FITNESS CENTER STRUCTURAL & HVAC:

CENTRAL HIGH SCHOOL

BAY CITY PUBLIC SCHOOLS

BAY CITY, MICHIGAN

CONTACTS

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STRUCTURAL/MECHANICAL & ELECTRICAL ENGINEERS:

MacMILLAN ASSOCIATES, INC.
714 E. MIDLAND STREET
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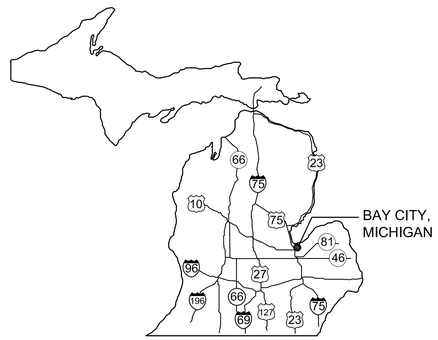
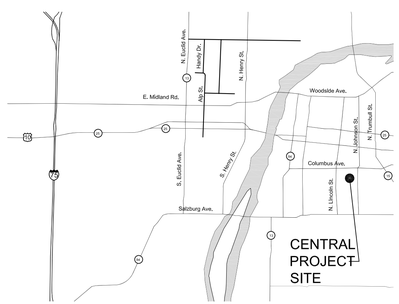
PHONE: (989) 894-4300

DRAWING INDEX



NORTH REGION MAP
NO SCALE



NORTH PROJECT SITE LOCATION
NO SCALE

NO.	REVISION	DATE

WTAARCH.COM
WTA ARCHITECTS
100 S Jefferson Ave, Suite 601
Saginaw, Michigan 48607
989 752 8107

PROJECT TITLE
FITNESS CENTER STRUCT. & HVAC
CENTRAL HIGH SCHOOL
BAY CITY PUBLIC SCHOOLS
BAY CITY, MICHIGAN

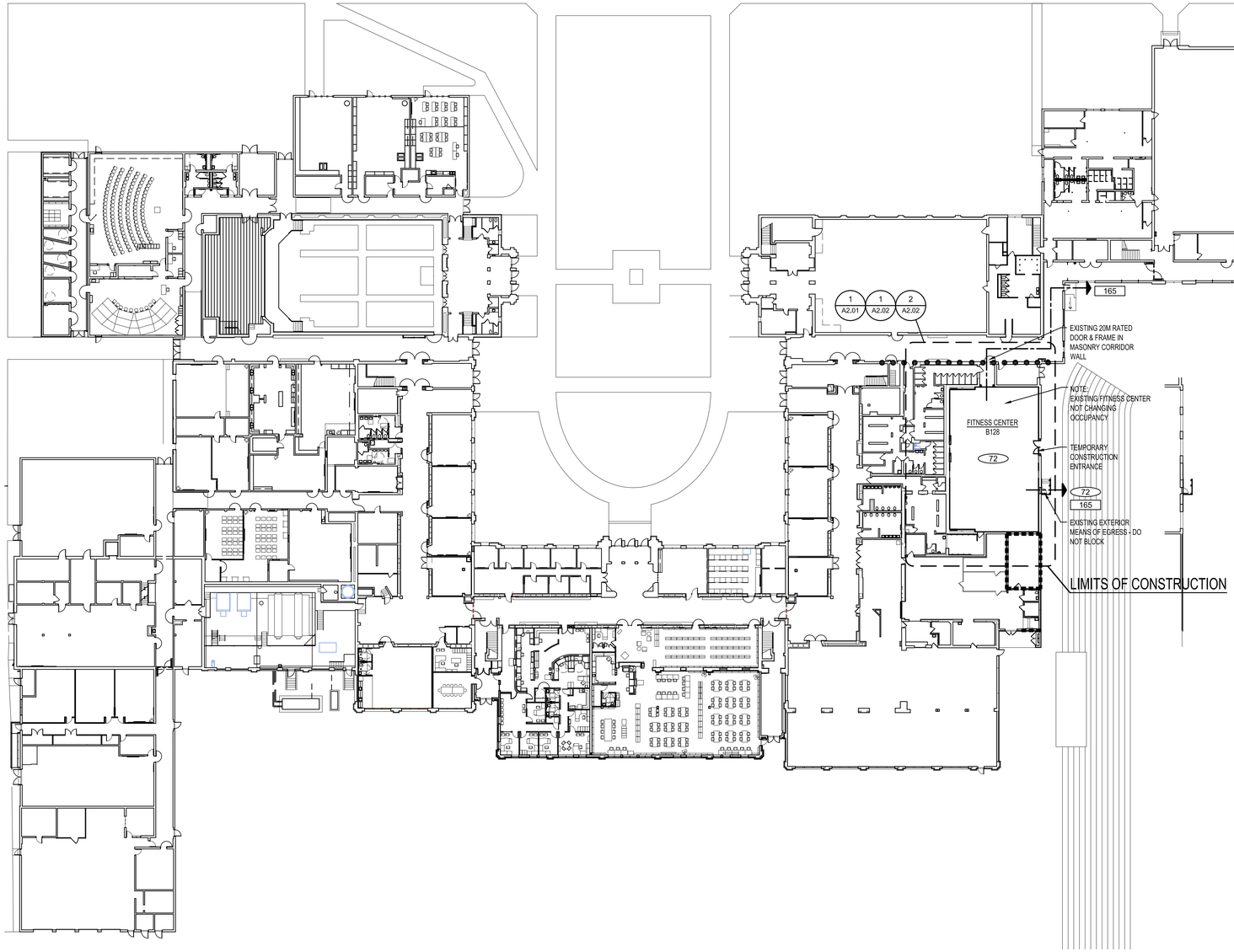
SHEET TITLE
TITLE SHEET
LOCATION MAP
& DRAWING INDEX

PROJECT NUMBER
2018040.19

PROJECT DATE
JANUARY 7, 2025

CHECKED BY
J.A.R.

SHEET NUMBER
TS



NORTH

LIFE SAFETY PLAN

SCALE: 1/32" = 1'-0"

CODE LEGEND

- CALCULATED CAPACITY OF EGRESS COMPONENTS
- ACTUAL OCCUPANT COUNT THROUGH EGRESS
- 1 HOUR RATED CORRIDOR WALL
- 1 HOUR RATED FIRE BARRIER
- 2 HOUR RATED FIRE BARRIER
- 2 HOUR RATED FIRE WALL
- SMOKE PARTITION
- EXISTING LINE OF TRAVEL- TRAVEL DISTANCE TO EXITS = 200' MAX. COMMON PATH OF TRAVEL = 75' MAX. DEAD ENDS = 20' MAX. (r14.2.6.2)
- NEW LINE OF TRAVEL- TRAVEL DISTANCE TO EXITS = 200' MAX. COMMON PATH OF TRAVEL = 75' MAX. DEAD ENDS = 20' MAX. (r14.2.6.2)

OCCUPANT LOAD FACTORS

EDUCATIONAL	
CLASSROOMS AND COMPUTER LABS	1/20 SF. (NET)
SHOPS AND VOCATIONAL ROOMS	1/50 SF. (NET)
ACCESSORY/STORAGE AREAS	1/300 SF. (NET)
LOCKER ROOMS	1/15 SF. (GROSS)
KITCHENS	1/100 SF. (GROSS)
EXERCISE ROOMS (WITH EQUIPMENT)	1/50 SF. (GROSS)
POOL DECK	1/15 SF. (GROSS)
POOL AREA	1/50 SF. (GROSS)
GYMNASIUM	1/7 SF. (CHAIRS)
LIBRARY	1/50 SF. (READING) 1/100 SF. (STACKS)
CAFETERIA	1/15 SF. (NET)
BAND/CHOIR ROOMS	1/7 SF. (NET)
BUSINESS	
OFFICES	1/100 SF. (GROSS)
MEETING ROOMS	1/15 SF. (NET)
WAITING AREAS	1/15 SF. (GROSS)

BUILDING DATA

CONSTRUCTION TYPE 5B (V-000) / 1-STORY / USE GROUP "E".
946 SF WOMENS LOCKER ROOM
1,090 SF MENS LOCKER ROOM

CODE REFERENCES

2012 NFPA 101 / 2016 MICHIGAN SCHOOL RULES
2015 MICHIGAN BUILDING CODE
2015 MICHIGAN PLUMBING CODE
2015 MICHIGAN MECHANICAL CODE
2015 MICHIGAN ELECTRICAL CODE
2014 MICHIGAN LICENSING RULES FOR CHILD CARE CENTERS

TOTAL BUILDING AREA

27,467 SQUARE FEET (EXISTING)

BAY CITY PUBLIC SCHOOLS

NO.	REVISION	DATE

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100 S Jefferson Ave, Suite 601
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989 752 8107

PROJECT TITLE

FITNESS CENTER STRUCT. & HVAC

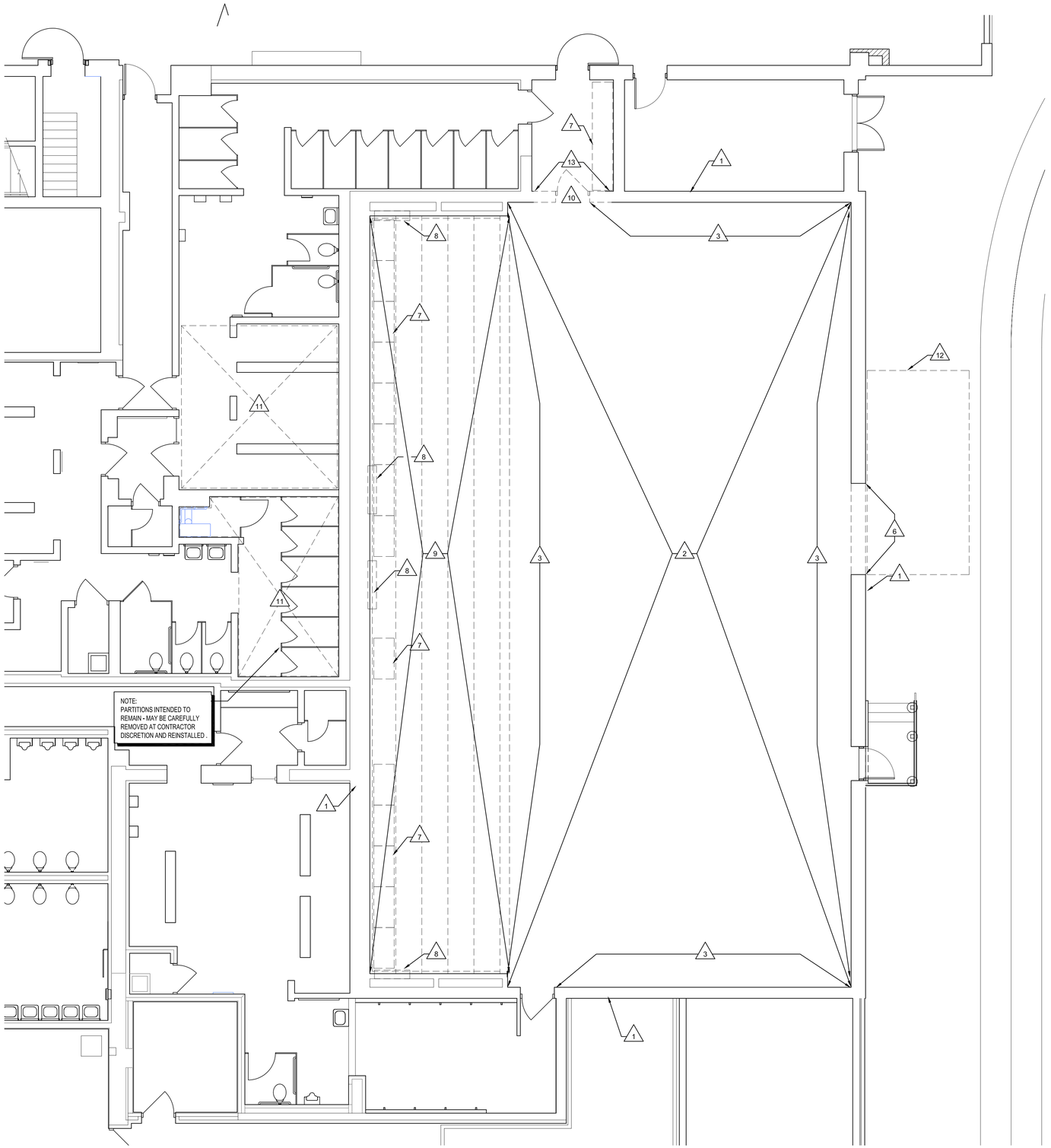
CENTRAL HIGH SCHOOL
BAY CITY PUBLIC SCHOOLS

BAY CITY, MICHIGAN

SHEET TITLE

LIFE SAFETY PLAN

PROJECT NUMBER	SHEET NUMBER
2018040.19	LS-1
PROJECT DATE: JANUARY 7, 2025	
CHECKED BY: J.A.R.	



ENLARGED DEMOILTION FIRST FLOOR PLAN

NORTH SCALE: 13/16" = 1'-0"

GENERAL DEMOLITION NOTES:

1. REFER TO ALL ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ANY RELATED AND/OR ADDITIONAL DEMOLITION WORK. THE FULL EXTENT OF CIVIL, MECHANICAL, AND ELECTRICAL DEMOLITION NOT INDICATED ON THESE PLANS.
2. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION BETWEEN ALL TRADES REGARDING THE EXTENT OF DEMOLITION WORK NECESSARY FOR NEW CONSTRUCTION.
3. THE CONTRACTOR SHALL PROVIDE ALL SHORING, TEMPORARY SUPPORTS, AND BRACING REQUIRED FOR THE SAFE DEMOLITION AND ERECTION OF ANY STRUCTURAL COMPONENTS.
4. THE OWNER HAS FIRST SALVAGEABLE RIGHTS TO ALL ITEMS AND EQUIPMENT THAT ARE BEING DEMOLISHED. THIS INCLUDES ALL ITEMS THAT ARE CALLED OUT TO BE DEMOLISHED ON THE MECHANICAL AND ELECTRICAL DRAWINGS. DEMOLITION CONTRACTOR SHALL VERIFY WITH THE OWNER WHICH ITEMS THEY WISH TO KEEP PRIOR TO THE START OF ANY DEMOLITION WORK. THESE SALVAGED ITEMS ARE TO BE REMOVED IN GOOD CONDITION AND TURNED OVER TO THE OWNER.
5. ALL BUILDING MATERIALS THAT ARE BEING DEMOLISHED, UNLESS NOTED OTHERWISE, EXCLUDING THOSE ITEMS SALVAGED BY THE OWNER, ARE TO BE DISPOSED OF PROPERLY BY THE CONTRACTOR. U.N.O.
6. PROTECT ADJACENT MEMBERS, FINISHES AND SURFACES FROM DAMAGE DURING DEMOLITION WORK. CONDUCT DEMOLITION TO MINIMIZE INTERFERENCE WITH ADJACENT STRUCTURAL MEMBERS, BUILDING AREAS AND PUBLIC AND PRIVATE THOROUGHFARES. MAINTAIN PROTECTED EGRESS AND ACCESS AT ALL TIMES.
7. PROVIDE TEMPORARY BARRIERS AS REQUIRED TO PREVENT UNAUTHORIZED ACCESS IN TO THE WORK AREA, AND TO PROTECT THE PUBLIC.
8. ALL AREAS DAMAGED BY DEMOLITION TO BE PATCHED AND REPAIRED OR REPLACED TO MATCH EXISTING ADJACENT SURFACES.
9. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES LINES AND CONFIRM CONNECTION POINT FOR NEW SYSTEMS PRIOR TO ANY SAWCUTTING OR CORING OF EXISTING FLOOR SLAB.

DEMOLITION KEYNOTES:

1. EXISTING MASONRY WALLS TO REMAIN.
2. REMOVE EXISTING PURPLE CARPET AND PLACE IN LOCATION DESIGNATED BY OWNER.
3. REMOVE AND SALVAGE EXISTING WALL PADS. PLACE IN LOCATION DESIGNED BY OWNER.
4. REMOVE AND SALVAGE EXISTING CEILING HUNG BATTING CAGES. PLACE IN LOCATION DESIGNATED BY OWNER.
5. REMOVE EXISTING WOOD NAILER
6. REMOVE MASONRY WALL CONSTRUCTION BELOW, AND MASONRY INFILL ABOVE AS REQUIRED FOR NEW OPENING UP TO EXISTING LINTEL. REFER TO STRUCTURAL. PROVIDE TEMPORARY SHORING AS REQUIRED.
7. REMOVE EXISTING WOOD CABINETS.
8. REMOVE EXISTING GRILL OR DIFFUSER - SEE MECHANICAL
9. SAWCUT AND REMOVE EXISTING CONCRETE BLEACHER SLAB AS REQUIRED FOR INSTALLATION OF NEW FLOOR SLAB LEVEL WITH EXISTING FLOOR. PROVIDE SHORING AS REQUIRED. REFER TO STRUCTURAL
10. REMOVE EXISTING DOOR ASSEMBLY
11. REMOVE EXISTING SUSPENDED GYPSUM BOARD OR PLASTER CEILINGS AND SUPPORT FRAMING AND HARDWARE COMPLETE.
12. TEMPORARY GRAVEL CONSTRUCTION RAMP BY OTHERS.
13. REMOVE EXISTING MASONRY AT JAMBS AND HEAD AS REQUIRED TO ENLARGE ROUGH OPENING AND INSTALL NEW LINTEL. REMOVE MASONRY TO APPX 4" BELOW FINISH FLOOR TO ALLOW FOR FLOOR PATCHING.

NO.	REVISION	DATE

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PROJECT TITLE

FITNESS CENTER STRUCT. & HVAC

CENTRAL HIGH SCHOOL
BAY CITY PUBLIC SCHOOLS

BAY CITY, MICHIGAN

SHEET TITLE

ENLARGED DEMOLITION FIRST FLOOR PLAN

PROJECT NUMBER	SHEET NUMBER
2018040.19	A2.01
PROJECT DATE	
JANUARY 7, 2025	
CHECKED BY	
J.A.R.	

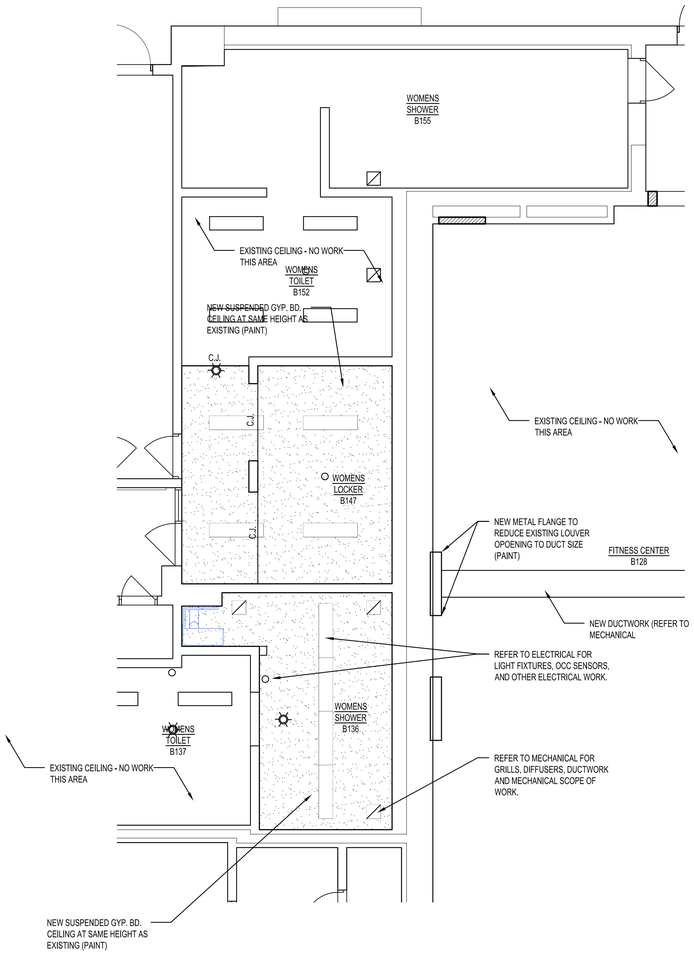
SYMBOL LEGEND:

GYPSUM BOARD

NEW LIGHT FIXTURES OR EXIT SIGNS (RE: ELECTRICAL)

RETURN OR EXHAUST AIR GRILLE (RE: MECHANICAL)

