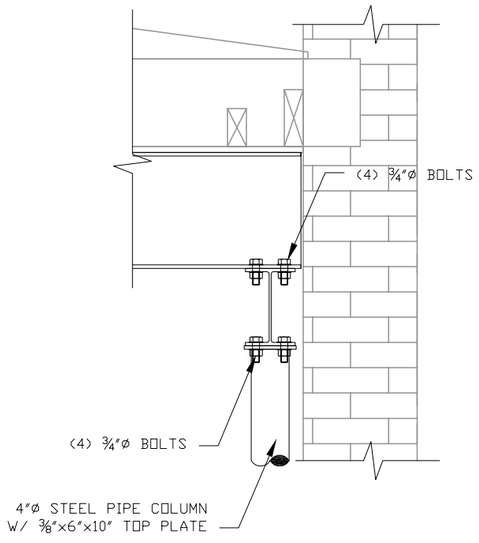
2 **DETAIL A**
Scale: 3/4" = 1'-0"



3 **DETAIL B**
Scale: 3/4" = 1'-0"



4 **DETAIL C**
Scale: 3/4" = 1'-0"



5 **DETAIL D**
Scale: 3/4" = 1'-0"

SCHMIDT Engineering Consultants, Inc.
CIVIL, STRUCTURAL, AND ARCHITECTURAL ENGINEERING
311 Cottonwood, Strong City, Kansas 66869 / 815 Graham St., Emporia, Kansas 66801 / 620-343-0302

TECH CAD SERVICES, LLC
Building Designer
CAD Drafting Services
Factory Built Consulting

