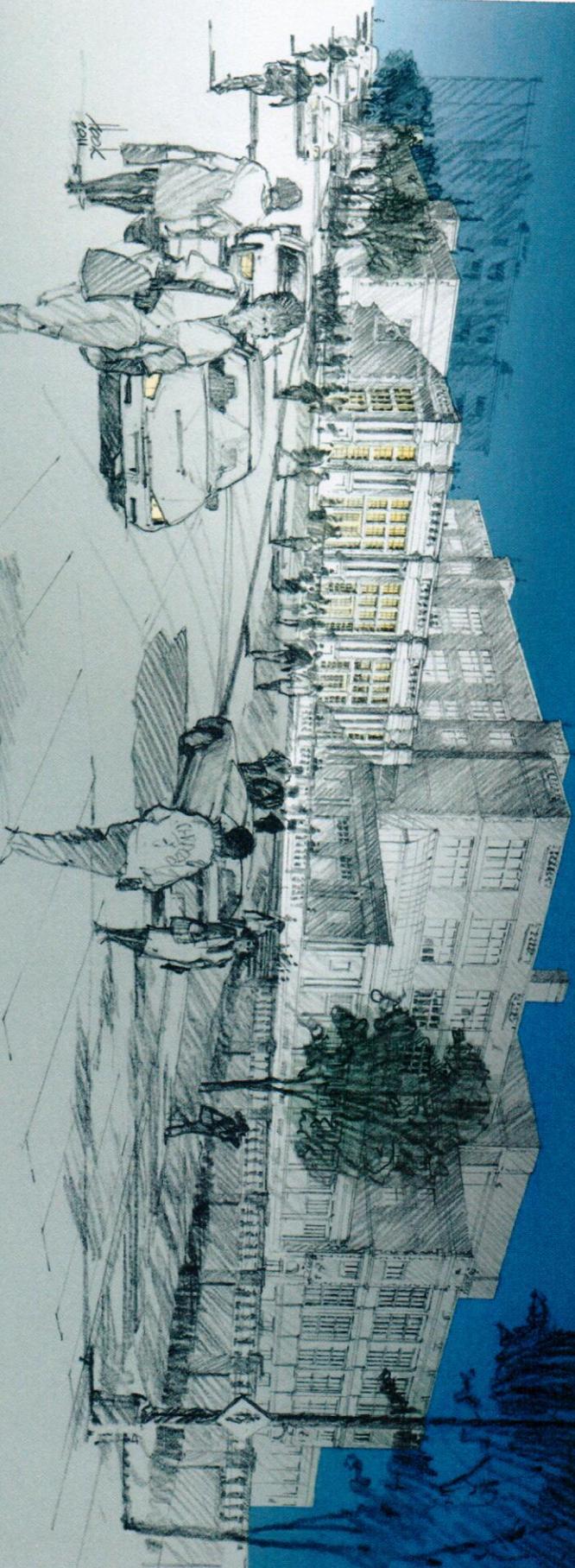


Cardozo High School Modernization

Project and Mechanical Systems Overview



CARDOZO HIGH SCHOOL

HARTMAN-COX / GRIMM + PARKER ARCHITECTS / GCS-SIGAL



Factoids

- Historic Landmark constructed 1915
- Building Area: 374,000 GSF
 - Main building: 326,400 GSF
 - Gym Addition: 47,600 GSF
- # of Floors : 6
- LEED Goal : Gold
- Cooling towers 2
- # of Heat pumps: 135
- # of Boilers :4