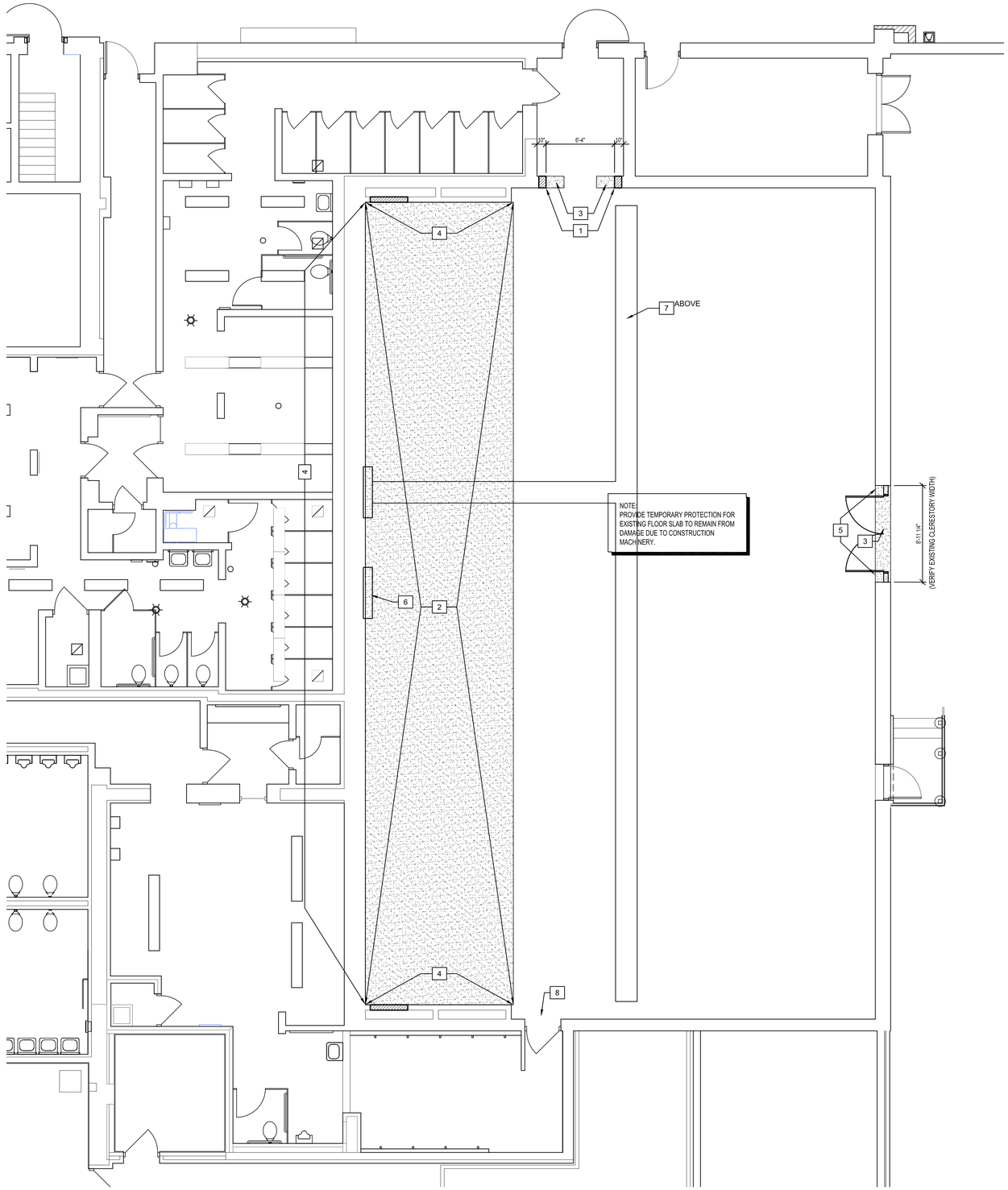
SUPPLY AIR GRILLE (RE: MECHANICAL)



NORTH 1 A2.02

PARTIAL REFLECTED CEILING PLAN

SCALE: 3/16" = 1'-0"



NORTH 2 A2.02

ENLARGED FIRST FLOOR PLAN

SCALE: 3/16" = 1'-0"

GENERAL PLAN NOTES:

1. REFER TO ALL ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ANY RELATED AND/OR ADDITIONAL DEMOLITION WORK.
2. PATCH ALL EXISTING WALLS TO REMAIN AT ARCHITECTURAL, MECHANAICAL, AND ELECTRICAL DEMOLITION POINTS WITH SIMILAR MATERIALS, MATCHING ADJACENT MATERIALS IN SIZE, COLOR, AND TEXTURE. U.N.O.
3. THE OWNER HAS FIRST SALVAGEABLE RIGHTS TO ALL ITEMS AND EQUIPMENT THAT IS BEING DEMOLISHED. THIS INCLUDES ALL ITEMS CALLED OUT TO BE DEMOLISHED ON THE MECHANICAL AND ELECTRICAL DRAWINGS. DEMOLITION CONTRACTOR SHALL VERIFY WITH THE OWNER WHICH ITEMS THEY WISH TO KEEP PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION WORK. THESE SALVAGED ITEMS ARE TO BE REMOVED IN GOOD CONDITION AND TURNED OVER TO THE OWNER.
4. THE CONTRACTOR SHALL PROVIDE ALL SHORING, TEMPORARY SUPPORTS, AND BRACING REQUIRED FOR THE SAFE DEMOLITION AND ERECTION OF ANY STRUCTURAL COMPONENTS.
5. ALL BUILDING MATERIALS THAT ARE BEING DEMOLISHED, UNLESS NOTED OTHERWISE AND EXCLUDING THOSE ITEMS SALVAGED BY THE OWNER, ARE TO BE DISPOSED OF BY THE CONTRACTOR. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
6. PROTECT ADJACENT MEMBERS, FINISHES AND SURFACES AS REQUIRED TO REMAIN FREE OF DAMAGE DURING DEMOLITION AND CONSTRUCTION WORK. ANY DAMAGED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR TO ITS ORIGINAL CONDITION.
7. PROVIDE TEMPORARY BARRIERS AS REQUIRED TO PREVENT THE MIGRATION OF DUST AND NOISE INTO ADJACENT AREAS, TO PREVENT UNAUTHORIZED ACCESS INTO THE WORK AREA, AND TO PROTECT THE GENERAL PUBLIC.
8. CONTRACTOR SHALL REMOVE ALL TEMPORARY WALLS AT THE COMPLETION OF THE PROJECT.

FLOOR PLAN KEYNOTES:

1. NEW MASONRY OPENING, BRICK JAMBS, AND NEW STEEL LINTEL - REFER TO STRUCTURAL
2. NEW CONCRETE FLOOR SLAB LEVEL WITH EXISTING FLOOR SLAB. REFER TO STRUCTURAL FOR SUPPORT, REINFORCEMENT AND OTHER ADDITIONAL INFORMATION.
3. PATCH CONCRETE FLOOR SLAB. REFER TO STRUCTURAL.
4. REMOVE SURFACE ROUGHNESS AND PREP WALL SURFACE AT REMOVED RISERS FOR NEW CONSTRUCTION.
5. TEMPORARY CONSTRUCTION ENTRANCE. PROVIDE LOCKABLE AND WEATHERTIGHT CONSTRUCTION DOOR AND 2X6 STUDS @ 24" O/C WITH $\frac{1}{2}$" PLYWOOD SHEATHING FULL HEIGHT TO EXISTING CLERESTORY LINTEL.
6. NEW GRILL OR DIFFUSER - SEE MECHANICAL.
7. NEW SURFACE MOUNTED DUCTWORK - SEE MECHANICAL.
8. REPAIR DAMAGED ROWLOCK BRICK HEADER ABOVE DOOR.

NO.	REVISION	DATE

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Saginaw, Michigan 48607
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PROJECT TITLE

FITNESS CENTER STRUCT. & HVAC

CENTRAL HIGH SCHOOL
BAY CITY PUBLIC SCHOOLS

BAY CITY, MICHIGAN

SHEET TITLE

ENLARGED
FIRST FLOOR PLAN

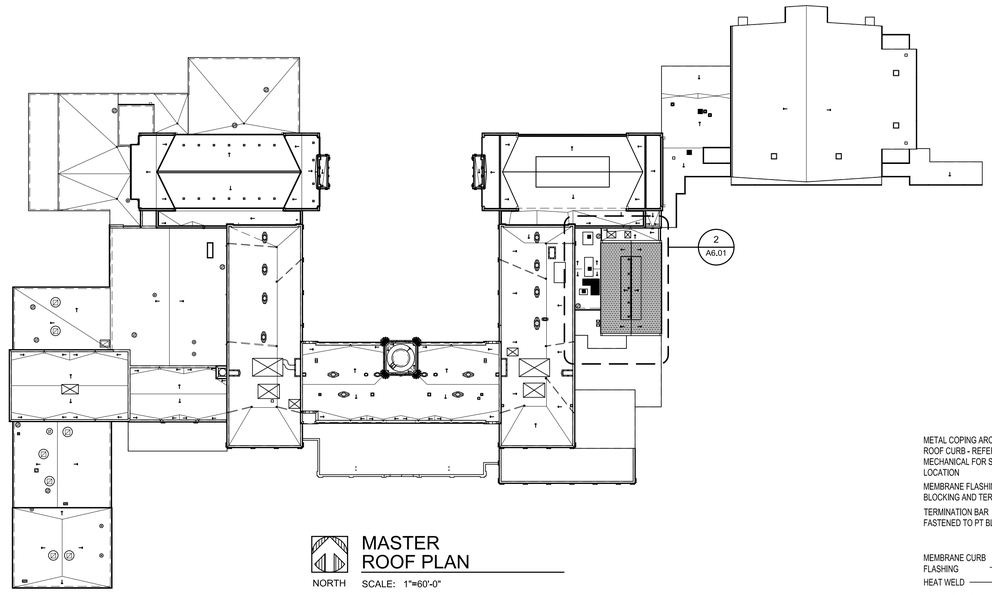
PROJECT NUMBER	SHEET NUMBER
2018040.19	A2.02
PROJECT DATE: JANUARY 7, 2025	
CHECKED BY: J.A.R.	

GENERAL ROOF DEMOLITION NOTES:

1. EXISTING ROOF IN UNDER WARRANTY. ALL DEMO AND NEW CONSTRUCTION ROOF WORK TO BE PERFORMED BY CONTRACTORS APPROVED BY EXISTING ROOFING MANUFACTURER. ALL ROOFIN WORK IS TO BR PERFORMED IN A MANNER AS TO MAINTAIN THE EXISTING ROOF WARRANTY.
2. SEE ALL STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ANY ADDITIONAL DEMOLITION WORK.
3. THE CONTRACTOR SHALL PROVIDE ALL SHORING, TEMPORARY SUPPORTS, AND BRACING REQUIRED .
4. CONTRACTOR TO PROVIDE TEMPORARY PROTECTION OF EXISTING CONSTRUCTION AND REPAIR ANY DAMAGES DUE TO CONSTRUCTION.

ROOF DEMOLITION KEYNOTES:

1. EXISTING (NEW) SINGLE PLY MEMBRANE ROOF TO REMAIN.
2. EXISTING MECHANICAL ROOFTOP AND CURB TO BE REMOVED - REFER TO MECHANICAL.
3. EXISTING EXHAUST FAN BELIEVED ABANDONED (VERIFY). REMOVE EXISTING EXHAUST FAN AND CURB - REFER TO MECHANICAL.
4. REMOVE EXISTING METAL HOOD AND CURB - REFER TO MECHANICAL.
5. CUT AND REMOVE EXISTING SINGLE PLY MEMBRANE AND ROOFING DOWN TO STRUCTURAL DECK TO ALLOW INSTALLATION OF NEW CURBS OR NEW DECK INFILL - COORDINATE WITH MECHANICAL TRADES.
6. CUT NEW OPENINGS IN EXISTING CONCRETE DECK FOR NEW DUCTWORK, TAKING CARE TO AVOID CONCRETE JOISTS. VERIFY LOCATION OF JOISTS PRIOR TO DEMO WORK - REFER TO STRUCTURAL. COORDINATE WITH MECHANICL TRADES.
7. EXISTING MECHANICAL ROOFTOP UNIT TO REMAIN (PROTECT)
8. EXISTING EXHAUST FAN TO REMAIN (PROTECT)



NORTH

MASTER ROOF PLAN

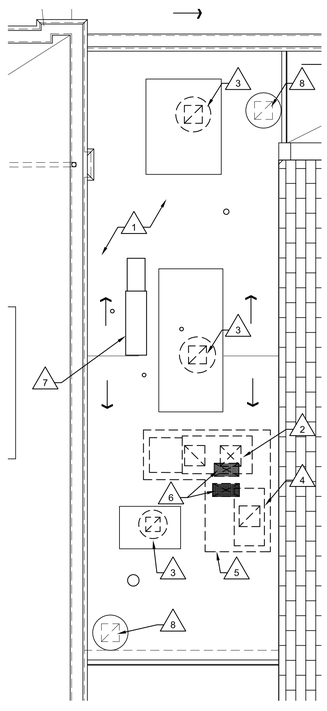
SCALE: 1"=60'-0"

GENERAL ROOF PLAN NOTES:

1. NOT ALL ROOF TOP EQUIPMENT AND PENETRATIONS ARE SHOWN. REFER TO ALL MECHANICAL AND ELECTRICAL DRAWINGS.
2. PROVIDE FLASHING PER ROOFING MANUFACTURER'S RECOMMENDATIONS AT ALL PENETRATIONS, ROOF EDGES, ETC.
3. PROVIDE TREATED WOOD BLOCKING AT MATCH THE DEPTH OF THE EXISTING INSULATION AROUND ALL MECHANICAL ROOFTOP EQUIPMENT.
4. PROVIDE ROOF CRICKETS AT ALL MECHANICAL ROOFTOP EQUIPMENT SURFACES PERPENDICULAR TO ROOF SLOPE. SLOPE ¼" PER FOOT, TYPICAL.

ROOF PLAN KEYNOTES:

1. EXISTING ROOF TO REMAIN.
2. NEW MECHANICAL ROOFTOP UNIT ON NEW CURB - REFER TO MECHANICAL. PROVIDE NEW MEMBRANE BASE FLASHING.
3. INFILL EXISTING ROOF DECK PENETRATION WITH STEEL PLATE ANCHORED TO EXISTING DECK - REFER TO STRUCTURAL,
4. HATCHED AREA INDICATES INFILL WITH NEW ROOF INSULATION TO MATCH EXISTING INSULATION THICKNESS, AND PROVIDE NEW SINGLE PLY MEMBRANE PATCH.

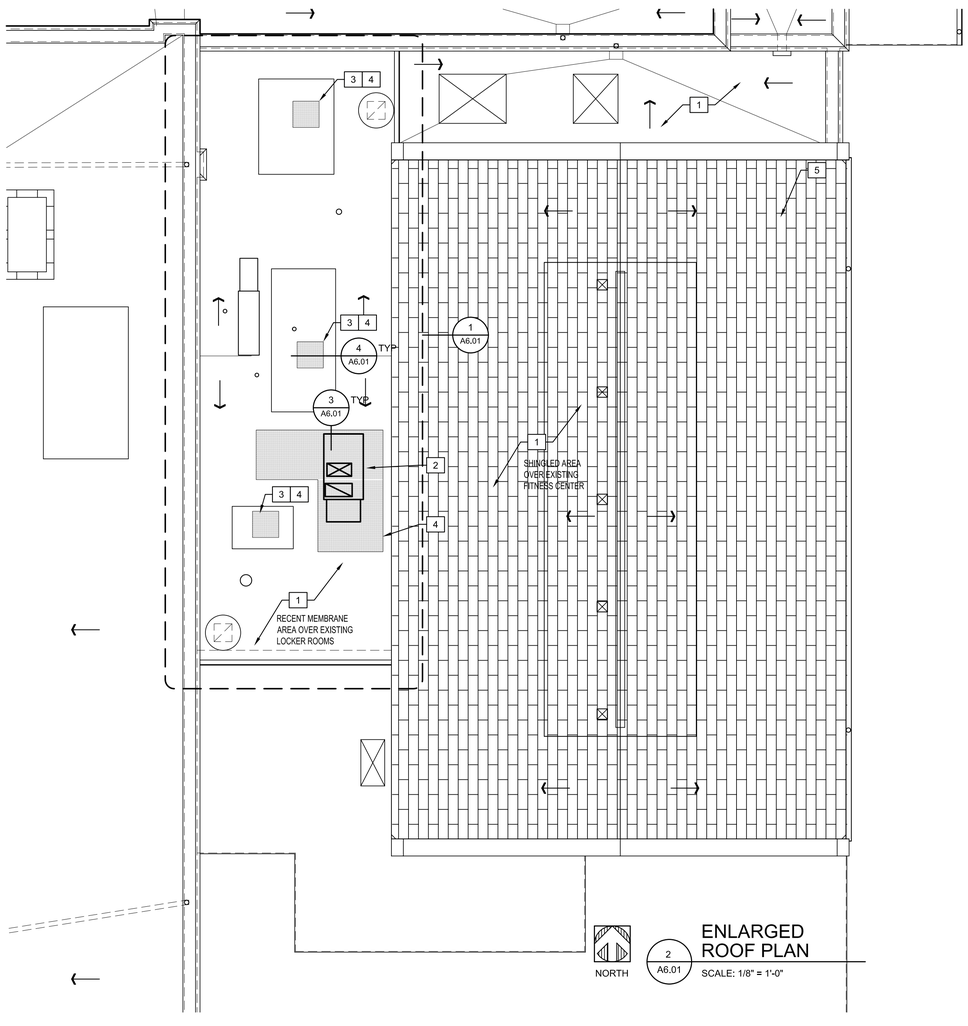


NORTH

1 A6.01

ENLARGED ROOF DEMO PLAN

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

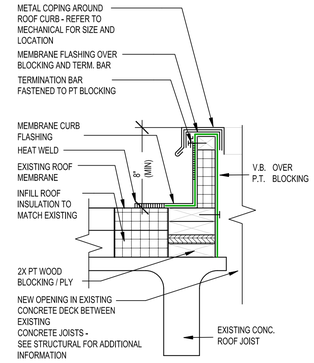


NORTH

2 A6.01

ENLARGED ROOF PLAN

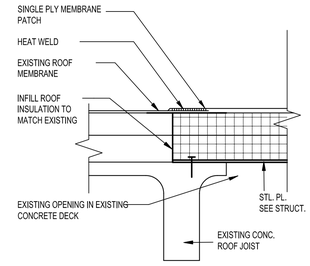
SCALE: 1/8" = 1'-0"



3 A6.01

ROOF CURB OPENING DETAIL

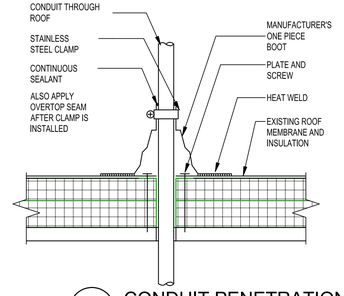
SCALE: NOT TO SCALE



4 A6.01

ROOF OPENING INFILL DETAIL

SCALE: NOT TO SCALE



5 A6.01

CONDUIT PENETRATION

SCALE: NOT TO SCALE

NO.	REVISION	DATE

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PROJECT TITLE

FITNESS CENTER STRUCT. & HVAC

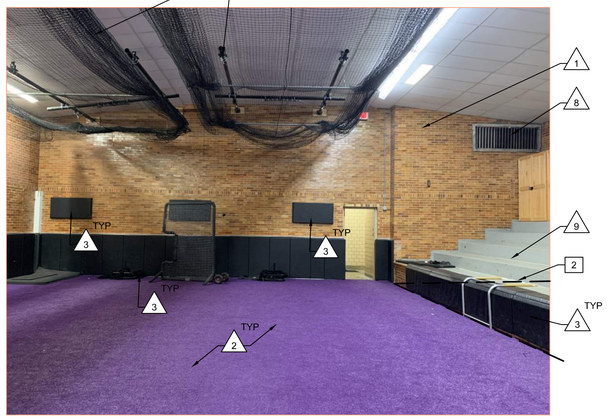
CENTRAL HIGH SCHOOL
BAY CITY PUBLIC SCHOOLS

BAY CITY, MICHIGAN

SHEET TITLE

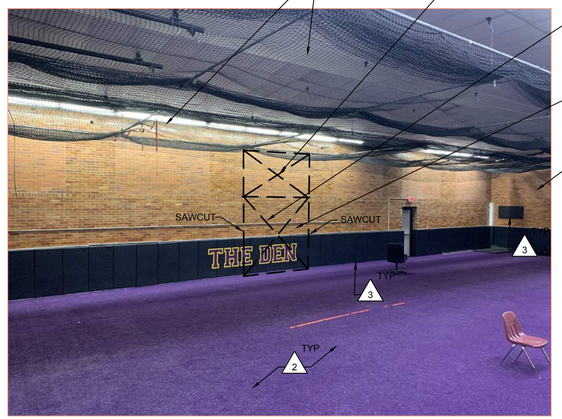
MASTER AND ENLARGED ROOF PLANS AND DETAILS

PROJECT NUMBER	SHEET NUMBER
2018040.19	A6.01
PROJECT DATE: JANUARY 7, 2025	
CHECKED BY: J.A.R.	



