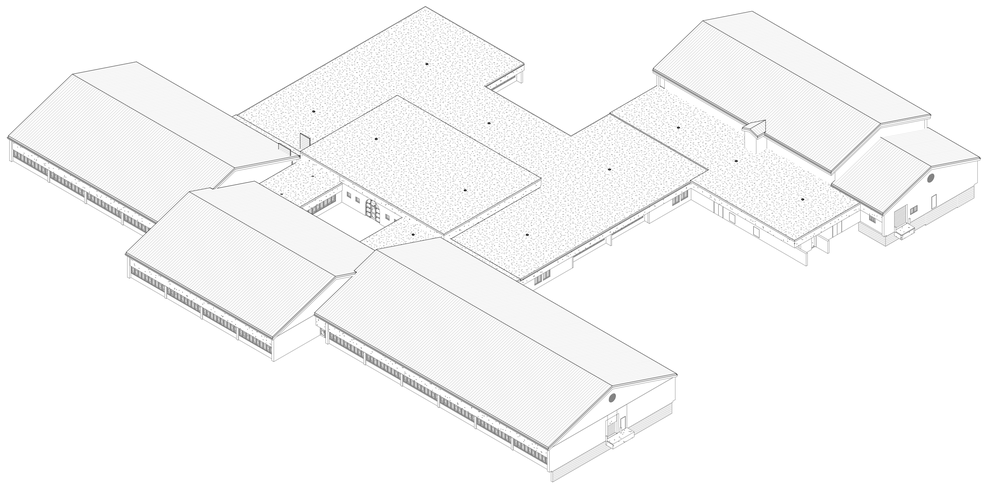
RENOVATIONS TO:
OJR DISTRICT SERVICES CENTER

932 SANATOGA ROAD
POTTSTOWN, PA 19465



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Renovations to:
OJR DISTRICT SERVICES CENTER
932 SANATOGA ROAD
POTTSTOWN, PA 19465

ISSUED FOR:

NO.	DESCRIPTION	DATE
	ISSUED FOR BIDDING	07/24/2026

DATE: 07/24/2026

SGA PROJECT NUMBER: 225180.00

Key Plan:

Drawing Title:
COVER SHEET

Drawing Number:
CS.1

R-2 RESIDENTIAL DISTRICT

OFFICE USE: 3 SPACES PER 1,000 GSF OF FLOOR AREA PLUS 1 PER EMPLOYEE

11,450 SF TOTAL RENOVATION + 1,650 SF EXISTING OFFICE SPACE = 13,100 SF / 1,000 = 13 X 3 = 39 SPACES REQUIRED

17 EXISTING EMPLOYEES +18 NEW EMPLOYEES = 35 TOTAL EMPLOYEES = 35 SPACES REQUIRED

EXISTING PARKING SPACES = 69
PROPOSED PARKING SPACES = 17 NEW SPACES
TOTAL REQUIRED PARKING = 74 TOTAL PARKING SPACES REQUIRED
TOTAL PARKING PROVIDED = 86 PARKING SPACES

GRAPHIC SCALE
0 25 50 100
SCALE: 1" = 50'

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901 RIDGE ROAD,
POTTSTOWN, PA 17465

PARKING SKETCH

DISTRICT SERVICE CENTER FOR OWEN J ROBERTS SCHOOL DISTRICT

932 SANTOGA ROAD, POTTSTOWN, PA 19465

EAST COVENTRY TOWNSHIP, CHESTER COUNTY, PA

ISSUED FOR:

NO.	DESCRIPTION	DATE

DATE: 07 May, 2026

SG PROJECT NUMBER: 11-000

Key Plan:

Drawing Title:

SITE PLAN

Drawing Number:

C1.0

INTERNATIONAL EXISTING BUILDING CODE, 2018

CHAPTER 6: CLASSIFICATION OF WORK

SECTION 602 - ALTERATION LEVEL 1
SECTION 602.1 SCOPE
LEVEL 1 ALTERATIONS INCLUDE THE REMOVAL AND REPLACEMENT OR THE COVERING OF EXISTING MATERIALS, ELEMENTS, EQUIPMENT OR FIXTURES USING NEW MATERIALS, ELEMENTS, EQUIPMENT OR FIXTURES THAT SERVE THE SAME PURPOSE.

SECTION 603 - ALTERATION LEVEL 2
SECTION 603.1 SCOPE
LEVEL 2 ALTERATIONS INCLUDE THE ADDITION OR ELIMINATION OF ANY DOOR OR WINDOW, THE RECONFIGURATION OR EXTENSION OF ANY SYSTEM, OR THE INSTALLATION OF ANY ADDITIONAL EQUIPMENT, AND SHALL APPLY WHERE THE WORK AREA IS EQUAL TO OR LESS THAN 50 PERCENT OF THE BUILDING AREA.

SECTION 604 - ALTERATION LEVEL 3
SECTION 604.1 SCOPE
LEVEL 3 ALTERATIONS APPLY WHERE THE WORK AREA EXCEEDS 50 PERCENT OF THE BUILDING AREA.

CALCULATION OF LEVEL 2 WORK: 16% OF TOTAL EXISTING BUILDING AREA
LEVEL 2 WORK THRESHOLD DOES NOT EXCEED 50%, THEREFORE DOES NOT MEET LEVEL 3 REQUIREMENTS.

CHAPTER 7: ALTERATIONS - LEVEL 1

SECTION 702: BUILDING ELEMENTS AND MATERIALS
SECTION 702.7 MATERIALS AND METHODS
NEW WORK SHALL COMPLY WITH THE MATERIALS AND METHODS REQUIREMENTS IN THE INTERNATIONAL BUILDING CODE, INTERNATIONAL ENERGY CONSERVATION CODE, INTERNATIONAL MECHANICAL CODE AND INTERNATIONAL PLUMBING CODE, AS APPLICABLE, THAT SPECIFY MATERIAL STANDARDS, DETAIL OF INSTALLATION AND CONNECTION, JOINTS, PENETRATIONS AND CONTINUITY OF ANY ELEMENT, COMPONENT OR SYSTEM IN THE BUILDING.

CHAPTER 8: ALTERATIONS - LEVEL 2

SECTION 801.2 ALTERATION LEVEL 1 COMPLIANCE
IN ADDITION TO THE REQUIREMENTS OF THIS CHAPTER, ALL WORK SALL COMPLY WITH THE REQUIREMENTS OF CHAPTER 7.

SECTION 802: BUILDING ELEMENTS AND MATERIALS
SECTION 802.6: FIRE RESISTANCE RATINGS
WHERE APPROVED BY THE CODE OFFICAL, BUILDINGS WHERE AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3.1.1 OR 903.3.1.2 OF THE INTERNATIONAL BUILDING CODE HAS BEEN ADDED, AND THE BUILDING IS NOW SPRINKLERED THROUGHOUT, THE REQUIRED FIRE-RESISTANCE RATINGS OF BUILDING ELEMENTS AND MATERIALS SHALL BE PERMITTED TO MEET THE REQUIREMENTS OF THE CURRENT BUILDING CODE. THE BUILDING IS REQUIRED TO MEET THE OTHER APPLICABLE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE.

INTERNATIONAL BUILDING CODE, 2018

CHAPTER 3: USE AND OCCUPANCY CLASSIFICATION

SECTION 302: CLASSIFICATION
EDUCATIONAL: GROUP E
NOTE: EXISTING CLASSROOMS AND RELATED SPACES NOT IN WORK AREA ARE LEFT UINCHANGED.

SECTION 304: BUSINESS GROUP B
SECTION 304.1 BUSINESS GROUP B
BUSINESS GROUP B OCCUPANCY INCLUDES, AMONG OTHERS, THE USE OF A BUILDING OR STRUCTURE, OR PORTION THEREOF, FOR OFFICE, PROFESSIONAL OR SERVICE-TYPE TRANSACTIONS, INCLUDING STORAGE OF RECORDS AND ACCOUNTS.

SECTION 305: EDUCATIONAL GROUP E
SECTION 305.1: EDUCATIONAL GROUP E
EDUCATIONAL GROUP E OCCUPANCY INCLUDES, AMONG OTHERS, THE USE OF A BUILDING OR STRUCTURE, OR A PORTION THEREOF, BY SIX OR MORE PERSONS AT ANY ONE TIME FOR EDUCATIONAL PURPOSES THROUGH 12TH GRADE.

CHAPTER 5: GENERAL BUILDING HEIGHTS AND AREAS

SECTION 503: GENERAL BUILDING HEIGHT AND AREA LIMITATIONS
SECTION 503.1
UNLESS OTHERWISE SPECIFICALLY MODIFIED IN CHAPTER 4 AND THIS CHAPTER, BUILDING HEIGHT, NUMBER OF STORIES, AND BUILDING AREA SHALL NOT EXCEED THE LIMITS SPECIFIED IN SECTIONS 504 AND 506 BASED ON THE TYPE OF CONSTRUCTION AS DETERMINED BY SECTION 602 AND THE OCCUPANCIES AS DETERMINTED BY SECTION 302 EXCEPT AS MODIFIED HEREAFTER. FOR THE PURPOSE OF DETERMINING AREA LIMITATIONS, HEIGHT LIMITATIONS AND TYPE OF CONSTRUCTION, EACH PORTION OF A BUILDING SEPARATED BY ONE OR MORE FIRE WALLS COMPLYING WITH SECTION 706 SHALL BE CONSIDERED TO BE A SEPARATE BUILDING.

SECTION 504: BUILDING HEIGHT AND NUMBER OF STORIES
THE HEIGHT, IN FEET, AND THE NUMBER OF STORIES OF A BUILDING SHALL BE DETERMINED BASED ON THE TYPE OF CONSTRUCTION, OCCUPANCY CLASSIFICATION AND WHETHER THERE IS AN AUTOMATIC SPRINKLER SYSTEM INSTALLED THROUGHOUT THE BUILDING.

SECTION 506: BUILDING AREA
THE FLOOR AREA OF A BUILDING SHALL BE DETERMINED BASED ON THE TYPE OF CONSTRUCTION, OCCUPANCY CLASSIFICATION, WHETHER THERE IS AN AUTOMATIC SPRINKLER SYSTEM INSTALLED THROUGHOUT THE BUILDING AND THE AMOUNT OF BUILDING FRONTAGE ON A PUBLIC WAY OR OPEN SPACE.

CHAPTER 6: TYPES OF CONSTRUCTION

TABLE 601: FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)

CONSTRUCTION TYPE IIB
STRUCTURAL FRAME (COLUMNS, GIRDERS, TRUSSES): 0
BEARING WALLS (INTERIOR, EXTERIOR): 0
NON-BEARING WALLS (INTERIOR, EXTERIOR): 0
FLOOR CONSTRUCTION (INCLUDING BEAMS & JOISTS): 0
ROOF CONSTRUCTION (INCLUDING BEAMS & JOISTS): 0

SECTION 602.2: TYPES I AND II
TYPES I AND II CONSTRUCTION ARE THOSE TYPES OF CONSTRUCTION IN WHICH BUILDING ELEMENTS LISTED IN TABLE 601 ARE OF NONCOMBUSTIBLE MATERIALS, EXCEPT AS PERMITTED IN 603 AND ELSEWHERE IN THIS CODE.

SECTION 603: COMBUSTIBLE MATERIAL IN TYPE I AND II CONSTRUCTION
SECTION 603.1: ALLOWABLE MATERIALS
COMBUSTIBLE MATERIALS SHALL BE PERMITTED IN BUILDINGS TYPE I OR II CONSTRUCTION IN THE FOLLOWING APPLICATIONS AND IN ACCRODANCE WITH SECTIONS 603.1.1 THROUGH 603.1.3.