SHEET TITLE
SECTION AND DETAILS

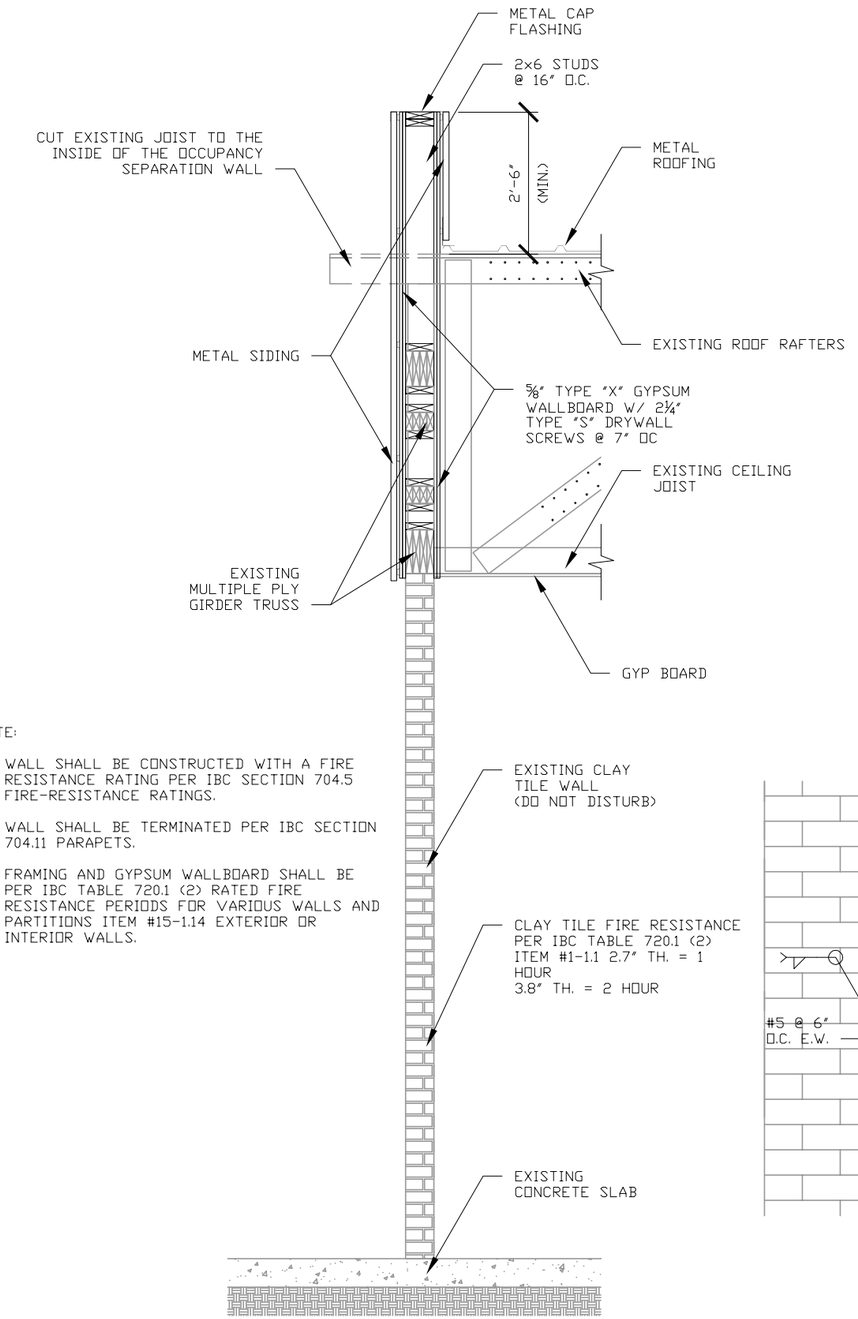
PROJECT
627 MARKET STREET, OSAGE CITY, KANSAS
ROOF STABILIZATION

REVISION

REF:
PROJECT NO: SEC/2013.009
DATE: FEB. 16, 2014
DRAWN BY: K. Hector Girardin
CHK'D BY: M.L. Schmidt
DRAWING

S-3

2013.009 ROOF CONSTRUCTION 2004.DWG

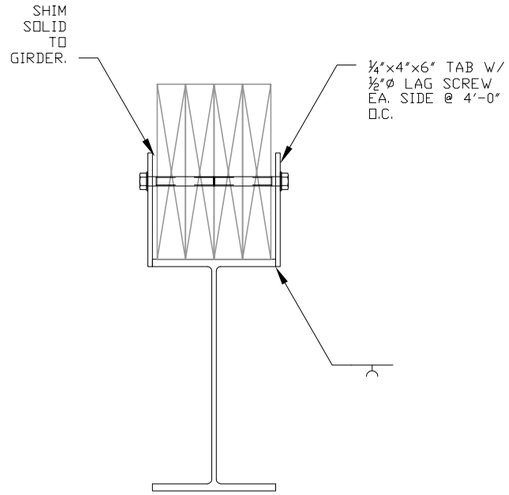


NOTE:

1. WALL SHALL BE CONSTRUCTED WITH A FIRE RESISTANCE RATING PER IBC SECTION 704.5 FIRE-RESISTANCE RATINGS.
2. WALL SHALL BE TERMINATED PER IBC SECTION 704.11 PARAPETS.
3. FRAMING AND GYPSUM WALLBOARD SHALL BE PER IBC TABLE 720.1 (2) RATED FIRE RESISTANCE PERIODS FOR VARIOUS WALLS AND PARTITIONS ITEM #15-1.14 EXTERIOR OR INTERIOR WALLS.

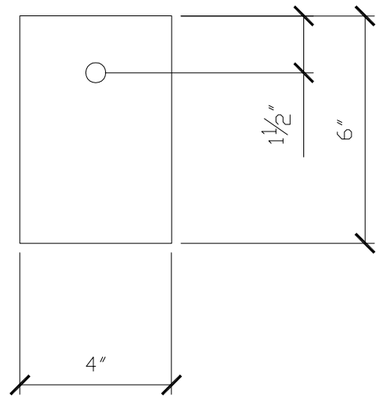
1 WEST EXTERIOR WALL

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



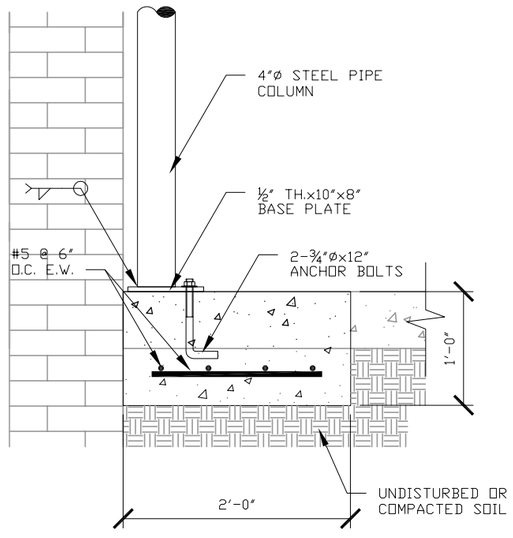
4 BEAM BRACING

Scale: 1 1/2" = 1'-0"



