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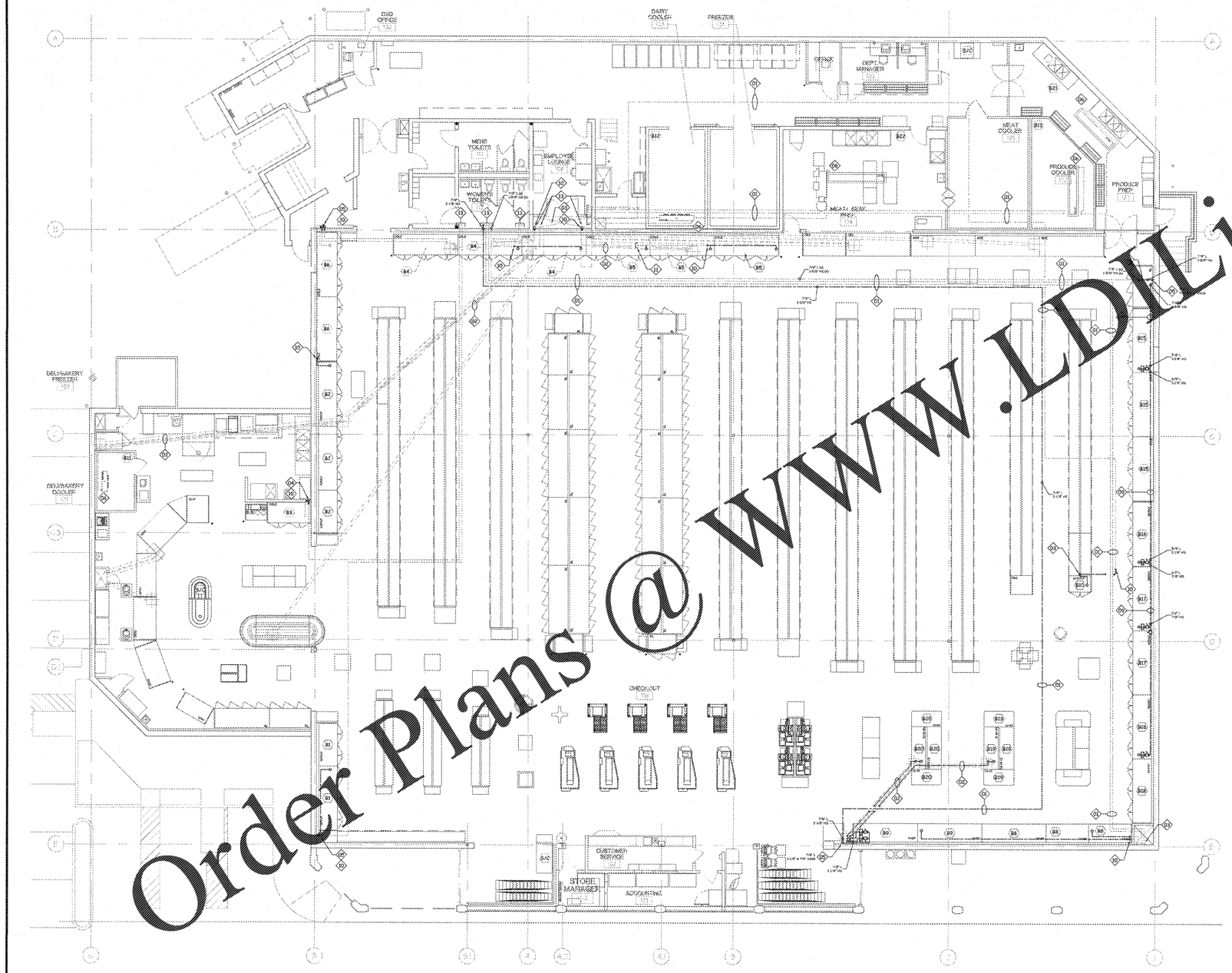
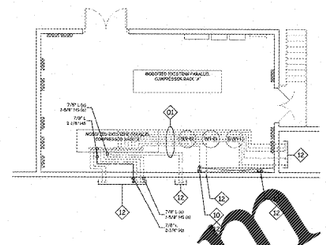