CHAPTER 7: FIRE AND SMOKE PROTECTION FEATURES

FIRE WALL: A FIRE-RESISTANCE-RATED WALL HAVING PROTECTED OPENINGS, WHICH RESTRICTS THE SPREAD OF FIRE AND EXTENDS CONTINUOUSLY FROM THE FOUNDATION TO OR THROUGH THE ROOF, WITH SUFFICIENT STRUCTURAL STABILITY UNDER FIRE CONDITIONS TO ALLOW COLLAPSE OF CONSTRUCTION ON EITHER SIDE WITHOUT COLLAPSE OF THE WALL.

SECTION 705: EXTERIOR WALLS
SECTION 705.5: FIRE-RESISTANCE RATINGS
EXTERIOR WALLS SHALL BE FIRE-RESISTANCE RATED IN ACCORDANCE WITH TABLES 601 AND 602 AND THIS SECTION. THE REQUIRED FIRE-RESISTANCE RATING OF EXTERIOR WALLS WITH A FIRE SEPARATION DISTANCE OF GREATER THAN 10 FEET SHALL BE RATED FOR EXPOSURE TO FIRE FROM INSIDE. THE REQUIRED FIRE-RESISTANCE RATING OF EXTERIOR WALLS WITH A FIRE SEPARATION DISTANCE OF LESS THAN OR EQUAL TO 10 FEET HALL BE RATED FOR EXPOSURE TO FIRE FROM BOTH SIDES.

SECTION 706: FIRE WALLS (EXISTING TO REMAIN)
TABLE 706.4: FIRE WALL FIRE-RESISTANCE RATINGS
USE GROUP E - FIRE WALL FIRE-RESISTANCE RATING / 3 HOURS
NOTE A. IN TYPE II OR V CONSTRUCTION, WALLS SHALL BE PERMITTED TO HAVE A 2-HOUR FIRE-RESISTANCE RATING.

SECTION 706.5.1: EXTERIOR WALLS
WHERE THE FIRE WALL INTERSECTS EXTERIOR WALLS, THE FIRE RESISTANCE RATING AND OPENING PROTECTION OF THE EXTERIOR WALLS SHALL COMPLY WITH ONE OF THE FOLLOWING:
1. EXTERIOR WALL INTERSECTIONS AT FIRE WALLS THAT FORM AN ANGLE EQUAL TO OR GREATER THAN 180 DEGREES DO NOT NEED EXTERIOR WALL PROTECTION.

SECTION 706.6: VERTICAL CONTINUITY
FIRE WALLS SHALL EXTEND FROM THE FOUNDATION TO A TERMINATION POINT AT LEAST 30 INCHES ABOVE BOTH ADJACENT ROOFS.
EXCEPTION 2: TWO-HOUR FIRE-RESISTANCE-RATED WALLS SHALL BE PERMITTED TO TERMINATE AT THE UNDERSIDE OF THE ROOF SHEATHING, DECK OR SLAB, PROVIDED:
2.1: THE LOWER ROOF ASSEMBLY WITHIN 4 FEET OF THE WALL HAS NOT LESS THAN A 1-HOUR FIRE-RESISTANCE RATING AND THE ENTIRE LENGTH AND SPAN OF SUPPORTING ELEMENTS FOR THE RATED ROOF ASSEMBLY HAS A FIRE-RESISTANCE RATING OF NOT LESS THAN 1 HOUR.
2.2: OPENINGS IN THE ROOF SHALL NOT BE LOCATED WITHIN 4 FEET OF THE FIRE WALL.
2.3 EACH BUILDING SHALL BE PROVIDED WITH NOT LESS THAN A CLASS B ROOF COVERING.

SECTION 706.8 OPENINGS
EACH OPENING THROUGH A FIRE WALL SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 716 AND SHALL NOT EXCEED 156 SQUARE FEET. THE AGGREGATE WIDTH OF OPENINGS AT ANY FLOOR LEVEL SHALL NOT EXCEED 25 PERCENT OF THE LENGTH OF THE WALL.
EXCEPTION 2: OPENINGS SHALL NOT BE LIMITED TO 156 SQUARE FEET WHERE BOTH BUILDINGS ARE EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3.1.1.

SECTION 707: FIRE BARRIERS (EXISTING TO REMAIN)
SECTION 707.3.10: FIRE AREAS
THE FIRE BARRIERS, FIRE WALLS, HORIZONTAL ASSEMBLIES OR COMBINATIONS THEREOF SEPARATING A SINGLE OCCUPANCY INTO DIFFERENT FIRE AREAS SHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN THAT INDICATED IN TABLE 707.3.10. THE FIRE BARRIERS, FIRE WALLS, HORIZONTAL ASSEMBLIES OR COMBINATIONS THEREOF SEPARATING FIRE AREAS OF MIXED OCCUPANCIES SHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN THE HIGHEST VALUE INDICATED IN TABLE 707.3.10 FOR THE OCCUPANCIES UNDER CONSIDERATION.

TABLE 707.3.10: FIRE-RESISTANCE RATING REQUIREMENTS FOR FIRE BARRIER ASSEMBLIES OR HORIZONTAL ASSEMBLIES BETWEEN FIRE AREAS
USE GROUP E - FIRE BARRIER FIRE-RESISTANCE RATING / 2 HOURS

SECTION 707.4 EXTERIOR WALLS:
WHERE EXTERIOR WALLS SERVE AS A PART OF A REQUIRED FIRE-RESISTANCE-RATED SHAFT, OR SEPARATION OR ENCLOSURE FOR A STAIRWAY, RAMP OR EXIT PASSAGEWAY, SUCH WALLS SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 705 FOR EXTERIOR WALLS AND THE FIRE-RESISTANCE-RATED ENCLOSURES OR SEPARATION SHALL NOT APPLY.

SECTION 707.5.1: SUPPORTING CONSTRUCTION
EXCEPTION 2: SUPPORTING CONSTRUCTION FOR 1-HOUR FIRE BARRIERS REQUIRED BY TABLE 509.1 IN BUILDINGS TYPE IIB, IIIB AND VB CONSTRUCTION IS NOT REQUIRED TO BE FIRE RESISTANCE RATED UNLESS REQUIRED BY OTHER SECTIONS OF THIS CODE.

SECTION 707.6: OPENINGS
OPENINGS IN A FIRE BARRIER SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 716. OPENINGS SHALL BE LIMITED TO A MAXIMUM AGGREGATE WIDTH OF 25 PERCENT OF THE LENGTH OF THE WALL, AND THE MAXIMUM AREA OF ANY SINGLE OPENING SHALL NOT EXCEED 156 SQUARE FEET. OPENINGS IN ENCLOSURES FOR EXIT ACESS STAIRWAYS AND RAMPS, INTERIOR EXIT STAIRWAYS AND RAMPS, AND EXIT PASSAGEWAYS SHALL ALSO COMPLY WITH SECTIONS 1019, 1023.4 AND 1024.5 RESPECTIVELY.
EXCEPTION 1: OPENINGS SHALL NOT BE LIMITED TO 156 SQUARE FEET WHERE ADJOINING FLOOR AREAS ARE EQUIPPED WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1.

SECTION 714: PENETRATIONS
SECTION 714.4.1: THROUGH PENETRATIONS
EXCEPTION: WHERE THE PENETRATING ITEMS ARE STEEL, FERROUS OR COPPER PIPES, TUBES OR CONDUITS, THE ANNULAR SPACE BETWEEN THE PENETRATING ITEM AND THE FIRE RESISTANCE-RATED WALL IS PERMITTED TO BE PROTECTED BY EITHER OF THE FOLLOWING MEASURES:
2. THE MATERIAL USED TO FILL THE ANNULAR SPACE SHALL PREVENT THE PASSAGE OF FLAME AND HOT GASES SUFFICIENT TO IGNITE COTTON WASTE WHEN SUBJECTED TO ASTM E119 OR UL 263 TIME-TEMPERATURE FIRE CONDITIONS UNDER A MINIMUM POSITIVE PRESSURE DIFFERENTIAL OF 0.01 IN OF WATER AT THE LOCATION OF THE PENETRATION FOR THE TIME PERIOD EQUIVALENT TO THE FIRE-RESISTANCE RATING OF THE CONSTRUCTION PENETRATED.

SECTION 716: OPENING PROTECTIVES
SECTION 716.1.2.3: FIRE-RESISTANCE-RATED GLAZING
FIRE-RESISTANCE-RATED GLAZING TESTED AS PART OF A FIRE-RESISTANCE-RATED WALL OR FLOOR/CEILING ASSEMBLY IN ACCORDANCE WITH ASTM E119 OR UL 263 AND LABELED IN ACCORDANCE WITH SECTION 703.4 SHALL NOT OTHERWISE BE REQUIRED TO COMPLY WITH THIS SECTION WHERE USED AS PART OF A WALL OR FLOOR/CEILING ASSEMBLY.

CHAPTER 8: INTERIOR FINISHES

SECTION 803: WALL AND CEILING FINISHES
SECTION 803.1.2: INTERIOR WALL AND CEILING FINISH MATERIALS
- CLASS A: FLAME SPREAD 0-25; SMOKE-DEVELOPED INDEX 0-450
- CLASS B: FLAME SPREAD 26-75; SMOKE-DEVELOPED INDEX 0-450
- CLASS C: FLAME SPREAD 76-200; SMOKE-DEVELOPED INDEX 0-450

TABLE 803.13: INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY GROUP E / SPRINKLERED
- EXIT ENCLOSURES AND EXIT PASSAGEWAYS B
- CORRIDORS C
- ROOMS AND ENCLOSED SPACES C

SECTION 804: INTERIOR FLOOR FINISH
SECTION 804.4.2: MINIMUM CRITICAL RADIANT FLUX
IN ALL OCCUPANCIES, INTERIOR FLOOR FINISH AND FLOOR COVERING MATERIALS IN ENCLOSURES FOR STAIRWAYS AND RAMPS, EXIT PASSAGEWAYS, CORRIDORS AND ROOMS OR SPACES NOT SEPARATED FROM CORRIDORS BY PARTITIONS EXTENDING FROM THE FLOOR TO THE UNDERSIDE OF THE CEILILNG SHALL NOT BE LESS THAN CLASS I IN GROUPS I-1, I-2 AND I-3 AND NOT LESS THAN CLASS II IN GROUPS A, B, E, H, I-4, M, R-1, R-2 AND S.

EXCEPTION: WHERE A BUILDING IS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1 OR 903.3.1.2, CLASS II MATERIALS ARE PERMITTED IN ANY AREA WHERE CLASS I MATERIALS ARE REQUIRED AND MATERIALS COMPLYING WITH DOC FF-1 "PILL TEST" (CPSC 16 CFR, PART 1630) ARE PERMITTED IN ANY AREA CLASS II MATERIALS ARE REQUIRED.

SECTION 805: COMBUSTIBLE MATERIALS IN TYPES I AND II CONSTRUCTION
SECTION 805.1: APPLICATION
COMBUSTIBLE MATERIALS INSTALLED ON OR EMBEDDED IN FLOORS OF BUILDINGS OF TYPE I OR II CONSTRUCTIONS SHALL COMPLY WITH SECTIONS 805.1.1 THROUGH 805.1.3.
EXCEPTION: STAGES AND PLATFORMS CONSTRUCTED IN ACCORDANCE WITH SECTIONS 410.2 AND 410.3, RESPECTIVELY.