FITNESS CENTER PHOTO DETAIL

1 / A7.01 — NO SCALE — SOUTH ELEVATION

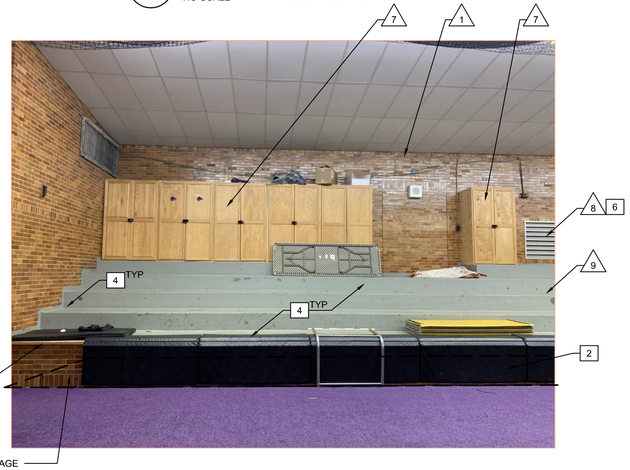


FITNESS CENTER PHOTO DETAIL

2 / A7.01 — NO SCALE — EAST ELEVATION

FITNESS CENTER PHOTO DETAIL

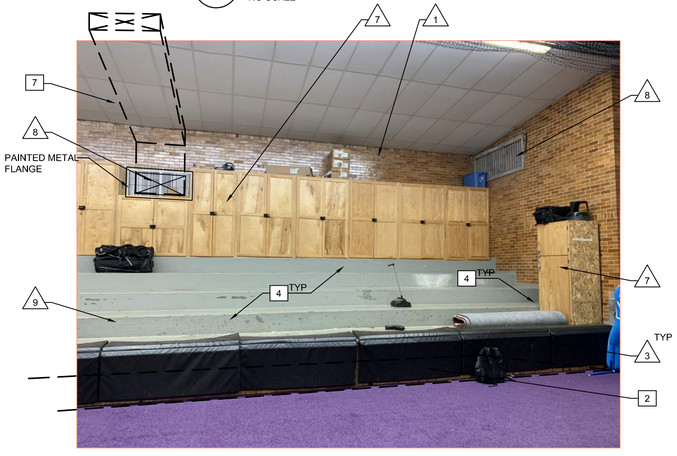
3 / A7.01 — NO SCALE — NORTH ELEVATION



SALVAGE EXISTING BRICK TO RE-USE AT EXPOSED NEW JAMBS

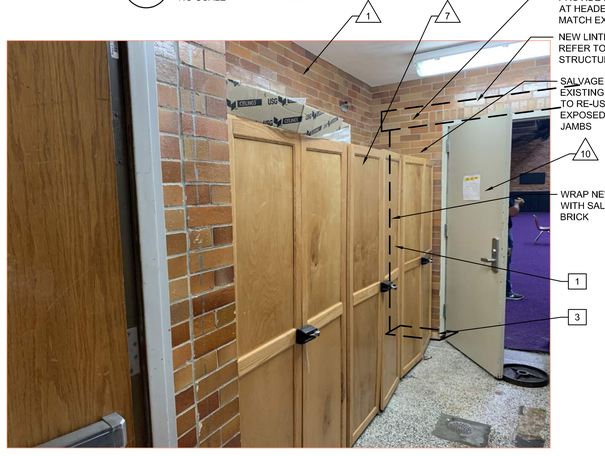
FITNESS CENTER PHOTO DETAIL

4 / A7.01 — NO SCALE — WEST ELEVATION



FITNESS CENTER PHOTO DETAIL

5 / A7.01 — NO SCALE — WEST ELEVATION

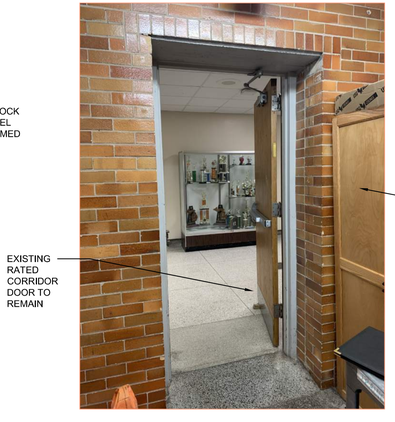


PASSAGE PHOTO DETAIL

6 / A7.01 — NO SCALE

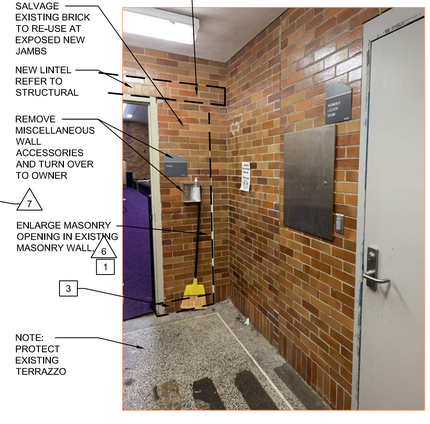
MENS LOCKER RM ENTRANCE PHOTO DETAIL

7 / A7.01 — NO SCALE



FITNESS CENTER PHOTO DETAIL

8 / A7.01 — NO SCALE



PASSAGE PHOTO DETAIL

9 / A7.01 — NO SCALE

FLOOR PLAN KEYNOTES:

1. NEW MASONRY OPENING, BRICK JAMBS, AND NEW STEEL LINTEL - REFER TO STRUCTURAL
2. NEW CONCRETE FLOOR SLAB LEVEL WITH EXISTING FLOOR SLAB. REFER TO STRUCTURAL FOR SUPPORT, REINFORCEMENT AND OTHER ADDITIONAL INFORMATION.
3. PATCH CONCRETE FLOOR SLAB. REFER TO STRUCTURAL.
4. REMOVE SURFACE ROUGHNESS AND PREP WALL SURFACE AT REMOVED RISERS FOR NEW CONSTRUCTION.
5. TEMPORARY CONSTRUCTION ENTRANCE. PROVIDE LOCKABLE AND WEATHERTIGHT CONSTRUCTION DOOR AND 2X6 STUDS @ 24" O/C WITH ¾" PLYWOOD SHEATHING FULL HEIGHT TO EXISTING CLERESTORY LINTEL..
6. NEW GRILL OR DIFFUSER - SEE MECHANICAL.
7. NEW SURFACE MOUNTED DUCTWORK - SEE MECHANICAL.
8. REPAIR DAMAGED ROWLOCK BRICK HEADER ABOVE DOOR.

DEMOLITION KEYNOTES:

1. EXISTING MASONRY WALLS TO REMAIN.
2. REMOVE EXISTING PURPLE CARPET AND PLACE IN LOCATION DESIGNATED BY OWNER.
3. REMOVE AND SALVAGE EXISTING WALL PADS. PLACE IN LOCATION DESIGNED BY OWNER.
4. REMOVE AND SALVAGE EXISTING CEILING HUNG BATTING CAGES. PLACE IN LOCATION DESIGNATED BY OWNER.
5. REMOVE EXISTING WOOD NAILER
6. REMOVE MASONRY WALL CONSTRUCTION BELOW, AND MASONRY INFILL ABOVE AS REQUIRED FOR NEW OPENING UP TO EXISTING LINTEL. REFER TO STRUCTURAL. PROVIDE TEMPORARY SHORING AS REQUIRED.
7. REMOVE EXISTING WOOD CABINETS.
8. REMOVE EXISTING GRILL OR DIFFUSER - SEE MECHANICAL
9. SAWCUT AND REMOVE EXISTING CONCRETE BLEACHER SLAB AS REQUIRED FOR INSTALLATION OF NEW FLOOR SLAB LEVEL WITH EXISTING FLOOR. PROVIDE SHORING AS REQUIRED. REFER TO STRUCTURAL
10. REMOVE EXISTING DOOR ASSEMBLY
11. REMOVE EXISTING SUSPENDED GYPSUM BOARD OR PLASTER CEILINGS AND SUPPORT FRAMING AND HARDWARE COMPLETE.
12. TEMPORARY GRAVEL CONSTRUCTION RAMP BY OTHERS.
13. REMOVE EXISTING MASONRY AT JAMBS AND HEAD AS REQUIRED TO ENLARGE ROUGH OPENING AND INSTALL NEW LINTEL. REMOVE MASONRY TO APPX 4" BELOW FINISH FLOOR TO ALLOW FOR FLOOR PATCHING.

NO.	REVISION	DATE

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PROJECT TITLE

FITNESS CENTER STRUCT. & HVAC

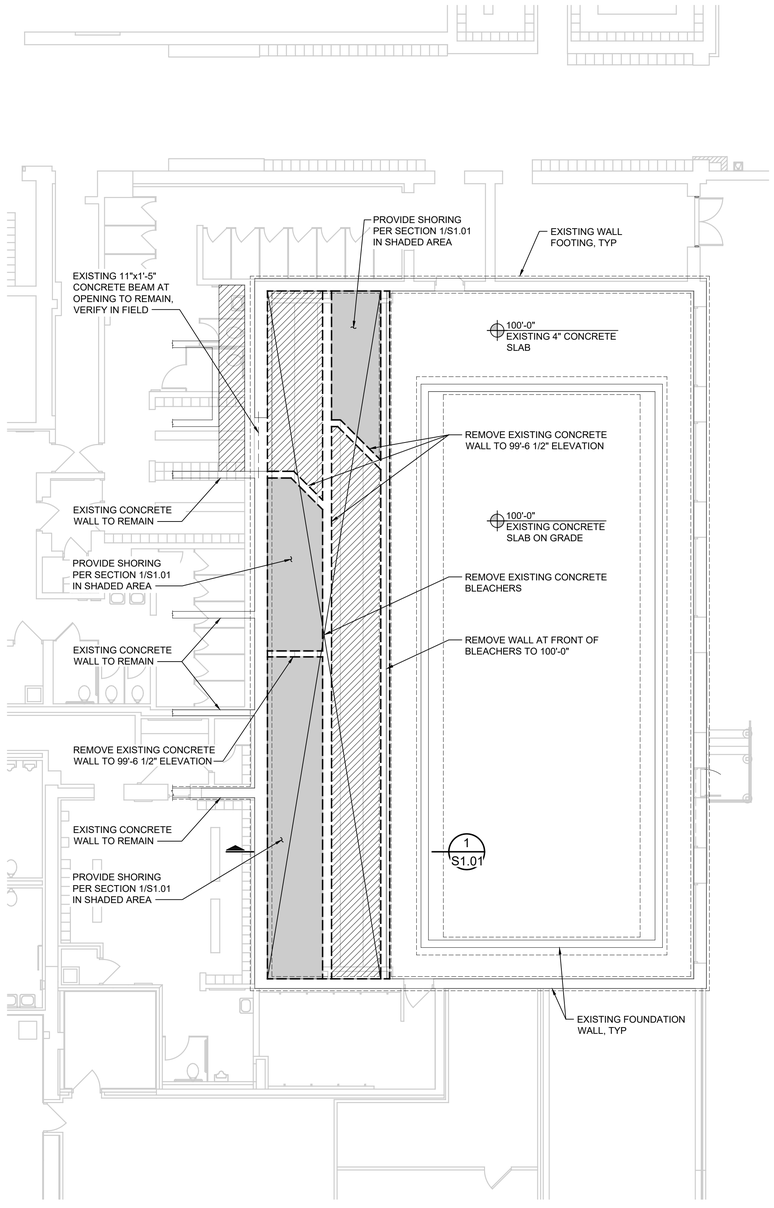
CENTRAL HIGH SCHOOL
BAY CITY PUBLIC SCHOOLS

BAY CITY, MICHIGAN

SHEET TITLE

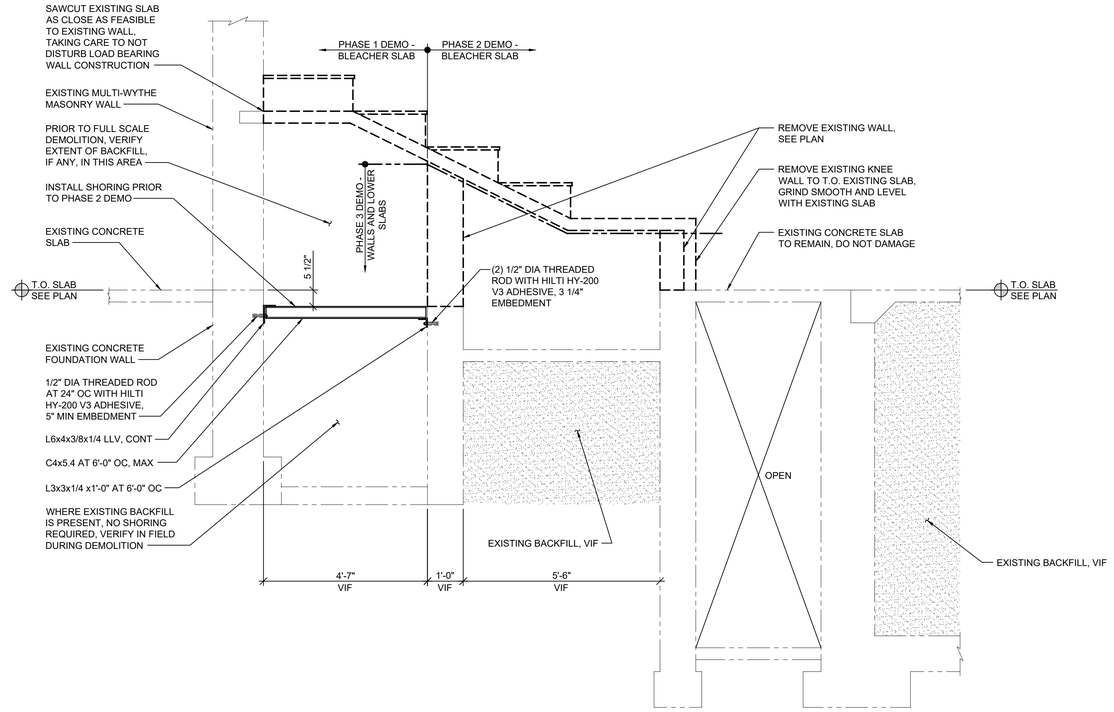
PHOTO DETAILS

PROJECT NUMBER	SHEET NUMBER
2018040.19	A7.01
PROJECT DATE	
JANUARY 7, 2025	
CHECKED BY	
J.A.R.	



FOUNDATION AND FIRST FLOOR DEMOLITION AND SHORING PLAN

1/8"=1'-0"



1 DEMOLITION AND SHORING SECTION

S1.01 1/2"=1'-0"

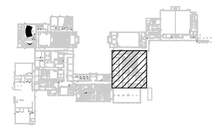
BCC POOL BLEACHER REMOVAL

1. SAWCUT CONCRETE BLEACHERS FULL DEPTH AS CLOSE TO INTERSECTION OF WALL AS POSSIBLE IN 4'-0" WIDE INCREMENTS. NOTE THE BLEACHER CONSTRUCTION IS TIED INTO THE EXISTING BRICK WALL. THE INTENT IS TO AVOID DAMAGE TO THIS EXISTING WALL.
2. REMOVE CONCRETE BLEACHERS FROM THE TOP DOWN IN 4'-0" WIDE SECTIONS. INSTALL SHORING IF NEEDED FOLLOWING FIRST SECTION OF DEMOLITION PER SECTION 1/S1.01.

LEGEND

- EXISTING UTILITY TUNNEL, TUNNEL FLOOR SLAB AT ELEVATION 98'-0", VIF, EXISTING TUNNEL FLOOR SLAB TO REMAIN.
- EXISTING UTILITY TUNNEL, TUNNEL FLOOR SLAB AT ELEVATION 93'-0", VIF, EXISTING TUNNEL FLOOR SLAB TO REMAIN.

NO.	REVISION	DATE



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PROJECT TITLE

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CENTRAL HIGH SCHOOL
BAY CITY PUBLIC SCHOOLS

BAY CITY, MICHIGAN

SHEET TITLE

DEMOLITION PLAN

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2018040.19	S1.01
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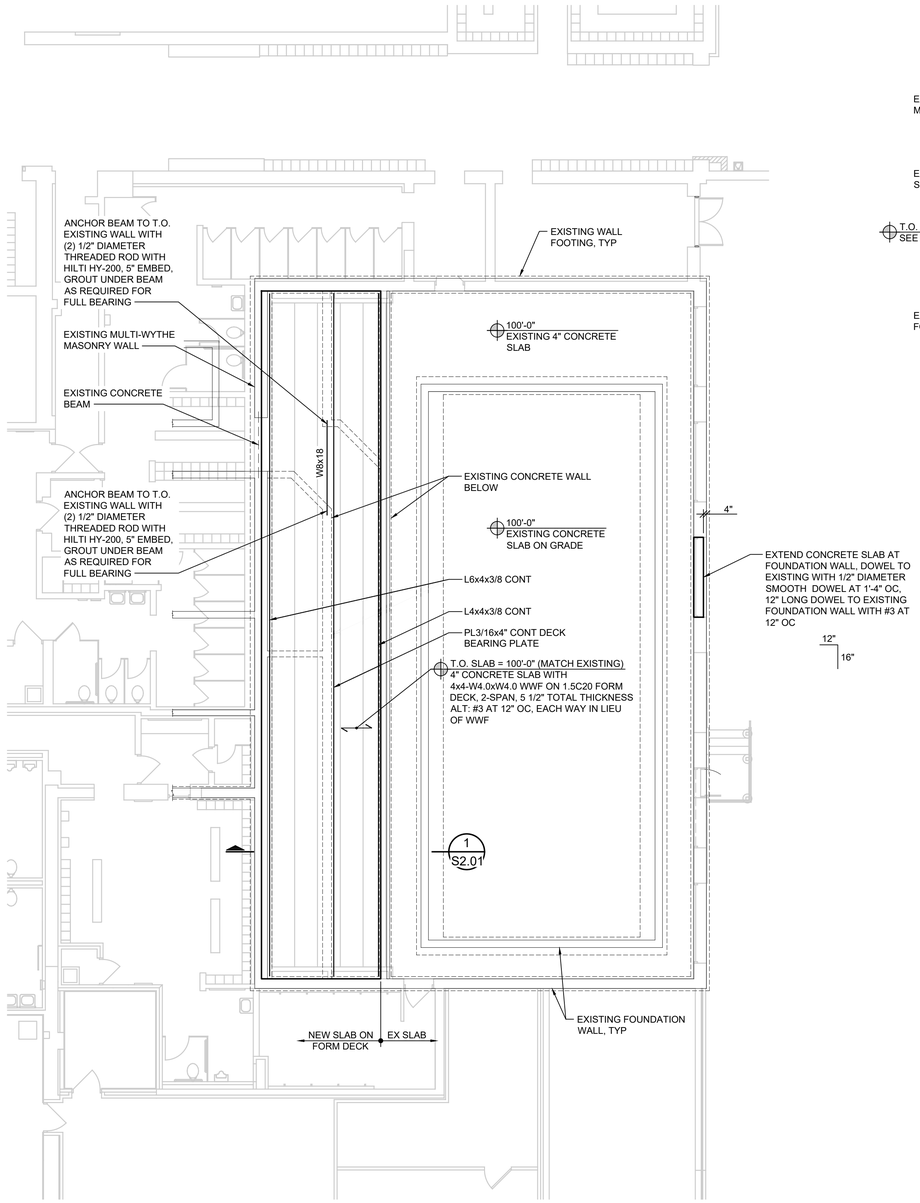
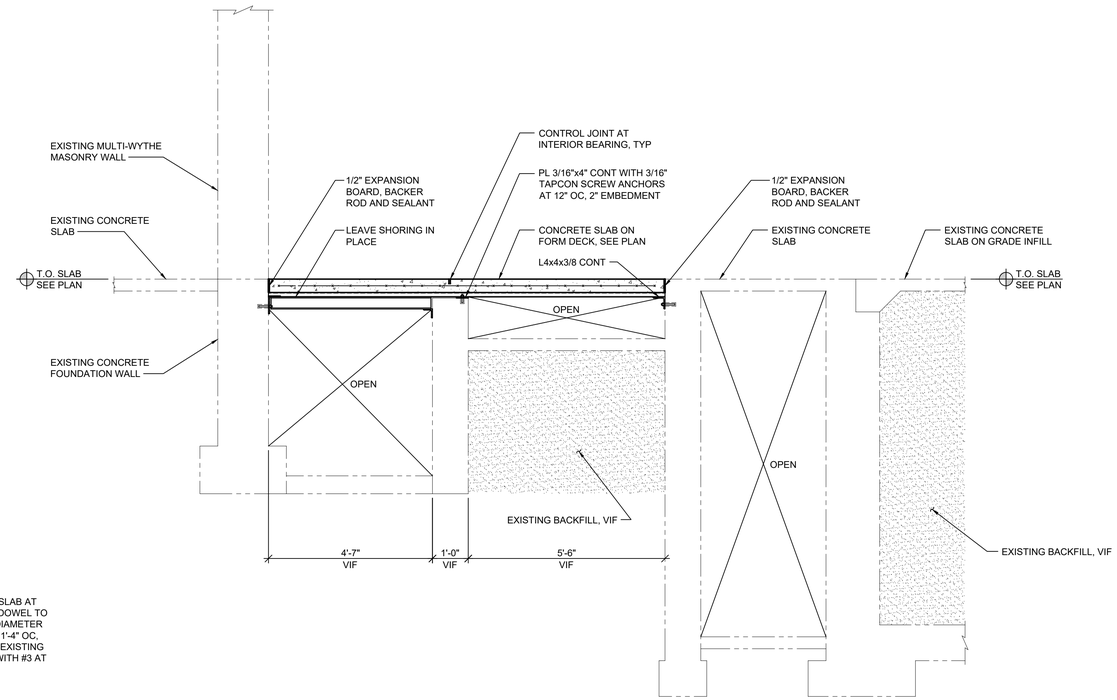


FIRST FLOOR FRAMING PLAN
1/8"=1'-0"
TOP OF STEEL = BOTTOM OF DECK UNO



1 S2.01 FRAMING SECTION
1/2"=1'-0"

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BAY CITY, MICHIGAN

SHEET TITLE
FIRST FLOOR FRAMING PLAN

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2018040.19	S2.01
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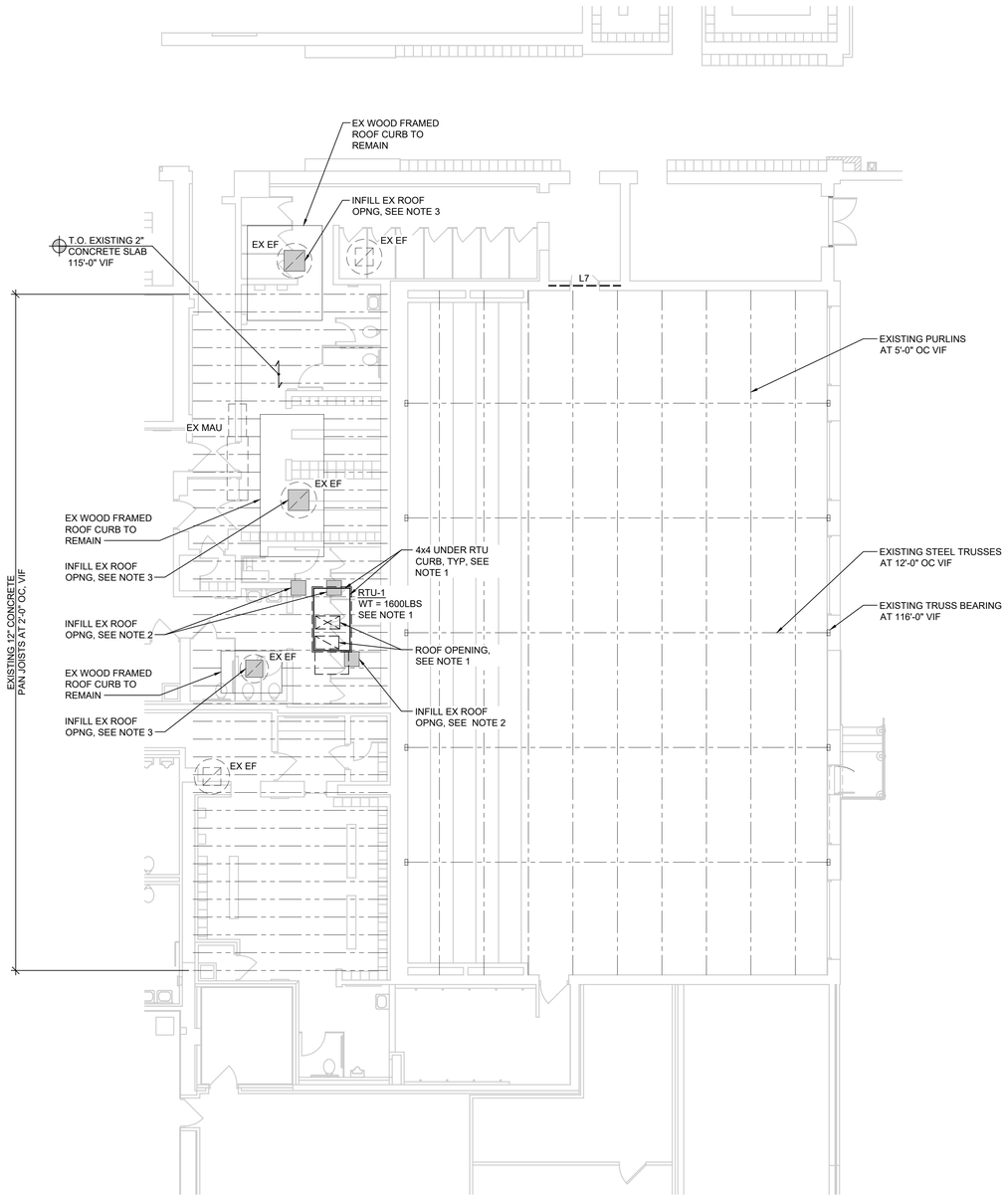


ROOF FRAMING PLAN

1/8"=1'-0" TOP OF STEEL = BOTTOM OF DECK UNO (+/-0'-0")

LEGEND

L1 - STEEL LINTEL, SEE LINTEL SCHEDULE THIS SHEET

NOTES:

1. ROOF OPENING AND ROOF CURB SUPPORT PER DETAIL 1/S2.02, COORDINATE SIZE AND LOCATION WITH MECHANICAL TRADES. EXISTING CONCRETE ROOF JOISTS SHALL NOT BE CUT, CORED THROUGH, OR ALTERED IN ANY WAY.
2. INFILL EXISTING ROOF OPENING WITH 3/16" PLATE OVER EXISTING OPENING, EXTEND PLATE 6" PAST OPENING OR 1" PAST EXISTING JOIST CENTERLINES, WHICHEVER IS LARGER, AND FASTEN TO EXISTING CONCRETE ROOF JOIST WITH (3) 3/16" TAPCON SCREW ANCHORS EACH SIDE.
3. INFILL EXISTING ROOF OPENING WITH 1/2" THICK APA RATED SHEATHING FASTENED TO 2x4 FRAMING BETWEEN EXISTING FRAMING AS REQUIRED.