1 REFRIGERATION PIPING PLAN - RACK 'Z'

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



2 MEZZANINE MOTOR ROOM DETAIL

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

REFRIGERATION NOTES

1. THIS PLAN IS FOR GRAPHICALLY SHOWN, FOR CLARIFICATION PURPOSES ONLY. EACH LINE DISPLAYED REPRESENTS A LEGEND ITEM, NOT NECESSARILY A SINGLE PIPE. PIPING PER DESIGN MAY CONSIST OF MULTIPLE PIPES (OTHERWISE NOTED).
2. PRIOR TO INSTALLATION OF REFRIGERATION PIPING, THE REFRIGERATION INSTALLATION CONTRACTOR SHALL COORDINATE ALL PIPING PATHS WITH THE STRUCTURAL STEEL IN CONJUNCTION WITH THE BUILDING CONTRACTOR.
3. THE REFRIGERATION INSTALLATION CONTRACTOR SHALL COORDINATE ALL PIPING PATHS TO AVOID CONFLICTS WITH ALL ELECTRICAL PANELS, SWITCHGEAR AND CONDUITS. NO PIPING SHALL PASS ABOVE ELECTRICAL PANELS AND TRANSFORMERS OR THROUGH SWITCHGEAR OR CONDUITS.
4. THE REFRIGERATION INSTALLATION CONTRACTOR SHALL COORDINATE ALL PIPING PATHS TO AVOID CONFLICTS WITH ALL OTHER TRADES (i.e. HVAC EQUIPMENT, LIGHTING FIXTURES, PLUMBING LINES, ETC.).

REFRIGERATION LEGEND

- REFRIGERATION PIPING - RACK 'A' - EXISTING - L.H.S.
- REFRIGERATION PIPING - RACK 'A' - EXISTING - L.H.S.
- REFRIGERATION PIPING - RACK 'A' - NEW - L.H.S.
- REFRIGERATION PIPING - RACK 'A' - NEW - L.H.S.

KEYED NOTES

- (D1) OVERHEAD DIRECT EXPANSION REFRIGERATION PIPING. TIGHT TO STRUCTURE. COORDINATE WITH MECHANICAL, ELECTRICAL, PLUMBING AND SPRINKLER INSTALLATION.
- (D2) DIRECT EXPANSION REFRIGERATION PIPING RUN IN PIPE CHASE BELOW FLOOR.
- (D3) OVERHEAD DIRECT EXPANSION REFRIGERATION PIPING DROP IN RIGID PVC CONDUCTOR CHASE.
- (D4) OVERHEAD DIRECT EXPANSION REFRIGERATION PIPING DROP. CONCEALED ON WALL.
- (D5) OVERHEAD DIRECT EXPANSION REFRIGERATION PIPING DROP SUPPORTED TO WALL / COLUMN.
- (D6) OVERHEAD DIRECT EXPANSION REFRIGERATION PIPING DROP TO EVAPORATOR CONNECTION.
- (D7) OVERHEAD DIRECT EXPANSION REFRIGERATION PIPING DROP TO CASE CONNECTION. PAINT TO MATCH DECOR.
- (D8) OVERHEAD DIRECT EXPANSION REFRIGERATION PIPING DROP TO CASE CONNECTION. PAINT TO MATCH DECOR ABOVE DROP CEILING. WRAP IN STAINLESS STEEL ENCLOSURE BELOW DROP CEILING. ENCLOSURE BY SEC.
- (D9) DIRECT EXPANSION REFRIGERATION PIPING TO RUN ON TOP OF REFRIGERATED CASES. COORDINATE WITH CASE UPLIGHTING AND DECOR PANELS.
- (D10) EXTEND EXISTING DIRECT EXPANSION REFRIGERATION PIPING AS SPECIFIED. NEW BRANCH CONNECTION LINE SIZING.
- (E1) EXISTING DIRECT EXPANSION REFRIGERATION PIPING TO BE TERMINATED AND CAPPED.
- (E2) SEE DETAIL #1 ON THIS PLAN FOR DIRECT EXPANSION REFRIGERATION PIPING CONTINUATION.
- (E3) SEE DETAIL #2 ON THIS PLAN FOR DIRECT EXPANSION REFRIGERATION PIPING CONTINUATION.

