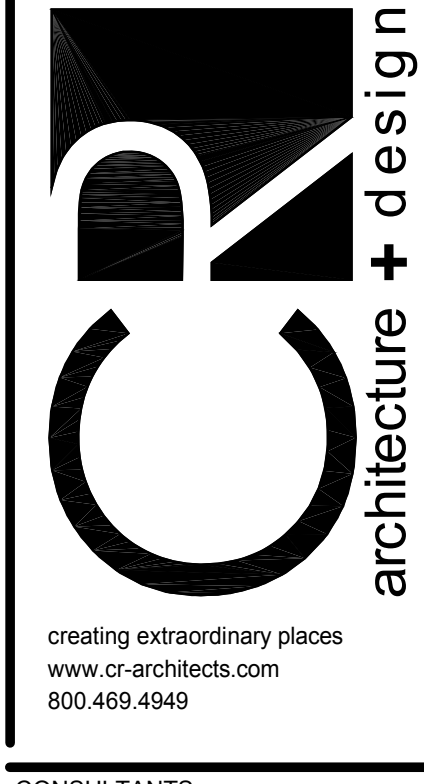


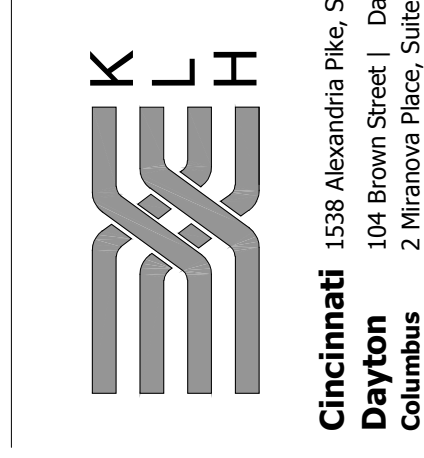


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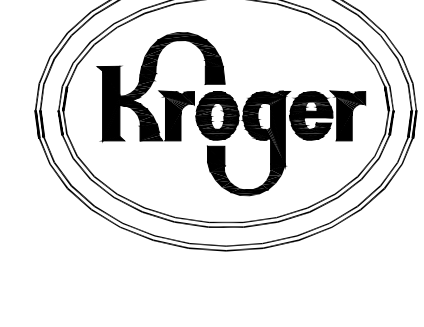
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ISSUE/REVISION

04/22/2014	90% OWNER REVIEW
05/16/2014	BID/PERMIT ISSUE

PROJECT TITLE

KROGER STORE  
 SW572

FM 407 & McKin Road  
 Bartonsville, TX 78734

COMMISSION NO. 514040  
 ISSUE DATE 05/16/14

SHEET TITLE

HVAC FLOOR  
 PLAN - EAST

SHEET NO.

