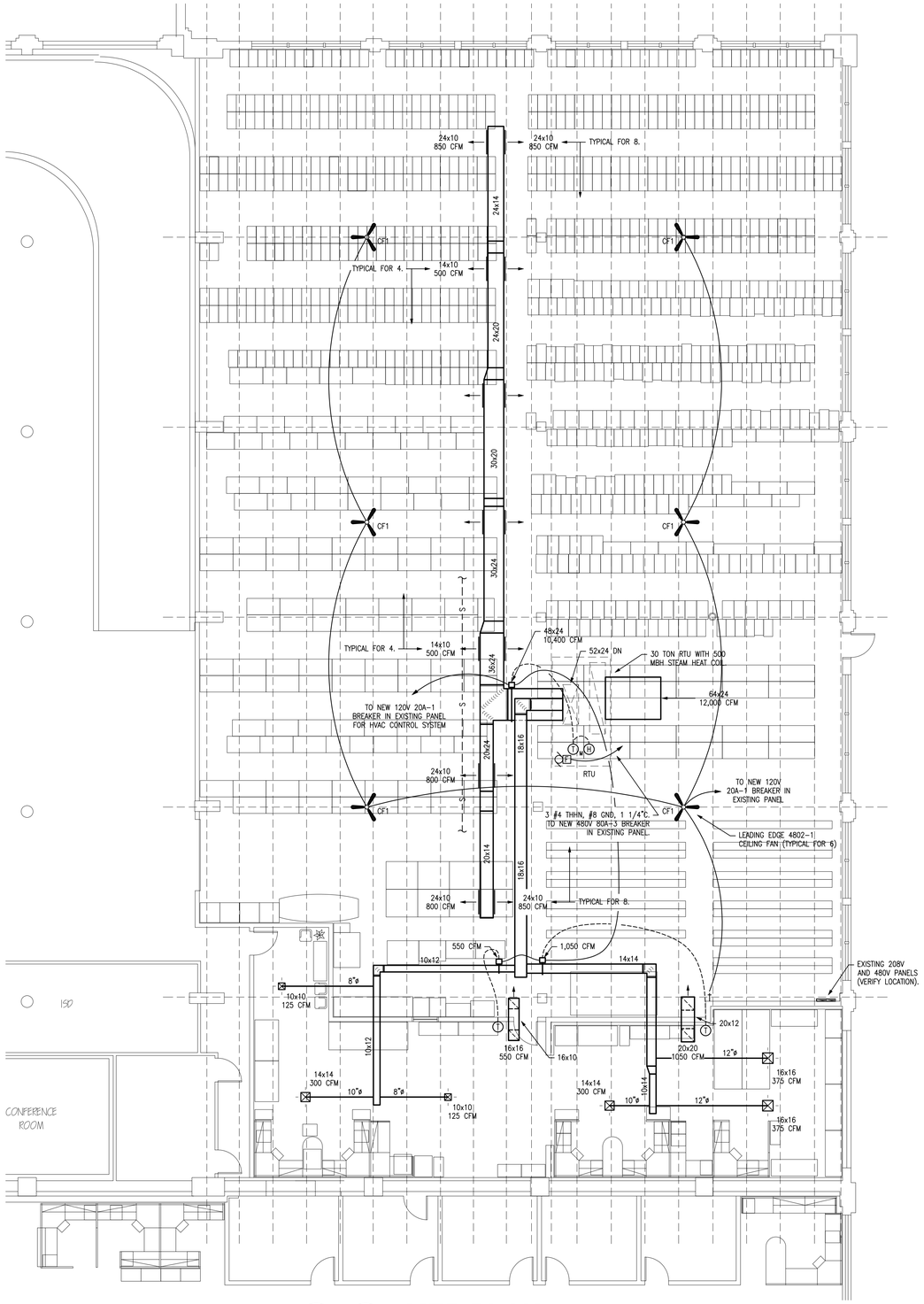
MECHANICAL SYMBOL SCHEDULE

—— WST ——	WASTE PIPING	
- - - - V - - - -	VENT PIPING	
—·—·— VW —·—·—	VENT PIPING OVER WASTE PIPING	
—— CW ——	COLD WATER PIPING	
—— HW ——	HOT WATER PIPING	
—⋈—	VALVE	– CHECK VALVE
—⊥⊥—	UNION	– STRAINER
—▫—	GAS COCK	
—◇—	BALANCING COCK	
ø / # ø / ###	DIFFUSER TAG. "ø" INDICATES MARK ON GRILLE AND REGISTER SCHEDULE.	
	"#"ø" INDICATES NECK SIZE UNLESS OTHERWISE NOTED ON GRILLE AND REGISTER SCHEDULE.	
	"###" INDICATES AIR VOLUME IN CFM.	
—◀—	FIRE DAMPER	
—◁—	SMOKE DAMPER	
—⌋—	MANUAL DAMPER	
—□—	MOTORIZED DAMPER	
T$_i$ H$_i$	THERMOSTAT – HUMIDISTAT (ZONE SUBSCRIPT)	
WST V	WASTE	– VENT
CO VTR	CLEAN OUT	– VENT THROUGH ROOF
SA RA	SUPPLY AIR	– RETURN AIR
FA EA	FRESH AIR	– EXHAUST AIR
N/E E/R	NEW CONNECTS TO EXISTING	– EXISTING TO REMAIN
⊕	PENDANT MOUNTED SPRINKLER HEAD	
◉	UPRIGHT MOUNTED SPRINKLER HEAD	
◉	PENDANT HEAD BELOW / UPRIGHT HEAD ABOVE	
◀	SIDEWALL SPRINKLER HEAD	
◁	EXTENDED COVERAGE SIDEWALL SPRINKLER HEAD	



1 ME1 MEP PLAN

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

GENERAL MECHANICAL-ELECTRICAL SPECIFICATIONS

1) ALL WORK SHALL BE DONE IN STRICT CONFORMANCE TO THE BUILDING CODES OF THE CITY OF JEFFERSON CITY, MO.
2) ALL MATERIALS SHALL BE NEW, FIRST CLASS, AND INSTALLED TO MANUFACTURER'S WRITTEN SPECIFICATIONS.
3) ALL SYSTEMS SHALL BE COMPLETE AND OPERABLE IN EVERY WAY.