CHAPTER 9: FIRE PROTECTION SYSTEMS

SECTION 901.2: FIRE PROTECTION SYSTEMS
FIRE PROTECTION AND LIFE SAFETY SYSTEMS SHALL BE INSTALLED, REPAIRED, OPERATED AND MAINTAINED IN ACCORDANCE WITH THIS CODE AND THE INTERNATIONAL FIRE CODE.

SECTION 903: AUTOMATIC SPRINKLER SYSTEMS
SECTION 903.2.1.3: GROUP A-3
AN AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED FOR GROUP A-3 OCCUPANCIES WHERE ONE OF THE FOLLOWING CONDITIONS EXISTS:
- THE FIRE AREA EXCEEDS 12,000 SQUARE FEET
- THE FIRE AREA HAS AN OCCUPANT LOAD OF 300 OR MORE; OR
- THE FIRE AREA IS LOCATED ON A FLOOR OTHER THAN THE LEVEL OF EXIT DISCHARGE SERVING SUCH OCCUPANTS

SECTION 903.2.3: GROUP E
AN AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED FOR GROUP E OCCUPANCIES AS FOLLOWS:
- THROUGHOUT ALL GROUP E FIRE AREAS GREATER THAN 12,000 SQUARE FEET IN AREA
- THE GROUP E FIRE AREA IS LOCATED ON A FLOOR OTHER THAN A LEVEL OF EXIT DISCHARGE SERVING SUCH OCCUPANCIES.
EXCEPTION: IN BUILDINGS WHERE EVERY CLASSROOM HAS NOT FEWER THAN ONE EXTERIOR EXIT DOOR AT GROUND LEVEL, AN AUTOMATIC SPRINKLER SYSTEM IS NOT REQUIRED IN ANY AREA BELOW THE LOWEST LEVEL OF EXIT DISCHARGE SERVING THAT AREA.
- THE GROUP E FIRE AREA HAS AN OCCUPANT LOAD OF 300 OR MORE.

SECTION 906: PORTABLE FIRE EXTINGUISHERS
SECTION 906.1: PORTABLE FIRE EXTINGUISHERS SHALL BE INSTALLED IN ALL OF THE FOLLOWING LOCATIONS:
1. IN GROUP A, B, E, F, H, I, M, R-1, R-2, R-4 AND S OOCCUPANCIES.
EXCEPTION 2: IN GROUP E OCCUPANCIES, PORTABLE FIRE EXTINGUISHERS SHALL BE REQUIRED ONLY IN LOCATIONS SPECIFIED IN ITEMS 2 THROUGH 6 WHERE EACH CLASSROOM IS PROVIDED WITH A PORTABLE FIRE EXTINGUISHER HAVING A MINIMUM RATING OF 2-A:20-B.C.
2. WITHIN 30 FEET DISTANCE FO TRAVEL FROM COMMERCIAL COOKING EQUIPMENT.

TABLE 906.3(1) FIRE EXTINGUISHERS FOR CLASS A FIRE HAZARDS: LIGHT (LOW) HAZARD OCCUPANCY
- MINIMUM RATED EXTINGUISHER 2-A
- MAX FLOOR AREA FOR EXTINGUISHER 11,250 SQUARE FEET
- MAXIMUM TRAVEL DISTANCE 75 FEET

SECTION 907: FIRE ALARM AND DETECTION SYSTEMS
SECTION 907.2.1: GROUP A
A MANUAL FIRE ALARM SYSTEM THAT ACTIVATES THE OCCUPANT NOTIFICATION SYSTEM IN ACCORDANCE WITH SECTION 907.5 SHALLL BE INSTALLED IN GROUP A OCCUPANALLS WHERE THE OCCUPANT LOAD DUE TO ASSEMBLY OCCUPANCY IS 300 OR MORE, OR WHERE GROUP A OCCUPANT LOAD IS MORE THAN 100 PERSONS ABOVE OR BELOW THE LOWEST LEVEL OF EXIT DISCHARGE. GROUP A OCCUPANICES NOT SEPARATED FROM ONE ANOTHER IN ACCORDANCE WITH SECTION 707.3.10 SHALL BE CONSIDERED AS A SINGLE OCCUPANCY FOR THE PURPOSE OF APPLYING THIS SECTION. PORTIONS OF GROUP E OCCUPANCIES OCCUPIED FOR ASSEMBLY PURPOSES SHALL BE PROVIDED WITH A FIRE ALARM SYSTEM AS REQUIRED FOR THE GROUP E OCCUPANCY.
EXCEPTION: MANUAL FIRE ALARM BOXES ARE NOT REQUIRED WHERE THE BUILDING IS EQUPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3.1.1 AND THE OCCUPANT NOTIFICATION APPLIANCES WILL ACTIVATE THROUGHOUT THE NOTIFICATION ZONES UPON SPRINKLER WATER FLOW.

SECTION 907.2.3: GROUP E
A MANUAL FIRE ALARM SYSTEM THAT ACTIVATES THE OCCUPANT NOTIFICATION SYSTEM IN ACCORDANCE WITH SECTION 907.6 SHALL BE INSTALLED IN GROUP E OCCUPANCIES. WHEN AUTOMATIC SPRINKLER SYSTEMS OR SMOKE DETECTORS ARE INSTALLED, SUCH SYSTEMS OR DETECTORS SHALL BE CONNECTED TO THE BUILDING FIRE ALARM SYSTEM.

CHAPTER 10: MEANS OF EGRESS

SECTION 1004: OCCUPANT LOAD
SECTION 1004.4 MULTIPLE OCCUPANICES
WHERE A BUILDING CONTAINS TWO OR MORE OCCUPANICES, THE MEANS OF EGRESS REQUIREMENTS SHALL APPLY TO EACH PORTION OF THE BUILDING BASED ON THE OCCUPANCY OF THAT SPACE. WHERE TWO OR MORE OCCUPANCIES UTILIZE PORTIONS OF THE SAME MEANS OF EGRESS SYSTEM, THOSE EGRESS COMPONENTS SHALL MEET THE MORE STRINGENT REQUIREMENTS OF ALL OCCUPANICES THAT ARE SERVED.

TABLE 1004.5: MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT
- ACCESSORY STORAGE AREAS 300 GROSS
- ASSEMBLY WITHOUT FIXED SEATS (UNCONCENTRATED) 15 NET
- BUSINESS AREAS 150 GROSS
- EDUCATIONAL (CLASSROOM AREA) 20 NET

SECTION 1005: EGRESS WIDTH
SECTION 1005.3.2 OTHER EGRESS COMPONENTS
EXCEPTION 1: FOR OTHER THAN GROUP H AND I-2 OCCUPANCIES, THE CAPACITY, IN INCHES, OF MEANS OF EGRESS COMPONENTS ITHER THAN STAIRWAYS SHALL BE CALCULATED BY MULTIPLYING THE OCCUPANT LOAD SERVED BY SUCH COMPONENT BY A MEANS OF EGRESS CAPACITY FACTOR OF 0.15 INCH PER OCCUPANT IN BUILDINGS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3.1.1 OR 903.3.1.2 AND AN EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM IN ACCORDANCE WITH SECTION 907.5.2.2.

SECTION 1005.7.1 DOORS
DOORS, WHEN FULLY OPENED, SHALL NOT REDUCE THE REQUIRED WIDTH BY MORE THAN 7 INCHES. DOORS IN ANY POSITION SHALLD NOT REDUCE THE REQUIRED WIDTH BY MORE THAN ONE-HALF.

SECTION 1006: NUMBER OF EXITS AND EXIT ACCESS DOORWAYS
TABLE 1006.2.1 SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY
OCCUPANCY A AND E
- MAXIMUM OF 49 OCCUPANTS
- MAXIMUM DISTANCE OF 75 FEET
OCCUPANCY B
- MAXIMUM OF 49 OCCUPANTS
- MAXIMUM DISTANCE OF 100 FEET

TABLE 1006.3.2: MINIMUM NUMBER OF EXITS OR ACCESS TO EXITS PER STORY
1-500 (PERSON PER STORY) = 2 EXITS
501-1,000 (PERSONS PER STORY) = 3 EXITS
MORE THAN 1,000 (PERSONS PER STORY) = 4 EXITS

SECTION 1017: EXIT ACCESS TRAVEL DISTANCE
TABLE 1017.2 EXIT ACCESS TRAVEL DISTANCE
GROUP E - FULLY SPRINKLERED: 250 FEET
GROUP B - FULLY SPRINKLERED: 300 FEET
SECTION 1017.3 MEASUREMENT
EXIT ACCESS TRAVEL DISTANCE SHALL BE MEASURED FROM THE MOST REMOTE POINT OF EACH ROOM, AREA OR SPACE ALONG THE NATURAL AND UNOBSTRUCTED PATH OF HORIZONTAL AND VERTICAL EGRESS TRAVEL TO THE ENTRANCE TO AN EXIT.

SECTION 1020: CORRIDORS
TABLE 1020.1 CORRIDOR FIRE-RESISTANCE RATING
GROUP B, E - FULLY SPRINKLERED: 0 HOURS

TABLE 1020.2: MINIMUM CORRIDOR WIDTH
- ANY FACILITY NOT LISTED IN THIS TABLE: 44 INCHES
- WITH AN OCCUPANT LOAD OF LESS THAN 50: 36 INCHES
- IN GROUP E WITH A CORRIDOR HAVING AN OCCUPANT LOAD OF 100 OR MORE: 72 INCHES

SECTION 1020.3: OBSTRUCTION
THE MINIMUM WIDTH OR REQUIRED CAPCITY OF CORRIDORS SHALL BE UNOBSTRUCTED.
EXCEPTION: ENCROACHMENTS COMPLYING WITH SECTION 1005.7.

SECTION 1020.4: DEAD ENDS
WHERE MORE THAN ONE EXIT OR EXIT ACCESS DOORWAYS IS REQUIRED, THE EXIT ACCESS SHALL BE ARRANGED SUCH THAT THERE ARE NO DEAD ENDS IN CORRIDORS MORE THAN 20 FEET IN LENGTH.
EXCEPTION 2: IN GROUP E, WHERE THE BUILDING IS EQUIPPED WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1, THE LENGTH OF THE DEAD END CORRIDORS SHALL NOT EXCEED 50 FEET IN LENGTH.

SECTION 1028: EXIT DISCHARGE
SECTION 1028.1: EXIT DISCHARGE
EXISTS SHALL DISCHARDE DIRECTLY TO THE EXTERIOR OF THE BUILDING. THE EXIT DISCHARGE SHALL BE AT GRADE OR SHALL PROVIDE A DIRECT PATH OF EGRESS TRAVEL TO GRADE. THE EXIT DISCHARGE SHALL NOT REENTER THE BUILDING. THE COMBINED USE OF EXCEPTIONS 1 AND 2 SHALL NOT EXCEED 50 PERCENT OF THE NUMBER AND MINIMUM WIDTH OR REQUIRED CAPCITY OF THE REQUIRED EXITS.