M1.1a

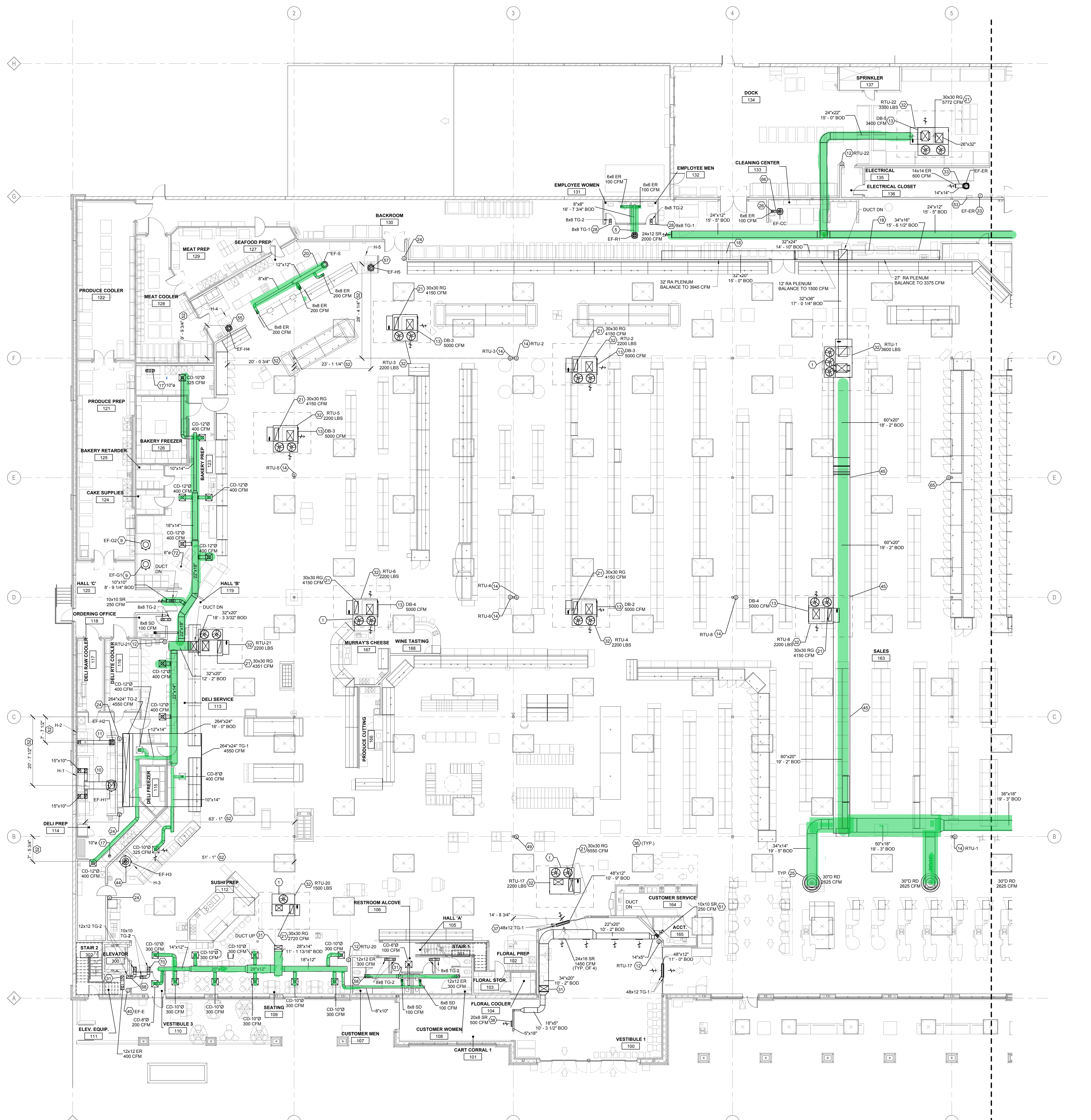
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**GENERAL NOTES**