4) DO ALL EXCAVATION, BACKFILLING, CUTTING, PATCHING, OFFSETTING, ADJUSTING AND BALANCING AS REQUIRED TO COMPLETE THE JOB.
5) SPECIFIC MODELS ARE SPECIFIED TO ESTABLISH QUALITY ONLY. ENGINEER'S DECISION SHALL BE FINAL ON ALL MATERIAL SELECTIONS OR SUBSTITUTIONS.
6) MAINTAIN SAFETY SIGNS AND BARRIERS AS REQUIRED TO ASSURE SAFE WORKING CONDITIONS.
7) GUARANTEE ALL WORKMANSHIP AND MATERIALS FOR ONE YEAR FROM FINAL ACCEPTANCE. PROVIDE FIVE YEAR AIR CONDITIONING COMPRESSOR WARRANTY.
8) EACH CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING UP HIS OWN DEBRIS.
9) CONTRACTOR SHALL NOT BE RESPONSIBLE FOR PROPER OPERATION OF OWNER-FURNISHED MATERIALS.
10) INSPECT JOB SITE PRIOR TO BIDDING TO DETERMINE EXACT JOB REQUIREMENTS. SEE ARCHITECTURAL DRAWINGS FOR DEMOLITION AND CONSTRUCTION DETAILS.
11) REMOVE ALL UNUSED PLUMBING, HVAC, AND ELECTRICAL WHETHER OR NOT SPECIFICALLY NOTED AND PROPERLY TERMINATE REMAINING SERVICES. ALL EXISTING PLUMBING, HVAC, AND ELECTRICAL SHALL BE REWORKED TO COMPLY WITH CODE WHETHER OR NOT SPECIFICALLY INDICATED.
12) ALL REMOVED MATERIALS SHALL BE REMOVED FROM SITE OR GIVEN TO OWNER AT OWNER'S DIRECTION.

PLUMBING SPECIFICATIONS

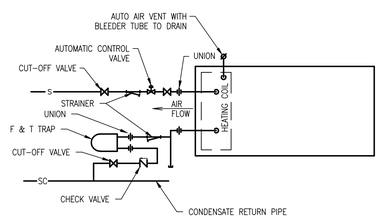
1) SEE GENERAL MECHANICAL-ELECTRICAL SPECIFICATIONS.
2) LOW PRESSURE STEAM PIPING SHALL BE SCHEDULE 40 BLACK STEEL WITH WELDED OR CLASS 125 CAST IRON THREADED FITTINGS.
3) STEAM CONDENSATE PIPING SHALL BE SCHEDULE 80 BLACK STEEL WITH WELDED OR CLASS 250 CAST IRON THREADED FITTINGS.

