DEMOLITION NOTES:

EXISTING ROOFTOP UNIT SYSTEMS SERVING THIS BUILDING ARE TO BE REMOVED. REMOVE UNITS AND ASSOCIATED ROOF CURBS, DUCTWORK, EXISTING AIR DISTRIBUTION DEVICES, GAS PIPING, DRAIN PIPING AND CONTROLS. LOCATE NEW UNITS (WHERE INDICATED) TO BE IN THE SAME APPROXIMATE LOCATION AS THE EXISTING UNIT BEING REMOVED. USE EXISTING DUCT PENETRATIONS TO THE EXTENT POSSIBLE.

EXISTING HOT WATER BOILER TO REMAIN AS ABANDONED. REMOVE GAS LINE CONNECTION TO THE BOILER AND REMOVE ALL EXISTING HOT WATER PIPING AND PIPING SUPPORTS IN THE CEILINGS SPACE.

EXISTING NATURAL GAS PIPING (ON THE ROOF AND WITHIN THE BUILDING) IS TO BE REMOVED. REFER TO THIS PLAN FOR NEW NATURAL GAS PIPING TO THE NEW UNITS AS WELL AS TO RE-FEED THE EXISTING GAS WATER HEATER. CONNECT NEW GAS MAIN TO EXISTING GAS MAIN WHERE IT TURNS INTO THE CEILING SPACE - SEE PLAN.

EXISTING TOILET EXHAUST TO REMAIN. REMOVE, CLEAN AND RE-INSTALL EXISTING GRILLES INTO THE NEW CEILING AS REQUIRED. RE-CONNECT TO EXISTING DUCTWORK OR FAN AND REQUIRED AND RE-SEAL

NOTE
RTU-4 SHALL BE LOCATED IN THE SAME JOIST BAY AS THE EXISTING UNIT AND ALIGN EASTERN EDGE OF UNIT WITH THE EXISTING COLUMN LINE.

ALL NEW UNITS MUST BE HELD AT LEAST TEN FEET AWAY FROM THE EDGE OF THE EXISTING ROOF PER IMC REQUIREMENTS. FIELD VERIFY PRIOR TO PLACING ANY NEW UNITS ON THE ROOF.

EXISTING GAS METER CENTER. EXISTING METER TO BE RE-USED OR REMOVED AND REPLACED AT THE DIRECTION OF MLGW. NEW GAS DEMAND FOR THE BUILDING IS 541 CFH. COORDINATE WITH MLGW AND PAY ALL COST INCURRED.

CONNECT NEW 2½" LOW PRESSURE GAS LINE TO EXISTING 2½" GAS LINE IN CEILING SPACE (PRIOR TO EXISTING GAS LINE TURNING UP THRU ROOF) THIS VICINITY. PROVIDE ALL NEW NATURAL GAS PIPING TO SERVE THE NEW RTU'S AND EXISTING DOMESTIC WATER HEATER AS SHOWN. EXISTING GAS DISTRIBUTION PIPING TO BE REMOVED.

GENERAL NOTES:

IT IS INTENDED NEW MECHANICAL UNITS BE POSITIONED ON THE EXISTING ROOF TO SPAN OVER TWO (2) STEEL ROOF JOISTS (MIN) AT LOCATIONS WHERE SHOWN.

PLACE NEW MECHANICAL EQUIPMENT OVER EXISTING MECHANICAL DUCTWORK ROOF OPENINGS TO THE EXTENT POSSIBLE (FIELD VERIFY). POSITION UNITS SO THAT DUCT OPENINGS AVOID THE EXISTING ROOF JOISTS AND AS INDICATED IN NOTE 1 ABOVE.

PATCH PORTIONS OF EXISTING ROOF DECK OPENINGS AS REQUIRED THAT REMAIN EXPOSED AFTER INSTALLATION OF THE NEW ROOFTOP EQUIPMENT. MATCH EXISTING DECKING MATERIAL.

INSTALL STEEL ANGLE SUPPORTS AT ALL UN-SUPPORTED ROOF DECK EDGES AT MECHANICAL EQUIPMENT AND DUCTWORK PENETRATIONS.

INSTALL NEW RTU'S ON FULL PERIMETER ROOF CURBS SET ON THE EXISTING STRUCTURE AND FLASH/SEAL AS REQUIRED. NEW CURBS SHALL BE LEVEL - COORDINATE WITH EXISTING ROOF STRUCTURE.