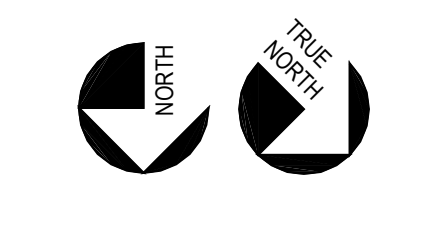
- A. REFER TO HEATING, VENTILATING & AIR CONDITIONING SPECIFICATIONS AND GENERAL CONDITIONS FOR ADDITIONAL REQUIREMENTS.
- B. ALL DIFFUSERS AND CEILING GRILLES SHALL BE COORDINATED WITH LAY-IN CEILING GRID AND PROVIDED BY MECHANICAL CONTRACTOR. SEE SCHEDULE SHEET M6.1.
- C. PROVIDE BALANCING DAMPERS FOR EACH DIFFUSER, REGISTER AND GRILLE AT POINTS ON SUPPLY, RETURN, AND EXHAUST SYSTEMS WHERE BRANCHES LEAD OFF FROM LARGER DUCTS OR IN DIFFUSERS AS REQUIRED FOR AIR BALANCING. INSTALL AT A MINIMUM OF TWO DUCT WIDTHS FROM BRANCH TAKEOFF WHERE PRACTICAL. REFER TO HD-29 ON SHEET M5.1.
- D. NO PROVISION HAS BEEN MADE FOR RETURN AIR FROM THE BACK ROOM AS IT HAS BEEN OUR EXPERIENCE THAT ACCEPTABLE CONSTRUCTION TOLERANCES IN THIS AREA RESULTS IN LEAKAGE IN AN AMOUNT EQUAL TO THAT SUPPLIED.
- E. ALL NEW EXHAUST FANS AND RTU'S SPECIFIED ARE INCLUDED IN OWNER'S DIRECT BUY PROGRAM AND SHALL BE PROVIDED BY OWNER AND INSTALLED BY HVAC CONTRACTOR, UNLESS OTHERWISE NOTED.
- F. ALL HVAC DUCT SMOKE DETECTORS ARE SHOWN ON ELECTRICAL SYSTEMS PLAN.
- G. REFER TO RTU SCHEDULE SHEET M6.1 FOR ROOFTOP UNIT INFORMATION.
- H. PROVIDE AND INSTALL BACKDRAFT DAMPERS FOR NON-KITCHEN EXHAUST FANS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- I. THE STORE'S MECHANICAL DESIGN SHALL BE ELIGIBLE TO EARN ENERGY STAR CERTIFICATION.
- J. SUPPLY AND RETURN DUCTWORK FROM ROOFTOP UNITS TO BE INTERNALLY INSULATED A MINIMUM OF TEN FEET FOR SOUND ATTENUATION. SEE DETAIL HSD-3, SHEET M5.1.
- K. REFER TO ROOFTOP UNIT CURB DETAILS, SHEET M5.1 FOR ROOFTOP UNIT CURB INSTALLATION.
- L. PROVIDE TURNING VANES IN ALL RECTANGULAR MITERED ELBOWS ONLY ITEMS REQUIRED FOR THE OPERATION OF THE ELEVATOR ARE ALLOWED TO BE IN OR PASS THROUGH THE ELEVATOR EQUIPMENT ROOM.
- N. ALL DIFFUSERS ARE 4-WAY UNLESS OTHERWISE INDICATED. REFER TO HD-8 ON SHEET M5.1.
- O. RUNOUTS TO CEILING DIFFUSERS ARE THE SAME SIZE AS THE DIFFUSER NECK UNLESS NOTED OTHERWISE.
- P. REFER TO RTU WIND SEISMIC RESTRAINT BRACKET DETAIL HSD-10 ON SHEET M5.1.

