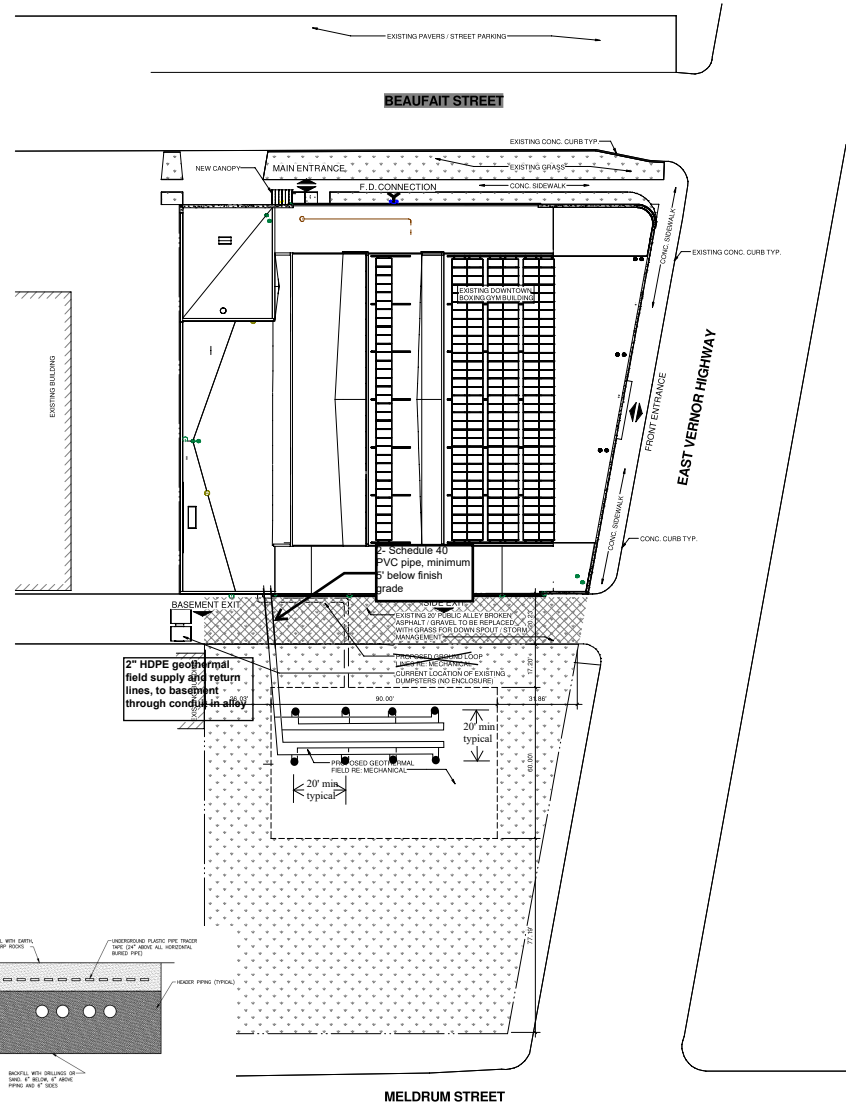
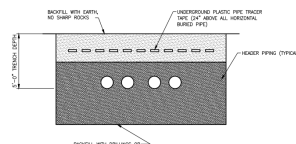
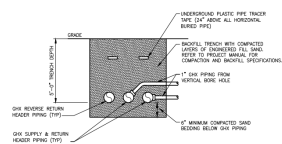


GROUND HEAT EXCHANGER SUMMARY INFORMATION

HEAT EXCHANGER INFORMATION	
CONFIGURATION	VERTICAL CLOSED LOOP
BOREHOLE QUANTITY	8
BOREHOLE ACTIVE DEPTH	230'
BOREHOLE TOTAL DEPTH	235'
BOREHOLE SEPARATION	20 FT ON CENTER
NUMBER OF CIRCUITS	2
THERMAL CONDUCTIVITY *	1.35 BTU/(H*FT*F)
SOIL DIFFUSIVITY *	0.90 FT ² /DAY
UNDISTURBED GROUND TEMPERATURE *	54.6 °F
GHX PRESSURE DROP	11.6 ft. hd.
SYSTEM FLUID INFORMATION	
TOTAL FLOW **	50.0 GPM
FLUID	25% PROPYLENE GLYCOL
MINIMUM HEAT PUMP INLET FLUID TEMP	30 °F
MAXIMUM HEAT PUMP INLET FLUID TEMP	90 °F
GROUT INFORMATION	
GROUT TYPE	THERMALLY ENHANCED BENTONITE
MINIMUM THERMAL CONDUCTIVITY	0.88 BTU/(H*FT*F)
FLUSH & PURGE INFORMATION	
MINIMUM FLUID VELOCITY	1.0 FT/SEC
MINIMUM PURGE FLOW (PER CIRCUIT)	25 GPM
PURGE PRESSURE DROP (PER CIRCUIT)	21.0 ft. hd.
GHX CAPACITY INFORMATION	
PEAK HEATING **	130 MBH
PEAK COOLING **	98 MBH
HEATING EQUIVALENT FULL LOAD HOURS **	1906 HOURS
COOLING EQUIVALENT FULL LOAD HOURS **	1315 HOURS



1
A-101

ARCHITECTURAL SITE PLAN
SCALE: 1" = 25'-0"



GENERAL NOTES:

1. This drawing is NOT to be scaled for construction purposes.
 2. The contractor must verify and accept responsibility for all dimensions and conditions on site and must notify NORR LLC of any variation from the supplied information.
 3. NORR LLC shall not be responsible for the accuracy, or verity, of the other design information shown on this drawing. Refer to the appropriate consultant's drawings before proceeding with the work.
 4. Construction must conform to all applicable codes and requirements of authorities having jurisdiction.
- This drawing has been prepared solely for the use of the Downtown Dining Center and there are no representations or any kind made by NORR LLC to any party with whom NORR LLC has not entered into a contract.
- This drawing shall not be used for construction purposes until the seal, engineering licensure is signed and dated by the Architect or Engineer.

Project Component



Project No.