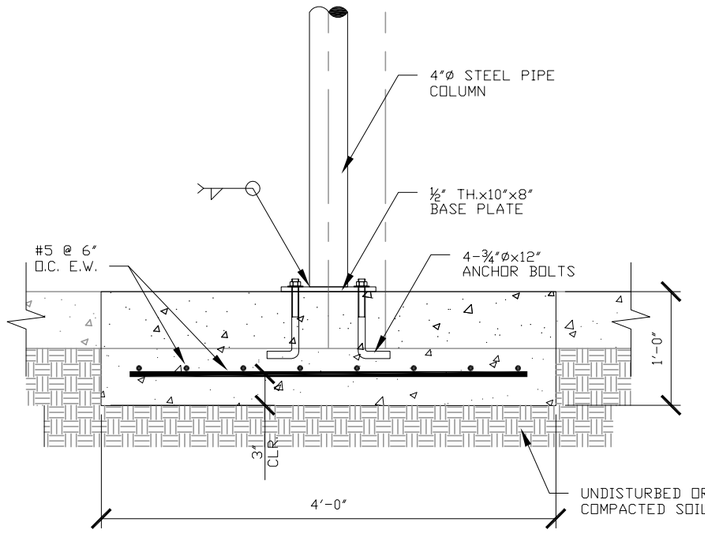
5 TAB DETAIL

Scale:3" = 1'-0"



2 DETAIL A

Scale: 3/4" = 1'-0"



3 DETAIL B

Scale: 3/4" = 1'-0"

SCHMIDT Engineering Consultants, Inc.
CIVIL, STRUCTURAL, AND ARCHITECTURAL ENGINEERING
311 Cottonwood, Strong City, Kansas 66869 / 815 Graham St., Emporia, Kansas 66801 / 620-343-0302

TECH CAD SERVICES, LLC
Building Designer
CAD Drafting Services
Factory Built Consulting

SHEET TITLE
SECTIONS AND DETAILS

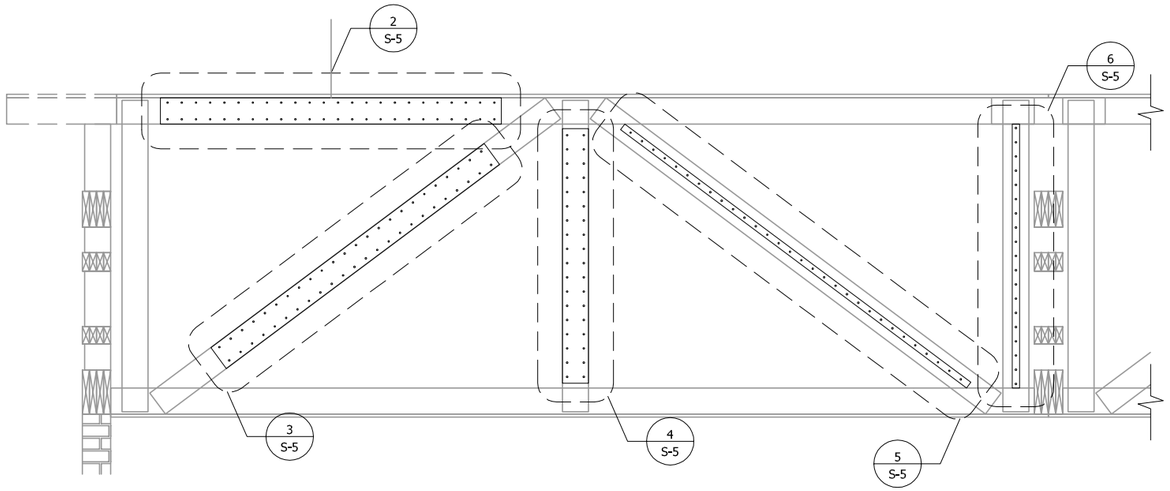
PROJECT
627 MARKET STREET, OSAGE CITY, KS
ROOF STABILIZATION

REVISION

REF:
PROJECT NO: SEC/2013.009
DATE: FEB 16, 2014
DRAWN BY: K. Hector Girardin
CHK'D BY: M.L. Schmidt