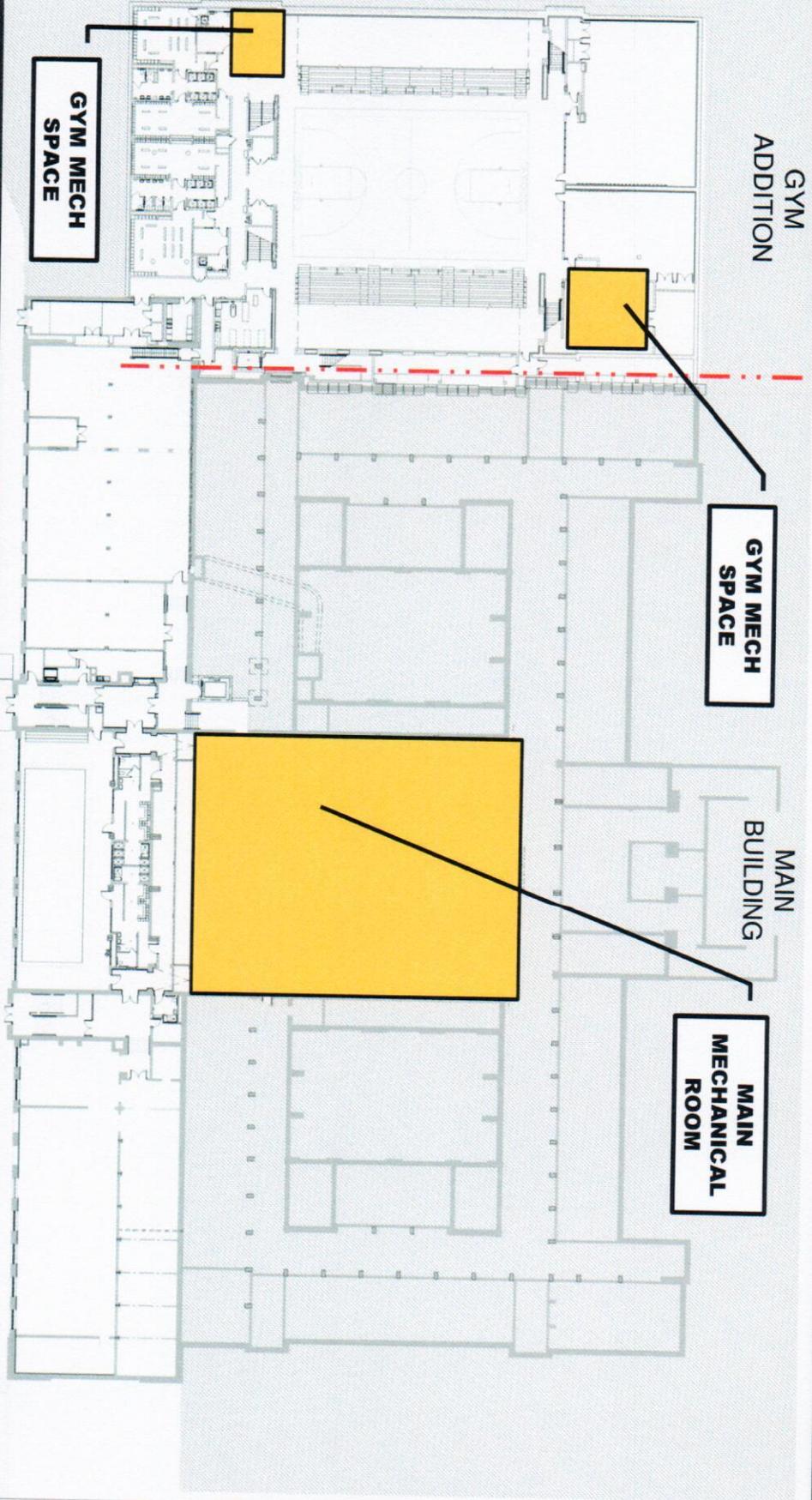


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Lower Terrace Level