CKT	DESCRIPTION	MBH	EVAP TEMP	SST	SUCTION LINE(S)	SUCTION RISER	LIQ
V1	12' DROP-1 of 3RACK	3.20	24	R-404a	7/8"OD	1-3/8"OD	5/8"OD
V2	12' DROP-2 of 3RACK	3.44	24	R-404a	7/8"OD	1-3/8"OD	5/8"OD
V3	8' DROP-3 of 3RACK/MEDIUM	9.82	24	R-404a	1 5/8"OD	1 5/8"OD	1 1/8"OD
V4	12' DROP-1 of Stepped CASES	15.39	24	R-404a	1 5/8"OD	1 5/8"OD	1 1/8"OD
V5	12' DROP-2 of Stepped CASES	12.39	24	R-404a	1 3/8"OD	1 3/8"OD	1 1/8"OD
V6	12' DROP-3 of Stepped CASES	10.20	24	R-404a	1 3/8"OD	1 3/8"OD	1 1/8"OD
V7	LOOP TIED INTO EXISTING			R-404a	See the Refrigeration Concept P&E Sheet		
V8	24' DROP-1 of PRODUCE	14.61	24	R-404a	1 5/8"OD	2 1/8"OD	1 1/8"OD
V9	24' DROP-2 of PRODUCE	20.50	24	R-404a	2 5/8"OD	2 1/8"OD	1 1/8"OD
V10	8' DROP-3 of PRODUCE	7.00	24	R-404a	2 5/8"OD	1 5/8"OD	1 1/8"OD
V11	DELI/BAKERY COOLER	6.85	24	R-404a	Existing to Remain		
V12	DAIRY COOLER	14.00	24	R-404a	Existing to Remain		
V13	PRODUCE COOLER	13.61	24	R-404a	Existing to Remain		
V14	SPARE			R-404a			
* V15	20' DROP of 3RACK/MEDIUM	16.00	24	R-404a	1 5/8"	1 5/8"	1 1/8"
V16	12' DROP-1 of MEAT	8.60	24	R-404a	1 3/8"	1 3/8"	1 1/8"
V17	24' DROP-2 of MEAT	7.08	24	R-404a	2 1/8"	2 1/8"	1 1/8"
* V18	24' DROP-3 of MEAT/PRODUCE	7.68	24	R-404a	2 1/8"	2 1/8"	1 1/8"
* V19	(2) 8"x20"Grid DX-4.5C-(2)R-449A PRODUCE ISLAND	39.06	25	R-404a	5"/7"	3-1/8"	1-1/8"
* V20	(2) 8"x20"Grid DX-4.5C-(2)R-449A PRODUCE ISLAND	30.86	25	R-404a	5"/7"	1-3/8"	1-1/8"
V21	PRODUCE MIST	13.33	24	R-404a	Existing to Remain		
V22	MEAT COOLER	13.00	19	R-404a	Existing to Remain		
V23	FUTURE RACK	67.00	24	R-404a	Existing to Remain		
V24	SPARE			R-404a			

Denotes circuits tied into Loop Piping Configuration (runs original circuit #)
Denotes Suction and Hot Gas Loop Piping Configuration

All piping listed above to be new unless noted with the following:
ex - Existing Piping to be extended, modified, or relocated new connections.
re - Verify existing piping to match/replace if necessary.

3 REFRIGERATION NOTES AND LEGEND

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Date: SEPTEMBER 10, 2019 Job No. 1927

Revisions:

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No.	Date	Note

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CERTIFICATE OF AUTHORIZATION NO. C-1111
CERTIFICATE OF AUTHORIZATION NO. P-0111

NORTH CAROLINA PROFESSIONAL SEAL 026408 ENGINEER
07/31/2019

Harris Teeter
Neighborhood Food & Pharmacy

Project: HARRIS TEETER STORE #289 ~ REMODEL
2603 GLENWOOD AVENUE, SUITE 101
RALEIGH, NC 27608

Title: REFRIGERATION PIPING PLAN - RACK 'B'

RC4.2

Sheet 5 of 5