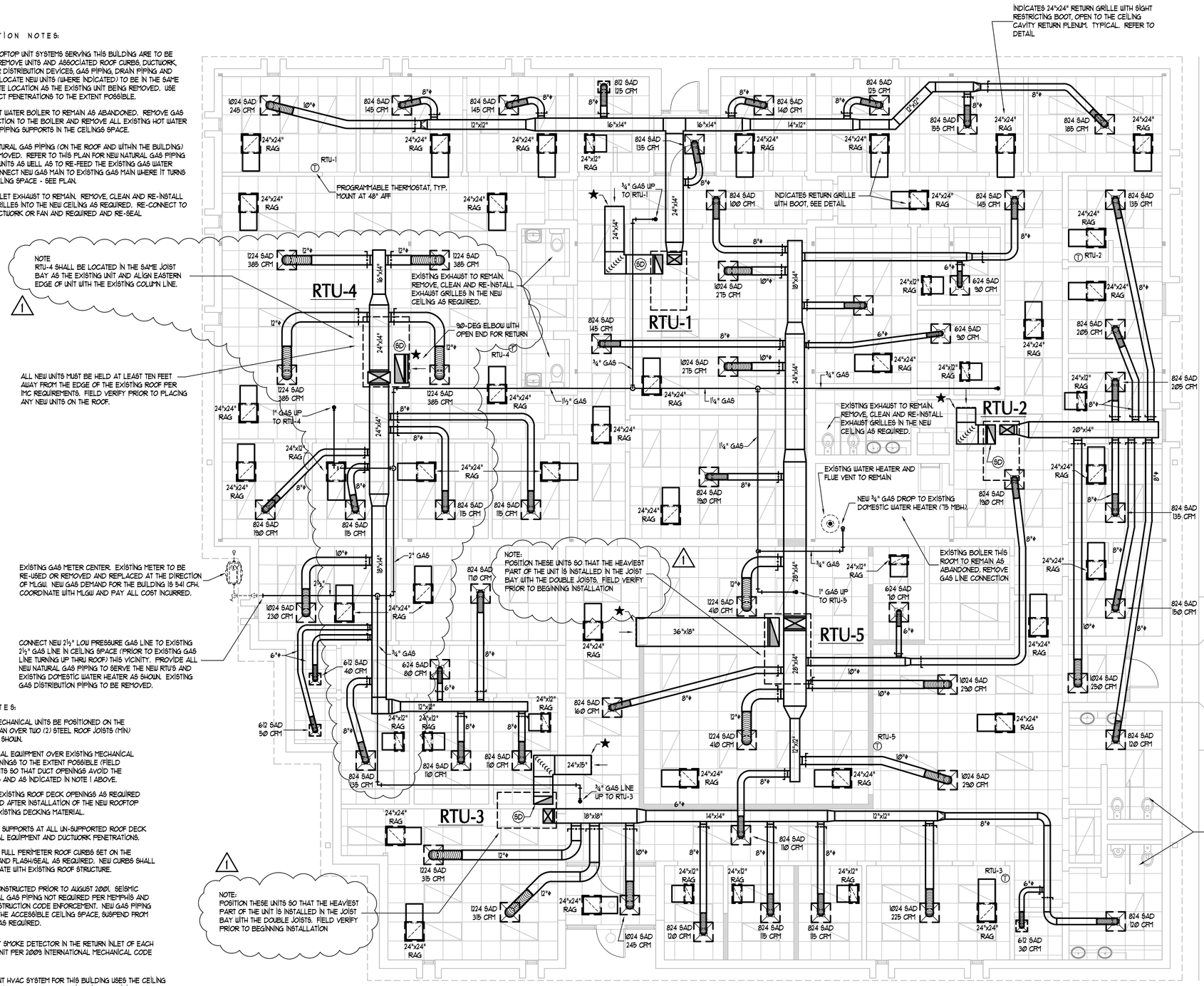
EXISTING BUILDING CONSTRUCTED PRIOR TO AUGUST 2001. SEISMIC BRACING FOR NATURAL GAS PIPING NOT REQUIRED PER MEMPHIS AND SHELBY COUNTY CONSTRUCTION CODE ENFORCEMENT. NEW GAS PIPING TO BE INSTALLED IN THE ACCESSIBLE CEILING SPACE, SUSPEND FROM EXISTING STRUCTURE AS REQUIRED.