**KEYED NOTES**

- 1. RTU TO BE INSTALLED WITH FACTORY INSTALLED HEAT RECLAIM COIL. PROVIDE OPENING THRU ROOF FOR REFRIGERATION LINES. COORDINATE WITH ALL OTHER DISCIPLINES PRIOR TO PENETRATING ROOF.
- 5. 8X8 DUCT UP TO OPENING THRU ROOF CAPPED WITH KROGER FURNISHED EXHAUST FAN AND CURB EF-1.
- 9. 10" B-VENT DUCT UP FROM RACK OVEN VENT COLLAR THRU ROOF CAPPED WITH EF-G102. DUCTS ARE ONLY TO OFFSET ABOVE ACT TILES. DUCTS ARE TO BE RUN STRAIGHT AND VERTICAL, WHO'S VISIBLE TO SALES FLOOR. REFER TO DETAIL HSD-7 SHEET M5.1.
- 10. 26X20 GREASE DUCT FROM EXHAUST HOOD H-1 TO OPENING THRU ROOF PER NFPA 96, CAPPED WITH EF-H1. MECHANICAL CONTRACTOR TO INSTALL PROVIDED HINGE KIT. DUCTWRAP IS TO RUN THE ENTIRE LENGTH OF GREASE DUCT FROM CEILING PENETRATION TO FAN. REFER TO DETAIL HSD-4 SHEET M5.1. REFER TO SCHEDULE SHEET M5.1.
- 11. 13X10 GREASE DUCT FROM EXHAUST HOOD H-2 TO OPENING THRU ROOF PER NFPA 96, CAPPED WITH EF-H2. MECHANICAL CONTRACTOR TO INSTALL PROVIDED HINGE KIT. DUCTWRAP IS TO RUN THE ENTIRE LENGTH OF GREASE DUCT FROM CEILING PENETRATION TO FAN. REFER TO DETAIL HSD-4 SHEET M5.1. REFER TO SCHEDULE SHEET M5.1.
- 12. TEMPERATURE SENSOR FOR ROOFTOP UNIT FURNISHED BY BUILDING CONTROL PROVIDER. MOUNT SENSOR AT 2'-0" AFF. REFER TO SM SERIES OF DRAWINGS FOR ADDITIONAL INFORMATION.
- 13. DROP BOX DIFFUSER SYSTEM. REFER TO DIFFUSER SCHEDULE FOR AES MODEL NUMBERS AND QUANTITIES. REFER TO DETAIL HSD-1 FOR INSTALLATION. DIRECTIONS AND CFM. REFER TO DETAIL HSD-1 FOR INSTALLATION.
- 14. TEMPERATURE SENSOR FOR ROOF MOUNTED RTU FURNISHED BY BUILDING CONTROL PROVIDER. ROUTE CONTROL WIRING THROUGH RTU AND BACK TO BUILDING CONTROL PANEL. MOUNT SENSOR 7'-6" AFF IN SALES FLOOR AREA.
- 17. UW-50 VENT KIT INCLUDED WITH UNIT AND SUPPLIED BY HOBART. VENT KIT AUTOMATICALLY REMOVES STEAM/CONDENSATION AT THE COMPLETION OF THE WAREWASH CYCLE. WAREWASH DOOR WILL NOT OPEN UNTIL THIS PROCESS IS COMPLETED. MECHANICAL CONTRACTOR TO CONNECT A 10" STAINLESS STEEL DUCT TO THE VENT KIT OPENING THRU ROOF AND TO TERMINATE THE END OF THE DUCT WITH AN ELL. REFER TO DETAIL HSD-8 SHEET M5.1.
- 18. BEHIND THE CASE RETURN AIR DUCT PLENUM. BALANCE TO CFM INDICATED ON PLANS. REFER TO HSD-2 ON SHEET M5.1 AND ARCH STANDARD DETAILS. ROUTE RETURN DUCT THRU MAIN ORDER WHEN APPLICABLE TO MAINTAIN MAXIMUM BOTTOM OF DUCT CLEARANCE. CUT AND PATCH DUCT PER SMACNA STANDARDS AROUND GIRDER.
- 20. 12X12 DUCT UP TO OPENING THRU ROOF CAPPED WITH KROGER FURNISHED EXHAUST FAN AND CURB EF-S.
- 21. RETURN AIR GRILLE IN SIDE OF DUCT DROP. TYPUS 50F WITH 1 INCH OPENINGS OR EQUAL. REFER TO HSD-1, SHEET M5.1.
- 24. HOOD ANSUL PULL STATION LOCATION. COORDINATE FINAL LOCATION WITH ELECTRICAL 2-2 SERIES FLOOR PLANS. PROVIDE NAMEPLATE AT STATION WITH HOOD NUMBER AND LOCATION.
- 25. MOUNT TOP OF DIFFUSER EVEN WITH LIGHTING IN AREA. REFER TO LUMINAIRE SCHEDULE. SHEET ES3 FOR LIGHTING MOUNTING HEIGHTS. REFER TO EXPOSED DUCT DIFFUSER INSTALLATION DETAIL HD-1 ON SHEET M5.1 (TYP).