DRAWING
S-4

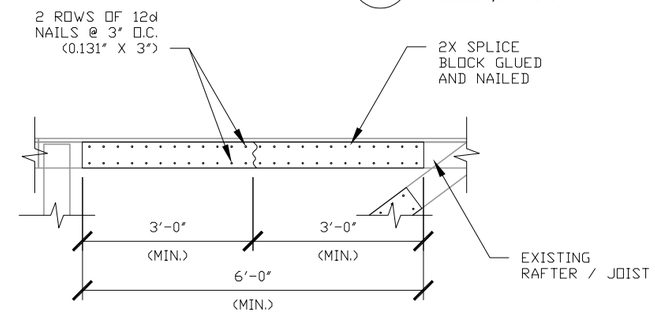
2013.009 ROOF CONSTRUCTION 2004.DWG



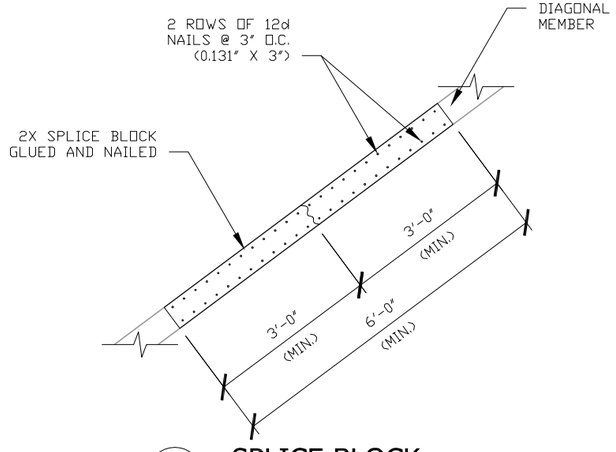
NOTES:

1. ALL ROOF FRAMING MEMBERS SHALL BE INSPECTED FOR DEFORMATION, CRACKS, FATIGUE. ANY MEMBER SHOWING STRUCTURAL DEFICIENCIES SHALL BE REPAIRED PER THE APPLICABLE DETAIL AS SHOWN ON THIS SHEET.
2. A RAFTER OR JOIST SHOWING STRUCTURAL DEFICIENCIES SHALL BE SISTERED WITH A MEMBER OF EQUAL SIZE AND LENGTH GLUED AND NAILED WITH (2) ROWS OF 12d NAILS AT 3" O.C. (0.131. x 3").
3. MINIMUM SPLICE BLOCK LENGTH SHALL BE 6'-0". IF MINIMUM LENGTH CAN NOT BE INSTALLED THE MEMBER SHALL BE SISTERED OR REPLACED.

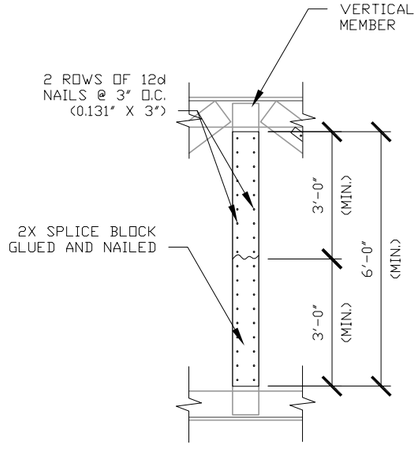
1 SECTION
Scale: 3/8" = 1'-0"



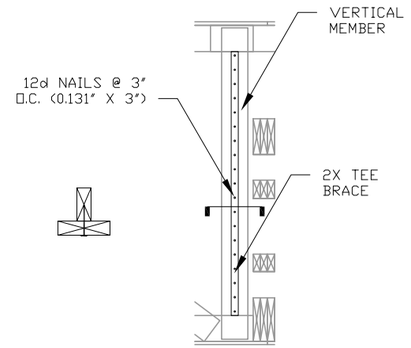
2 RAFTER/JOIST SPLICE BLOCK
Scale: 3/8" = 1'-0"



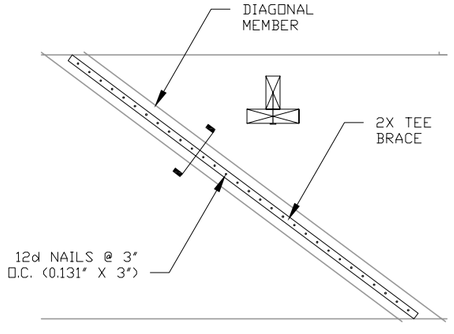
3 SPLICE BLOCK
Scale: 3/8" = 1'-0"



4 SPLICE BLOCK
Scale: 3/8" = 1'-0"



6 TEE BRACE
Scale: 3/8" = 1'-0"



5 TEE BRACE
Scale: 3/8" = 1'-0"

SCHMIDT Engineering Consultants, Inc.
CIVIL, STRUCTURAL, AND ARCHITECTURAL ENGINEERING
311 Cottonwood, Strong City, Kansas 66869 / 815 Graham St., Emporia, Kansas 66801 / 620-343-0302

TECH CAD SERVICES, LLC
Building Designer
CAD Drafting Services
Factory Built Consulting

SHEET TITLE
SECTIONS AND DETAILS

PROJECT
627 MARKET STREET, OSAGE CITY, KS
ROOF STABILIZATION

REVISION

REF:
PROJECT NO: SEC/2013.009
DATE: FEB 16, 2014
DRAWN BY: K. Hector Girardin
CHK'D BY: M.L. Schmidt
DRAWING

S-5

2013.009 ROOF CONSTRUCTION 2004.DWG