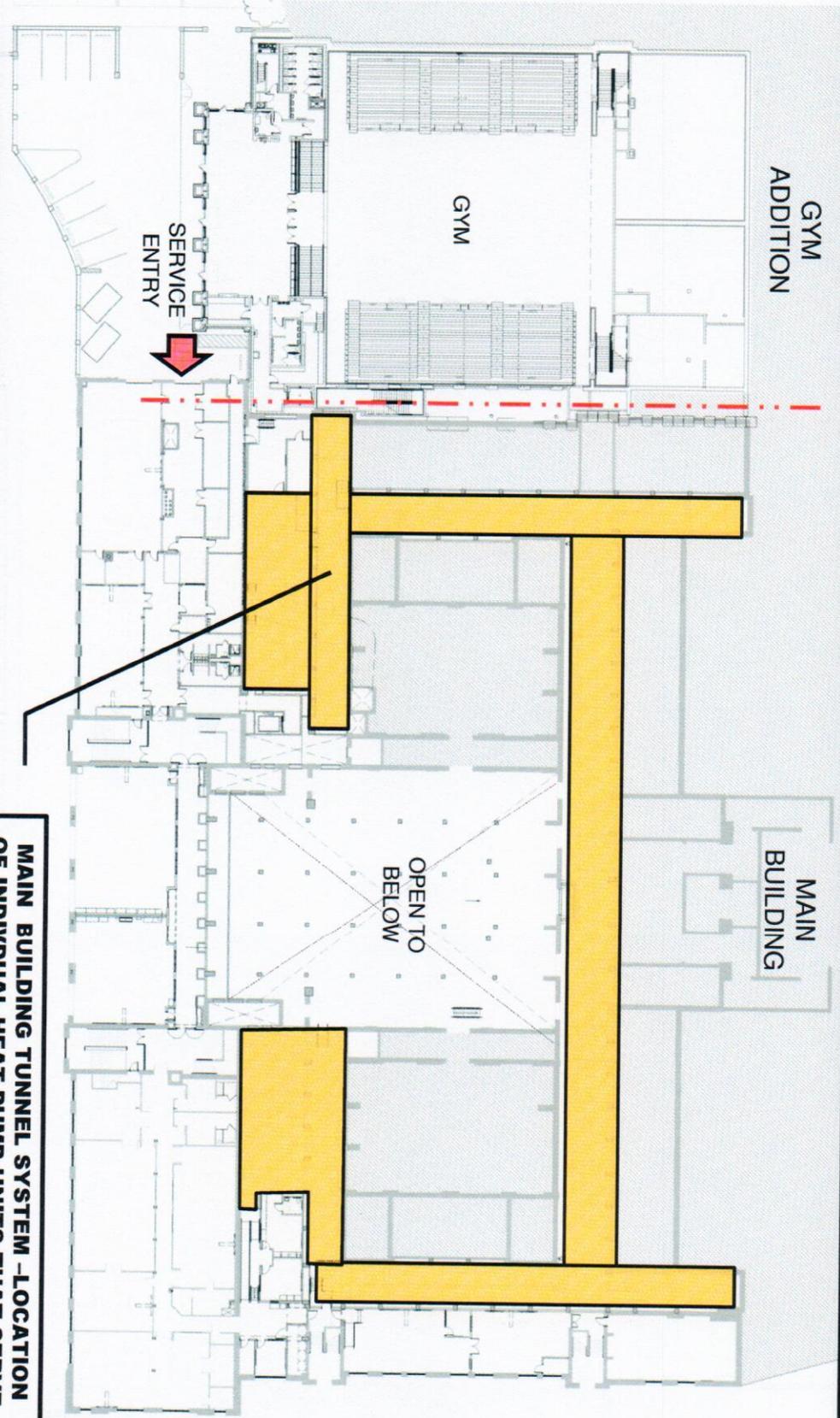


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Terrace Level



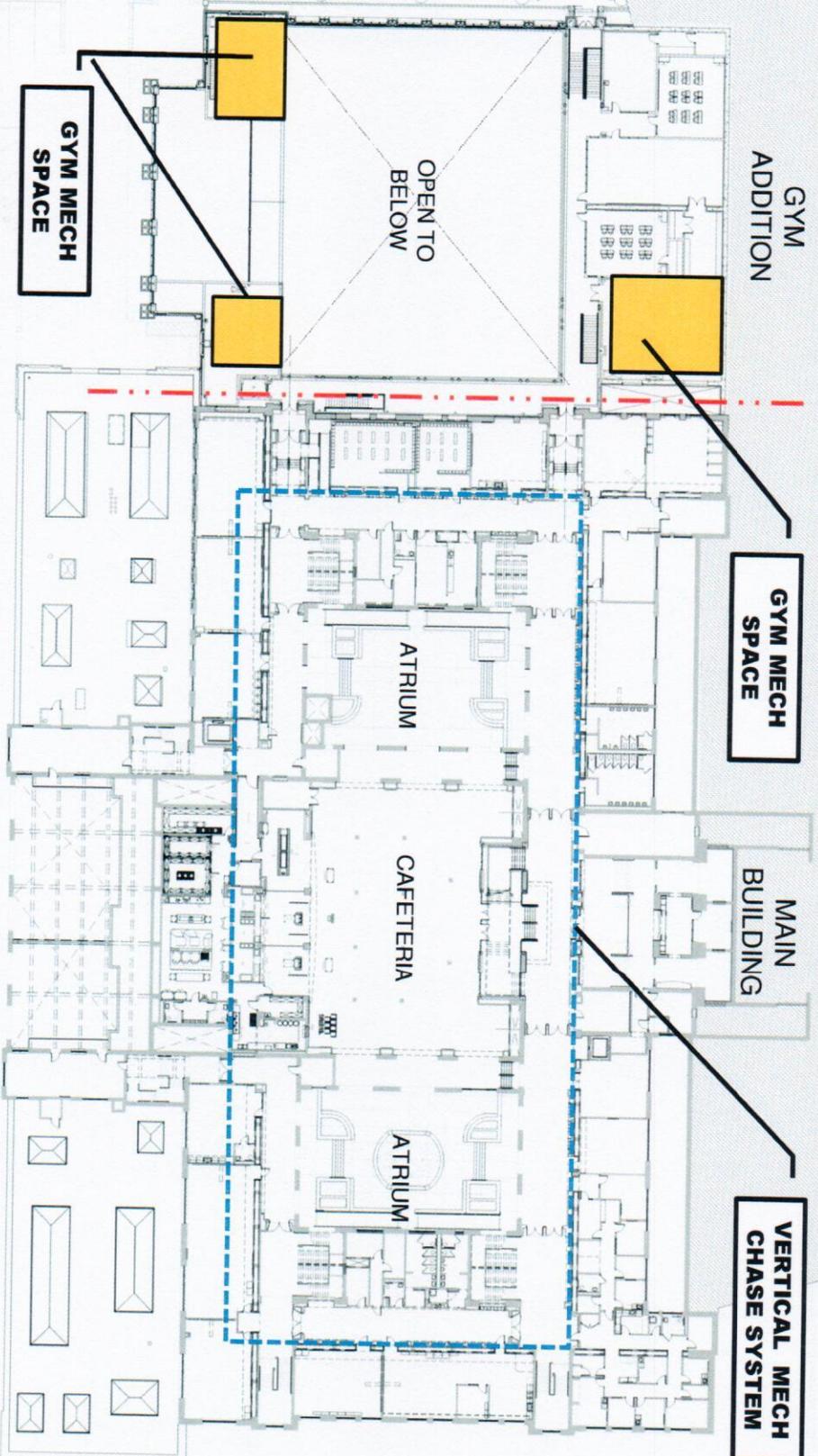
MAIN BUILDING TUNNEL SYSTEM - LOCATION OF INDIVIDUAL HEAT PUMP UNITS THAT SERVE ALL FLOORS OF THE MAIN BUILDING