CHAPTER 29: PLUMBING SYSTEMS

-SEE CHART TO RIGHT OF SHEET A001

CODE COMPLIANCE: PENNSYLVANIA UNIFORM CONSTRUCTION CODE
2018 INTERNATIONAL BUILDING CODE
2018 INTERNATIONAL EXISTING BUILDING CODE
2018 INTERNATIONAL ENERGY CONSERVATION CODE
2018 INTERNATIONAL EXISTING BUILDING CODE
2018 INTERNATIONAL FIRE CODE
2018 INTERNATIONAL FUEL GAS CODE
2018 INTERNATIONAL MECHANICAL CODE
2018 INTERNATIONAL PLUMBING CODE
NFPA 70-2017 NATIONAL ELECTRIC CODE
2017 AMERICAN NATIONAL STANDARDS INSTITUTE (117.1)
2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

BUILDING CONSTRUCTION DATA (CHAPTER 5 OF IBC 2018)

AREA	GROUP	CONSTRUCTION TYPE	BUILDING AREA	ALLOWABLE AREA	MAXIMUM HEIGHT	ALLOWABLE HEIGHT
FIRE AREA 1	BUSINESS - 'B'	* IIB - ANY NONCOMBUSTIBLE MATERIAL PERMITTED BY CODE	33,090 SF	92,000 SF	32'-0"	75 FEET, 3 STORIES
FIRE AREA 2	BUSINESS - 'B'	* IIB - ANY NONCOMBUSTIBLE MATERIAL PERMITTED BY CODE	22,780 SF	92,000 SF	32'-0"	75 FEET, 3 STORIES
FIRE AREA 1	BUSINESS - 'B'	* IIB - ANY NONCOMBUSTIBLE MATERIAL PERMITTED BY CODE	14,700 SF	92,000 SF	32'-0"	75 FEET, 3 STORIES
		BUILDING TOTAL	**70,570 SF**			

OCCUPANCY 'B'; S1 = BUILDINGS TA MAXINMUM OF ONE STORY ABOVE GRADE PLANE EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3.1.1

INTERNATIONAL PLUMBING CODE (TABLE 2902.1 MINIMUM NUMBER OF PLUMBING FIXTURES)

TOTAL NUMBER OF FIXTURES REQUIRED FOR RENVATED AREA:

RENOVATED OCCUPANCY: 82 OCCUPANTS

WATER CLOSETS
1/25 for the first 50, 1/50 for the remainder = 3
LAVATORIES
1/40 for the first 80, 1/80 for the remainder = 3
DRINKING FOUNTAINS = 1/100 = 1
SERVICE SINKS = 1 REQUIRED

TOTAL NUMBER OF FIXTURES PROVIDED FOR RENOVATED AREA:

WATER CLOSETS = 3
LAVATORIES = 3
DRINKING FOUNTAINS = 1
SERVICE SINKS = 1

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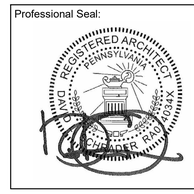


Owner:
OWEN J. ROBERTS SCHOOL DISTRICT
901 RIDGE RD.
POTTSTOWN, PA 19465

Additions and Renovations to:
OJR DISTRICT SERVICES CENTER
932 SANATOGA ROAD
POTTSTOWN, PA 19465

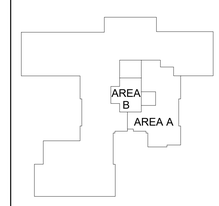
ISSUED FOR:

NO.	DESCRIPTION	DATE
	ISSUED FOR BIDDING	07/24/2026

DATE: 07/24/2026

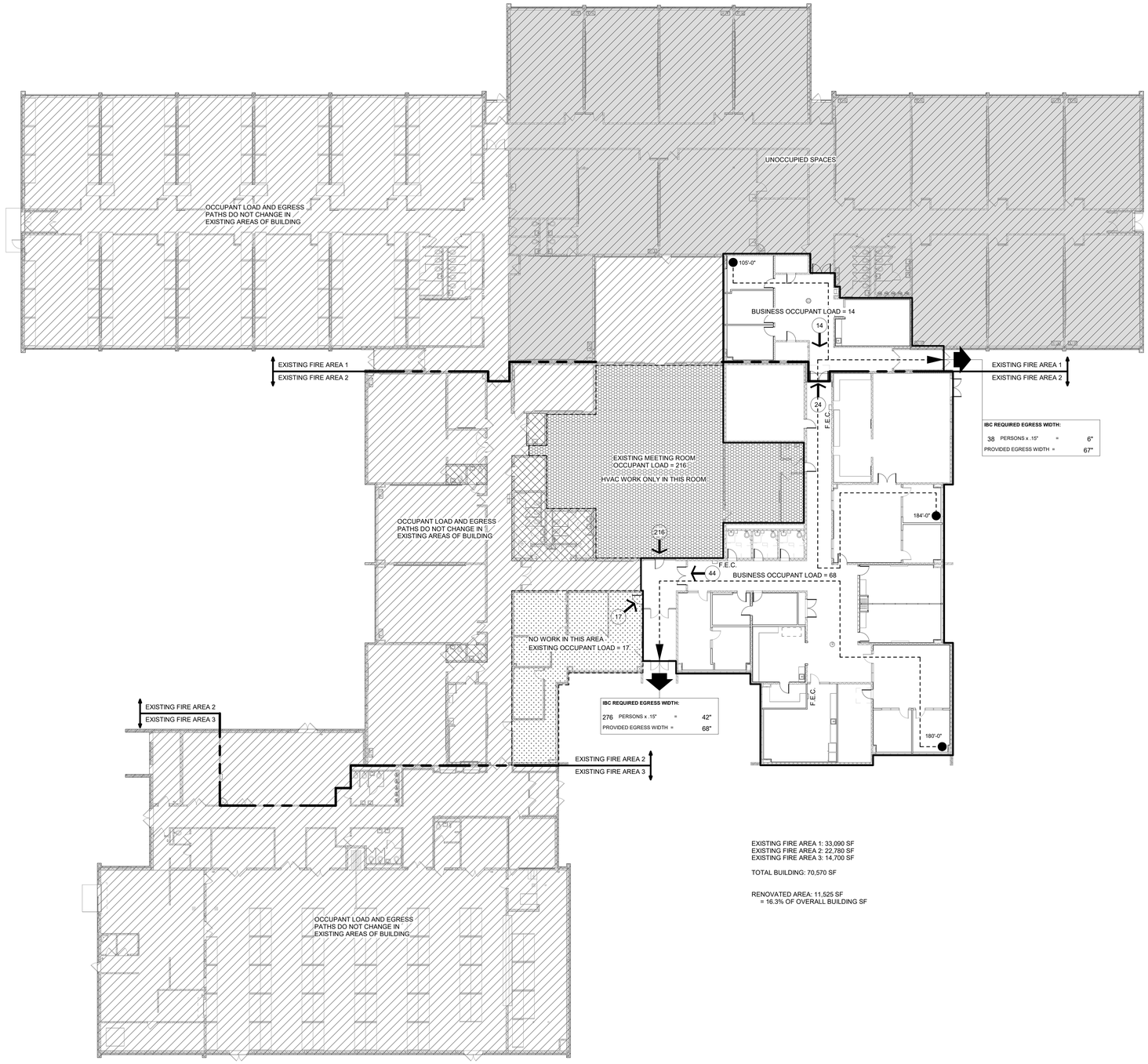
SG PROJECT NUMBER: 225180.00

Key Plan:



Drawing Title:
CODE REVIEW

Drawing Number:
A001



ISC REQUIRED EGRESS WIDTH:

38	PERSONS x .15"	=	6"
PROVIDED EGRESS WIDTH =			67"

IBC REQUIRED EGRESS WIDTH:

276	PERSONS x .15"	=	42"
PROVIDED EGRESS WIDTH =			68"

EXISTING FIRE AREA 1: 33,090 SF
EXISTING FIRE AREA 2: 22,780 SF
EXISTING FIRE AREA 3: 14,700 SF

TOTAL BUILDING: 70,570 SF

RENOVATED AREA: 11,525 SF
= 16.3% OF OVERALL BUILDING SF

1 FIRST FLOOR EGRESS PLAN
A002 SCALE: 1/16" = 1'-0"

SYMBOL KEY

- 2 HOUR FIRE WALL
- EGRESS PATHWAY
- INDICATES POINT OF EXIT DISCHARGE
- ### INDICATES ACTUAL NUMBER OF PERSONS DESIGNATED FOR EGRESS FROM SPACE
- NON-SIMULTANEOUS OCCUPANCY
- FEC FIRE EXTINGUISHER CABINET

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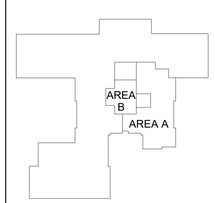
Key Plan:



Drawing Title:
FIRST FLOOR FIRE SAFETY & EGRESS PLAN

Drawing Number:
A002

N
True Project

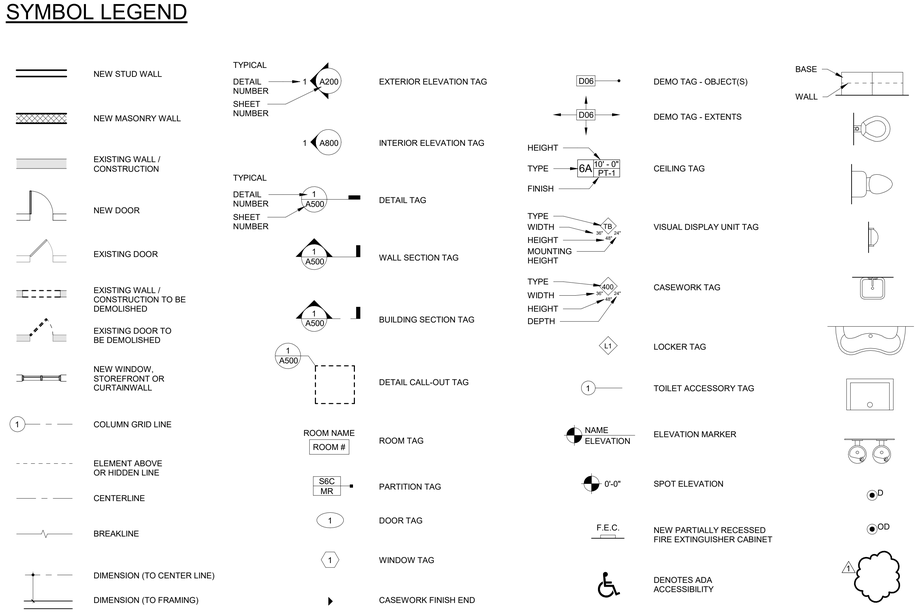
GENERAL NOTES

1. THE CONTRACTOR SHALL INVESTIGATE JOB SITE TO COMPARE CONTRACT DOCUMENTS AND EXISTING CONDITIONS. INCLUDE COST FOR ALL WORK DESCRIBED IN CONTRACT DOCUMENTS AND REQUIRED OR IMPLIED BY EXISTING CONDITIONS. NOTIFY ARCHITECT OF ANY OMISSIONS OR CONFLICTS IN THE DRAWINGS AND ANY RESTRICTIONS RELATED TO THE EXECUTION OF THE WORK.
2. THE CONTRACTOR SHALL COMPLY AND COORDINATE ALL WORK WITH BUILDING OWNER REGARDING HEAT, WATER, ELECTRICITY, DELIVERIES, ACCESS, ELEVATOR AVAILABILITY, NOISE CONTROL, TRASH AND DEBRIS REMOVAL, HOISTING, AND ANY OTHER UTILITIES OR OWNER'S RULES AND REGULATIONS CONCERNING THE PROJECT SITE.
3. THE CONTRACTOR SHALL COORDINATE SCHEDULING, PROVISIONS FOR INSTALLATION, LOCATIONS AND THE ACTUAL INSTALLATION OF ITEMS FURNISHED BY OWNER OR BY OTHERS.
4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND IS RESPONSIBLE FOR ALL PHASES INCLUDING BIDDING, FABRICATION, COORDINATION AND CONSTRUCTION. CONTRACT DRAWINGS ARE NOT INTENDED TO REPRESENT EXACT DIMENSIONS.
5. DO NOT SCALE DRAWINGS. DIMENSIONS GOVERN. LARGE SCALE DETAILS GOVERN OVER SMALL SCALE DETAILS.
6. THE CONTRACTOR SHALL SUBMIT FOR ARCHITECT'S REVIEW PRIOR TO FABRICATION OR PURCHASE, SHOP DRAWINGS OR SAMPLES FOR ALL MILLWORK, CUSTOM METALWORK, CUSTOM CASEWORK, AND ALL OTHER ITEMS AS REQUESTED BY THE ARCHITECT FOR ALL ABOVE BUILDING STANDARD ITEMS.
7. CHANGES IN DRAWINGS OR ACTUAL WORK MUST BE ISSUED BY THE ARCHITECT.
8. PERFORM ALL WORK AND INSTALL MATERIALS IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND INSTRUCTIONS AND IN A MANNER CONSISTENT WITH INDUSTRY STANDARD OF WORKMANSHIP.
9. THE CONTRACTOR SHALL EXAMINE ALL SURFACES TO DETERMINE THAT THEY ARE SOUND, DRY, CLEAN AND READY TO RECEIVE FINISHES PRIOR TO INSTALLATION. START OF INSTALLATION SHALL IMPLY ACCEPTANCE OF SUBSTRATE AND SHALL NOT BE GROUNDS FOR CLAIMS AGAINST IMPROPER PERFORMANCE OF INSTALLED MATERIALS. ADVISE ARCHITECT OF ANY EXISTING CONSTRUCTION NOT LEVEL, SMOOTH AND PLUMB WITHIN INDUSTRY STANDARDS PRIOR TO START OF CONSTRUCTION.
10. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL NECESSARY COVERINGS, PROTECTIVE ENCLOSURES, TEMPORARY DOORS AND PARTITIONS AND DUST BARRIERS TO PROTECT ALL OCCUPANTS AND EXISTING WORK AND FINISHES TO REMAIN. LOCATION OF SUCH PROTECTION SHALL BE VERIFIED WITH OWNER AND LOCAL CODE OFFICIALS FOR EGRESS CONFORMANCE. PRIOR TO COMMENCING WORK AND IN COORDINATION WITH PROGRESSION OF WORK SCHEDULE. PERFORM WORK IN A MANNER THAT WILL AVOID HAZARDS TO PERSONS IN ADJACENT AREAS AND THAT WON'T INTERFERE WITH WORK OR PASSAGE TO ANY OF THESE AREAS. REPAIR AND REPLACE ANY DAMAGES CAUSED BY IMPROPER PROTECTIONS AT NO ADDITIONAL CHARGE TO OWNER.
11. WORK DAMAGED DURING CONSTRUCTION OR NOT CONFORMING TO SPECIFIED STANDARDS, TOLERANCES OR MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION SHALL BE REPLACED, BY THE CONTRACTOR, AT NO ADDITIONAL CHARGE TO THE OWNER.
12. THE CONTRACTOR SHALL MAINTAIN ALL EXITS, EXIT LIGHTING, FIRE PROTECTION DEVICES AND LIFE SAFETY SYSTEMS IN WORKING ORDER. CONTRACTOR TO PROVIDE TEMPORARY FIRE EXTINGUISHERS DURING THE COURSE OF CONSTRUCTION AS REQ'D BY THE AUTHORITIES HAVING JURISDICTION .
13. EXIT DOORS, EGRESS DOORS, AND OTHER DOORS REQUIRED FOR MEANS OF EGRESS SHALL BE OPERABLE FROM THE INSIDE WITHOUT USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.
14. CONTRACTOR SHALL FULLY ACQUAINT HIMSELF WITH THE CONDITIONS OF THE CONTRACT, LOCAL CONDITIONS RELATING TO LOCATION, ACCESSIBILITY AND GENERAL CHARACTER OF THE CONSTRUCTION SITE AND LOCAL LABOR CONDITIONS SO THAT HE UNDERSTANDS THE NATURE, EXTENT, DIFFICULTIES, AND RESTRICTIONS RELATED TO THE EXECUTION OF WORK. NOTIFY ARCHITECT OF ALL DISCREPANCIES PRIOR TO COMMENCING WORK.
15. ALL WOOD BLOCKING IN FIRE RATED ASSEMBLIES TO BE FIRE RETARDANT.
16. ALL WOOD ON EXTERIOR WALLS AND ROOF TO BE MOISTURE RESISTANT.
17. IN ALL INSTANCES WHERE WORK IS BEING CORRECTED OR REPAIRED, CONTRACTOR IS TO REPAINT ENTIRE WALL TO NEAREST CORNER OR BREAK-LINE WHERE WALL CHANGES DIRECTION.
18. CONTRACTOR TO COORDINATE WITH E.C. THE MOUNTING HEIGHT OF ALL SWITCHES AND OUTLETS AT MILLWORK, COUNTERS, SHELVING, SINKS, ETC.
19. CONTRACTOR IS TO PROVIDE ALL MISC. FRAMING, BLOCKING, ETC. TO HANG SCREENS, BULLETIN BOARDS, RAILS, TOILET ACCESSORIES, WOODWORK, ETC.
20. ALL MASONRY VENEER SHELVES TO TERMINATE A MINIMUM OF 8" BELOW PROPOSED FINISHED GRADE. REFERENCE CIVIL DRAWINGS FOR PROPOSED GRADING.
21. CONTROL JOINTS IN GYPSUM BOARD PARTITIONS AND GYPSUM BOARD CEILINGS SHALL BE SPACED AS FOLLOWS:

PARTITIONS	- 30 FT. MAXIMUM IN EITHER DIRECTION.
INTERIOR CEILINGS	- 30 FT. MAXIMUM IN EITHER DIRECTION.
EXTERIOR CEILINGS	- 30 FT. MAXIMUM IN EITHER DIRECTION.

22. ALL PENETRATIONS THROUGH RATED WALLS ARE TO BE SEALED TO MAINTAIN INTEGRITY OF WALL CONSTRUCTION AND RATING (ASTM E814 SYSTEM BY 3M, HILTI, OR SIM).
23. ALL INSULATION EXPOSED TO CEILING PLENUM IS TO BE FIRE AND DUST PROOF.
24. ALL NEW SUPPLY AIR AND RETURN GRILLES SHALL BE LOCATED IN THE CENTER LINE OF ACOUSTICAL TILES UNLESS OTHERWISE INDICATED ON PLANS.
25. CONTRACTOR SHALL COMPLY WITH MANUFACTURER'S INSTRUCTIONS WHEN RELOCATING AND/OR INSTALLING ANY EQUIPMENT AND FURNISHINGS.
26. CONTRACTOR SHALL VERIFY EQUIPMENT LOCATIONS WITH OWNER PRIOR TO INSTALLATION.
27. ALL PENETRATIONS THROUGH DRYWALL AND MASONRY SURFACES INCLUDING BUT NOT LIMITED TO PIPE, CONDUIT, DUCTWORK, GRILLES, REGISTERS, DEVICE BOXES, HANGER RODS, ETC. SHALL HAVE THEIR COMMON JOINTS WITH DRYWALL AND/OR MASONRY CAULKED TO PROVIDE AN AIR-TIGHT SEAL.
28. CONTRACTOR TO REMOVE ANY STRAY PAINT, DIRT, OR STAINS INCURRED DURING THE CONSTRUCTION PROCESS. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TEMPORARY EQUIPMENT COVERINGS USED DURING CONSTRUCTION AND HE SHALL ALSO BE RESPONSIBLE FOR REMOVING HIS TRASH OFF OF THE JOB SITE DAILY.
29. THE CONTRACTOR SHALL PERFORM ALL CUTTING AND WELDING IN COMPLIANCE WITH THE PUBLISHED STANDARDS OF NFPA. THE CONTRACTOR SHALL PROVIDE FIRE WATCHES FOR ALL CUTTING, GRINDING, AND WELDING OPERATIONS. THE TRAINING OF THESE FIRE WATCHES AND THE USE OF THE CONTRACTOR'S SUPPLIED FIRE EXTINGUISHERS IS THE RESPONSIBILITY OF THE CONTRACTOR.
30. REFER TO MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR DETAILS OF UTILITY WALL PENETRATIONS.
31. ALL FIXTURES LABELED " " INDICATE HANDICAP ACCESSIBLE FIXTURES.
32. WHERE TWO DISSIMILAR METALS MEET, PAINT FACE OF ONE WITH BITUMINOUS PAINT.
33. ALL EXTERIOR ENTRANCE DOORS AND FRAMES TO RECEIVE PERIMETER WEATHER STRIPPING AS PER SPECIFICATIONS.
34. CONTRACTOR IS TO PROVIDE STUD BRACING AS REQUIRED FOR METAL STUD PARTITIONS ABOVE 10'-0".
35. ALL MASONRY WEEP HOLES MUST BE LOCATED ABOVE GRADE, CONCRETE WALKS, PAVEMENT MULCH, ETC. DO NOT COVER UNDER ANY CIRCUMSTANCES. CONTRACTOR IN CHARGE OF MASONRY WORK IS RESPONSIBLE FOR COORDINATING WITH ALL CIVIL WORK (TYPICAL).
36. ANY AREA OUTSIDE THE LIMITS OF CONSTRUCTION DISTURBED BY OPERATIONS OF THE CONTRACTOR SHALL BE RESTORED AT THE CONTRACTORS EXPENSE.
37. ALL CONCRETE WALKS, ASPHALT, CURBS AND LANDSCAPING DAMAGED DURING CONSTRUCTION ARE TO BE REPAIRED BY CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
38. CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL WEEP JOINTS AROUND WINDOWS AND EXTRUDED ALUM. STORE FRONTS FREE OF CAULK.
39. 2 X 6 CONTINUOUS WOOD BLOCKING SHALL BE PROVIDED AT DRYWALL PARTITIONS FOR ALL CABINET WORK AT TOP AND BOTTOM OF WALL MOUNTED UNITS AND UNDER COUNTER TOP LEVEL OF BASE CABINET. ALL OPEN-FACE SHELVING UNITS SHALL HAVE CONCEALED ANCHOR BRACKETS.
40. ALL INTERIOR AND EXTERIOR WINDOWS, DOORS, LOUVERS, VENTS, EXHAUST FANS, PIPE PENETRATIONS, AND ALL OTHER PENETRATIONS THRU INTERIOR AND EXTERIOR WALLS SHALL BE SEALED AROUND ENTIRE PERIMETER WITH SEALANT. (BOTH ON EXTERIOR AND INTERIOR SIDES), EXCEPT AS NOTED IN NOTE 38.
41. ALL INTERIOR PARTITIONS WHICH RECEIVE CERAMIC TILE SHALL BE FRAMED WITH 20 GA. MIN. STUDS AT 12" O.C. W/ HORIZONTAL COLD ROLLED STIFFENER CHANNELS AT 4'-0" O.C. (MAX.) AND EXTEND FROM FINISHED FLOOR TO STRUCTURE ABOVE. 20 GA. DIAGONAL STUD KICKERS MUST ALSO BE INSTALLED AT EVERY OTHER VERTICAL STUD ABOVE CEILING.
42. FIRE EXTINGUISHER CABINETS TO BE MOUNTED 4'-0" A.F.F. TO TOP MAXIMUM IN ACCORDANCE ACCESSIBILITY REQUIREMENTS. (FIRE EXTINGUISHERS WITH GROSS WEIGHT OVER 40LBS. MUST BE MOUNTED 3'-6" MAX.). CLEARANCE BETWEEN THE BOTTOM OF THE FLOOR AND THE EXTINGUISHER MAY NOT BE LESS THAN 4".)