GENERAL

1. VERIFY DIMENSIONS BEFORE COMMENCING WORK. REPORT DISCREPANCIES TO THE ARCHITECT.
2. VERIFY OPENINGS IN THE FRAMING PLANS WITH THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.
3. ALL WORK SHALL CONFORM TO MICHIGAN BUILDING CODE 2015.
4. DESIGN LOADS
   a. DESIGNED IN ACCORDANCE WITH MICHIGAN BUILDING CODE 2015.
   b. ROOF SNOW LOAD:
      GROUND SNOW LOAD PG = 35 PSF
      FLAT ROOF SNOW LOAD, PF = 27 PSF
      SNOW EXPOSURE FACTOR, CE = 1
      SNOW LOAD IMPORTANCE FACTOR, I = 1.1
      THERMAL FACTOR, CT = 1.0

   a. WIND LOADS:
      BASIC WIND SPEED V_{ULT} = 120 MPH, V_{ASD} = 93 MPH
      WIND EXPOSURE b
      INTERNAL PRESSURE COEFFICIENT, GC PI = +/- 0.18

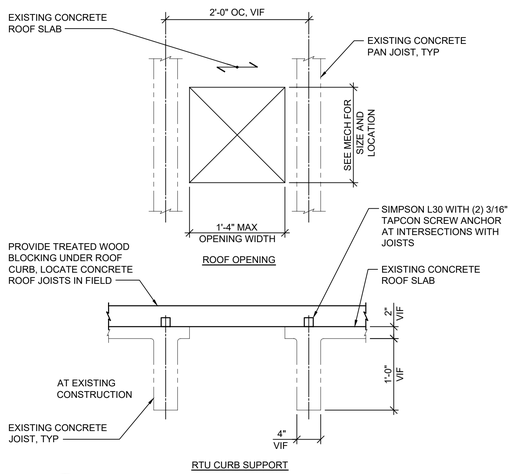
   b. EARTHQUAKE DESIGN DATA:
      SEISMIC USE GROUP, III
      SEISMIC IMPORTANCE FACTOR, I = 1.25
      SPECTRAL RESPONSE COEFFICIENTS: SDS = .067, SD1 = .062
      SITE CLASS D
      SEISMIC DESIGN CATEGORY, A
5. SPECIAL INSPECTIONS:
   a. SPECIAL INSPECTIONS SHALL BE IN ACCORDANCE WITH THE MICHIGAN BUILDING CODE 2015 SECTION 1700.
   b. THE FOLLOWING TYPES OF WORK REQUIRE SPECIAL INSPECTIONS: (REFER TO THE BUILDING CODE AND SPECIFICATIONS FOR DETAILED INSPECTION REQUIREMENTS).
      1. PREPARED FILL.
      2. CONCRETE CONSTRUCTION.
      3. STEEL CONSTRUCTION.

STEEL LINTEL SCHEDULE

MARK	CLEAR SPAN	SIZE	BEARING EACH END
L1	4'-0"	L3 1/2x2 1/2x1/4 SLV	4"
L2	5'-0"	L3 1/2x3x1/4 SLV	6"
L3	6'-0"	L3 1/2x3 1/2x1/4	6"
L4	7'-0"	L4x3 1/2x1/4 LLV	6"
L5	8'-0"	L5x3 1/2x1/4 LLV	8"
L6	9'-0"	L6x3 1/2x 3/8 LLV	8"
	BOTTOM OF PLATE SEE ARCH DWGS; L7 L8	LINTELS SCHEDULED FOR SINGLE 4" OF WALL THICKNESS. PROVIDE 2 FOR 8" WALL, 3 FOR 10" WALL, 3" HORIZONTAL LEGS AND 3 FOR 12" WALL.	
L7	W8x18 + PL 1/4x1'-0"		8"

NOTE: 1. GROUT BELOW LINTEL BEARING 3 COURSES.

2. BEARING LENGTH IS OVER CMU OR COMPOSITE BRICK/BLOCK. DO NOT BEAR ON BRICK VENEER.
3. ANCHOR MASONRY TO BEAMS WITH 9 GA WIRE TIES EACH SIDE AT 2'-8" OC.
4. PROVIDE STEEL LINTELS AT ALL MASONRY WALL OPENINGS, INCLUDING MECHANICAL AND ELECTRICAL GREATER THAN 8" WIDE. SEE LINTEL SCHEDULE.



1 S2.02 ROOF OPENING / RTU CURB SUPPORT

1"=1'-0"

CONCRETE NOTES

1. ACI BUILDING CODE (318); MANUAL OF STANDARD PRACTICE FOR DETAILING (315) FOR THE MIXING, FABRICATION AND PLACEMENT OF CONCRETE, REINFORCING STEEL, AND ACCESSORIES.
2. CONCRETE STRENGTH - (STANDARD) WEIGHT CONCRETE:
   FOOTINGS, WALLS, PIERS: F'C = (3000 MINIMUM) PSI
   CONCRETE FILL ON (COMPOSITE) (FORM) (PRECAST CONCRETE) DECK: F'C = (3500 MINIMUM) PSI
   CONCRETE SLABS ON GRADE: F'C = (3500 MINIMUM) PSI
   EXTERIOR CONCRETE SLABS EXPOSED TO DE-ICING: F'C = (4500 MINIMUM) PSI
3. REINFORCING - BARS: ASTM A-615 GRADE 60
   WELDED WIRE FABRIC: ASTM A-1064
4. CONCRETE SLABS ON GRADE REINFORCING: 6x6 - W1.4xW1.4 WWF UNLESS NOTED. LOCATED IN THE UPPER 1/3 OF SLAB THICKNESS.
5. PROVIDE SAWCUT CONTROL JOINTS AT APPROXIMATELY 20' ON CENTER EACH WAY IN SLABS ON GRADE, SEE DETAILS. LOCATE JOINTS UNDER PARTITIONS WHENEVER POSSIBLE. CONSTRUCTION JOINTS AT CONTRACTOR'S OPTION.
6. DEPRESS SLABS AS REQUIRED FOR FLOOR FINISHES, SEE ARCHITECT.
7. SLOPE FLOORS AS REQUIRED TO FLOOR DRAINS, SEE ARCHITECT.
8. FORM ALL CONCRETE.
9. EXPOSED EDGES OF CONCRETE BEAMS, COLUMNS, ETC. SHALL BE CHAMFERED 3/4".
10. PROVIDE CORNER BARS FOR ALL CONTIGUOUS CORNERS.
11. CONTINUOUS DOVETAIL ANCHORS FOR BRICK ANCHORAGE SHALL BE 1" DEEP MAXIMUM.
12. WATER/CEMENT RATIO LIMITS:
    F'C = 3000 PSI 0.68 NON-AIR ENTRAINED, 0.50 AIR ENTRAINED
    F'C = 3500 PSI 0.62 NON-AIR ENTRAINED, 0.50 AIR-ENTRAINED
    F'C = 4500 PSI 0.4 AIR-ENTRAINED
13. SLUMP LIMITS:
    3" FOR FOUNDATIONS, 4" FOR SLABS AND WALLS
14. PROVIDE AIR ENTRAINED CONCRETE FOR EXTERIOR EXPOSURES.
15. CONTRACTOR TO SUBMIT SIZE AND LAYOUT OF CONCRETE WALL SLEEVES, OPENINGS, ETC. FOR REVIEW PRIOR TO CONCRETE PLACEMENT.
16. PROVIDE (2) #5 EACH SIDE OF OPENINGS IN CONCRETE WALLS OR SLABS, EXTEND 2'-0" BEYOND CORNERS AND (2) #5 BARS, 4'-0" LONG DIAGONAL BARS AT EACH CORNER, UNLESS NOTED OTHERWISE.
17. WALL FOOTING REINFORCING LAP LENGTH: MINIMUM 27", 21" IF LAPS STAGGERED.

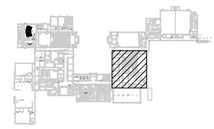
STRUCTURAL STEEL

1. STRUCTURAL STEEL: FABRICATED AND ERECTED PER THE AISC MANUAL OF STEEL CONSTRUCTION.
   W-BEAMS: ASTM A-992 GR. 50.
   HSS: ASTM A-500 GRADE B.
   STEEL PIPE: ASTM A53, TYPE E, GRADE B.
   ALL OTHER SHAPES: ASTM A-36.
2. ANCHOR RODS: 36 KSI, ASTM F-1554.
3. WELDS: TO BE 70 KSI LOW HYDROGEN FILLER METAL PLACED BY WELDERS CERTIFIED IN WELD AND POSITION BY AWS D1.1, STRUCTURAL WELDING CODE. ALL WELDS SHALL BE APPLIED TO SURFACES FREE OF GREASE, PAINT, DIRT, OR OTHER HARMFUL MATERIAL.
4. BOLTED CONNECTIONS: 3/4" DIAMETER A-325 BOLTS WITH HEAVY HEX NUTS UNLESS NOTED. DESIGNED FOR BEARING CONNECTIONS, TIGHTENED TO SNUG TIGHT CRITERIA UNLESS NOTED OTHERWISE.
5. STEEL PRIMER: RUST INHIBITING ALKYD INDUSTRIAL PRIMER, SSPC 6, 1.5 MIL MINIMUM THICKNESS EXCEPT:
   a. STEEL WHICH WILL RECEIVE SPRAYED-ON FIRE PROOFING.
   b. TOP SURFACE OF FLOOR BEAMS WHICH WILL RECEIVE SHEAR STUDS.
   c. FAYING SURFACES OF CONNECTIONS INDICATED AS SLIP CRITICAL DESIGN.
6. BEAM CONNECTIONS SHALL BE DESIGNED TO SUPPORT ONE-HALF THE TOTAL UNIFORM LOAD CAPACITY PER AISC. WHEREVER POSSIBLE, EXTEND CONNECTIONS FULL DEPTH OF BEAM.
7. BEAM BEARING PLATES ARE TO BE LOCATED ON CENTER OF WALL UNLESS NOTED OTHERWISE. BEAR BEAM FULL LENGTH OF BEARING PLATES.
8. DO NOT ALLOW LOADS ON SLAB UNTIL CONCRETE HAS ATTAINED A MINIMUM OF 75% OF THE 28-DAY SPECIFIED STRENGTH.

METAL DECK

1. FORM DECK: 1.5C20: S MIN - .226 IN^3/FT, I MIN = .265 IN^4/FT, Fy = 50 KSI, GALVANIZED, CAPABLE OF SUPPORTING WET CONCRETE LOAD WITHOUT SHORING, WELD TO STEEL SUPPORTS WITH 5/8" DIAMETER PUDDLE WELDS AT 12" MAX SPACING.
2. DECK FINISH: AS SPECIFIED.

NO.	REVISION	DATE



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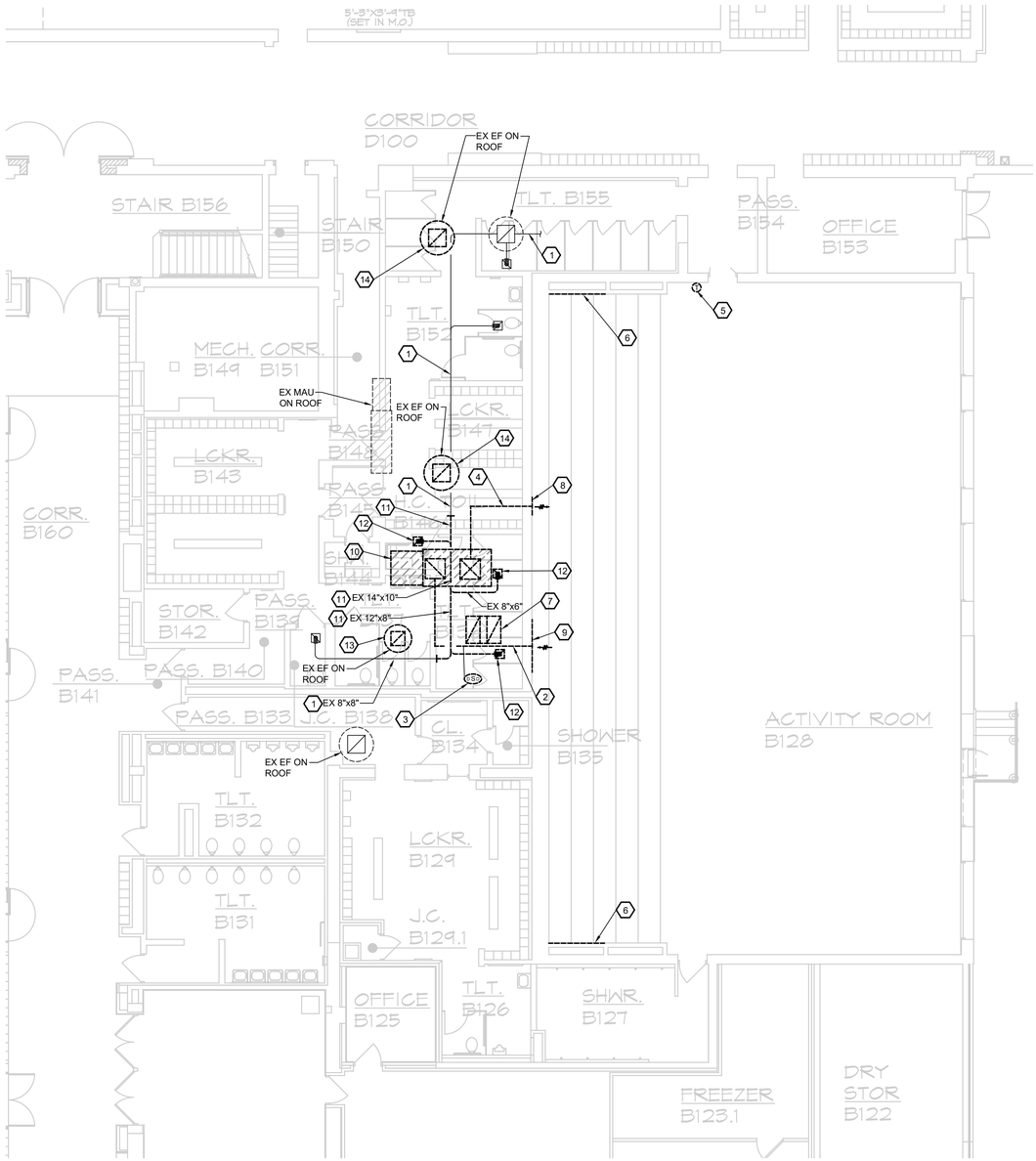
PROJECT TITLE
FITNESS CENTER STRUCT. & HVAC
CENTRAL HIGH SCHOOL
BAY CITY PUBLIC SCHOOLS
BAY CITY, MICHIGAN

SHEET TITLE
ROOF FRAMING PLAN, DETAILS AND NOTES

PROJECT NUMBER	SHEET NUMBER
2018040.19	S2.02
PROJECT DATE: JANUARY 7, 2025	
CHECKED BY: ASK/JAG	



FIRST FLOOR PLAN - MECHANICAL DEMOLITION

1/8"=1'-0"

KEYED NOTES

13. EXISTING EXHAUST FAN ON ROOF IS THOUGHT TO BE ABANDONED AND IS INTENDED TO BE REMOVED. FIELD VERIFY AND DETERMINE IF EXHAUST FAN IS ABANDONED. IF ABANDONED, EXHAUST FAN SHALL BE REMOVED. IF NOT ABANDONED, EXHAUST FAN SHALL BE RELOCATED SUCH THAT IT IS A MINIMUM OF 10'-0" FROM THE INTAKE OF THE NEW RTU. IF EXHAUST FAN IS RELOCATED, EXISTING EXHAUST FAN DUCTWORK CONNECTED TO EXISTING EXHAUST FAN SHALL BE REVISED AND EXTENDED AS NECESSARY FOR NEW LOCATION OF EXISTING EXHAUST FAN. SEAL ALL VOIDS IN ROOF AIR/WATER TIGHT. IF EXISTING EXHAUST FAN IS NOT ABANDONED ENGINEER SHALL BE NOTIFIED PRIOR TO STARTING ANY WORK.

14. EXISTING EXHAUST FAN ON ROOF IS THOUGHT TO BE ABANDONED AND IS INTENDED TO BE REMOVED. FIELD VERIFY AND DETERMINE IF EXHAUST FAN IS ABANDONED. IF ABANDONED, EXHAUST FAN SHALL BE REMOVED. REFER TO STRUCTURAL AND ARCHITECTURAL DRAWINGS TO INFILL EXISTING OPENING AIR/WATER TIGHT. IF NOT ABANDONED, EXISTING EXHAUST FAN SHALL REMAIN. IF EXISTING EXHAUST FAN IS NOT ABANDONED NOTIFY ENGINEER.

GENERAL NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL MATERIALS AND EQUIPMENT SHOWN TO BE REMOVED BEFORE STARTING WORK.
2. COORDINATE ALL DEMOLITION WORK WITH NEW WORK, ESPECIALLY IN REGARDS TO NEW CONNECTIONS.
3. THE INTENT OF THE DRAWING IS TO REMOVE ALL MATERIALS AND EQUIPMENT WITH A DASHED AND DARKER LINE TYPE.
4. THE GENERAL TRADE SHALL BE RESPONSIBLE FOR REMOVAL AND PATCHING OF ANY SOFFITS, WALL SECTIONS, ETC. REQUIRED TO GAIN ACCESS TO PIPING, EQUIPMENT, ETC. TO BE REMOVED.
5. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR REFERRING TO ARCHITECTURAL DRAWINGS FOR SCOPE OF WORK INDICATED ON ARCHITECTURAL PLANS AND BID THE SET OF DRAWINGS IN THEIR ENTIRETY.

KEYED NOTES

1. APPROXIMATE LOCATION OF EXISTING EXHAUST AIR DUCTWORK TO REMAIN.
2. APPROXIMATE LOCATION OF EXISTING RETURN AIR DUCTWORK TO BE REMOVED. REMOVE RETURN AIR DUCTWORK FROM EXISTING MAKE-UP AIR UNIT ON ROOF BACK TO EXISTING RETURN AIR LOUVER IN FITNESS CENTER SPACE. REMOVAL OF DUCTWORK SHALL INCLUDE REMOVAL OF ALL GRILLES, LOUVERS, ETC. CONNECTED TO ASSOCIATED DUCTWORK. FIELD VERIFY EXACT LOCATIONS OF DUCTWORK, GRILLES, LOUVERS, ETC. TO BE REMOVED.
3. APPROXIMATE LOCATION OF DUCT SMOKE DETECTOR IN RETURN AIR DUCTWORK TO BE REMOVED.
4. EXISTING SUPPLY AIR DUCTWORK TO BE REMOVED. REMOVE SUPPLY AIR DUCTWORK FROM EXISTING MAKE-UP AIR UNIT ON ROOF BACK TO EXISTING SUPPLY AIR DIFFUSER IN FITNESS CENTER SPACE. REMOVAL OF DUCTWORK SHALL INCLUDE REMOVAL OF ALL GRILLES, DIFFUSERS, ETC. CONNECTED TO ASSOCIATED DUCTWORK. FIELD VERIFY EXACT LOCATIONS OF DUCTWORK, GRILLES, DIFFUSERS, ETC. TO BE REMOVED.
5. EXISTING THERMOSTAT IN SPACE TO BE REMOVED.
6. EXISTING 72"x24" GRILLE/LOUVER TO BE REMOVED. INFILL EXISTING WALL/CHASE WITH MATERIAL TO MATCH EXISTING ADJACENT MATERIAL.
7. EXISTING DUCTWORK AND VENT THROUGH ROOF TO BE REMOVED. EXISTING DUCTWORK IS ABANDONED ABOVE CEILING AND SHALL BE REMOVED. INFILL EXISTING OPENING AIR/WATER TIGHT. FIELD VERIFY LOCATIONS PRIOR TO REMOVAL.
8. EXISTING 48"x24" SUPPLY AIR DIFFUSER TO BE REMOVED. INTENT IS FOR EXISTING WALL OPENING TO REMAIN FOR INSTALLATION OF NEW DUCTWORK. FIELD VERIFY EXACT LOCATION OF EXISTING OPENING.
9. EXISTING 72"x26" RETURN AIR GRILLE TO BE REMOVED. INTENT IS FOR EXISTING WALL OPENING TO REMAIN FOR INSTALLATION OF NEW DUCTWORK. FIELD VERIFY EXACT LOCATION OF EXISTING OPENING.
10. EXISTING MAKE-UP AIR UNIT ON ROOF TO BE REMOVED. SEE ROOF DEMOLITION PLAN FOR DETAILS.
11. REMOVE EXISTING EXHAUST AIR DUCTWORK TO PROVIDE WORKING CLEARANCE FOR REMOVAL OF EXISTING SUPPLY AIR DUCTWORK, RETURN AIR DUCTWORK, AND MAKE-UP AIR UNIT. INTENT IS TO REMOVE ONLY ENOUGH EXHAUST AIR DUCTWORK TO PROVIDE SUFFICIENT SPACE FOR REMOVAL OF EXISTING MAKE-UP AIR UNIT AND DUCTWORK AND FOR INSTALLATION OF NEW ROOFTOP UNIT AND DUCTWORK.
12. EXISTING EXHAUST AIR GRILLE TO BE REMOVED AND REPLACED.