(SD) INDICATES DUCT SMOKE DETECTOR IN THE RETURN INLET OF EACH NEW ROOFTOP UNIT PER 2003 INTERNATIONAL MECHANICAL CODE REQUIREMENTS

THE NEW REPLACEMENT HVAC SYSTEM FOR THIS BUILDING USES THE CEILING SPACE AS A RETURN AIR PLENUM. ALL MATERIALS IN THE CEILING PLENUM SPACE SHALL BE NON-COMBUSTIBLE AND PLENUM RATED. OPENINGS AT THE EXISTING RTU'S ARE BELIEVED TO BE FRAMED WITH WOOD (COMBUSTIBLE). WHERE OPENINGS ARE RE-USED OR WHERE WOOD FRAMING REMAINS AND IS EXPOSED TO THE PLENUM, THE HVAC CONTRACTOR SHALL WRAP THE WOOD WITH FIRE RATED SHEETROCK, SEALED AS REQUIRED, SO THAT THE EXISTING WOOD IS NO LONGER EXPOSED IN THE PLENUM SPACE.

THIS BUILDING HAS A PERMANENT MEANS OF ACCESS TO THE ROOF

REFER TO ARCHITECTURAL FOR LOCATIONS OF ALL ROOFTOP ITEMS REQUIRING CURB, PIPE OR VENT STACK EXTENSIONS UNDER SCOPE OF THIS CONTRACT AS WELL AS INFORMATION REGARDING STEEL ROOF DECK IN-FILLS, EQUIPMENT AND DECK ALTERATIONS, NEW SPRAY FOAM DECK INSULATION AND ADD ALTERNATE BID ITEM FOR NEW SUSPENDED ACOUSTIC TILE CEILING INSTALLATION.



NOTE:
NEW UNITS TO BE LOCATED IN THE SAME JOIST BAY AS THE EXISTING UNITS BEING REPLACED.

★ - INDICATES RETURN AIR DUCT TO BE TERMINATED WITH OPEN END COVERED WITH GALVANIZED B'SCREEN IN THE CEILING SPACE. CEILING CAVITY USED AS A RETURN AIR PLENUM. PROVIDE METAL NOSING OVER EXPOSED LINER EDGES FACING THE AIRSTREAM.

A FLOOR PLAN - HVAC
3/16" = 1'-0"

BCM
BARHAM / CAIN / MYNATT
incorporated
CONSULTING ENGINEERS
1015 Cordova Station Road Cordova, Tennessee 38018
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REVISIONS

DESCRIPTION	DATE
1 STRUCTURAL	03.24.14

SMOKE DETECTORS FOR FAN SHUT-DOWN:

INSTALL UL LISTED LOW VOLTAGE PHOTOELECTRIC TYPE DUCT SMOKE DETECTORS IN THE RETURN INTAKE OF EACH NEW PACKAGED ROOFTOP UNIT THIS TENANT FOR FAN SHUT-DOUN CONTROL PER THE INTERNATIONAL MECHANICAL CODE (REFERENCED BELOW).

WHENEVER SMOKE IS DETECTED, THE UNIT SHALL BE STOPPED AND AN ALARM INITIATED PER IMC. COMPLY WITH REQMTS OF LOCAL CODE.

DETECTORS AND VISUAL/AUDIBLE ALARM TO BE FURNISHED AND INSTALLED BY THE HVAC CONTRACTOR. THIS BUILDING DOES NOT HAVE A FIRE ALARM SYSTEM. COMPLY WITH THE INTERNATIONAL MECHANICAL CODE:

606.4.1 Supervision. The duct smoke detectors shall be connected to a fire alarm system where a fire alarm system is required by Section 907.2 of the *International Fire Code*. The actuation of a duct smoke detector shall activate a visible and audible supervisory signal at a constantly attended location.

Exceptions:

1. The supervisory signal at a constantly attended location is not required where the duct smoke detector activates the building's alarm-indicating appliances.
2. In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and audible signal in an *approved* location. Duct smoke detector trouble conditions shall activate a visible or audible signal in an *approved* location and shall be identified as air duct detector trouble.

PROJECT TITLE:
Shelby County Corrections Re-Entry Program
HVAC RENOVATION
1362 Mississippi Blvd Memphis,TN 38106

PROJECT NO.	DRAWN BY:
CE13044	TM/WD
DATE: 1.31.2014	DESIGNED BY: STM
SCALE: AS NOTED	CHECKED BY: DEC
SHEET TITLE: HVAC FLOOR PLAN	SHEET NUMBER: M1