- 26. MOUNT EXHAUST GRILLE 8" ABOVE FINISHED FLOOR IN CLEANING CENTER AREA.
- 28. MOUNT TRANSFER GRILLE ABOVE RESTROOM DOOR.
- 29. REFER TO MEZZANINE PLAN FOR CONTINUATION OF DUCTWORK.
- 30. ROOFTOP UNIT FURNISHED BY KROGER AND INSTALLED BY MECHANICAL CONTRACTOR. REFER TO SCHEDULE SHEET M5.1. BALANCE TO SCHEDULED CFM. REFER TO MOUNTING DETAILS, SHEET M5.1.
- 33. 14X14 DUCT UP TO OPENING THRU ROOF CAPPED WITH KROGER FURNISHED EXHAUST FAN AND CURB EF-ER. CONTRACTOR TO PROVIDE REVERSE ACTING THERMOSTAT FOR FAN. FAN TO ENERGIZE WHEN ROOM REACHES 80 DEG F. MOUNT EXHAUST REGISTER ON END OF DUCT. MOUNT EXHAUST DUCT AT SAME HEIGHT AS LIGHTING IN AREA. REFER TO ELECTRICAL LIGHTING SCHEDULE FOR LIGHTING MOUNTING HEIGHTS.
- 36. SKYLIGHT SHOWN FOR COORDINATION.
- 37. CENTER TRANSFER GRILLE ABOVE DOOR. CONTRACTOR TO FIELD VERIFY DIMENSIONS.
- 38. SUPPLY REGISTER TO BE MOUNTED IN CART CORRAL SOFFIT.
- 39. 12X12 DUCT UP TO OPENING THRU ROOF CAPPED WITH KROGER FURNISHED EXHAUST FAN AND CURB EF-E. CONTRACTOR TO PROVIDE REVERSE ACTING THERMOSTAT FOR FAN. FAN TO ENERGIZE WHEN ROOM REACHES 80 DEG F.
- 44. 12X10 GREASE DUCT FROM EXHAUST HOOD H-3 TO OPENING THRU ROOF PER NFPA 96, CAPPED WITH EF-H3. MECHANICAL CONTRACTOR TO INSTALL PROVIDED HINGE KIT. DUCTWRAP IS TO RUN THE ENTIRE LENGTH OF GREASE DUCT FROM CEILING PENETRATION TO FAN. REFER TO DETAIL HSD-4 SHEET M5.1. REFER TO SCHEDULE SHEET M5.1.
- 45. DUCT TO BE ROUTED THROUGH STRUCTURAL WIERENDEEL. COORDINATE WITH STRUCTURE PRIOR TO FABRICATION OF DUCTWORK.
- 46. HUMIDITY/TEMPERATURE SENSOR FOR RTUS FURNISHED BY BUILDING CONTROLS PROVIDER. INSTALL PROBE 7'-6" ON COLUMN. REFER TO EM SERIES OF DRAWINGS FOR ADDITIONAL INFORMATION.
- 51. MOUNT TOP OF AIR DEVICE AT 8'-0" AFF. AIR DEVICE TO HAVE FACE-OPERABLE VOLUME DAMPER.
- 52. DIMENSIONS TO CENTER OF HOOD FOR REFERENCE ONLY. COORDINATE WITH FINAL FIXTURE PLACEMENT PRIOR TO HOOD INSTALLATION.
- 53. LOCATION OF EMS PANEL. REFER TO EM- SERIES OF DRAWINGS FOR ADDITIONAL INFORMATION.
- 55. 12"D DUCT UP TO OPENING THRU ROOF CAPPED WITH KROGER FURNISHED EXHAUST FAN AND CURB EF-H4.
- 57. 13X12 DUCT UP TO OPENING THRU ROOF CAPPED WITH KROGER FURNISHED EXHAUST FAN AND CURB EF-H5.
- 58. REFER TO RETURN EXHAUST REGISTER DETAIL HD-8 ON SHEET M5.1 (TYP).
- 65. HUMIDITY SENSOR FOR ANTI-SWEATS. FURNISHED BY BUILDING CONTROLS PROVIDER. INSTALL PROBE AT 7'-6" AFF ON COLUMN. REFER TO EM SERIES OF DRAWINGS FOR FURTHER INFORMATION.
- 66. 6X6 DUCT UP TO OPENING THRU ROOF CAPPED WITH KROGER FURNISHED EXHAUST FAN AND CURB EF-CC.
- 67. PROVIDE FIRE DAMPER IN TRANSFER DUCTWORK.
- 68. REFER TO TRANSFER GRILLE INSTALLATION DETAIL HD-11 ON SHEET M5.1 (TYP).
- 69. STAINLESS STEEL DUCT, NATURAL DRAFT, PER NFPA 96 FOR TORTILLA MACHINE THRU ROOF. TERMINATE PER MANUFACTURERS INSTRUCTIONS.