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Courtyard Level



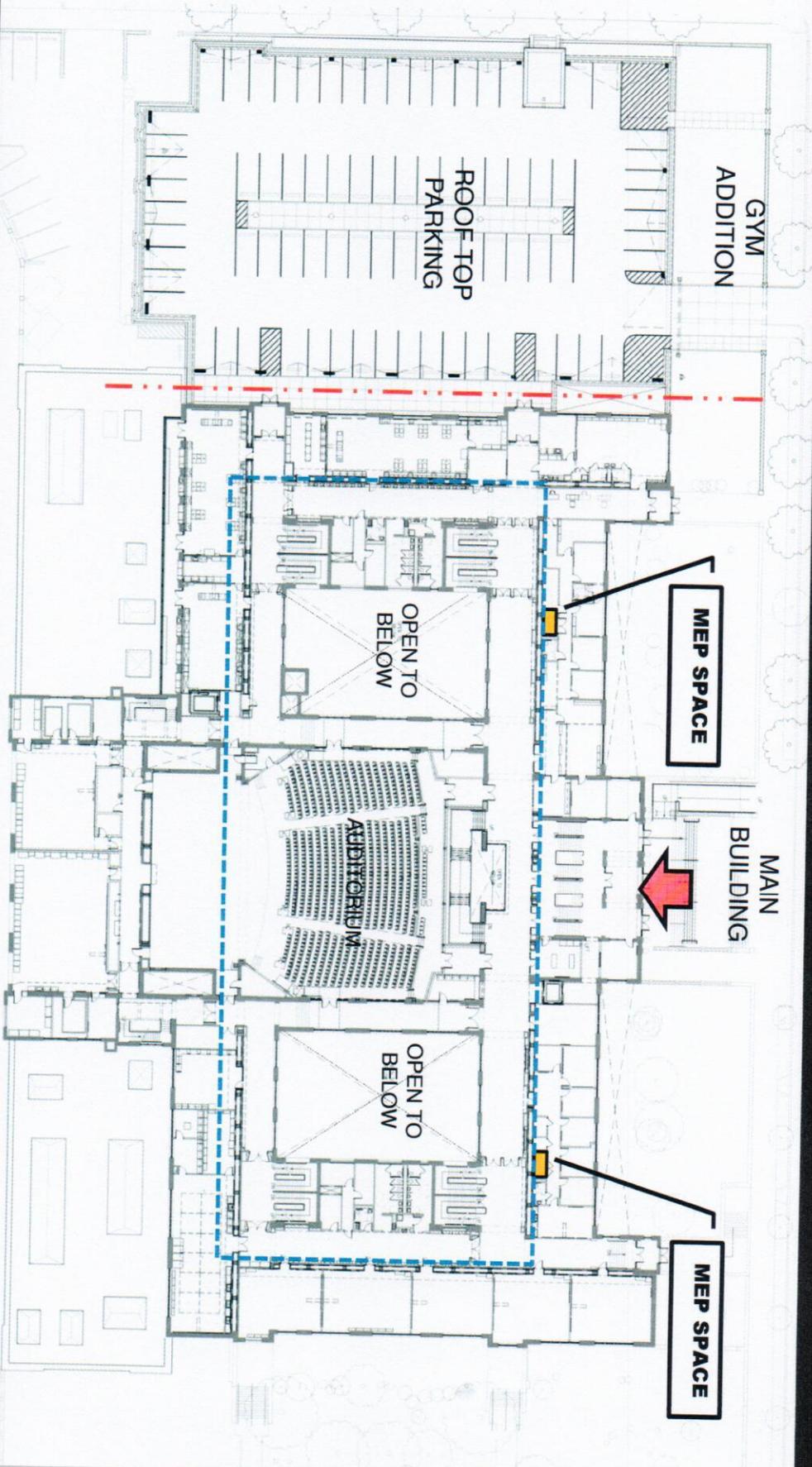
22 MAY 2012 | SIT TEAM VALUE ENGINEERING SPECIAL MEETING

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1st Floor

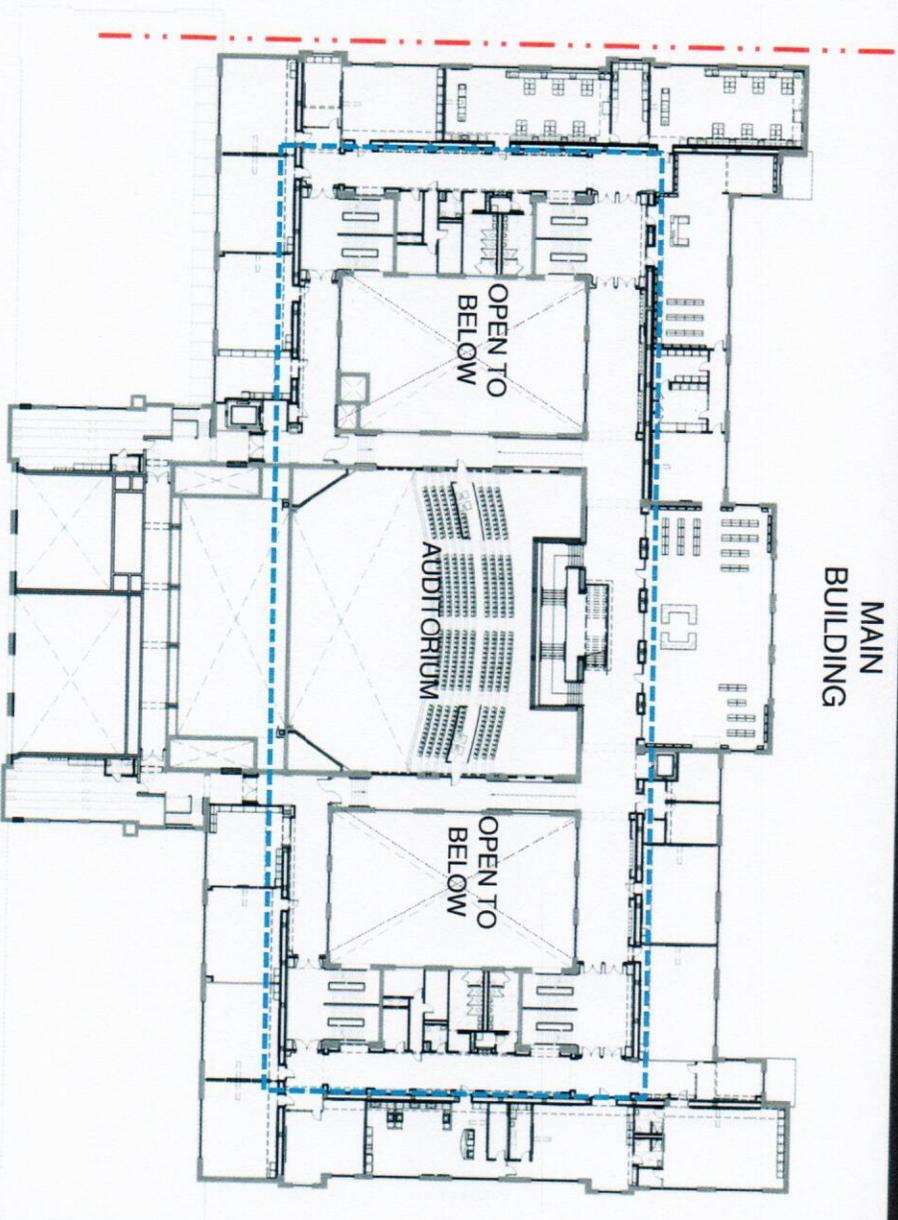


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2nd Floor

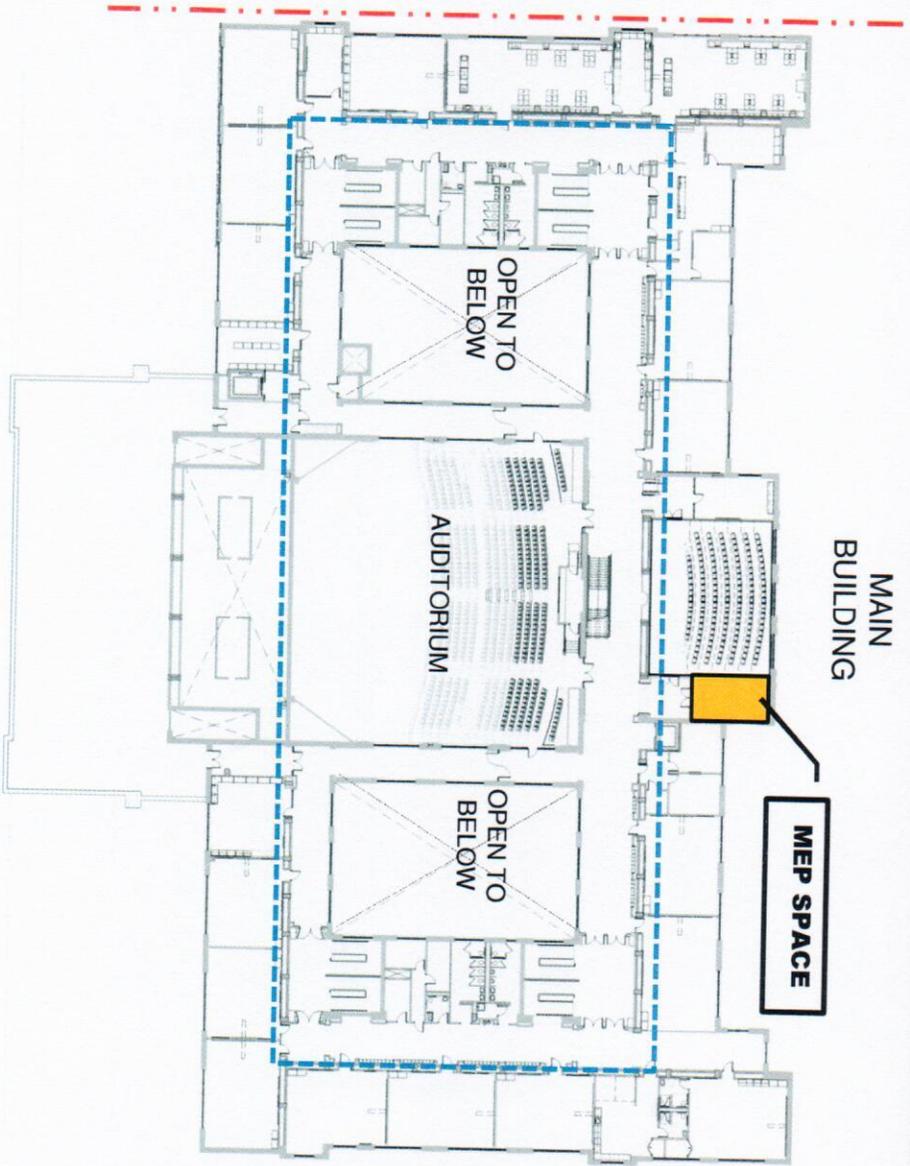


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3rd Floor

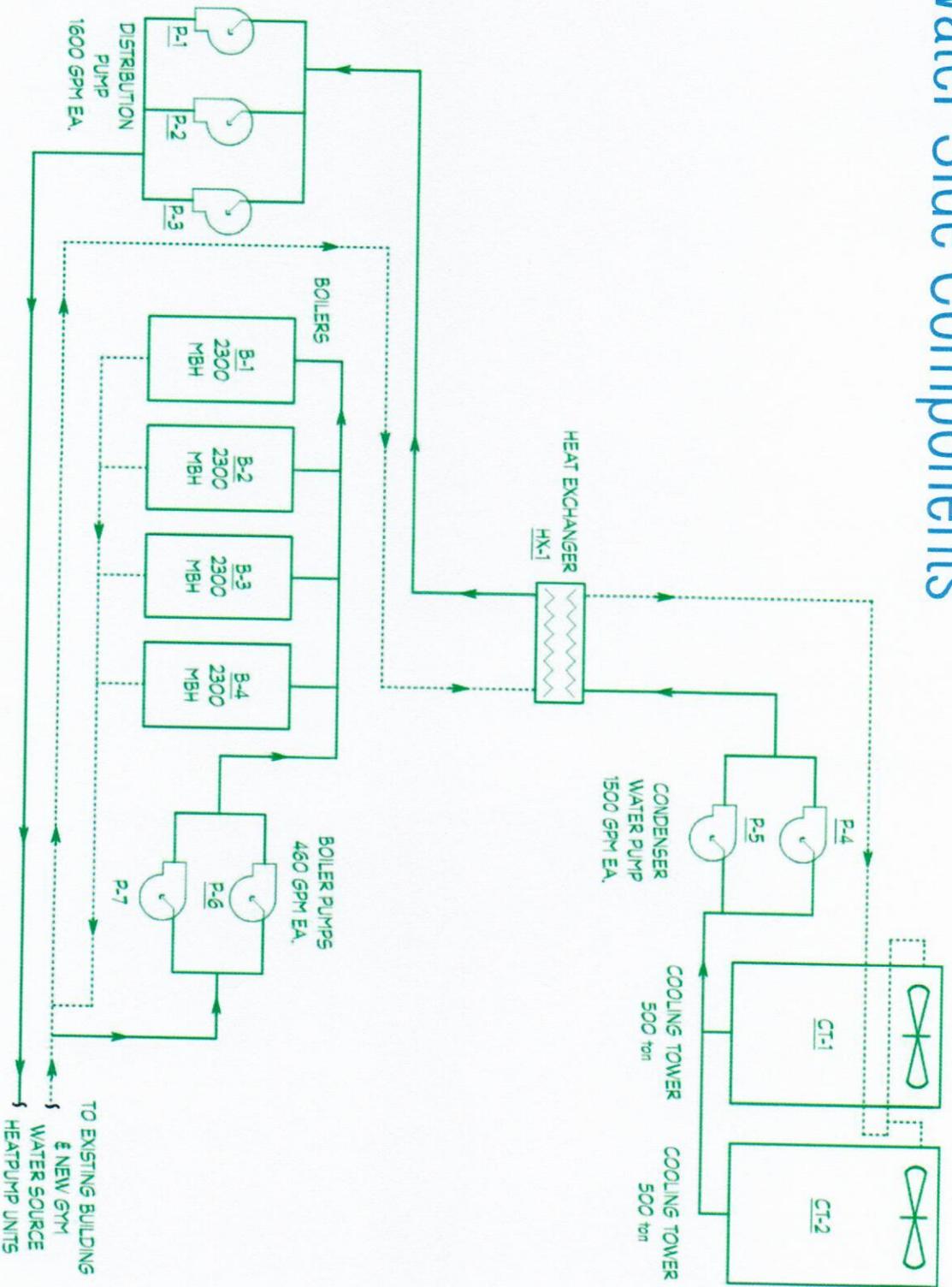


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Water Side Components



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Air Side Components