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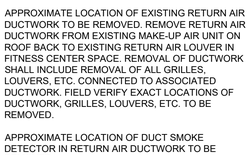

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PROJECT TITLE

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CENTRAL HIGH SCHOOL
BAY CITY PUBLIC SCHOOLS

BAY CITY, MICHIGAN

SHEET TITLE

FIRST FLOOR PLAN
MECHANICAL DEMOLITION

PROJECT NUMBER	SHEET NUMBER
2018040.19	M1.01
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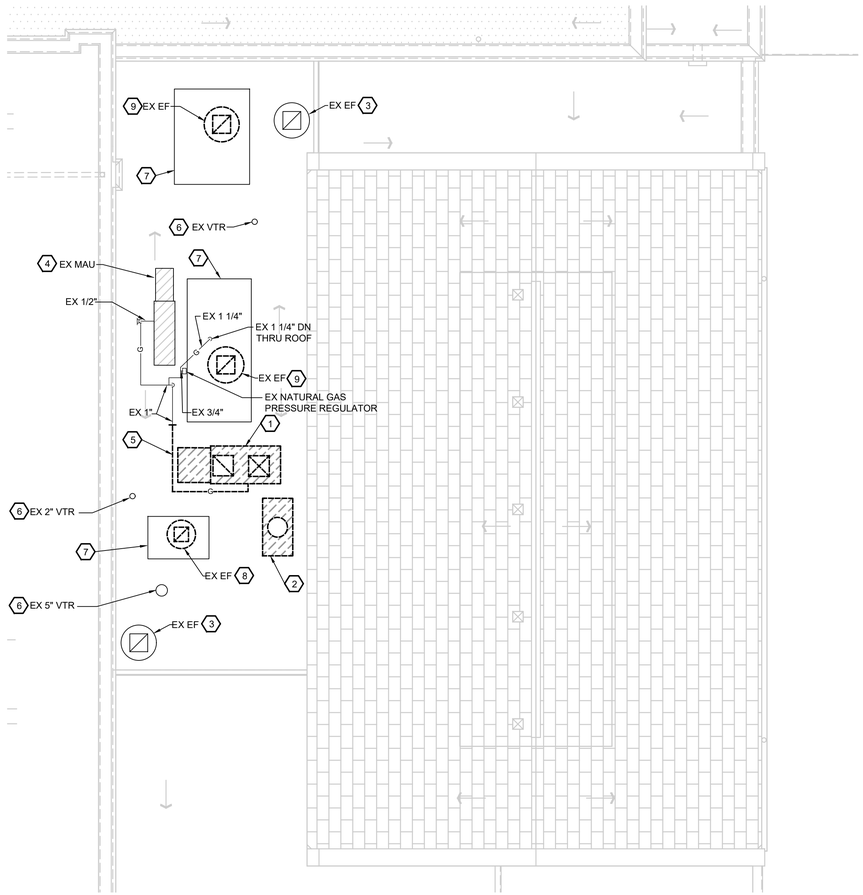


ROOF PLAN - MECHANICAL DEMOLITION
1/8"=1'-0"

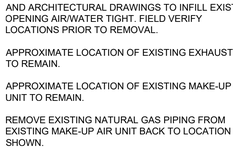
GENERAL NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL MATERIALS AND EQUIPMENT SHOWN TO BE REMOVED BEFORE STARTING WORK.
2. COORDINATE ALL DEMOLITION WORK WITH NEW WORK, ESPECIALLY IN REGARDS TO NEW CONNECTIONS.
3. THE INTENT OF THE DRAWING IS TO REMOVE ALL MATERIALS AND EQUIPMENT WITH A DASHED AND DARKER LINE TYPE.
4. PIPING REMOVED SHALL ALSO INCLUDE THE REMOVAL AND REPLACEMENT OF ALL FITTINGS, SUPPORTS, AND INSULATION ASSOCIATE WITH PORTIONS OF PIPE SHOWN TO BE REMOVED.
5. THE GENERAL TRADE SHALL BE RESPONSIBLE FOR REMOVAL AND PATCHING OF ANY SOFFITS, WALL SECTIONS, ETC. REQUIRED TO GAIN ACCESS TO PIPING, EQUIPMENT, ETC. TO BE REMOVED.
6. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR REFERRING TO ARCHITECTURAL DRAWINGS FOR SCOPE OF WORK INDICATED ON ARCHITECTURAL PLANS AND BID THE SET OF DRAWINGS IN THEIR ENTIRETY.

KEYED NOTES

1. EXISTING MAKE-UP AIR UNIT ON ROOF TO BE REMOVED. REMOVAL SHALL INCLUDE ASSOCIATED CURB, PIPING, DUCTWORK, ELECTRICAL, ETC. REFER TO STRUCTURAL AND ARCHITECTURAL DRAWINGS TO INFILL EXISTING OPENING AIR/WATER TIGHT. FIELD VERIFY LOCATIONS PRIOR TO REMOVAL.
2. EXISTING VENT THROUGH ROOF TO BE REMOVED. REMOVAL SHALL INCLUDE EXISTING STEEL VENT SHROUD AT ROOF LEVEL. REFER TO STRUCTURAL AND ARCHITECTURAL DRAWINGS TO INFILL EXISTING OPENING AIR/WATER TIGHT. FIELD VERIFY LOCATIONS PRIOR TO REMOVAL.
3. APPROXIMATE LOCATION OF EXISTING EXHAUST FAN TO REMAIN.
4. APPROXIMATE LOCATION OF EXISTING MAKE-UP AIR UNIT TO REMAIN.
5. REMOVE EXISTING NATURAL GAS PIPING FROM EXISTING MAKE-UP AIR UNIT BACK TO LOCATION SHOWN.
6. EXISTING VENT THROUGH ROOF TO REMAIN.
7. APPROXIMATE LOCATION OF EXISTING ROOF CURB/CAP TO REMAIN.
8. EXISTING EXHAUST FAN ON ROOF IS THOUGHT TO BE ABANDONED AND IS INTENDED TO BE REMOVED. FIELD VERIFY AND DETERMINE IF EXHAUST FAN IS ABANDONED. IF ABANDONED, EXHAUST FAN SHALL BE REMOVED. IF NOT ABANDONED, EXHAUST FAN SHALL BE RELOCATED SUCH THAT IT IS A MINIMUM OF 10'-0" FROM THE INTAKE OF THE NEW RTU. IF EXHAUST FAN IS RELOCATED, EXISTING EXHAUST FAN DUCTWORK CONNECTED TO EXISTING EXHAUST FAN SHALL BE REVISED AND EXTENDED AS NECESSARY FOR NEW LOCATION OF EXISTING EXHAUST FAN. SEAL ALL VOIDS IN ROOF AIR/WATER TIGHT. IF EXISTING EXHAUST FAN IS NOT ABANDONED ENGINEER SHALL BE NOTIFIED PRIOR TO STARTING ANY WORK.
9. EXISTING EXHAUST FAN ON ROOF IS THOUGHT TO BE ABANDONED AND IS INTENDED TO BE REMOVED. FIELD VERIFY IF EXHAUST FAN IS ABANDONED. IF ABANDONED, EXHAUST FAN SHALL BE REMOVED. REFER TO STRUCTURAL AND ARCHITECTURAL DRAWINGS TO INFILL EXISTING OPENING AIR/WATER TIGHT. IF NOT ABANDONED, EXISTING EXHAUST FAN SHALL REMAIN. IF EXISTING EXHAUST FAN IS NOT ABANDONED NOTIFY ENGINEER.

NO.	REVISION	DATE



KEY PLAN

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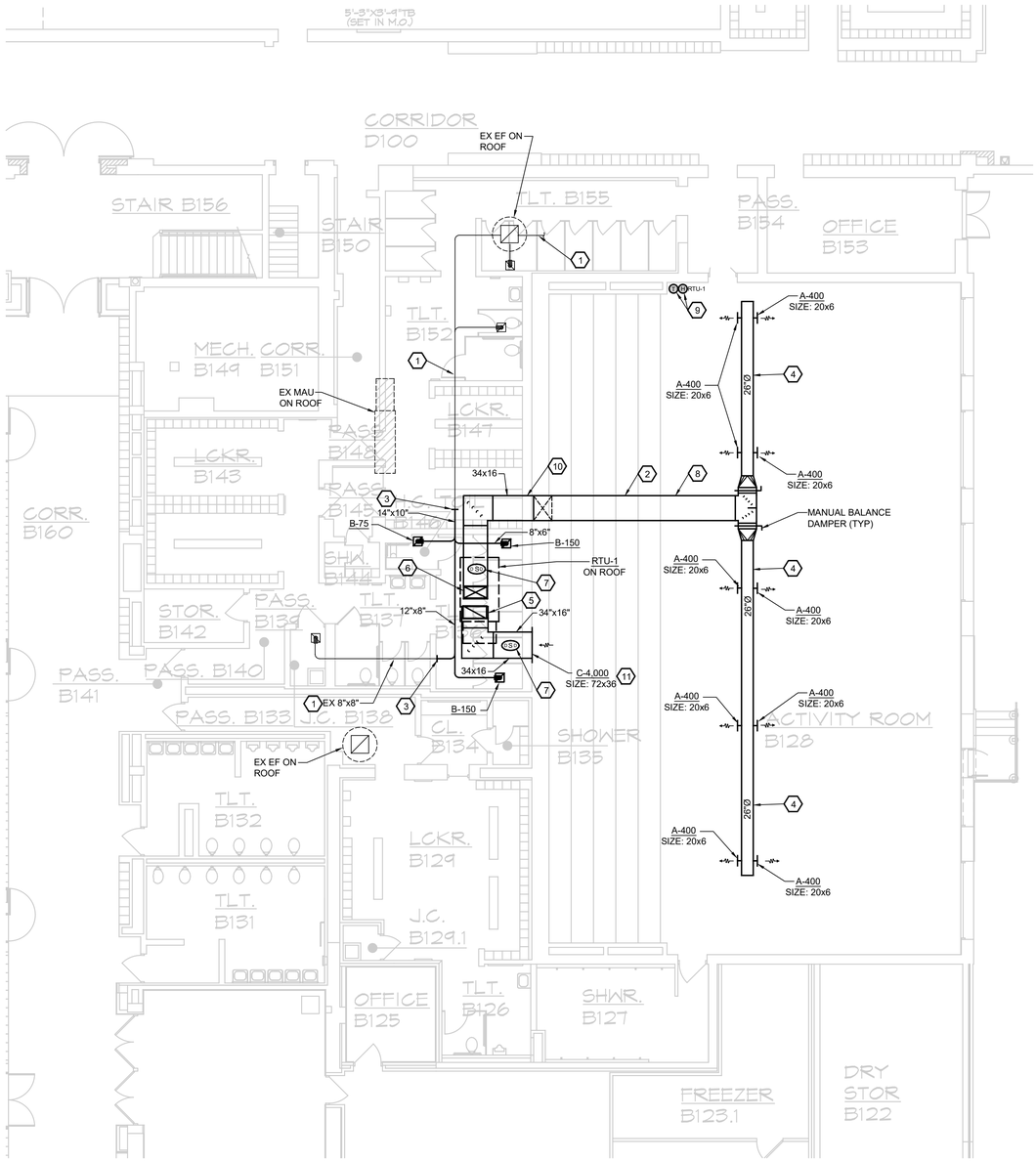
PROJECT TITLE
FITNESS CENTER STRUCT. & HVAC
CENTRAL HIGH SCHOOL
BAY CITY PUBLIC SCHOOLS

BAY CITY, MICHIGAN

SHEET TITLE
ROOF PLAN
MECHANICAL DEMOLITION

PROJECT NUMBER	SHEET NUMBER
2018040.19	M1.02
PROJECT DATE: JANUARY 7, 2025	
CHECKED BY: GRS	



FIRST FLOOR PLAN - MECHANICAL REVISIONS

1/8"=1'-0"

GENERAL NOTES:

1. TEST AND BALANCE CONTRACTOR SHALL BALANCE DIFFUSERS AND GRILLES TO CFM'S SHOWN ±1-10%.
2. INSTALL ALL HVAC UNIT OUTSIDE AIR INTAKES TO MAINTAIN A MINIMUM OF 10'-0" FROM PLUMBING VENTS AND EXHAUST FANS.
3. COORDINATE ROUTES/LOCATIONS OF ALL DUCTWORK, DIFFUSERS, ETC. WITH ALL CONDITIONS, OTHER TRADES, ETC. THE MECHANICAL TRADES SHALL BE RESPONSIBLE FOR ROUTING DUCT THROUGH JOIST SPACE AS REQUIRED TO AVOID CONFLICTS WITH OTHER SYSTEMS, DUCTWORK, ETC. FURNISH AND INSTALL ALL FITTINGS, DUCTWORK, ETC. TO OFFSET DUCTWORK UP AND DOWN AS REQUIRED TO ACHIEVE INSTALLATION OF DUCT SYSTEM.
4. FURNISH AND INSTALL MANUAL BALANCING DAMPERS ON ALL SUPPLY AIR, RETURN AIR, AND EXHAUST AIR BRANCH DUCTWORK TO ALLOW BALANCING OF EACH INDIVIDUAL AIR OUTLET. THIS INCLUDES GRILLES MOUNTED DIRECTLY TO DUCTS, WHICH SHOULD BE INSTALLED WITH ENOUGH DUCTWORK AT GRILLE TO INSTALL DAMPER.
5. FOR BRANCH DUCTS ROUTED TO DIFFUSERS OR GRILLES THAT DO NOT SHOW SIZES ON DRAWINGS, DUCT SIZE SHALL MATCH DIFFUSER OR GRILLE NECK SIZE NOTED ON DIFFUSER AND GRILLE SCHEDULE.
6. REFER TO PLANS FOR DUCT SMOKE DETECTOR LOCATIONS. DUCT SMOKE DETECTORS SHALL BE PROVIDED AND WIRED BY ELECTRICAL TRADES, WITH DUCT INSTALLATION OF SENSING TUBE TO BE PERFORMED BY MECHANICAL TRADES.
7. WHERE DUCTWORK IS EXPOSED AND ROUTED IN LOCATIONS WHERE THERE IS NO CEILING, AND THIS SPACE IS CONDITIONED BY THE HVAC SYSTEM, THEN EXTERNAL INSULATION IS NOT REQUIRED. WHERE PORTIONS OF THESE DUCTS ARE ROUTED ABOVE A CEILING, EXTERNAL INSULATION IS REQUIRED. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLANS AND GENERAL TRADES.
8. PROVIDE NEW FILTERS IN HVAC EQUIPMENT AFTER CONSTRUCTION IS COMPLETE AND BUILDING HAS BEEN CLEANED OF ALL DIRT AND DUST.
9. ALL DIFFUSER AND GRILLE LOCATIONS SHALL BE COORDINATED WITH ARCHITECTURAL REFLECTED CEILING PLANS.
10. ALL EXPOSED OR PARTIALLY EXPOSED DUCTWORK SHALL BE PAINTED IN FUTURE PROJECT PHASE. COLOR OF PAINT SELECTED BY ARCHITECT IN FUTURE PROJECT PHASE. FURNISH DUCTWORK WITH PAINT-GRIP FINISH.
11. MAINTAIN MANUFACTURER'S CLEARANCES FOR ALL EQUIPMENT.
12. INTERNALLY ACOUSTICALLY LINE ALL RETURN AIR DUCT AND 10 FOOT OF SUPPLY AIR DUCTWORK FROM UNIT CONSTRUCTION.
13. CONCRETE ROOF JOISTS SHALL NOT BE CUT, CORED THROUGH, OR ALTERED IN ANY WAY WITHOUT WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER AND ARCHITECT.

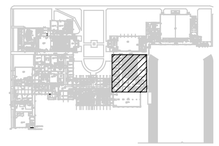
TEMPERATURE CONTROL NOTE

ALL TEMPERATURE CONTROL WORK SHALL BE PERFORMED BY THE OWNERS TEMPERATURE CONTROL CONTRACTOR, JOHNSON CONTROLS CORPORATE. THE MECHANICAL TRADE SHALL INCLUDE ALL COSTS FOR TEMPERATURE CONTROL WORK AND COORDINATE WORK WITH JOHNSON CONTROLS. CONNECT NEW ROOFTOP UNIT, RTU-1 TO EXISTING JOHNSON CONTROL SYSTEM. PROVIDE ALL NECESSARY UNITARY CONTROLLERS FOR NEW EQUIPMENT. THE TEMPERATURE CONTROL CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLS, CONTROL SEQUENCES, CONTROL DEVICES, CONTROL WIRING, ETC FOR NEW EQUIPMENT. THE TEMPERATURE CONTROL CONTRACTOR SHALL UTILIZE EXISTING CONTROL PANEL/BUILDING CONTROLLER AND VERIFY IF EXISTING BUILDING CONTROL PANEL IS LARGE ENOUGH TO CONNECT NEW EQUIPMENT AND EXPAND AS NECESSARY. THE TEMPERATURE CONTROL CONTRACTOR SHALL PROVIDE ASSOCIATED SOFTWARE, COLOR GRAPHICS, ETC TO CONTROL AND MONITOR NEW EQUIPMENT. IT IS THE INTENT OF THIS PROJECT AND TEMPERATURE CONTROL CONTRACTORS RESPONSIBILITY TO HAVE ALL NEW HVAC EQUIPMENT TO BE COMPLETELY OPERATIONAL AND FUNCTIONAL THROUGH THE EXISTING TEMPERATURE CONTROL SYSTEM. THE TEMPERATURE CONTROL CONTRACTOR SHALL COORDINATE WITH THE TEST AND BALANCE CONTRACTOR TO INCLUDE TIME TO BE ONSITE DURING AIR BALANCE.

KEYED NOTES

1. APPROXIMATE LOCATION OF EXISTING EXHAUST AIR DUCTWORK.
2. ROUTE NEW SUPPLY AIR DUCTWORK TIGHT TO CEILING. INTENT IS TO ROUTE DUCTWORK AS HIGH AS POSSIBLE IN SPACE AND FOLLOW EXISTING CEILING TRANSITIONS. FIELD VERIFY EXACT DUCTWORK ROUTING AND LOCATION.
3. CONNECT NEW EXHAUST AIR DUCTWORK TO EXISTING EXHAUST AIR DUCTWORK ABOVE CEILING. TRANSITION NEW EXHAUST AIR DUCTWORK AT NEW CONNECTION AS NECESSARY TO CONNECT TO EXISTING EXHAUST AIR DUCTWORK.
4. APPROXIMATE LOCATION OF NEW SUPPLY AIR DUCTWORK ROUTED TIGHT TO CEILING. COORDINATE EXACT DUCTWORK ROUTING WITH OWNER'S EQUIPMENT AND LIGHTING IN SPACE. IT IS THE INTENT FOR THE EXISTING LIGHTING TO REMAIN DURING THIS PHASE AND TO BE REPLACED IN A FUTURE PHASE.
5. ROUTE 34"x16" RETURN AIR DUCT UP THROUGH ROOF AND TRANSITION DUCTWORK IN CURB AS NECESSARY FOR RTU CONNECTION.
6. ROUTE 34"X16" SUPPLY AIR DUCT UP THROUGH ROOF AND TRANSITION DUCTWORK IN CURB AS NECESSARY FOR RTU CONNECTION.
7. DUCT SMOKE DETECTOR BY ELECTRICAL TRADES. SHEET METAL CONTRACTOR SHALL COORDINATE AND ASSIST WITH INSTALLATION.
8. ELECTRICAL CONTRACTOR SHALL REMOVE EXISTING LIGHTING AS NECESSARY TO ROUTE DUCTWORK TIGHT TO CEILING.
9. NEW THERMOSTAT AND HUMIDISTAT MOUNTED 48" ABOVE FINISHED FLOOR.
10. ROUTE NEW SUPPLY AIR DUCTWORK THROUGH EXISTING WALL OPENING AND UP ALONG WALL IN FITNESS CENTER TO FITNESS CENTER CEILING. MODIFY EXISTING WALL OPENING AS NECESSARY TO INSTALL NEW DUCTWORK. GENERAL TRADES SHALL INFILL WALL OPENING AROUND NEW DUCTWORK AS NECESSARY. REFER TO ARCHITECTURAL PLANS
11. FURNISH AND INSTALL NEW 72"x36" WALL RETURN AIR GRILLE IN EXISTING WALL OPENING. INFILL EXISTING WALL AROUND NEW RETURN AIR GRILLE AS NECESSARY WITH MATERIAL TO MATCH EXISTING ADJACENT WALL MATERIAL.