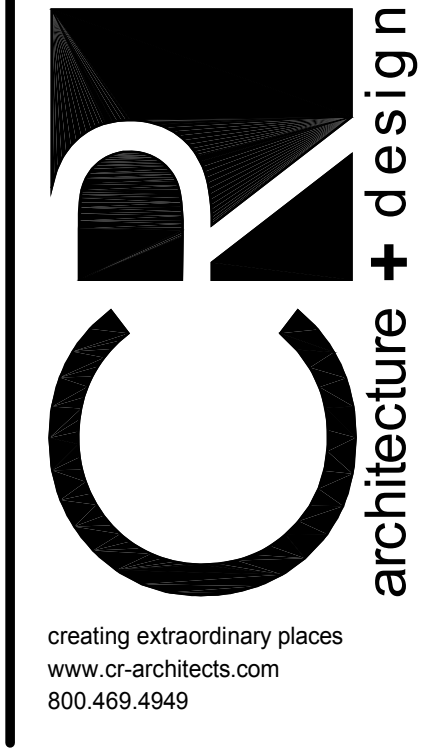
HVAC FLOOR PLAN - EAST  
 SCALE: 3/32" = 1'-0"



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OWNER



ISSUE/REVISION  
 04/22/2014 90% OWNER REVIEW  
 05/16/2014 BID/PERMIT ISSUE

PROJECT TITLE  
**KROGER STORE  
 SW572**  
 FM 407 & McMakin Road  
 Bartonville, TX 78704

COMMISSION NO. 514040  
 ISSUE DATE 05/16/14  
 SHEET TITLE  
**HVAC FLOOR  
 PLAN - WEST**

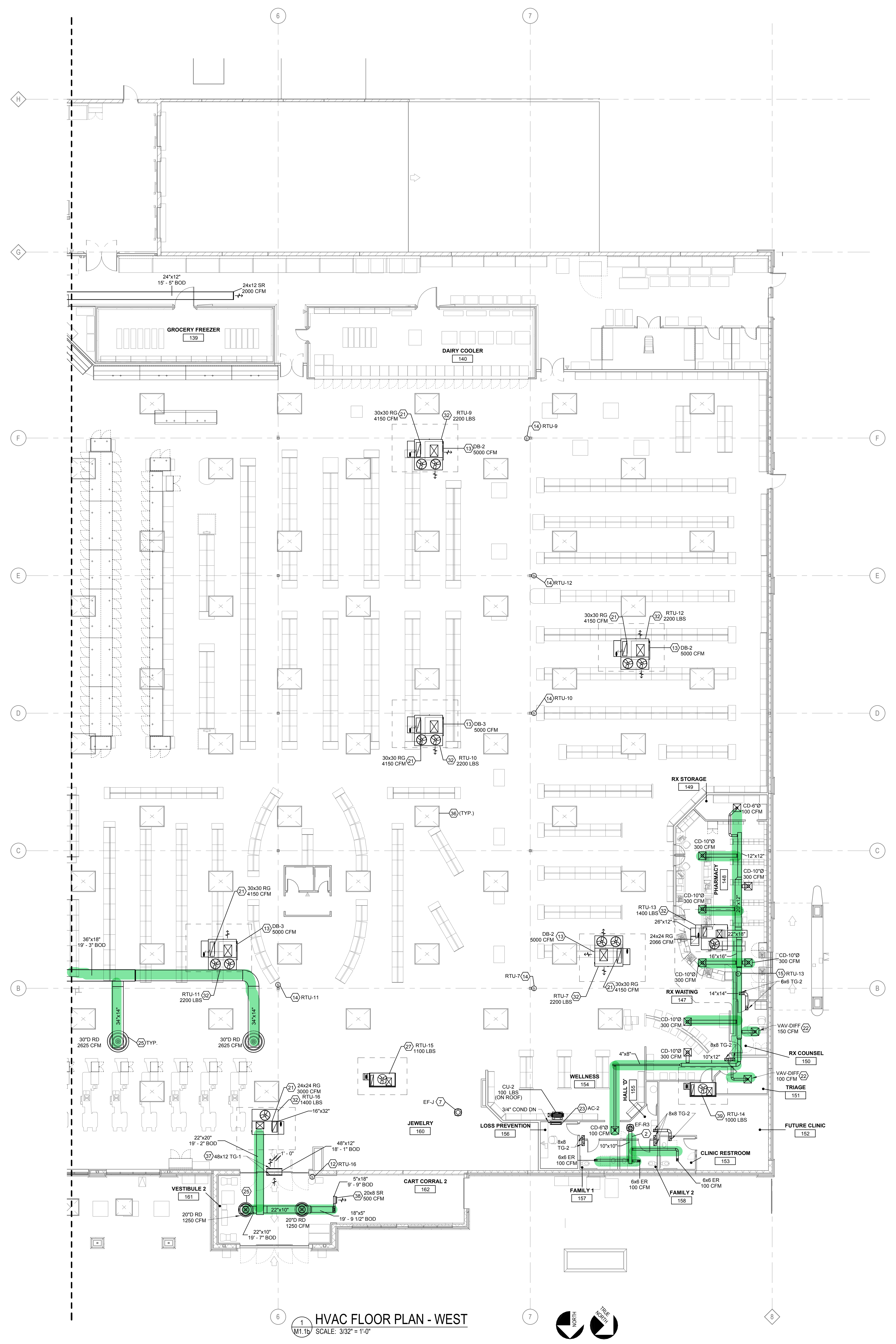
SHEET NO.  
**M1.1b**  
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**GENERAL NOTES**