AIR CONDITIONING SPECIFICATIONS

1) SEE GENERAL MECHANICAL-ELECTRICAL SPECIFICATIONS.
2) AC CONDENSATE PIPING SHALL BE INSULATED WITH 1/2" THICK IMCOLOCK AND HAVE A DIVERSITECH # SOS-1 SAFETY OVERFLOW SWITCH.
3) DUCTWORK SHALL BE GALVANIZED IRON WITH 1 1/2" .24 K FACTOR DUCTWRAP INSULATION IN CONDITIONED AREAS AND 2" .24 K FACTOR IN UNCONDITIONED AREAS.
4) ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN STRICT CONFORMANCE TO SMACNA SPECIFICATIONS.
5) AIR CONDITIONING EQUIPMENT SHALL BE AS SPECIFIED ON DRAWINGS.
6) GRILLES AND REGISTERS SHALL BE CARNES, OR APPROVED EQUAL.
7) ALL TEMPERATURE CONTROLS SHALL BE MIN 18 GA COPPER CONDUCTORS IN EMT.
8) CONTRACTOR TO FURNISH AND INSTALL A FREEZE STAT AND HIGH HUMIDITY ALARM TO DIAL OWNER IN THE EVENT OF UNSTABLE CONDITIONS.
9) ROOF TOP UNIT SHALL BE MCQUAY RPS030D OR EQUAL BY CARRIER OR LENNOX.

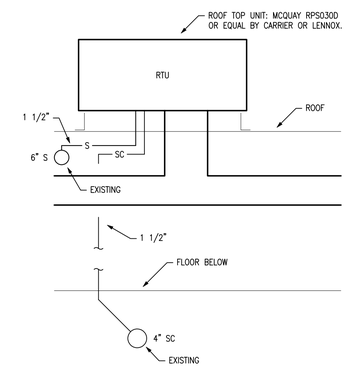
ELECTRICAL SPECIFICATIONS

1) SEE GENERAL MECHANICAL-ELECTRICAL SPECIFICATIONS.
2) BY OWNER



3 ME1 STEAM COIL PIPING

NO SCALE



2 ME1 MOUNTING DETAIL

NO SCALE

FREDDIE L. MALICOAT - ENGINEER
MO# E-16897

STATE OF MISSOURI — FREDDIE L. MALICOAT — NUMBER E-16897 — REGISTERED PROFESSIONAL ENGINEER — 02-04-10

MALICOAT - WINSLOW ENGINEERS, P.C.
MISSOURI STATE CERTIFICATE OF AUTHORITY #000421
5649 N. CLEARVIEW ROAD
COLUMBIA, MISSOURI 65202
TEL 573-875-1300
FAX 573-875-1305
FREDDIE MALICOAT, P.E.

MODOT ARCHIVES HVAC

601 W MAIN ST
JEFFERSON CITY MO 65101, COLE COUNTY

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 02-04-10

REVISIONS :

TITLE : MEP PLAN

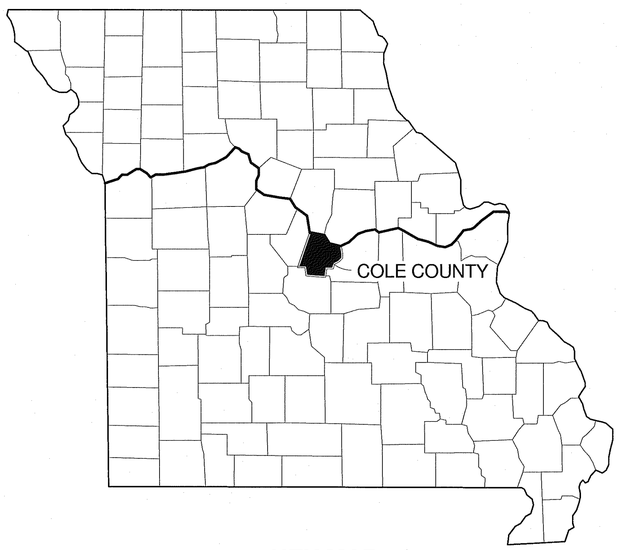
SHEET : ME1 OF ME1

PROJECT : 10006

\\Server2\Job\10\10006\10006.dwg, 2/4/2010 2:21:10 PM, JamesA

MISSOURI STATE HIGHWAY COMMISSION
HEADQUARTERS GARAGE - NEW ROOF PLATFORM

JEFFERSON CITY, MISSOURI



KEY MAP

SHOWING LOCATION OF COUNTY

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MISSOURI ONE CALL SYSTEM, INC.