NO.	REVISION	DATE



KEY PLAN

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PROJECT TITLE

FITNESS CENTER STRUCT. & HVAC

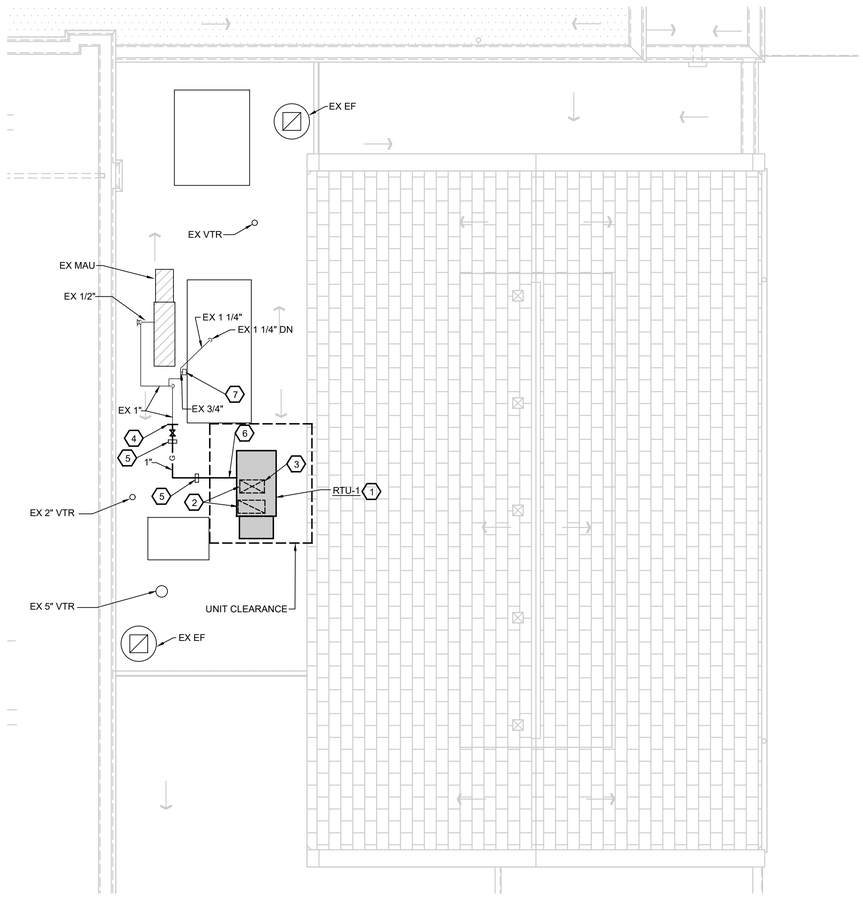
CENTRAL HIGH SCHOOL
BAY CITY PUBLIC SCHOOLS

BAY CITY, MICHIGAN

SHEET TITLE

FIRST FLOOR PLAN
MECHANICAL REVISIONS

PROJECT NUMBER	SHEET NUMBER
2018040.19	M2.01
PROJECT DATE	
JANUARY 7, 2025	
CHECKED BY	
GRS	



ROOF PLAN - MECHANICAL REVISIONS
1/8"=1'-0"

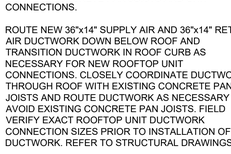
GENERAL NOTES:

1. TEST AND BALANCE CONTRACTOR SHALL BALANCE DIFFUSERS AND GRILLES TO CFM'S SHOWN ±1-10%.
2. INSTALL ALL HVAC UNIT OUTSIDE AIR INTAKES TO MAINTAIN A MINIMUM OF 10'-0" FROM PLUMBING VENTS, EXHAUST FANS, ETC.
3. PROVIDE NEW FILTERS IN HVAC EQUIPMENT AFTER CONSTRUCTION IS COMPLETE AND BUILDING HAS BEEN CLEANED OF ALL DIRT AND DUST.
4. FURNISH AND INSTALL EXTERIOR INSULATION ON ALL SUPPLY AIR AND OUTSIDE AIR DUCTWORK (AND RETURN AIR WHEN SPECIFICALLY NOTED) ABOVE CEILINGS.
5. MAINTAIN MANUFACTURER'S CLEARANCES FOR ALL EQUIPMENT.
6. PRIME AND PAINT ALL NATURAL GAS PIPING WITH RUST INHIBITOR PAINT THAT INCLUDES ZINC. COLOR OF PAINT SHALL BE YELLOW.
7. INSTALL ALL MECHANICAL EQUIPMENT ON ROOF A MINIMUM OF 12 FEET AWAY FROM ROOF EDGE.
8. THE MECHANICAL CONTRACTOR SHALL VERIFY THAT THERE IS PROPER GAS PRESSURE AT EACH PIECE OF EQUIPMENT AND SUPPLY NATURAL GAS PRESSURE REGULATORS AT EACH PIECE OF EQUIPMENT IF NECESSARY.
9. CONCRETE ROOF JOISTS SHALL NOT BE CUT, CORED THROUGH, OR ALTERED IN ANY WAY WITHOUT WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER AND ARCHITECT.

KEYED NOTES

1. FURNISH AND INSTALL NEW ROOFTOP UNIT ON ROOF CURB. REFER TO MANUFACTURER'S REQUIRED CLEARANCES FOR INSTALLATION. FIELD VERIFY EXACT LOCATION OF NEW ROOFTOP UNIT WITH EXISTING CONCRETE PAN JOISTS AND UNIT CONNECTIONS.
2. ROUTE NEW 36"x14" SUPPLY AIR AND 36"x14" RETURN AIR DUCTWORK DOWN BELOW ROOF AND TRANSITION DUCTWORK IN ROOF CURB AS NECESSARY FOR NEW ROOFTOP UNIT CONNECTIONS. CLOSELY COORDINATE DUCTWORK THROUGH ROOF WITH EXISTING CONCRETE PAN JOISTS AND ROUTE DUCTWORK AS NECESSARY TO AVOID EXISTING CONCRETE PAN JOISTS. FIELD VERIFY EXACT ROOFTOP UNIT DUCTWORK CONNECTION SIZES PRIOR TO INSTALLATION OF DUCTWORK. REFER TO STRUCTURAL DRAWINGS.
3. FIELD VERIFY IF NEW ROOFTOP UNIT CAN UTILIZE EXISTING DUCTWORK PENETRATION FROM EXISTING MAKE-UP AIR UNIT AND/OR EXISTING VENT BEING REMOVED. IF NEW ROOFTOP UNIT WILL MEET ALL MANUFACTURER'S REQUIRED CLEARANCES, OUTSIDE AIR INTAKE DISTANCES FROM VENTS, ETC. ROOFTOP UNIT SHALL BE INSTALLED IN A LOCATION TO UTILIZE EXISTING ROOF PENETRATION. IF EXISTING ROOF PENETRATION IS UTILIZED, ENLARGED/MODIFY EXISTING ROOF PENETRATION AS REQUIRED FOR NEW DUCTWORK PENETRATION.
4. CONNECT NEW GAS PIPING TO EXISTING GAS PIPING ON ROOF.
5. UTILIZE NON-PENETRATING ROOF PIPE SUPPORT WITH ROLLER MIRO MODEL #3-RS4-7 WITH SUPPORT AND SPACING AND QUANTITIES AS REQUIRED PER CODE.
6. NEW NATURAL GAS PIPING SHALL BE CONNECTED TO EXISTING NATURAL GAS PIPING AND ROUTED TO NEW ROOFTOP UNIT WITH NEW DIRT LEG AND 1" VALVE. INSTALL DIRT LEG AND VALVE AS SHOWN ON GAS PIPING CONNECTION DETAIL. TRANSITION 1" NATURAL GAS PIPING AS NECESSARY AT RTU FOR CONNECTION TO RTU. FIELD VERIFY EXACT CONNECTION SIZE AND LOCATION.
7. THE MECHANICAL CONTRACTOR SHALL VERIFY THE EXISTING NATURAL GAS REGULATOR CAPACITY, INLET PRESSURE AND OUTLET PRESSURE. PROVIDE NEW NATURAL GAS PRESSURE REGULATOR AS REQUIRED FOR INSTALLATION OF NEW EQUIPMENT.

NO.	REVISION	DATE



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PROJECT TITLE

FITNESS CENTER STRUCT. & HVAC

CENTRAL HIGH SCHOOL
BAY CITY PUBLIC SCHOOLS

BAY CITY, MICHIGAN

SHEET TITLE

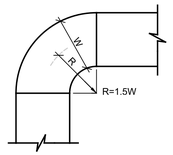
ROOF PLAN
MECHANICAL REVISIONS

PROJECT NUMBER	SHEET NUMBER
2018040.19	M2.02
PROJECT DATE: JANUARY 7, 2025	
CHECKED BY: GRS	

MECHANICAL SYMBOL LIST

SAN	SANITARY PIPING BELOW FLOOR OR GRADE
SAN	SANITARY PIPING ABOVE FLOOR
SAN	CO ABOVE FLOOR
SAN	CO UP TO GRADE
SAN	CO UP TO FLOOR
CD	MISC. EQUIP. COND DRAIN PIPING
G	NATURAL GAS PIPING
V	VENT PIPING
	DOMESTIC COLD WATER PIPING
	DOMESTIC HOT WATER PIPING
	DOMESTIC HOT WATER RETURN PIPING
	REDUCER
	CAP
	UNION
	ISOLATION BALL VALVE
	GAS REGULATOR
	FLOW ARROW
	STRAINER
	BUTTERFLY VALVE
	FLEXIBLE CONNECTION
	GAS COCK
	VALVE IN RISER
	ELBOW RISING UP
	ELBOW DROPPING DOWN
	TEE WITH PIPE UP
	TEE WITH PIPE DOWN
	SENSOR
	EXHAUST FAN WITH FAN ABOVE (FLOOR PLAN)
	EXHAUST FAN ON ROOF (ROOF PLAN)

	EX. VERTICAL FIRE DAMPER
	EX. HORIZONTAL FIRE DAMPER
	VERTICAL FIRE DAMPER
	HORIZONTAL FIRE DAMPER
	VERTICAL SMOKE DAMPER
	HORIZONTAL SMOKE DAMPER
	VERTICAL COMBINATION FIRE/SMOKE DAMPER
	HORIZONTAL COMBINATION FIRE/SMOKE DAMPER
['A-250']	SUPPLY AIR DIFFUSER - TYPE "A", 250 CFM
['B-250']	RETURN OR EXHAUST AIR GRILLE - TYPE "B", 250 CFM
	SLOT DIFFUSER
	MANUAL DAMPER
	MOTORIZED DAMPER
DSD	DUCT SMOKE DETECTOR
ABV	ABOVE
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
CFM	CUBIC FEET PER MINUTE
COND	CONDENSATE
EX	EXISTING
GPM	GALLONS PER MINUTE
MBD	MANUAL BALANCING DAMPER
MUA	MAKE UP AIR UNIT
OA	OUTSIDE AIR
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
RA	RETURN AIR
RTU	ROOF TOP UNIT
SA	SUPPLY AIR
SP	STATIC PRESSURE
VFD	VARIABLE FREQUENCY DRIVE
VTR	VENT THRU ROOF



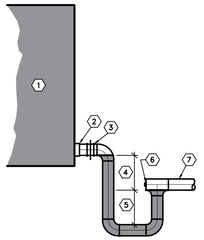
NOTE

1. THE INTERIOR SURFACE OF ALL RADIUS ELBOWS SHALL BE MADE ROUND.
2. ALL STANDARD RADIUS ELBOWS CAN BE SUBSTITUTED WITH A SQUARE VANE MITERED ELBOW.
3. NO MITERED ELBOWS WITHOUT VANES SHALL BE INSTALLED.

DUCTWORK RADIUS ELBOW
NO SCALE

NOTE: REFER TO MANUFACTURERS INSTALLATION INSTRUCTIONS AND MEET ALL REQUIREMENTS.

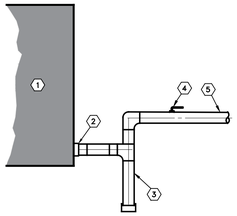
1. COOLING COIL
2. COOLING COIL CONDENSATE DRAIN CONNECTION
3. UNION
4. MINIMUM 6" DEEP TRAP SEAL FOR AIR HANDLERS MIN. 3" DEEP TRAP SEAL FOR U.V.'S AND FAN COIL UNITS
5. SAME DEPTH AS
6. CLEANOUT FITTING
7. CONDENSATE DRAIN - EXTEND TO FLOOR DRAIN, FLOOR SINK, AS NOTED ON DRAWINGS OR REQUIRED.



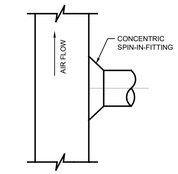
COOLING COIL CONDENSATE DRAIN TRAP DETAIL
NO SCALE

1. ROOF TOP AIR HANDLING UNIT
2. GAS PIPING CONNECTION
3. 6" LONG DIRT LEG WITH CAP
4. SHUT OFF VALVE
5. GAS PIPING (PROPERLY SUPPORTED ON ROOF)

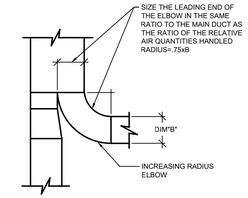
NOTE: DIRT LEG SHALL BE INSTALLED AT ALL LOCATIONS IN NEW GAS PIPING WHERE ELEVATION CHANGES.



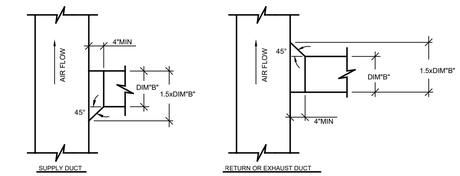
ROOF TOP UNIT GAS PIPING DETAIL
GAS PIPING ABOVE ROOF
NO SCALE



RECTANGULAR TO ROUND DUCT



SUPPLY, RETURN OR EXHAUST DUCT
FOR USE WHEN A BRANCH TAKE-OFF IS TO HANDLE MORE THAN 25% OF THE AIR HANDLED BY THE MAIN DUCT



RECTANGULAR DUCT BRANCH TAKE-OFF DETAILS
NO SCALE

GRILLE, REGISTER, AND DIFFUSER SCHEDULE

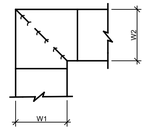
TYPE		MODEL NUMBERS	DEFLECTION	NECK SIZE	REMARKS
REF	SERVICE AND TYPE				
A	SPIRAL DUCT SUPPLY AIR GRILLE	PRICE SDGE	DOUBLE DEFLECTION	SEE DRAWINGS FOR SIZES	EXTRUDED ALUMINIM DUCT GRILLE WITH DOUBLE DEFLECTION CORE, INDIVIDUALLY ADJUSTABLE BLADES, 3/4" BLADE SPACING, AIR SCOOP WITH ROD OPERATOR, CLOSED CELL FOAM GASKET AROUND BORDER FOR TIGHT SEAL TO DUCT, AND END FRAME TO MATCH CURVATURE OF DUCT. THE MECHANICAL CONTRACTOR SHALL VERIFY THE DUCT MAIN SIZE AND MATCH THE SUPPLY AIR GRILLE TO THE DUCT SIZE. BAKED-ON ENAMEL FINISH WITH COLOR SELECTED BY ARCHTECT.
B	SUPPLY AIR DIFFUSER	PRICE SCD OR EQUAL TITUS	4 WAY	0-125 CFM: 6" x 6" (6" DIA) / 126-250 CFM: 9" x 9" (8" DIA) / 251-350 CFM: 12" x 12" (10" DIA) / 351-450 CFM: 12" x 12" (12" DIA) / 451-600 CFM: 15" x 15" (14" DIA) / 601-900 CFM: 18" x 18" (16" DIA)	ALL STEEL CONSTRUCTION, ADJUSTABLE HORIZONTAL TO VERTICAL AIRFLOW PATTERN, 3 CONE, 24X24, BAKED ON ENAMEL FINISH WITH COLOR SELECTED BY ARCHITECT. FRAME AS REQUIRED FOR CEILING TYPE WITH DIFFUSER PANEL SHALL MATCH GRID SIZE WHERE INSTALLED IN LAY IN CEILING. MAXIMUM NECK VELOCITY SHALL BE 700 FPM AND MAXIMUM NC LEVEL SHALL BE 25.
C	RETURN AIR GRILLE	PRICE 530L OR EQUAL TITUS	SINGLE DEFLECTION	SEE DRAWINGS FOR SIZES	ALL STEEL CONSTRUCTION, SINGLE DEFLECTION BLADES, 35 DEGREE HORIZONTAL FRONT BLADES, BAKED ON ENAMEL FINISH WITH COLOR SELECTED BY ARCHITECT.

ROOFTOP GAS HEAT/DX COOLING UNIT

MARK	MANUFACTURER	AREA SERVED	MODEL NO	TYPE	COOLING AIRFLOW	MIN. OUTSIDE AIR FLOW	TOTAL ESP	COOLING CAPACITY							HEATING CAPACITY					TOTAL UNIT WEIGHT	ELECTRICAL DATA			
								NOMINAL COOLING CAPACITY	TOTAL COOLING CAPACITY	EER	IEER	EAT		LAT Db	OSA DESIGN TEMP	GAS INPUT	GAS OUTPUT	GAS STAGES	EAT Db	LAT Db		UNIT POWER CONNECTION			
												Db	Wb												
					CFM	CFM	IN W.C.	TONS	MBH			°F	°F	°F	°F	MBH	MBH	RATIO	°F	°F	LBS	MCA	MOP	PHASE	VOLT
RTU-1	TRANE	FITNESS CENTER	YSK120	SINGLE ZONE	4,000	1,350	1.80	10	240	11	14	80	67	59	95	240	194	10:1	40	84	1379	33	45	3	480

NOTES:

1. THE MECHANICAL TRADE SHALL VERIFY UNIT CONFIGURATION (HORIZONATAL OR DOWNFLOW) WITH SCHEDULE LISTED ABOVE AND PROJECT DESIGN DRAWINGS.
2. UNITS SHALL HAVE REFERENCE ENTHALPY BASED ON ECONOMIZERS WITH 40% POWER RELIEF EXHAUST FAN POWERED BY UNIT AND LOW AMBIENT CONTROL FOR OPERATION IN 0 DEGREES F AMBIENT CONDITION. POWER EXHAUST SHALL BE WIRED BY MECHANICAL CONTRACTOR.
3. FURNISH PREFABRICATED ROOF CURB FOR EACH UNIT, WITH HEIGHT OF CURB TO GIVE MINIMUM OF 18" CLEAR FROM FINISHED ROOF TO CURB CAP. THE MECHANICAL TRADE SHALL FURNISH AND SET IN PLACE/LEVEL THE ROOF CURB. THE GENERAL TRADE SHALL PERFORM ALL ROOFING, FLASHING, ETC. THE ROOF INSULATION IS APPROXIMATELY 6" THICK, IT IS THE INTENT TO PROVIDE A MINIMUM OF 24" HIGH ROOF CURB TO GIVE 18" CLEAR FROM TOP OF ROOF CURB TO TOP OF ROOF. VERIFY EXACT THICKNESS OF INSULATION IN FIELD TO GIVE 18" CLEAR FROM TOP OF ROOF TO TOP OF ROOF CURB.
4. MECHANICAL TRADES SHALL FILL ALL OPEN VOIDS IN CURB (BETWEEN DECK AND BOTTOM OF RTU) WITH SPRAY FOAM INSULATION FOR ACOUSTICAL PURPOSES.
5. ALL UNITS SHALL HAVE A 2" THICK MERV 8 HIGH EFFICIENCY THROW AWAY FILTERS.
6. OUTSIDE AIR INTAKE DAMPERS SHALL BE ULTRA LOW-LEAK TYPE WITH BLADE AND JAMB SEALS.
7. MOTORS SHALL BE PREMIUM EFFICIENCY TYPE.
8. EACH RTU TO HAVE:
   A. SERVICE VALVES ON LIQUID, SUCTION, AND DISCHARGE LINES.
   B. THRU-THE-BASE ELECTRICAL PROVISIONS.
   C. NON-FUSED DISCONNECT SWITCH WITH EXTERNAL HANDLE.
   D. SUPPLY AIR SENSING AND CLOGGED FILTER SWITCH.
   E. VENTILATION OVERRIDE.
   F. HINGED SERVICE ACCESS.
   G. CONDENSER COIL GUARDS.
   H. SLOPED STAINLESS STEEL DRAIN PANS.
   I. 15 AMP POWERED CONVENIENCE OUTLET.
   J. HOT GAS REHEAT.
   K. HIGH GAS HEAT. STAINLESS STEEL HEAT EXCHANGER WITH MODULATING NATURAL GAS HEAT, 10:1 MODULATION.
9. FACTORY FURNISHED REFRIGERANT LEAK DETECTION SYSTEM FOR ALL REFRIGERANTS AS REQUIRED PER ASHRAE 15.
10. UNIT WITH GREATER THAN 2,000 CFM SHALL HAVE DRY CONTACTS FOR DUCT SMOKE DETECTOR CIRCUIT FACTORY WIRED TO STOP UNIT UPON DETECTION OF SMOKE. DUCT SMOKE DETECTOR SHALL BE FURNISHED AND WIRED BY ELECTRICAL CONTRACTOR, WITH SHEET METAL INSTALLATION BY MECHANICAL TRADES.
11. THE MECHANICAL TRADES SHALL BE RESPONSIBLE FOR COMPLETING ALL LOW-VOLTAGE WIRING, CONDUIT, AND ASSOCIATED POWER SUPPLY NECESSARY FOR A COMPLETE AND OPERATIONAL TEMPERATURE CONTROL SYSTEM. REFER TO THE ELECTRICAL DRAWINGS FOR AVAILABLE 120 VOLT POWER LOCATIONS. THE ELECTRICAL TRADES SHALL BE RESPONSIBLE FOR PROVIDING THE MAIN POWER FEED FOR ALL MECHANICAL EQUIPMENT. REFER TO THE ELECTRICAL DRAWINGS FOR CLARIFICATION OF ELECTRICAL TRADES FURNISHED POWER.
12. FURNISH 5 YEAR COMPRESSOR WARRANTY FOR ROOFTOP UNITS.
13. FURNISH ONE YEAR OF COMPLETE SERVICE AND MAINTENANCE OF ROOFTOP UNITS. INCLUDE MANUFACTURER CHECK TEST AND START-UP OF ROOFTOP UNITS AND CONTROL SYSTEM. PROVIDE FACTORY AND FIELD WIRING DIAGRAMS, AND PROVIDE TECHNICAL ASSISTANCE AS REQURED TO ASSURE FIRST CLASS OPERATING SYSTEMS.
14. PROVIDE TRANE BACNET CONTROLLER. MECHANICAL CONTRACTOR SHALL COORDINATE WITH TEMPERATURE CONTROL CONTRACTOR TO VERIFY IF CONTROLLER SHALL BE PROVIDED BY RTU MANUFACTURER OR FIELD MOUNTED BY THE TEMPERATURE CONTROL CONTRACTOR.
15. SCHEDULE BASED ON TRANE. DAIKIN SHALL BE CONSIDERED EQUAL, IF ALL CRITERIA ARE MATCHED.
16. SEQUENCE OF OPERATIONS:
OCCUPIED MODE: WHEN UNIT IS COMMANDED ON, OUTSIDE AIR DAMPER SHALL OPEN AND UNIT SHALL CONTROL TO A CONSTANT VOLUME AIRFLOW AS SET BY THE TEST AND BALANCE CONTRACTOR. AIR SIDE ECONOMIZER, DX COOLING AND NATURAL GAS FIRED HEAT EXCHANGER SHALL MODULATE TO MAINTAIN SPACE TEMPERATURE (74 DEGREES F ADJ). UNIT POWERED EXHAUST FAN SHALL OPERATE WHEN UNIT IS IN ECONOMIZER MODE TO MAINTAIN A NEUTRAL SPACE PRESSURE. IN DEHUMIDIFICATION MODE, THE DX COOLING COIL SHALL MODULATE TO MAINTAIN SPACE HUMIDITY SETPOINT AND MODULATE HOT GAS REHEAT TO MAINTAIN SPACE TEMPERATURE.
UNOCCUPIED MODE: OUTSIDE AIR DAMPER SHALL BE SHUT AND UNIT SHALL BE COMMANDED ON TO MAINTAIN SPACE TEMPERATURE SETBACK TEMPERATURE AND HUMIDITY SETPOINT.