SYMBOL LEGEND



TYPICAL ABBREVIATIONS:

AP	ACOUSTICAL PANEL
ACT	ACOUSTICAL CEILING TILE
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
ALUM, AL	ALUMINUM
ARCH	ARCHITECTURAL
ASPH	ASPHALT
ATTCHMT	ATTACHMENT
BD	BOARD
BLDG	BUILDING
BLK	BLOCK(ING)
BM	BEAM
B.O.S.	BOTTOM OF SLAB
BRG	BEARING
BRK	BRICK
BTM	BOTTOM
BYND	BEYOND
CFMF	COLD FORMED METAL FRAMING
CJ	CONTROL OR CONSTRUCTION JOINT
CLO.	CLOSET
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
C.O.	CLEAN OUT
COL.	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS
CORR	CORRIDOR
COV	COVER
CPT	CARPET
CT/CER	CERAMIC TILE/CERAMIC
C.U.H.	CABINET UNIT HEATER
CW	CURTAINWALL
D (or) DRN	DRAIN
DBL	DOUBLE
DET	DETAIL
D.F.	DRINKING FOUNTAIN
DIA	DIAMETER
DIM	DIMENSION
DIV. STRIP	DIVIDER STRIP
DN	DOWN
DP	DAMPPROOF(ING)
DR	DOOR
D.S.	DOWN SPOUT
DT	DRAIN TILE
D.W.	DISH WASHER
DWG	DRAWING
EA	EACH
EJ	EXPANSION JOINT
EJC	EXPANSION JOINT COVER
EIFS	EXTERIOR INSUL. FINISH SYSTEM
ELEC	ELECTRICAL
EL	ELEVATION
ELEV	ELEVATOR
ENCL	ENCLOSURE
EQ	EQUAL
EQUIP	EQUIPMENT
EXG	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
FA	FRESH AIR
FCU	FAN COIL UNIT
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
F.F. / FIN. FL.	FINISH FLOOR

FIN	FINISH
FL	FLOOR
FLSH	FLASHING
FLUOR	FLUORESCENT
F.O.S.	FACE OF STUDS
FR(G)	FRAME(ING)
FRTW	FIRE RATED TREATED WOOD
FT	FEET OR FOOT
FUR	FURRING
FVC	FIRE VALVE CABINET
GA	GAGE OR GAUGE
GALV	GALVANIZE
GC	GENERAL CONTRACTOR
G.I.	GALVANIZED IRON
GL	GLASS
GM	GALVANIZED METAL
GR	GRADE
GWB	GYPSUM WALL BOARD
GYP.BD / GWB	GYPSUM BOARD
H.B.	HOSE BIB
H.C.	HOLLOW CORE
"H"	HANDICAPPED ACCESSIBLE
HDW	HARDWARE
HDWD	HARDWOOD
H.M.	HOLLOW METAL
HOR	HORIZONTAL
HT	HEIGHT
HTR	HEATER
I.D.	INSIDE DIAMETER
INFO	INFORMATION
INSUL	INSULATION OR INSULATED
INT	INTERIOR
INV	INVERT
JAN	JANITOR
JT	JOINT
KO	KNOCKOUT
LAM	LAMINATE
LAV	LAVATORY
LP	LOW POINT
LT	LIGHT
MFGR / MANUF.	MANUFACTURER
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MBM	METAL BUILDING MANUFACTURER
MC	MECHANICAL CONTRACTOR
MECH	MECHANICAL
MEMB	MEMBRANE
MEP	MECHANICAL, ELECTRICAL, PLUMBING
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
M.O.	MASONRY OPENING
MOV	MOVABLE
M.T.	MARBLE THRESHOLD
MTL	METAL
N	NORTH
NIC	NOT IN CONTRACT
NOM	NOMINAL
NO.	NUMBERS
NTS	NOT TO SCALE

O.C.	ON CENTER
OFF	OFFICE
O.H.	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
O.S.B.	ORIENTED STRAND BOARD
OVHD	OVERHEAD
P.LAM.	PLASTIC LAMINATE
PTN	PARTITION
P.C.PL	PORTLAND CEMENT PLASTER
P.H.	PAPER HOLDER
PL	PROPERTY LINE
PLAS	PLASTER
PLUM	PLUMBING
PNL	PANEL
PNT	PAINT
POL	POLISHED
PR	PAIR
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PTS	POINTS
P.T.	PRESSURE TREATED
PWD	PLYWOOD
Q.T.	QUARRY TILE
R	RADIUS
R. VENT	RANGE VENT
REF	REFERENCE
REINF	REINFORCE, REINFORCED
REQ'D.	REQUIRE(D)
RET	RETURN
REV	REVISE, REVISION
RM	ROOM
R.O.	ROUGH OPENING
RSTRM	RESTROOM
SA	SELF-ADHERED
SAN	SANITARY
SAN. ST.	SANITARY STACK
SCR	SCREEN
SEC	SECTION
SCHED	SCHEDULE(D)
SCU	SELF-CONTAINED UNIT
SF	SQUARE FOOT (FEET)
SG	SCHRADERGROUP
SHT	SHEET
SIM	SIMILAR
SOG	SLAB ON GRADE
SP	STANDPIPE
SPLSH. BLK.	SPLASH BLOCK
SPEC	SPECIFICATION
SPR	SPRINKLER
SQ	SQUARE
SS	SOLID SURFACE
SSTL	STAINLESS STEEL
SSD	SEE STRUCTURAL DRAWINGS
STN	STAIN(ED)
STL	STEEL
STG/STOR	STORAGE
STRFRNT	STOREFRONT
STRUCT	STRUCTURAL, STRUCTURE
SUSP	SUSPEND(ED)

T	TEMPERED
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TB	TACKBOARD
TEMP	TEMPORARY
TH	THRESHOLD
THK	THICK(NESS)
THRU	THROUGH
T.O.C.	TOP OF CURB
T.O.M.	TOP OF MASONRY
T.O.	TOP OF
T.O.S.	TOP OF STEEL
TPFS	THROUGH-PENETRATION FIRE SAFING
TRTD	TREATED
TYP	TYPICAL
U.L.	UNDERWRITERS LABORATORY
UNFIN	UNFINISHED
U.N.O.	UNLESS NOTED OTHERWISE
V	VENT
VCT	VINYL COMPOSITION TILE
VENT.	VENTILATE
VERT	VERTICAL
VEST	VESTIBULE
V.I.F.	VERIFY IN FIELD
V.W.C.	VINYL WALL COVERING
VOL	VOLUME
W	WIDTH
W/	WITH
WxH	WIDTH x HEIGHT
WB	WHITE BOARD
WC	WATER CLOSET
WD	WOOD
WDW	WINDOW
WH	WATER HEATER
WK	WORK
WP	WORK POINT
WPF	WATERPROOF
WSHP	WATER SOURCE HEAT PUMP
WT	WEIGHT
&	AND
@	AT
'	FEET
"	INCHES
#	POUNDS

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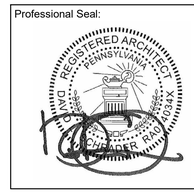

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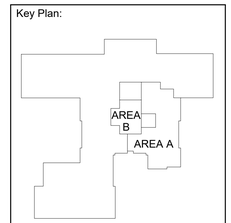
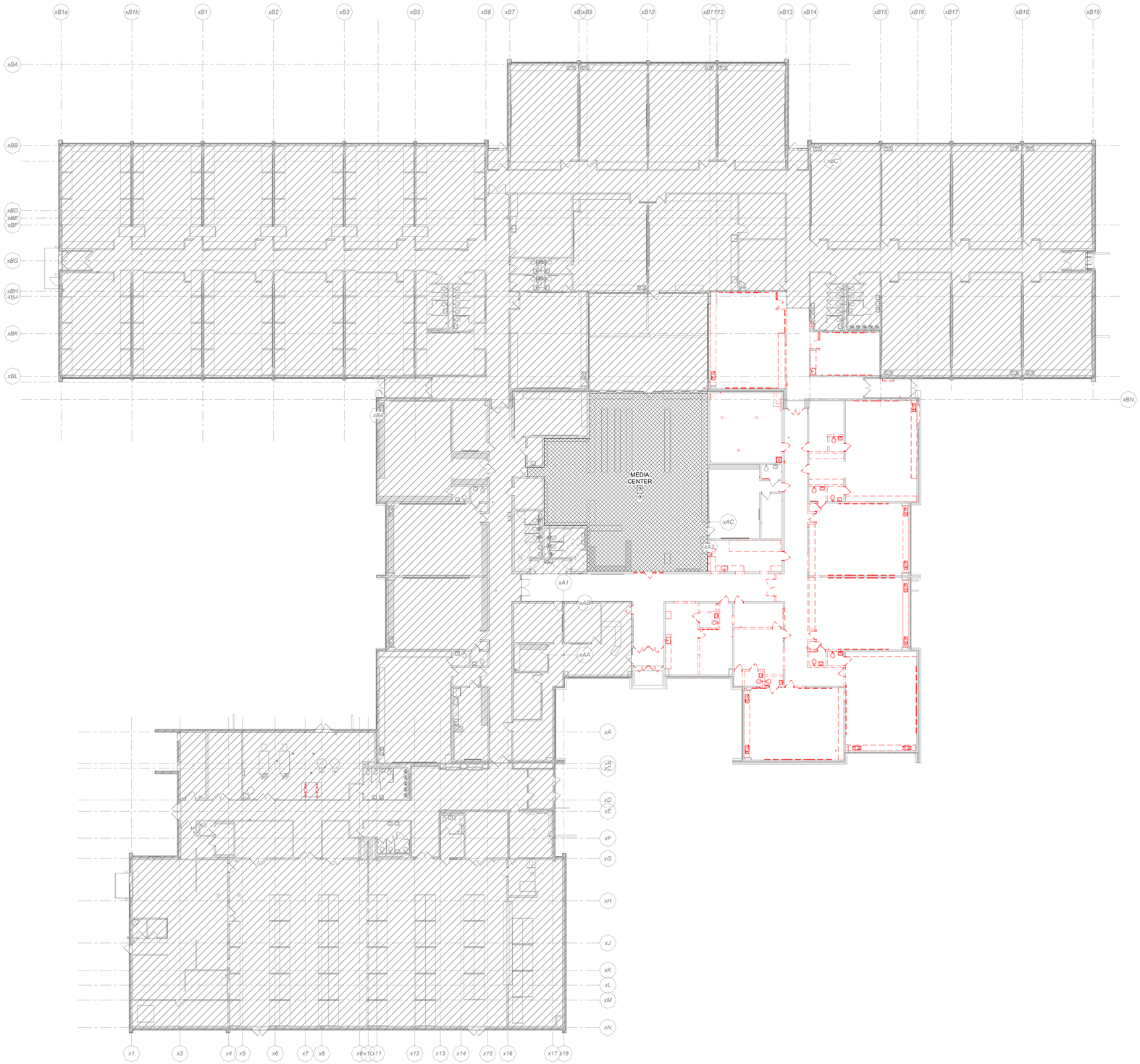
SG PROJECT NUMBER: 225180.00

Key Plan:



Drawing Title:
GENERAL NOTES, ABBREVIATION, & WALL TYPES

Drawing Number:
A003



1 COMPOSITE FIRST FLOOR DEMOLITION PLAN

AD101 SCALE: 1/16" = 1'-0"

DEMOLITION DEFINITIONS

WALL PARTITION SYSTEM - ALL WALL CONSTRUCTION FROM FLOOR SLAB, INCLUDING ALL ASSOCIATED STEEL, DOOR AND WINDOW SYSTEMS, BLOCKING, CORNICES, TRIM, BASE, FINISHES, TRACKS AND ALL RELATED ATTACHMENTS AND COMPONENTS. REFERENCE MEP DRAWINGS FOR ADDITIONAL REQUIREMENTS. DOES NOT INCLUDE BUILDING STRUCTURE UNLESS NOTED OTHERWISE (U.N.O.).