STRUCTURAL SHEET INDEX

SHEET #	SHEET TITLE	ISSUE A	B	C	D
S001	COVER SHEET	•			
S100	ROOF PLAN	•			
S500	FRAMING SECTIONS	•			

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573/442-4537 FAX: 620/365-6828
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Richard R. Klein
E-13489
2-3-10

Designed By: DK
Drawn By: KJB
Checked By: DK
Issue Date: 2/2/10

NO.	DATE	REVISIONS	BY	APP'D

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MISSOURI STATE HIGHWAY COMMISSION
JEFFERSON CITY, MISSOURI

HEADQUARTERS GARAGE – NEW ROOF PLATFORM
COVER SHEET

108026-010

SHEET NO.
S001

PLOT DATE & TIME: 2/3/2010 8:39:09 AM

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PLOT DATE & TIME: 2/2/2010 8:39:11 AM

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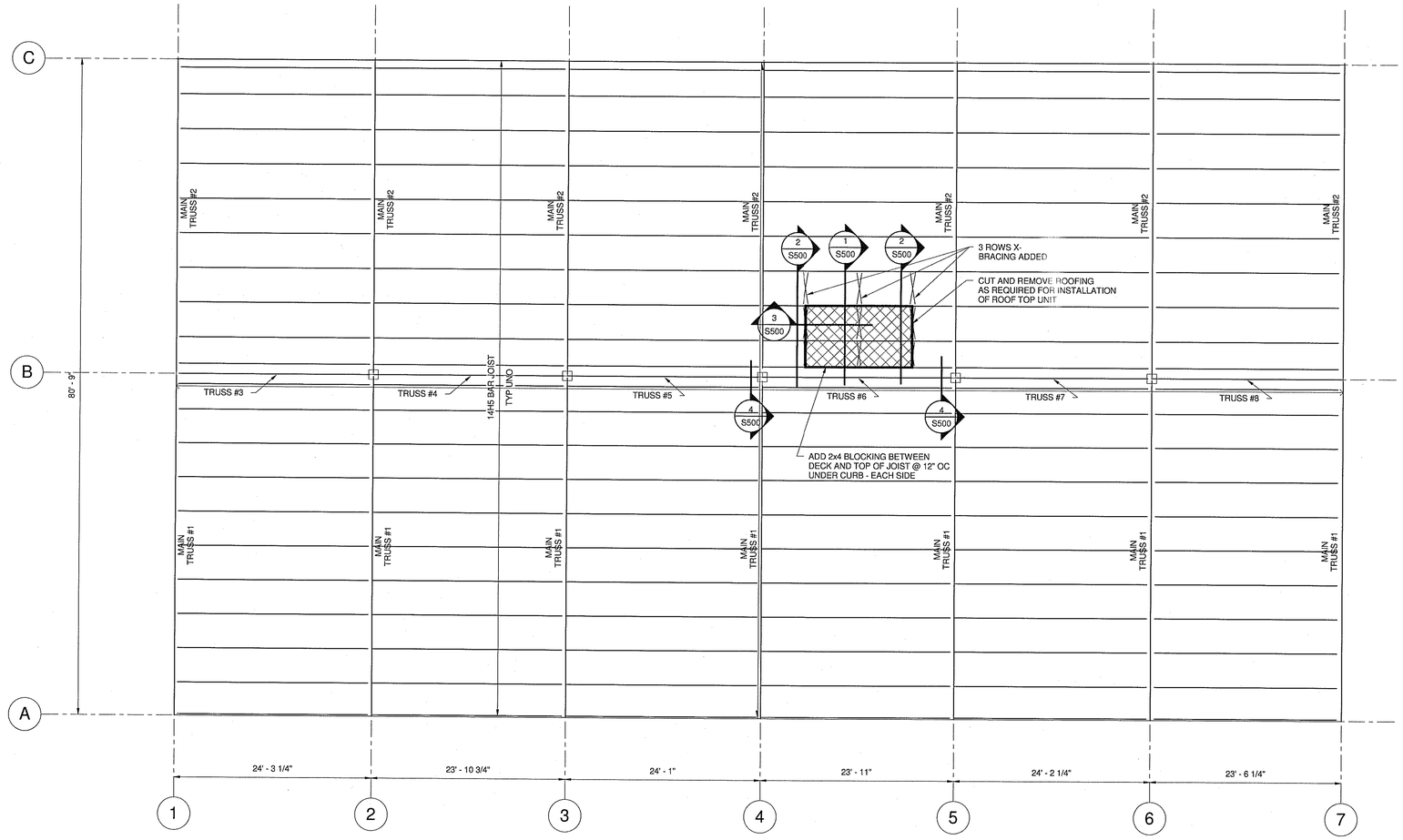
Note: Mechanical Unit, Curb & Duct Weight Allowance -- 5500 lbs