NOTE

1. ALL VANE ELBOWS SHALL BE CONSTRUCTED AND INSTALLED AS DETAILED BY SMACNA.
2. WHEN W1 DOES NOT EQUAL W2, VANE SHALL BE SINGLE THICKNESS VANE TYPE REGARDLESS OF W DIMENSION.
3. ALL SINGLE THICKNESS VANES SHALL HAVE A 2" RADIUS, 1 1/2" MAXIMUM SPACE BETWEEN VANES AND A 3/4" TRAILING EDGE.
4. WHEN W EQUALS W2 AND W1 IS GREATER THAN 20°, VANES SHALL BE DOUBLE VANE TYPE.
5. NO MITERED ELBOW WITHOUT VANES SHALL BE INSTALLED.

DUCTWORK SQUARE VANE MITERED ELBOWS
NO SCALE

NO.	REVISION	DATE

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PROJECT TITLE
FITNESS CENTER STRUCT. & HVAC
CENTRAL HIGH SCHOOL
BAY CITY PUBLIC SCHOOLS
BAY CITY, MICHIGAN

SHEET TITLE
MECHANICAL SCHEDULES AND DETAILS

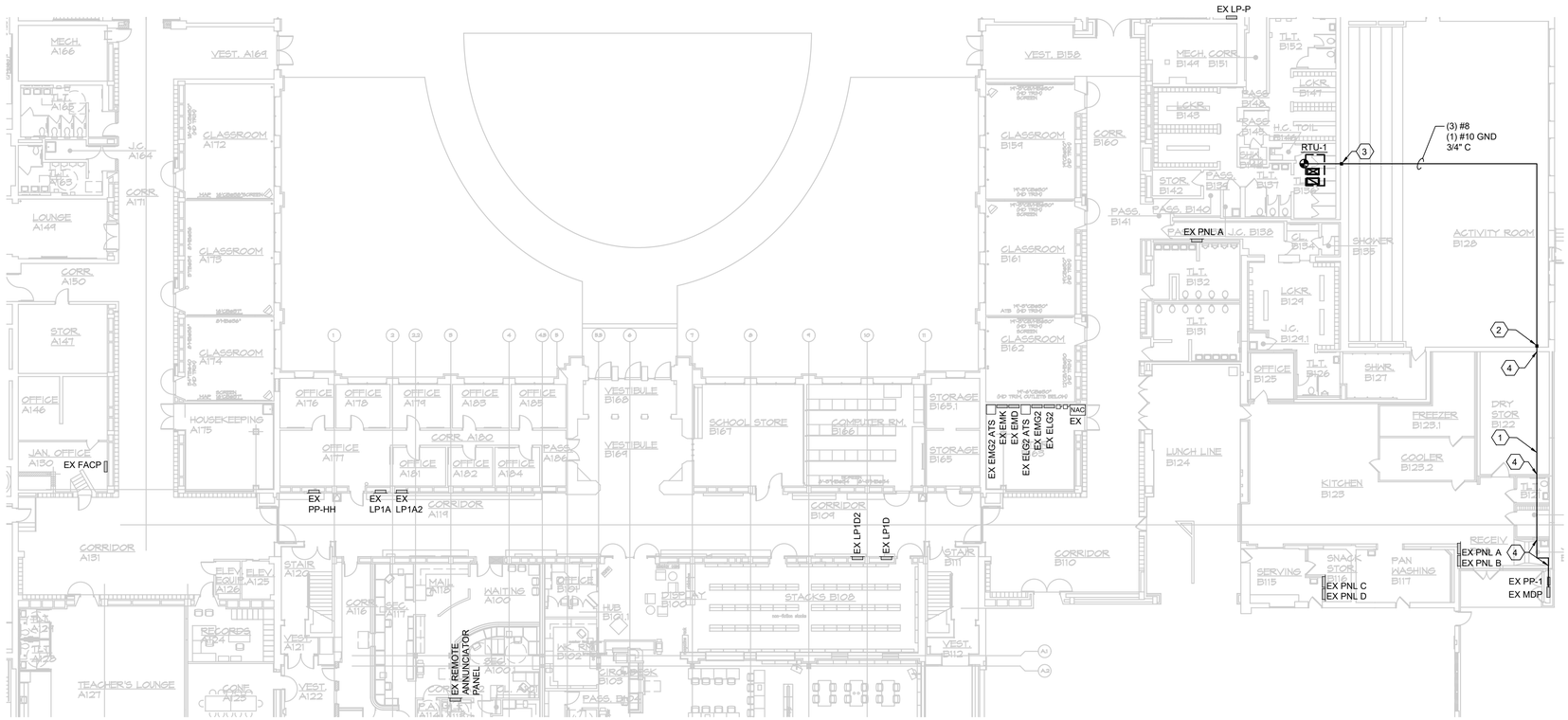
PROJECT NUMBER 2018040.19
PROJECT DATE JANUARY 7, 2025
CHECKED BY GRS
SHEET NUMBER M3.01

GENERAL NOTES

1. CONCRETE ROOF JOISTS SHALL NOT BE CUT, CORED THROUGH, OR ALTERED IN ANY WAY WITHOUT GETTING WRITTEN REVIEW AND APPROVAL OF THE STRUCTURAL ENGINEER AND ARCHITECT.

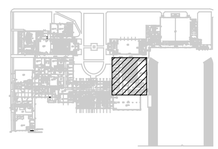
KEYED NOTES

1. ELECTRICAL CONTRACTOR SHALL INSTALL NEW CONDUIT AND WIRE IN CEILING SPACE IN LOCATION SHOWN TO FEED NEW RTU-1. CONDUIT ROUTE IS SHOWN DIAGRAMMATICALLY. FIELD VERIFY NEW CONDUIT ROUTE PRIOR TO INSTALLATION.
2. ELECTRICAL CONTRACTOR SHALL INSTALL 90° ELBOW(LB) AT 11'-0" AFF (±1'-0") TO TRANSITION CONDUIT VERTICAL INTO FITNESS CENTER CEILING SPACE.
3. ELECTRICAL CONTRACTOR SHALL INSTALL 90° ELBOW(LB) AT 11'-0" AFF (±1'-0") TO TRANSITION CONDUIT WEST INTO TOILET ROOM B136 CEILING SPACE. TERMINATE CIRCUIT ON FACTORY MOUNTED NON-FUSED DISCONNECT SWITCH ON RTU-1.
4. ELECTRICAL CONTRACTOR SHALL PROVIDE FIRE STOPPING AT CONDUIT WALL PENETRATION LOCATION.



OVERALL FIRST FLOOR PLAN - ELECTRICAL
1/8"=1'-0"

NO.	REVISION	DATE



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PROJECT TITLE

FITNESS CENTER STRUCT. & HVAC

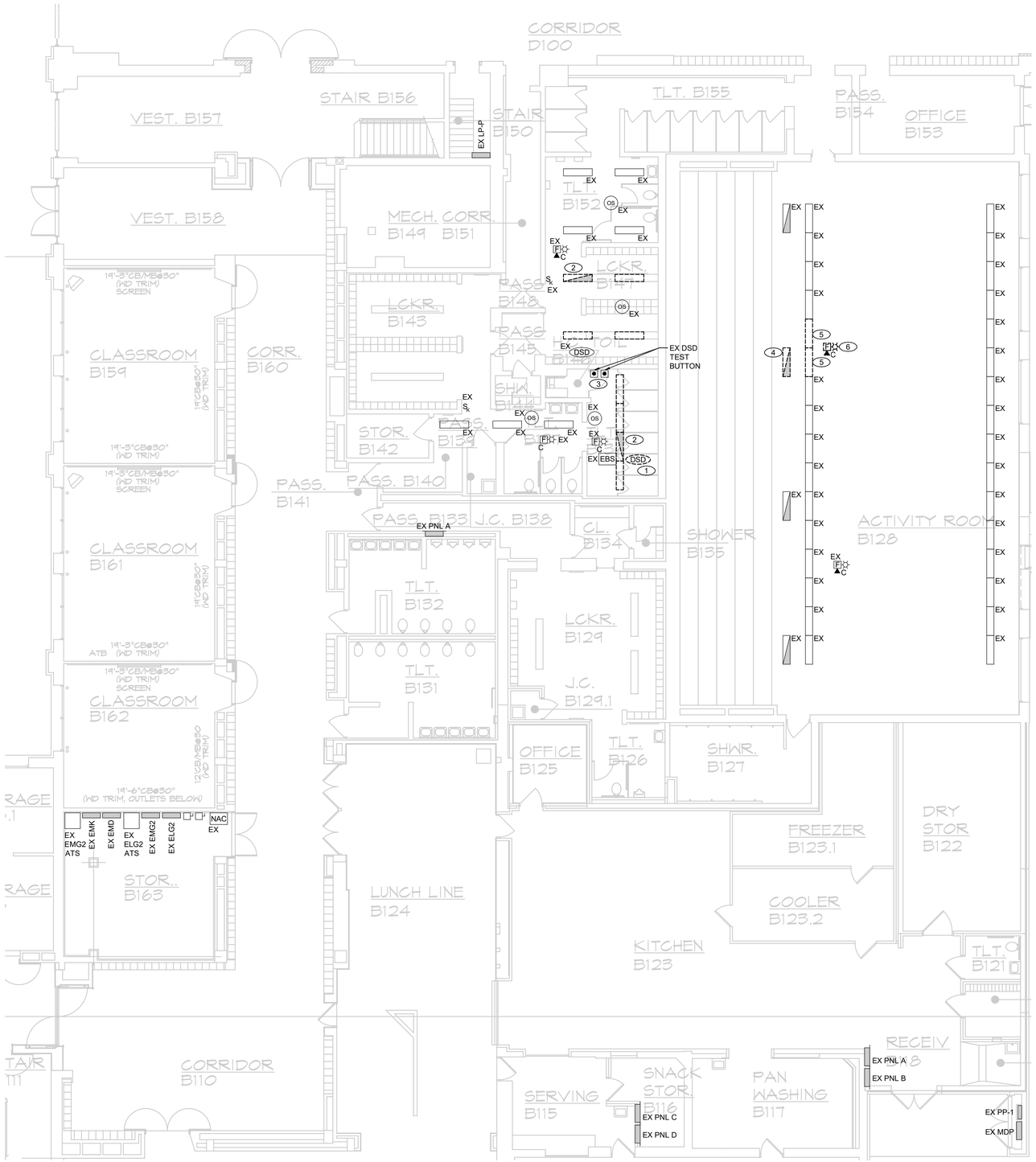
CENTRAL HIGH SCHOOL
BAY CITY PUBLIC SCHOOLS

BAY CITY, MICHIGAN

SHEET TITLE

OVERALL FIRST FLOOR PLAN - ELECTRICAL

PROJECT NUMBER	SHEET NUMBER
2018040.19	E0.01
PROJECT DATE: JANUARY 7, 2025	
CHECKED BY: JWF	



FIRST FLOOR PLAN - ELECTRICAL DEMOLITION

1/8"=1'-0"

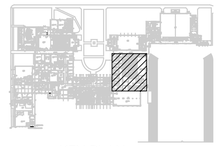
GENERAL NOTES - DEMOLITION

1. DEVICE LOCATIONS ARE SHOWN DIAGRAMMATICALLY. FIELD CONFIRM EXACT LOCATION.
2. ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE ALL LIGHT FIXTURES AND ASSOCIATED ELECTRICAL EQUIPMENT AS NEEDED. DESIGN INTENT IS TO RE-USE EXISTING LOCAL LIGHTING CIRCUIT.
3. FIRE ALARM SYSTEM IS EXISTING TO REMAIN. EXISTING DEVICES LOCATED IN THE AREA OF NEW WORK SHALL BE PROTECTED, REMOVED FROM EXISTING CEILING, TEMPORARILY SUPPORTED, AND REINSTALLED IN THE NEW CEILING IN THE SAME LOCATION. UNLESS NOTED OTHERWISE.
4. OCCUPANCY SENSORS ARE EXISTING TO REMAIN. EXISTING DEVICES LOCATED IN THE AREA OF NEW WORK SHALL BE REMOVED FROM EXISTING CEILING AND REINSTALLED IN THE NEW CEILING IN THE SAME LOCATION.
5. DUCT SMOKE DETECTOR TEST BUTTONS ARE EXISTING TO REMAIN. EXISTING DEVICES SHALL BE REMOVED FROM EXISTING CEILING AND REINSTALLED IN THE NEW CEILING IN THE SAME LOCATION. UNLESS NOTED OTHERWISE.
6. DASHED LINES SHOWN ON DEMOLITION SHEETS ARE ITEMS SHOWN TO BE REMOVED UNLESS NOTED OTHERWISE.
7. REMOVE ALL HANGERS, SUPPORTS AND STRAPS ASSOCIATED WITH ITEMS BEING REMOVED UNLESS NOTED OTHERWISE.
8. ALL LIGHTS SHOWN AS DASHED SHALL BE REMOVED. EXISTING LIGHTING CIRCUIT SHALL BE RE-USED FOR NEW LIGHTING. MODIFY AND EXTEND CIRCUIT AS NEEDED UNLESS NOTED OTHERWISE.

KEYED NOTES - DEMOLITION

1. ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING DUCT SMOKE DETECTOR. EXISTING FIRE ALARM WIRING SHALL BE RE-USED FOR NEW DUCT SMOKE DETECTOR.
2. ELECTRICAL CONTRACTOR SHALL RE-USE EXISTING EMERGENCY LIGHTING CIRCUIT AND EBS DEVICE FOR NEW EMERGENCY LIGHTING.
3. ELECTRICAL CONTRACTOR SHALL RE-USE EXISTING DUCT SMOKE DETECTOR TEST BUTTON FOR NEW DUCT SMOKE DETECTOR.
4. ELECTRICAL CONTRACTOR SHALL SHIFT EXISTING EMERGENCY RECESSED LIGHT FIXTURE TO AVOID NEW MECHANICAL DUCT. MODIFY AND EXTEND CIRCUIT TO NEW LOCATION.
5. SURFACE MOUNTED LIGHT FIXTURE SHALL BE REMOVED TO ALLOW FOR INSTALLATION OF NEW MECHANICAL DUCT. MODIFY AND EXTEND EXISTING CIRCUIT AS NEEDED TO KEEP REMAINING LIGHTS IN LINE OPERATIONAL.
6. ELECTRICAL CONTRACTOR SHALL SHIFT EXISTING FIRE ALARM DEVICE TO AVOID NEW MECHANICAL DUCT. MODIFY AND EXTEND FIRE ALARM WIRING TO NEW LOCATION.

NO.	REVISION	DATE



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PROJECT TITLE

FITNESS CENTER STRUCT. & HVAC

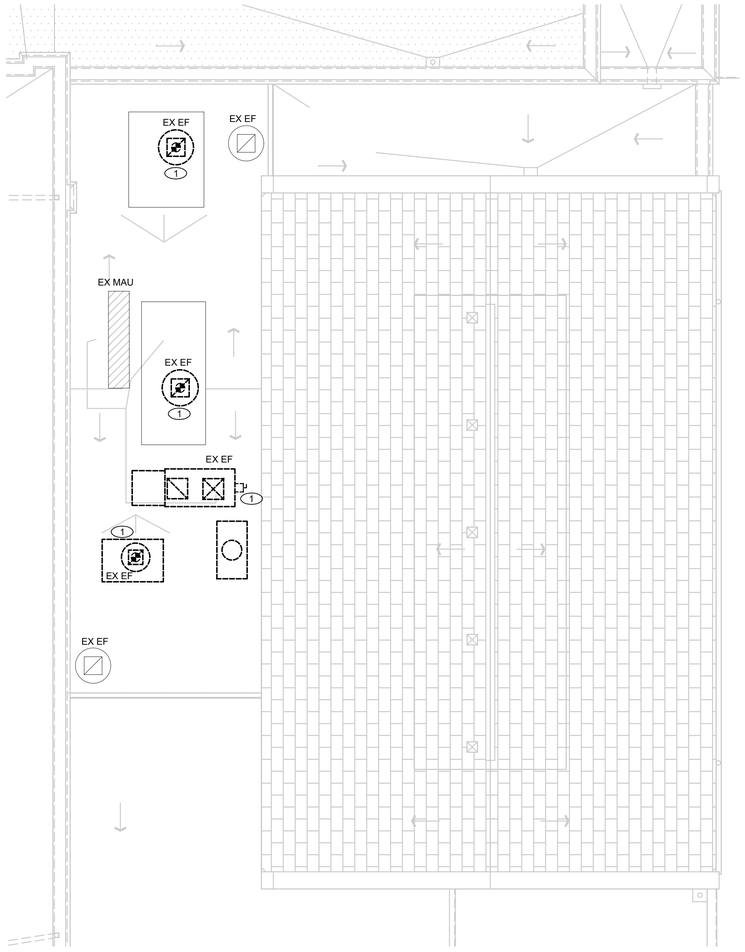
CENTRAL HIGH SCHOOL
BAY CITY PUBLIC SCHOOLS

BAY CITY, MICHIGAN

SHEET TITLE

FIRST FLOOR AND ROOF PLANS - ELEC DEMO

PROJECT NUMBER	SHEET NUMBER
2018040.19	E1.01
PROJECT DATE: JANUARY 7, 2025	
CHECKED BY: JWF	



ROOF PLAN - ELECTRICAL DEMOLITION
1/8"=1'-0"

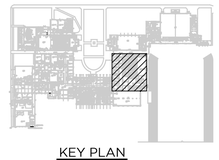
GENERAL NOTES - DEMOLITION

1. DEVICE LOCATIONS ARE SHOWN DIAGRAMMATICALLY. FIELD CONFIRM EXACT LOCATION.
2. DESIGN INTENT IS TO DISCONNECT AND REMOVE ELECTRICAL SYSTEMS FEEDING EXISTING MECHANICAL EQUIPMENT BACK TO SOURCE AND INSTALL NEW 480V FEED TO NEW MECHANICAL EQUIPMENT.
3. DASHED LINES SHOWN ON DEMOLITION SHEETS ARE ITEMS SHOWN TO BE REMOVED UNLESS NOTED OTHERWISE.
4. REMOVE ALL HANGERS, SUPPORTS AND STRAPS ASSOCIATED WITH ITEMS BEING REMOVED.

KEYED NOTES - DEMOLITION

(1) ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE ALL ELECTRICAL SYSTEMS FROM MECHANICAL EQUIPMENT BACK TO SOURCE. EXISTING CIRCUIT BREAKER FEEDING MECHANICAL EQUIPMENT SHALL BE MARKED AS SPARE. IF THE UNIT SHOWN AS DEMO IS STILL OPERATIONAL CONTACT ENGINEER OF RECORD PRIOR TO DEMOLITION.