- A. REFER TO HEATING, VENTILATING & AIR CONDITIONING SPECIFICATIONS AND GENERAL CONDITIONS FOR ADDITIONAL REQUIREMENTS.
- B. ALL DIFFUSERS AND CEILING GRILLES SHALL BE COORDINATED WITH LAY-IN CEILING GRID AND PROVIDED BY MECHANICAL CONTRACTOR. SEE SCHEDULE SHEET M6.1.
- C. PROVIDE BALANCING DAMPERS FOR EACH DIFFUSER, REGISTER AND GRILLE AT POINTS ON SUPPLY, RETURN, AND EXHAUST SYSTEMS WHERE BRANCHES LEAD OFF FROM LARGER DUCTS OR IN DIFFUSERS AS REQUIRED FOR AIR BALANCING. INSTALL AT A MINIMUM OF TWO DUCT WIDTHS FROM BRANCH TAKEOFF WHERE PRACTICAL. REFER TO HD-26 ON SHEET M3.1.
- D. NO PROVISION HAS BEEN MADE FOR RETURN AIR FROM THE BACK ROOM AS IT HAS BEEN OUR EXPERIENCE THAT ACCEPTABLE CONSTRUCTION TOLERANCES IN THIS AREA RESULTS IN LEAKAGE IN AN AMOUNT EQUAL TO THAT SUPPLIED.
- E. ALL NEW EXHAUST FANS AND RTUs SPECIFIED ARE INCLUDED IN OWNER'S DIRECT BUY PROGRAM, AND SHALL BE PROVIDED BY OWNER AND INSTALLED BY HVAC CONTRACTOR, UNLESS OTHERWISE NOTED.
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- G. REFER TO RTU SCHEDULE SHEET M6.1 FOR ROOFTOP UNIT INFORMATION.
- H. PROVIDE AND INSTALL BACKDRAFT DAMPERS FOR NON-KITCHEN EXHAUST FANS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
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- J. SUPPLY AND RETURN DUCTWORK FROM ROOFTOP UNITS TO BE INTERNALLY INSULATED A MINIMUM OF TEN FEET FOR SOUND ATTENUATION. SEE DETAIL HSD-3, SHEET M5.1.
- K. REFER TO ROOFTOP UNIT CURB DETAILS, SHEET M5.1 FOR ROOFTOP UNIT CURB INSTALLATION.
- L. PROVIDE TURNING VANES IN ALL RECTANGULAR MITERED ELBOWS. ONLY ITEMS REQUIRED FOR THE OPERATION OF THE ELEVATOR ARE ALLOWED TO BE IN OR PASS THROUGH THE ELEVATOR EQUIPMENT ROOM.
- N. ALL DIFFUSERS ARE 4-WAY UNLESS OTHERWISE INDICATED. REFER TO HD-4 ON SHEET M5.1.
- O. RUNOUTS TO CEILING DIFFUSERS ARE THE SAME SIZE AS THE DIFFUSER NECK UNLESS NOTED OTHERWISE.
- P. REFER TO RTU WIND SEISMIC RESTRAINT BRACKET DETAIL HSD-10 ON SHEET M5.1.