NORTH

1 SECOND FLOOR ROOF FRAMING PLAN

1/8" = 1'-0"

GENERAL NOTES

1. Remove roofing and insulation completely at mechanical unit to allow attachment of curb to roof framing and if necessary to allow additional welding of roof deck to edge joists to ensure deck to joists welding is at least 5/8" dia. puddle. Welds at 12" O.C. (MIN)

2. Allow for full removal of roof deck on center joist under unit and installation of C6x8.2 channel on top flange of joist. Coordinate with structural engineer.

3. Contractor to verify that existing roof joists are 14H5 members as shown on the existing building drawings prior to starting any other work on the roof framing. Notify engineer if this is not the case.

4. Contractor to verify all existing conditions and dimensions and coordinate all work with the Mechanical Engineering and Equipment Manufacturer's drawings. Notify engineer(s) if conditions and existing framing are not as indicated on the drawings.

5. Angles shall be ASTM A36 steel with shop primer.

6. All welding shall be done in accordance with AWS recommendations by AWS certified welders using E70XX electrodes or equivalent strength wire welding system.

7. Wood blocking between roof deck and roof joists shall be fire treated 2x southern pine or douglas fir lumber. Locate blocking over joist top chord panel points when possible.

NO.	DATE	REVISIONS	BY	APP'D

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Drawn By: KJB
Checked By: DK
Issue Date: 2/2/10

Richard R. Kline
E 13489

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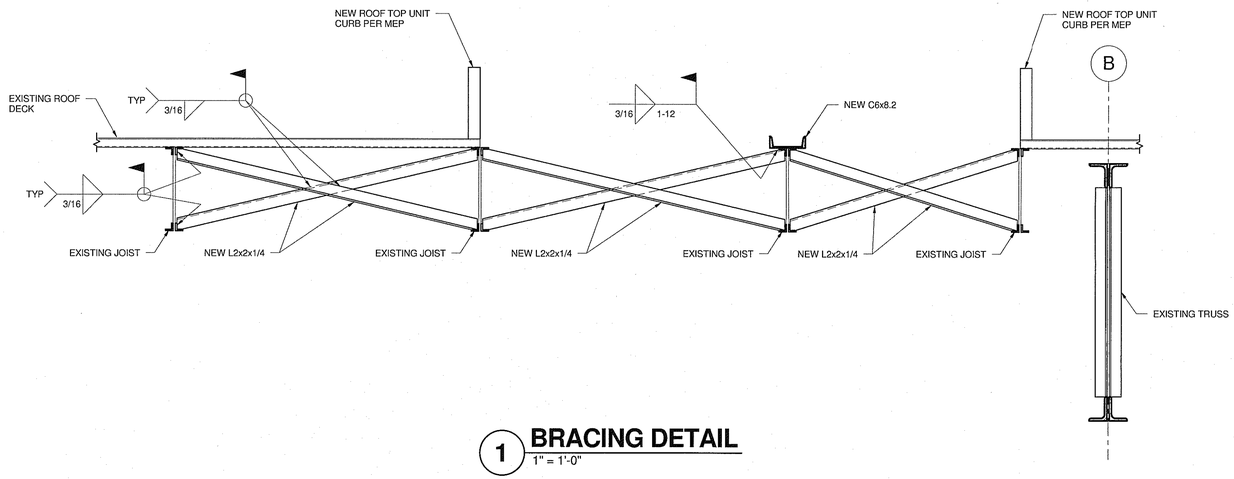
MISSOURI STATE HIGHWAY COMMISSION
JEFFERSON CITY, MISSOURI