NO.	REVISION	DATE



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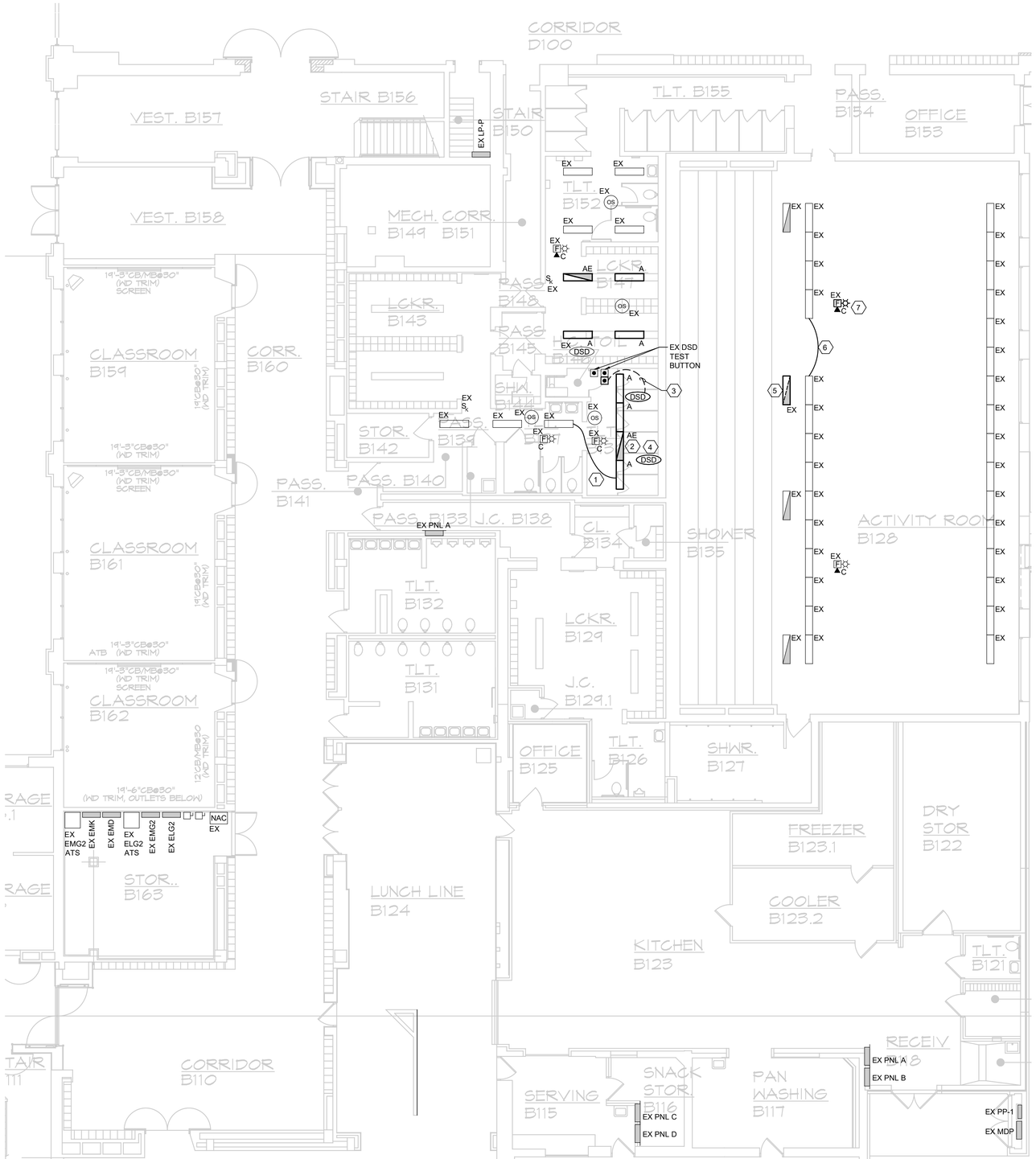
SHEET TITLE

ROOF PLAN
ELECTRICAL DEMOLITION

PROJECT NUMBER	SHEET NUMBER
2018040.19	E1.02
PROJECT DATE: JANUARY 7, 2025	
CHECKED BY: JWF	



FIRST FLOOR PLAN - ELECTRICAL REVISED

1/8"=1'-0"

GENERAL NOTES

1. EXISTING FIRE ALARM SYSTEMS SHALL BE REINSTALLED IN NEW CEILING IN THE SAME LOCATION. SYSTEM SHALL BE RE-CERTIFIED UPON COMPLETION OF CONSTRUCTION. UNLESS NOTED OTHERWISE.
2. EXISTING OCCUPANCY SENSORS SHALL BE REINSTALLED IN NEW CEILING IN THE SAME LOCATION.
3. EXISTING POWER PACKS ARE TO REMAIN IN SAME LOCATION. ELECTRICAL CONTRACTOR SHALL VERIFY ALL LIGHTING CONTROLS WORK AS IT DID ORIGINALLY BEFORE CONSTRUCTION.
4. ELECTRICAL CONTRACTOR SHALL VERIFY ALL DUCT SMOKE DETECTOR LOCATIONS WITH MECHANICAL DRAWINGS.
5. CONCRETE ROOF JOISTS SHALL NOT BE CUT, CORED THROUGH, OR ALTERED IN ANY WAY WITHOUT GETTING WRITTEN REVIEW AND APPROVAL OF THE STRUCTURAL ENGINEER AND ARCHITECT.

LIGHTING WIRING METHODS

1. ALL LIGHTING CIRCUITS SHALL BE INSTALLED IN CONDUIT.
2. MC CABLE IS AN ACCEPTABLE WIRING METHOD ONLY FOR FISHING EXISTING WALL CAVITIES AND FOR 12' WHIPS TO LIGHT FIXTURES IN ACCESSIBLE CEILINGS.
3. CEILING OCCUPANCY SENSORS SHALL BE WIRED AHEAD OF THE LOCAL SWITCHING. THIS ALLOWS THE LOCAL SWITCHES TO OVERRIDE THE SENSOR TO TURN OFF THE LIGHTS.

POWER & SYSTEMS WIRING METHODS

1. ALL POWER WIRING SHALL BE INSTALLED IN CONDUIT.
2. FIRE ALARM WIRING INSTALLED ABOVE THE FINISHED CEILING IS ACCEPTABLE TO USE THE FREE-AIR METHOD. USE "J" HOOKS OR "D" RINGS FOR SUPPORT METHODS. PROVIDE PLENUM RATED CABLE FOR THE ENTIRE PROJECT.
3. FIRE ALARM DEVICE MOUNTING HEIGHTS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72 NATIONAL FIRE ALARM CODE, BUREAU OF FIRE SERVICES, 2003 MICHIGAN BARRIER FREE DESIGN MANUAL AND OTHER APPLICABLE CODES. MOUNTING HEIGHT REQUIREMENTS:

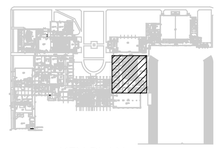
- WALL MOUNTED AUDIO/VISUAL UNITS SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80" AND NOT GREATER THAN 96" ABOVE THE FINISHED FLOOR. CEILING MOUNTED DEVICES ARE ACCEPTABLE AND ARE NOTED ON THE DRAWINGS.

4. J-HOOKS AND D-RINGS SHALL BE USED FOR THE LOW-VOLTAGE SYSTEM WIRING INCLUDING BUT NOT LIMITED TO: FIRE ALARM, LIGHTING CONTROL, ETC.
5. MC CABLE IS ONLY ACCEPTABLE FOR FINAL LIGHT FIXTURE CONNECTIONS ABOVE THE LAY-IN CEILING ON THIS PROJECT, UNLESS SPECIFICALLY NOTED.

KEYED NOTES

1. ELECTRICAL CONTRACTOR SHALL REUSE EXISTING LIGHTING CIRCUIT FOR NEW LED LIGHTS. LIGHTS SHALL BE TIED INTO EXISTING LIGHTING CONTROLS.
2. ELECTRICAL CONTRACTOR SHALL RE-USE EXISTING EMERGENCY LIGHTING CIRCUIT AND EXISTING EBS DEVICE FOR NEW LIGHTING. NEW LIGHTS SHALL BE TIED INTO EXISTING LIGHTING CIRCUIT.
3. ELECTRICAL CONTRACTOR SHALL PROVIDE NEW SIMPLEX DUCT SMOKE DETECTOR AND DUCT SMOKE DETECTOR TEST BUTTON. TIE INTO EXISTING SIMPLEX NAC PANEL IN STORAGE B163.
4. ELECTRICAL CONTRACTOR SHALL PROVIDE NEW SIMPLEX DUCT SMOKE DETECTOR. RE-USE EXISTING FIRE ALARM WIRING AND EXISTING DUCT SMOKE DETECTOR TEST BUTTON.
5. ELECTRICAL CONTRACTOR SHALL RELOCATE EXISTING LIGHT FIXTURE TO LOCATION SHOWN TO AVOID NEW MECHANICAL DUCT. MODIFY AND EXTEND EXISTING EMERGENCY LIGHTING CIRCUIT AS NEEDED.
6. ELECTRICAL CONTRACTOR SHALL MODIFY AND EXTEND EXISTING LIGHTING CIRCUIT AS SHOWN FOR EXISTING SURFACE LIGHTS TO REMAIN OPERATIONAL.
7. ELECTRICAL CONTRACTOR SHALL RELOCATE EXISTING FIRE ALARM DEVICE TO LOCATION SHOWN TO AVOID NEW MECHANICAL DUCT. MODIFY AND EXTEND EXISTING FIRE ALARM WIRING AS NEEDED.

NO.	REVISION	DATE



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PROJECT TITLE

FITNESS CENTER STRUCT. & HVAC

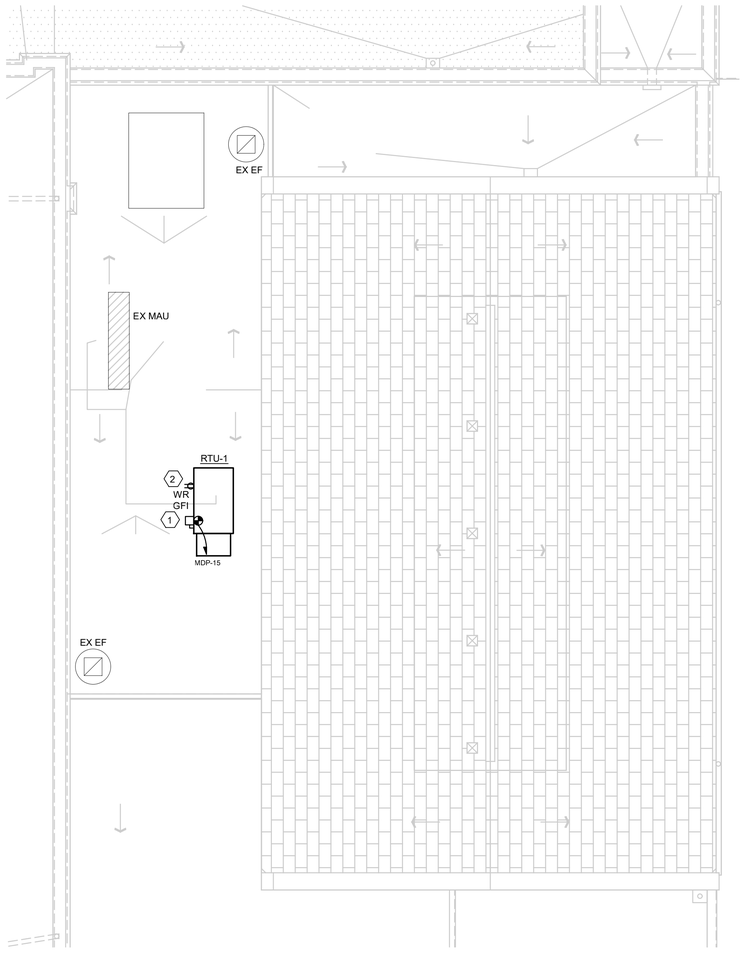
CENTRAL HIGH SCHOOL
BAY CITY PUBLIC SCHOOLS

BAY CITY, MICHIGAN

SHEET TITLE

FIRST FLOOR PLAN
ELECTRICAL REVISED

PROJECT NUMBER	SHEET NUMBER
2018040.19	E2.01
PROJECT DATE: JANUARY 7, 2025	
CHECKED BY: JWF	



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ROOF PLAN - ELECTRICAL REVISED

1/8"=1'-0"

POWER & SYSTEMS WIRING METHODS

1. ALL POWER WIRING SHALL BE INSTALLED IN CONDUIT.

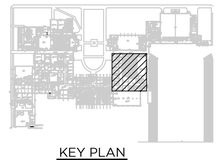
GENERAL NOTES

1. CONCRETE ROOF JOISTS SHALL NOT BE CUT, CORED THROUGH, OR ALTERED IN ANY WAY WITHOUT GETTING WRITTEN REVIEW AND APPROVAL OF THE STRUCTURAL ENGINEER AND ARCHITECT.

KEYED NOTES

1. NEMA 3R NON-FUSED DISCONNECT SWITCH SHALL BE FACTORY MOUNTED AND WIRED. ELECTRICAL CONTRACTOR SHALL PROVIDE SINGLE POINT POWER CONNECTION. SEE SHEET E0.01 FOR NEW CONDUIT ROUTE.
2. SERVICE RECEPTACLE SHALL BE FACTORY MOUNTED AND WIRED WITH MECHANICAL UNIT.

NO.	REVISION	DATE



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PROJECT TITLE

FITNESS CENTER STRUCT. & HVAC

CENTRAL HIGH SCHOOL
BAY CITY PUBLIC SCHOOLS

BAY CITY, MICHIGAN

SHEET TITLE

ROOF PLAN
ELECTRICAL - REVISED

PROJECT NUMBER	SHEET NUMBER
2018040.19	E2.02
PROJECT DATE: JANUARY 7, 2025	
CHECKED BY: JWF	

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION
A	1X4 LED FLAT PANEL, SELECTABLE LUMEN (MEDIUM SETTING),3700 LUMENS, SELECTABLE CCT, 90CRI, MATCH NEARBY EXISTING COLOR TEMP, RECESSED DRYWALL MOUNT KIT, ACRYLIC LENS, DAMP LOCATION LISTED, 40 WATTS METALUX #14MMS-L3C3-UNV
AE	SAME AS FIXTURE A EXCEPT WILL BE ON EMERGENCY GENERATOR CIRCUIT

ELECTRICAL SYMBOLS LIST

	1'x4' LED FIXTURE, TYPE INDICATED
	HALF-SHADED FIXTURE INDICATES EMERGENCY, TYPE INDICATED
OS	OCCUPANCY SENSOR
	POWER CONNECTION
	RECEPTACLE
	HOMERUN
DSD	DUCT SMOKE DETECTOR #SIMPLEX
	DUCT SMOKE DETECTOR TEST BUTTON #SIMPLEX
	FIRE ALARM HORN/STROBE
	NON-FUSED DISCONNECT SWITCH
NAC	FIRE ALARM NAC PANEL
FACP	FIRE ALARM CONTROL PANEL
RAP	REMOTE ANNUNCIATOR PANEL
	PANELBOARD
EBS	UL 924 DEVICE
EX	EXISTING
WR	WEATHER RESISTANT
MDP	MAIN DISTRIBUTION PANEL
PP	POWER PANEL
LP	LIGHTING PANEL
C	CEILING
ATS	AUTOMATIC TRANSFER SWITCH
GFI	GROUND FAULT CIRCUIT INTERRUPTER

LOAD SUMMARY

EXISTING LOADS REMOVED:
1. MAU 6.0KVA
2. LIGHTING 0.6KVA

TOTAL REMOVED: 6.6KVA @ 480 VOLT 3PH = 7.95 AMPS

NEW LOADS ADDED:
1. RTU-1 27.4KVA
2. LIGHTING 0.3KVA

TOTAL ADDED 27.7KVA @ 480 VOLT 3PH = 33.36 AMPS

REVISED
MDP
SQ-D ILINE PANEL- HCWM-124734436B0

MAIN: SIZE & TYPE: **1200** A
BUS RATING: **1200** A
VOLTAGE: **480** V **3** PH **3** W
MOUNTING: **SURFACE**

PANEL LOCATION: OUTSIDEB118
FEEDER SIZE: 1200A
FED FROM:
MIN RMS AMPS:

CKT #	CIRCUIT DESCRIPTION	AMPS / POLES	LOAD (KVA) A	LOAD (KVA) B	LOAD (KVA) C
1	**PANEL PP TRANSFORMER**	350A/3P			
2	**TUNNEL PANEL, PRESS BOX LR**	450A/3P			
3	**HVAC HOOD FAN, MAU**	35A/3P			
4	**ATS GEN #2 STAND BY**	30A/3P			
5	**ATS GEN #2 EMERGENCY**	150A/3P			
6	**EXISTING LOAD**	150A/3P			
7	**BLANK**				
8	**MAIN BREAKER**	1200A/3P			
9	**DISPOSAL**	15A/3P			
10	**DISPOSAL**	15A/3P			
11	**DISPOSAL**	15A/3P			
12	**GRIDDLE**	25A/3P			
13	**CAFÉ HEAT&AIR, RTU-1**	70A/3P			
14	**BOOSTER HEATER**	60A/3P			
1 15	**NEW RTU**	45A/3P	9.134	9.134	9.134
16					
17					
18					
19					
20					

NOTES:
1. MDP-15 SHALL BE A NEW CIRCUIT BREAKER INSTALLED IN EXISTING PANEL MDP.
2. ELECTRICAL CONTRACTOR SHALL TAKE A LOAD READING OF EXISTING MDP PRIOR TO DOING ANY WORK IN THE PANEL TO VERIFY IT HAS THE CAPACITY FOR ADDITIONAL LOAD. TURN OVER LOAD READING TO ENGINEER OF RECORD.

NO.	REVISION	DATE

KEY PLAN

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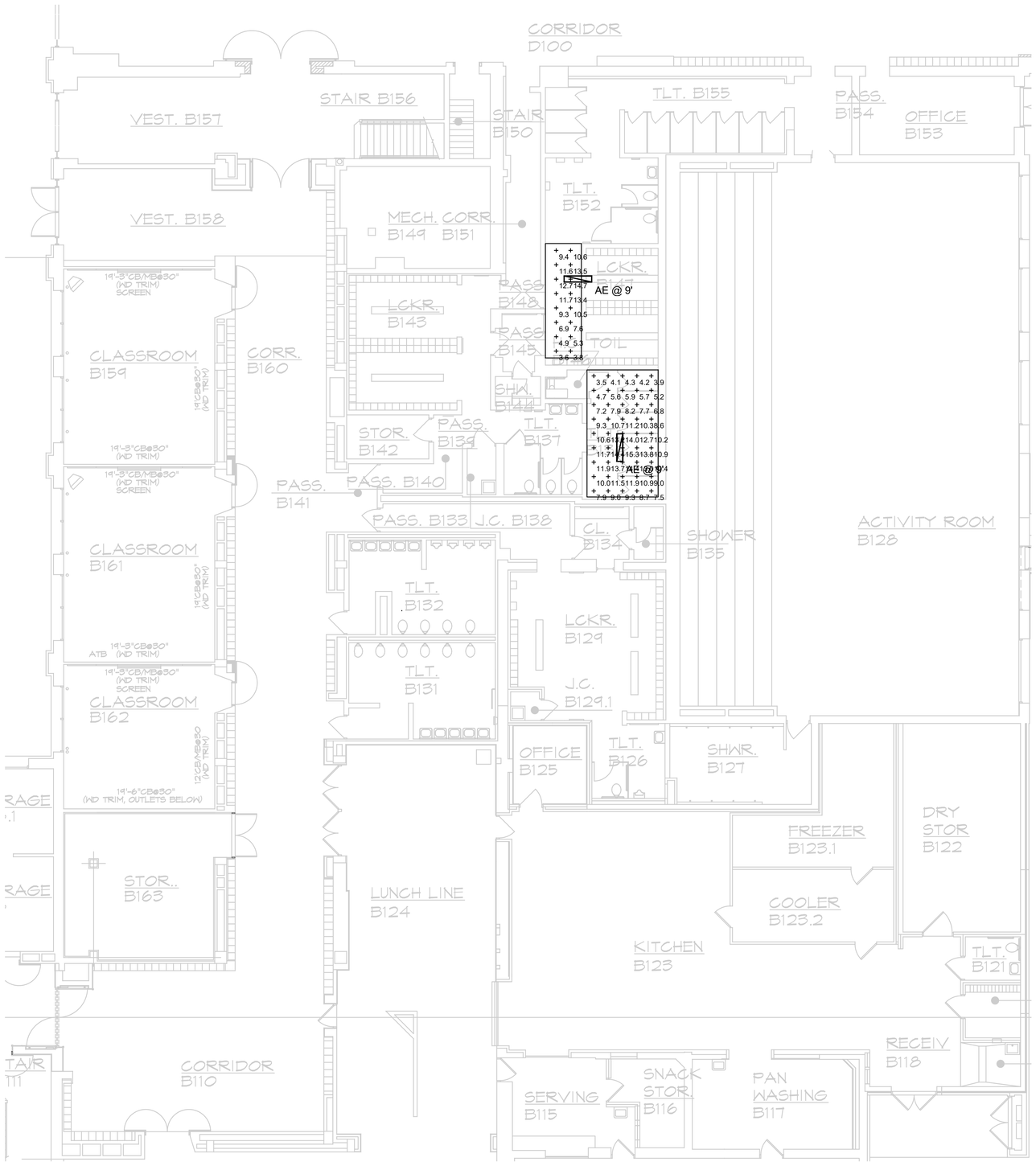
PROJECT TITLE
FITNESS CENTER STRUCT. & HVAC
CENTRAL HIGH SCHOOL
BAY CITY PUBLIC SCHOOLS
BAY CITY, MICHIGAN

SHEET TITLE
ELECTRICAL SYMBOLS AND PANEL SCHEDULE

PROJECT NUMBER 2018040.19
PROJECT DATE JANUARY 7, 2025
CHECKED BY JWF
SHEET NUMBER E3.01



FIRST FLOOR PLAN - EMERGENCY LIGHTING POINT BY POINT
1/8"=1'-0"

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
ULCKER B147	+	9.3 fc	14.7 fc	3.6 fc	4.1:1	2.6:1
UTLT B136	+	9.4 fc	15.3 fc	3.5 fc	4.4:1	2.7:1

NO.	REVISION	DATE

KEY PLAN

WTAARCH.COM
WTA ARCHITECTS
100 S Jefferson Ave, Suite 601
Saginaw, Michigan 48607
989 752 8107

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714 EAST MIDLAND STREET • BAY CITY, MICHIGAN 48706
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PROJECT TITLE
FITNESS CENTER STRUCT. & HVAC
CENTRAL HIGH SCHOOL
BAY CITY PUBLIC SCHOOLS
BAY CITY, MICHIGAN

SHEET TITLE
FIRST FLOOR PLAN
EMERGENCY LIGHTING

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