EXISTING BUILDING:

- 3 DEDICATED OUTDOOR AIR SYSTEM WITH ENERGY WHEEL LOCATED IN THE MAIN MECHANICAL ROOM.
- 1 DEDICATED OUTDOOR AIR SYSTEM WITH ENERGY WHEEL LOCATED IN THE SUB BASEMENT MECHANICAL ROOM.
- 1 ENERGY RECOVERY UNIT SERVING THE CAFETERIA LOCATED IN THE SUB BASEMENT MECHANICAL ROOM.
- 104 WATER SOURCE HEAT PUMPS LOCATED IN THE MAIN MECHANICAL ROOM.
- 2 WATER SOURCE HEAT PUMPS LOCATED ON FIRST FLOOR LEVEL.
- 5 WATER SOURCE HEAT PUMPS LOCATED ON SECOND FLOOR LEVEL.
- 8 WATER SOURCE HEAT PUMPS LOCATED ON THIRD FLOOR LEVEL.
- 1 NATATORIUM DEHUMIDIFICATION UNIT SERVING THE POOL LOCATED IN THE MAIN MECHANICAL ROOM.
- 3 ROOF MOUNTED WATER SOURCE HEAT PUMPS SERVING THE AUDITORIUM AND STAGE AREA.
- 1 ROOF MOUNTED KITCHEN MAKE-UP AIR UNIT.

NEW GYM BUILDING:

- 4 ENERGY RECOVERY UNITS SERVING THE NEW BUILDING.
- 1 UNIT LOCATED IN THE SUB BASEMENT LEVEL SOUTH MECHANICAL ROOM SERVING THE LOCKER ROOMS.
- 1 UNIT LOCATED IN THE SUB BASEMENT LEVEL NORTH MECHANICAL ROOM SERVING THE GYM MAIN PLAYING AREA.
- 2 UNITS LOCATED ON TWO SEPARATE MECHANICAL ROOMS SERVING THE GYM MAIN PLAYING AREA.
- 2 WATER SOURCE HEAT PUMP LOCATED IN THE SUB BASEMENT MECHANICAL CLOSETS SERVING THE GYM OFFICES.
- 1 WATER SOURCE HEAT PUMP LOCATED IN THE GROUND LEVEL MECHANICAL ROOM SERVING A CLASSROOM AND GYM COACH SPACES.
- 1 WATER SOURCE HEAT PUMP LOCATED IN THE GROUND LEVEL MECHANICAL ROOM SERVING THE GYM MAIN LOBBY.

EXHAUST SYSTEM:

- 2 ROOF MOUNTED EXHAUST FANS SERVING THE MAIN RESTROOMS.
- 8 ROOF MOUNTED ATRIUM SMOKE EXHAUST FANS, 4 FANS PER ATRIUM.
- 2 ROOF MOUNTED EXHAUST FANS SERVING ELECTRICAL ROOMS.
- 6 ROOF MOUNTED EXHAUST FANS SERVING LABORATORY HOODS.
- 1 ROOF MOUNTED KITCHEN EXHAUST FANS.
- 1 ROOF MOUNTED DISWASHER EXHAUST FANS.
- 32 CEILING MOUNTED INLINE EXHAUST FANS.

CARDOZO HIGH SCHOOL