**KEYED NOTES**

- 2. 10X10 DUCT UP TO OPENING THRU ROOF CAPPED WITH KROGER FURNISHED EXHAUST FAN AND CURB EF-R3.
- 7. KROGER FURNISHED EF-J ON ROOF FOR JEWELRY STORE. INSTALL FAN AND CURB. CAP ROOF OPENING IN CEILING SPACE FOR TENANT FIT OUT TO COMPLETE.
- 12. TEMPERATURE SENSOR FOR ROOFTOP UNIT FURNISHED BY BUILDING CONTROL PROVIDER. MOUNT SENSOR AT 5'0" AFF. REFER TO EM SERIES OF DRAWINGS FOR ADDITIONAL INFORMATION.
- 13. DROP BOX DIFFUSER SYSTEM. REFER TO DIFFUSER SCHEDULE FOR AES MODEL NUMBERS AND QUANTITIES. REFER TO PLANS FOR THROW DIRECTIONS AND CFM. REFER TO DETAIL HSD-1 FOR INSTALLATION.
- 14. TEMPERATURE SENSOR FOR ROOF MOUNTED RTU FURNISHED BY BUILDING CONTROL PROVIDER. ROUTE CONTROL WIRING THROUGH RTU AND BACK TO BUILDING CONTROL PANEL. MOUNT SENSOR 7'-6" AFF IN SALES FLOOR AREA.
- 15. SLIDER THERMOSTAT FURNISHED BY BUILDING CONTROL PROVIDER. THERMOSTAT TO BE MOUNTED AT 4'-0" AFF. REFER TO EM SERIES OF DRAWINGS FOR ADDITIONAL INFORMATION.
- 21. RETURN AIR GRILLE IN SIDE OF DUCT DROP. TITUS 50F WITH 1 INCH OPENINGS OR EQUAL. REFER TO HSD-1, SHEET M5.1.
- 22. MECHANICAL CONTRACTOR TO PROVIDE VAV DIFFUSER, ACCUTHERM THERMA-FUSE MODEL TF-HC OR EQUIVALENT.
- 23. KROGER FURNISHED SPLIT SYSTEM PROVIDED WITH LOW AMBIENT KIT AND WIND BAFFLES. MOUNT ON WALL PER MANUFACTURER'S RECOMMENDATIONS. ROUTE REFRIGERANT LINES THRU ROOF TO CONDENSING UNIT PER MANUFACTURER'S GUIDELINES. ROUTE 3/4" INSULATED CONDENSATE TO HUB DRAIN IN AREA. REFER TO HVAC SPLIT SYSTEM DIAGRAM HSD-11 ON SHEET M5.1.
- 25. MOUNT TOP OF DIFFUSER EVEN WITH LIGHTING IN AREA. REFER TO LUMINAIRE SCHEDULE, SHEET E5.3 FOR LIGHTING MOUNTING HEIGHTS. REFER TO EXPOSED DUCT DIFFUSER INSTALLATION DETAIL HD-1 ON SHEET M3.1 (TYP).
- 27. KROGER FURNISHED ROOFTOP UNIT FOR JEWELRY SPACE. CAP ROOF OPENINGS FOR TENANT FIT OUT TO COMPLETE.
- 32. ROOFTOP UNIT FURNISHED BY KROGER AND INSTALLED BY MECHANICAL CONTRACTOR. REFER TO SCHEDULE SHEET M6.1, BALANCE TO SCHEDULED CFM. REFER TO MOUNTING DETAILS, SHEET M6.1.
- 36. SKYLIGHT SHOWN FOR COORDINATION.
- 37. CENTER TRANSFER GRILLE ABOVE DOOR. CONTRACTOR TO FIELD VERIFY DIMENSIONS.
- 38. SUPPLY REGISTER TO BE MOUNTED IN CART CORRAL SOFFIT.
- 39. KROGER FURNISHED ROOFTOP UNIT FOR FUTURE TLC. INSTALLED BY MECHANICAL CONTRACTOR. CAP ROOF OPENINGS FOR TENANT TO COMPLETE DURING FIT OUT.



1 HVAC FLOOR PLAN - WEST  
 M1.1b SCALE: 3/32" = 1'-0"

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