DOOR SYSTEM - ALL CONSTRUCTION RELATED TO A DOOR OPENING, INCLUDING DOOR, FRAME, TRIM, THRESHOLD, STOPS, CLOSURES, TRANSOMS, SIDELIGHTS AND ALL RELATED ATTACHMENTS AND ANCHORS, ECT., TO PROVIDE A CLEAR ROUGH OR MASONRY OPENING. THE DOOR SYSTEM DOES NOT INCLUDE STRUCTURAL LINTELS UNLESS NOTED OTHERWISE.

WINDOW SYSTEMS - ALL CONSTRUCTION RELATED TO A WINDOW OPENING, INCLUDING SASH, FRAME, TRIM, SILL, WEIGHTS, LOCKS, BLINDS, AND ALL RELATED ATTACHMENTS AND COMPONENTS TO PROVIDE A CLEAR ROUGH OR MASONRY OPENING. THE WINDOW SYSTEM DOES NOT INCLUDE STRUCTURAL LINTELS OR EXTERIOR SILLS UNLESS NOTED OTHERWISE.

FLOOR SYSTEM - THE CONCRETE SLAB, SETTING BEDS, SUBFLOOR, FINISH FLOOR MATERIALS AND ANY FINISH ATTACHED ABOVE OR CEILING SYSTEM OR ATTACHMENT SUSPENDED BELOW. THE FLOOR SYSTEM DOES NOT INCLUDE ANY STRUCTURAL STEEL MEMBERS UNLESS NOTED OTHERWISE.

CEILING SYSTEM - ALL SUSPENDED CONSTRUCTION OR CEILING CONSTRUCTION SUPPORTED BY A WALL SYSTEM BEING REMOVED INCLUDING ALL RELATED ATTACHMENTS AND COMPONENTS (INCLUDING BUT NOT LIMITED TO LIGHTS, SPEAKERS, EXIT SIGNS. DIFFUSERS/REGISTERS. ECT.) UP TO THE UNDERSIDE OF THE BUILDING SLAB OR SUPPORTING STRUCTURE. REFERENCE MEP DRAWINGS FOR ADDITIONAL REQUIREMENTS.

CASEWORK SYSTEM - INCLUDING SHELVING, COUNTERS, CABINETRY, SINKS, ECT., AND ALL RELATED HARDWARE AND ATTACHMENTS REMOVED TO THE FINISHED WALL AND FLOOR.

FLOOR FINISH SYSTEM - ALL FLOOR FINISHES, INCLUDING BASE PADDING, FILLER STRIPS, THRESHOLDS, TRANSITION STRIPS, AND SPOT LEVELING UNDERLAYMENT, (U.O.N.) TO TOP OF SUBFLOOR CONSTRUCTION. REMOVE MASTICS ONLY AS REQUIRED TO PREP FLOOR FOR NEW FINISH, U.O.N.

STAIR SYSTEM - ALL CONSTRUCTION RELATED TO A STAIR SYSTEM INCLUDING TREADS, RISERS, STRINGERS, SUPPORT FRAMING, FINISHES, BLOCKING, HANDRAILS, GUARD RAILS, BRACKETS, NOSINGS, PANS, AND CONCRETE.

ROOF SYSTEM - ALL ROOF CONSTRUCTION FROM ROOF COVERINGS DOWN TO STRUCTURAL DECK, INCLUDING VAPOR RETARDERS, TAPERED CRICKETS, THERMAL BARRIERS, INSULATION, COVER BOARDS & SHEATHING, ROOF EDGING, GUTTERS, AND ALL RELATED FLASHINGS, ATTACHMENTS, AND COMPONENTS. THE ROOF SYSTEM DOES NOT INCLUDE THE ROOF DECK OR ROOF STRUCTURE, UNLESS IT IS PART OF A SINGLE COMPONENT SERVING AS THE ROOF COVERING.

DEMOLITION GENERAL NOTES

1. EXISTING BUILDING INFORMATION WAS OBTAINED FROM DRAWINGS OF "XXXXXXXXXXXX." EXISTING INFORMATION IS FOR REFERENCE ONLY. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
2. BEFORE STARTING WORK, MAKE A THOROUGH EXAMINATION OF THOSE PORTIONS OF THE STRUCTURE IN WHICH THE WORK IS TO BE PERFORMED. CHECK ALL THE WORK ADJOINING OR AT UNDERLYING LOCATIONS. REPORT TO THE ARCHITECT ANY AND ALL CONDITIONS WHICH MAY INTERFERE WITH OR OTHERWISE AFFECT OR PREVENT THE PROPER EXECUTION AND COMPLETION OF THE WORK. DO NOT START THE WORK UNTIL SUCH CONDITIONS HAVE BEEN EXAMINED AND A COURSE OF ACTION MUTUALLY AGREED UPON.
3. CONTRACTOR SHALL PERFORM ALL NECESSARY DEMOLITION AS REQUIRED FOR INSTALLATION OF NEW WORK AS SHOWN ON THE DRAWINGS. ALL DEMOLITION NOT SPECIFICALLY SHOWN BUT NECESSARY TO COMPLETE THE PROJECT AS SHOWN SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
4. PRIOR TO THE START OF DEMOLITION, THE CONTRACTOR SHALL CALL TO THE ATTENTION OF THE OWNER: ANY DAMAGE, CRACKS OR OTHER IMPERFECTIONS IN THE WORK ADJACENT TO DEMOLITION AREAS.
5. CONTRACTORS SHALL INSPECT AND ASSESS EACH SPACE AND FULFILL THE INTENT OF THE WORK REQUIRED BY THE CONTRACT DOCUMENTS. DEVIATIONS REQUIRED BY FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING.
6. ANY CUTTING AND REMOVAL INDICATED ON THE DRAWINGS ARE GENERAL INDICATIONS ONLY AND DO NOT NECESSARILY SHOW THE FULL EXTENT OF CUTTING AND REMOVAL WHICH MAY BE REQUIRED BY JOB CONDITIONS.
7. CONSTRUCTION AND EXISTING FINISHES SHALL REMAIN UNLESS NOTED OTHERWISE. DURING DEMOLITION WORK, PROPERLY PROTECT ALL EXISTING WORK SHOWN TO REMAIN. EXERCISE CARE WHEN REMOVING ADJACENT WORK. PROPERLY REPAIR TO THE ORIGINAL CONDITIONS. ANY DAMAGE TO ITEMS SHOWN TO REMAIN, CAUSED BY DEMOLITION PROCEDURES, TO THE SATISFACTION OF, AND AT NO ADDITIONAL COST, TO THE OWNER. PATCH SURFACE FINISHES BEHIND DEMOLITION WORK (I.E. FLOORS. WALLS. CEILINGS, ETC.) TO MATCH SURROUNDING CONDITIONS.
8. BEFORE STARTING DEMOLITION OPERATIONS, PROVIDE THE NECESSARY PROTECTIVE BARRIERS AROUND TRAFFIC AREAS NEAR INTERIOR WORK AS REQUIRED AND IN STRICT ACCORDANCE WITH OSHA RULES AND REGULATIONS. PROTECT ALL EXISTING EQUIPMENT NOT DESIGNATED TO BE REMOVED. PERFORM ALL WORK REQUIRED TO PROTECT THE PUBLIC AND UTILITIES.
9. TAKE NECESSARY PRECAUTIONS TO PREVENT DUST AND DIRT FROM RISING BY WETTING DEMOLISHED DEBRIS. EXCESSIVE USE OF WATER WILL NOT BE PERMITTED.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY, TEMPORARY BRACING AND / OR SHORING REQUIRED TO MAINTAIN THE INTEGRITY AND STRUCTURAL STABILITY OF THE BUILDING AND ITS INDIVIDUAL ELEMENTS.
11. EXCEPT WHERE NOTED OTHERWISE, REMOVE ALL DEMOLISHED MATERIALS FROM THE SITE. DO NOT BURN OR BURY MATERIALS ON THE SITE. AT THE COMPLETION OF WORK FOR EACH DAY, CLEAN THE ENTIRE AREA INVOLVED AND LEAVE IT IN A NEAT CONDITION, FREE OF DEBRIS AND RUBBISH. KEEP ALL ADJOINING PUBLIC AREAS CLEAN AND FREE OF DEBRIS OR CONSTRUCTION MATERIALS DURING WORKING HOURS. AND MAKE AN EFFORT TO PROVIDE SAFE CONDITIONS FOR THE GENERAL PUBLIC AND WORKMEN. REFERENCE DIVISION 01 SPECIFICATION SECTION "CONSTRUCTION WASTE MANAGEMENT" FOR CONTRACTORS RESPONSIBILITY FOR WASTE REMOVAL / DISPOSAL.
12. THE OWNER WILL REMOVE ALL EXISTING ITEMS THAT THE OWNER WISHES TO SALVAGE PRIOR TO START OF DEMOLITION. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL REMAINING ITEMS.
13. ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING, LAND DEVELOPMENT DRAWINGS, AND PROJECT SPECIFICATIONS MAY PROVIDE ADDITIONAL DEMOLITION REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BEING FAMILIAR WITH THESE DRAWINGS AND PROJECT SPECIFICATIONS AND ANY REQUIREMENTS PROVIDED BY THEM.
14. PRIOR TO THE DEMOLITION OF THOSE ITEMS WHICH HAVE UTILITY CONNECTIONS (WATER, GAS, ELECTRICITY, STEAM, ETC.) THE CONTRACTOR SHALL ARRANGE WITH THE OWNER TO LOCATE SHUTOFF VALVES, PANEL BOXES AND OTHER CONTROL ELEMENTS, SO THAT WATER DAMAGE AND OTHER POTENTIALLY INCONVENIENT OR DANGEROUS SITUATIONS ARE AVOIDED.
15. REFERENCE PARTIAL DEMOLITION PLANS FOR SPECIFIC DEMOLITION REQUIREMENTS.
16. REFERENCE DIVISION 01 SPECIFICATION SECTIONS FOR SELECTIVE DEMOLITION, CUTTING, AND PATCHING. TEMPORARY FACILITIES AND CONTROLS, SITE AND BUILDING DEMOLITION, CONSTRUCTION WASTE MANAGEMENT, AND RELATED SECTIONS FOR ADDITIONAL DEMOLITION REQUIREMENTS.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING DEMOLITION REQUIREMENTS WITH PROJECT PHASING. NOTIFY ARCHITECT PRIOR TO START OF WORK WITH ANY CONDITIONS WHICH MAY INTERFERE WITH OR OTHERWISE AFFECT OR PREVENT PROPER EXECUTION OF THE WORK.
18. THE OWNER PERFORMED ASBESTOS ABATEMENT UNDER A SEPARATE CONTRACT. NOTIFY THE ARCHITECT AND OWNER IMMEDIATELY OF ANY SUSPECTED ASBESTOS CONTAINING MATERIALS PRIOR TO THE START OF WORK UNLESS OTHERWISE NOTED HEREIN.
19. SLAB DEMOLITION SHOWN DOES NOT INDICATE ALL AREAS THAT ARE REQUIRED TO BE REMOVED FOR NEW MEP ROUGH INS. CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES TO DETERMINE FULL EXTENT OF EXISTING SLAB REMOVAL.