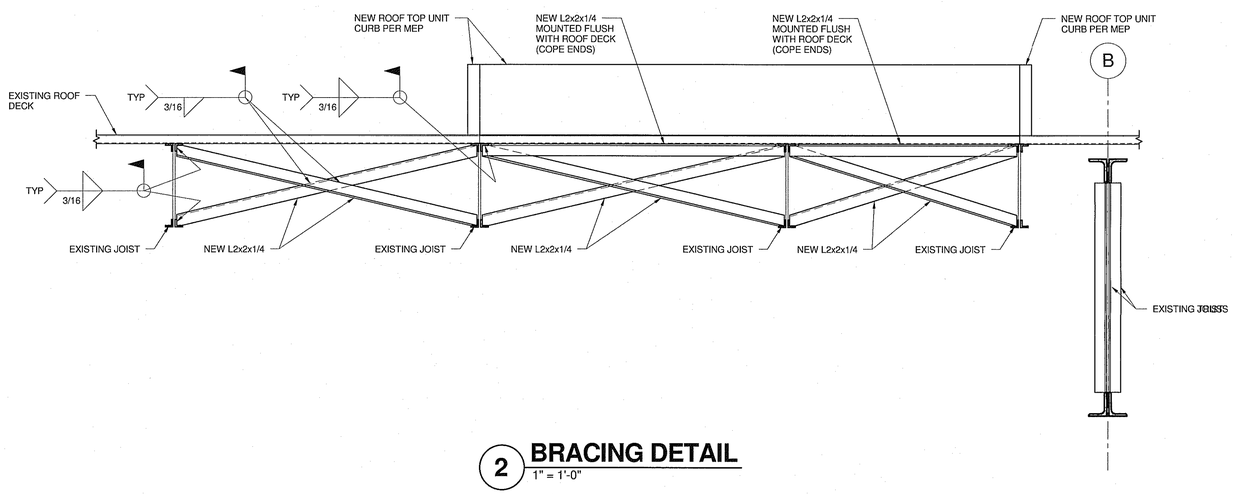
HEADQUARTERS GARAGE - NEW ROOF PLATFORM
ROOF PLAN

108026-010

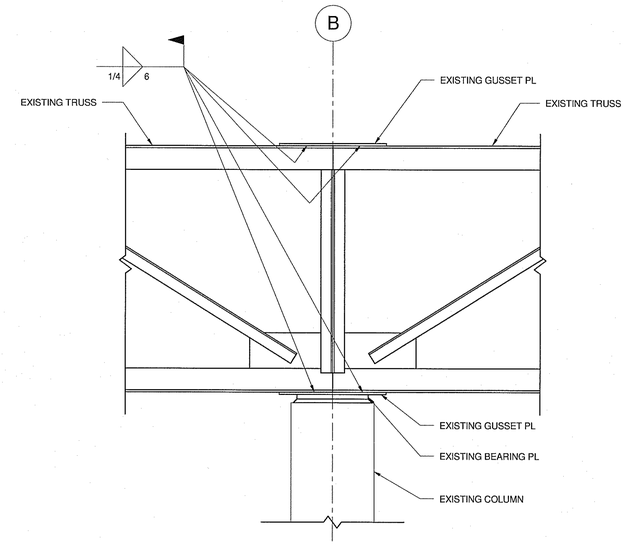
SHEET NO.
S100



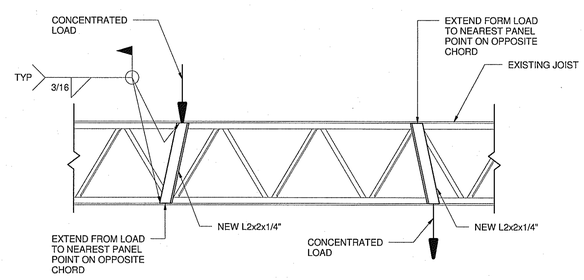
1 BRACING DETAIL
1" = 1'-0"



2 BRACING DETAIL
1" = 1'-0"



4 TRUSS DETAIL
1" = 1'-0"



3 JOIST REINFORCEMENT DETAIL
1" = 1'-0"

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Checked By: DK
Issue Date: 2/2/10

Richard R. Klein
E 13489
2-3-10

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MISSOURI STATE HIGHWAY COMMISSION
JEFFERSON CITY, MISSOURI

HEADQUARTERS GARAGE – NEW ROOF PLATFORM
FRAMING SECTIONS

108026-010

SHEET NO.
S500

PLOT DATE & TIME: 2/3/2010 8:39:12 AM

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