AREA NOT IN SCOPE (N.I.S.)

AREA OF WORK TO BE MEP IMPROVEMENTS ONLY

N

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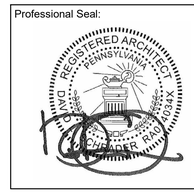

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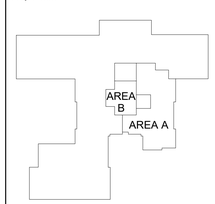
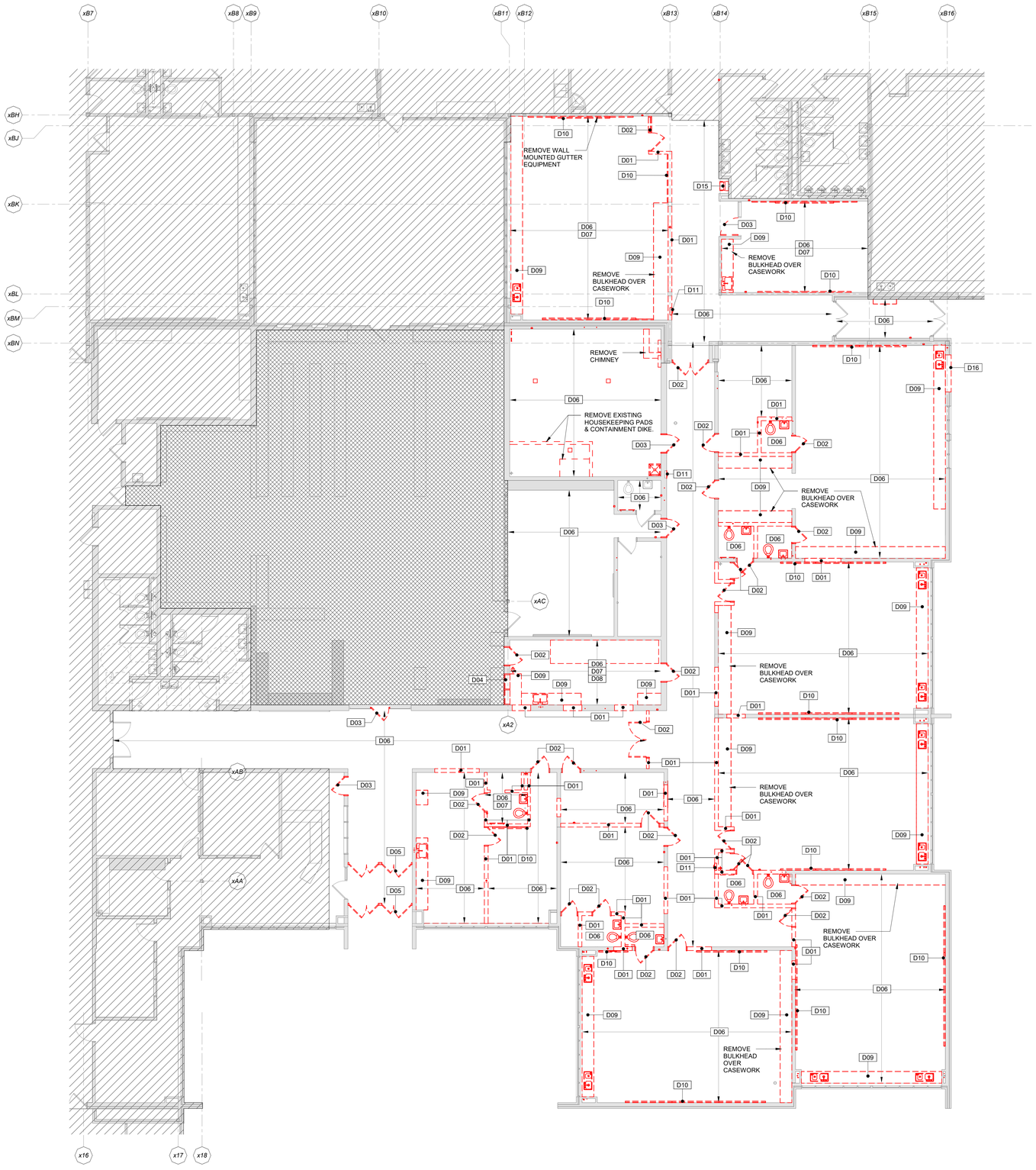


Drawing Title:
COMPOSITE FIRST FLOOR DEMOLITION PLAN

Drawing Number:
AD101



1 PARTIAL FIRST FLOOR DEMOLITIONP LAN - AREA A

AD101.A SCALE: 1/8" = 1'-0"

DEMOLITION LEGEND

NOTE: REFERENCE COMPOSITE DEMO PLAN FOR ALL GENERAL DEMOLITION NOTES & DEFINITIONS

NOTE: PATCH & REPAIR ALL EXISTING SURFACES TO REMAIN AS REQUIRED AT ALL AREAS SCHEDULED TO HAVE PARTIAL DEMOLITION

NOTE: P.C. RESPONSIBLE FOR CUTTING & RE INSTALLING ALL CONC. FLOOR SLABS REQ'D FOR DEMOLITION OF UNDER-SLAB PIPING. G.C. RESPONSIBLE FOR PREP WORK TO RECEIVE NEW FINISHES. P.C. TO VERIFY WITH ARCHITECT ANY LOCATIONS OF SLAB REMOVAL THAT ARE LOCATED IN FINISH TERRAZZO AREAS.

NOTE: E.C. RESPONSIBLE FOR REMOVAL OF ALL ELECTRICAL EQUIPMENT IN THE AREA OF DEMOLITION. ALL CIRCUITS FEEDING EQUIPMENT WITHIN THE AREA OF DEMOLITION SHALL BE DISCONNECTED FROM THE APPLICABLE PANELBOARDS, AND SAFED OFF. EXISTING LOW VOLTAGE SYSTEMS, INCLUDING, BUT NOT LIMITED TO FIRE ALARM, INTERCOM, SECURITY, CARD ACCESS, ETC. SHALL BE REPROGRAMMED SO THAT THE REMOVED DEVICES ARE NO LONGER ACTIVE AND CREATING TROUBLE SIGNALS FOR THE SYSTEMS.

NOTE: DRYWALL CONTRACTOR TO PATCH AND REPAIR ALL HOLES RESULTING FROM DEMOLITION OF CASEWORK, LOCKERS, CEILING MOULDING, TACK BOARDS, MARKER BOARDS, CHALK BOARDS, SMART BOARDS, LEDGER BOARDS, SIGNAGE, MISCELLANEOUS HOLES THROUGHOUT THE BUILDING. IN OTHER WORDS ALL HOLES. NO EXCEPTIONS. PATCH AND REPAIR MISCELLANEOUS DRYWALL DAMAGE RESULTING FROM DEMOLITION OF THE EXISTING DOOR FRAMES

NOTE: ONCE BOARDS ARE REMOVED CONTINUE TO REMOVE THE MASTIC. DRYWALL CONTRACTOR TO PATCH WALL BLEMISHES AS A RESULT OF THE MASTIC REMOVAL AND REMOVAL OF THE BOARDS.

CLASSROOM 101 — ROOM TAG

EXISTING WALL TO BE DEMOLISHED

EXISTING WALL TO REMAIN

D01 — DEMOLITION KEYNOTE APPLIES TO OBJECT INDICATED

D01 — DEMO TAG APPLIES TO AREA

EXISTING DOOR TO BE REMOVED

AREA NOT IN SCOPE (N.I.S.)

AREA OF WORK TO BE MEP IMPROVEMENTS ONLY

NOTE: CONTRACTOR SHALL REFERENCE ALL MEP DOCUMENTS FOR DEMOLITION SCOPE. PATCH EXISTING WALLS AND FLOORS AS REQUIRED FOR NEW CONSTRUCTION AND NEW FINISHES. REMOVE ALL EXISTING TOILET ROOM AND/OR CLASSROOM ACCESSORIES, INCLUDING: SOAP DISPENSERS, TOILET PAPER DISPENSERS, GRAB BARS, TOILET PARTITIONS, MIRRORS, AND PAPER TOWEL DISPENSERS.

DEMOLITION KEY

KEY VALUE	KEYNOTE TEXT
D01	REMOVE EXISTING PARTITION WHERE INDICATED. PATCH AS REQUIRED FOR NEW CONSTRUCTION.
D02	REMOVE EXISTING DOOR & FRAME SYSTEM IN ITS ENTIREY. PATCH EXISTING WALL AS REQUIRED FOR NEW CONSTRUCTION.
D03	REMOVE EXISTING DOOR AND HARDWARE ONLY. EXISTING FRAME TO REMAIN. PATCH FRAME AS NEEDED.
D04	REMOVE EXISTING WINDOW SYSTEM IN ITS ENTIRETY, PATCH EXISTING WALLS AS REQUIRED FOR NEW CONSTRUCTION.
D05	REMOVE EXISTING STOREFRONT SYSTEM IN ITS ENTIRETY. PATCH AS REQUIRED FOR NEW CONSTRUCTION.
D06	REMOVE EXISTING CEILING SYSTEM IN ITS ENTIRETY; INCLUDING LIGHT FIXTURES, DEVICES, DIFFUSER. PATCH EXISTING CONSTRUCTION AS REQUIRED FOR NEW CONSTRUCTION.
D07	REMOVE EXISTING FLOOR FINISH SYSTEM IN ITS ENTIRETY. PATCH AND PREPARE WALLS AND FLOORS FOR NEW FLOOR FINISHES.
D08	REMOVE EXISTING WOOD FRAME STAIRS, MEZZANINE, STORAGE, CEILING, & ALL FIXTURES. PREPARE FOR NEW CEILING TO BE INSTALLED.
D09	REMOVE EXISTING COUNTER TOPS, CASEWORK, AND SHELVING. PATCH AS REQUIRED FOR NEW CONSTRUCTION.
D10	REMOVE EXISTING CHALKBOARDS, TACKBOARDS, OR WHITE BOARDS. PATCH AS REQUIRED TO MATCH EXG.
D11	REMOVE EXISTING RECCESED FIRE EXTINGUISHER CABINET, PATCH AND PREPARE WALL FOR INFILL.
D12	REMOVE EXISTING ROOF SHINGLES IN ENTIRETY.
D13	REMOVE EXISTING ROOF SYSTEM IN ENTIRETY THROUGH TO EXISTING DECK WHERE INDICATED.
D14	REMOVE AND REPLACE ROOF DRAIN ASSEMBLY WHERE INDICATED.
D15	REMOVE EXISTING GUTTER / COPING SYSTEM & ASSOCIATED FASTENERS.
D16	REMOVE EXISTING WATER COOLER. PATCH AS REQUIRED FOR NEW CONSTRUCTION.

N

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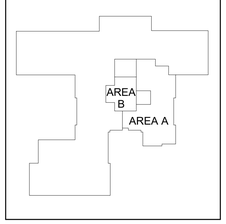
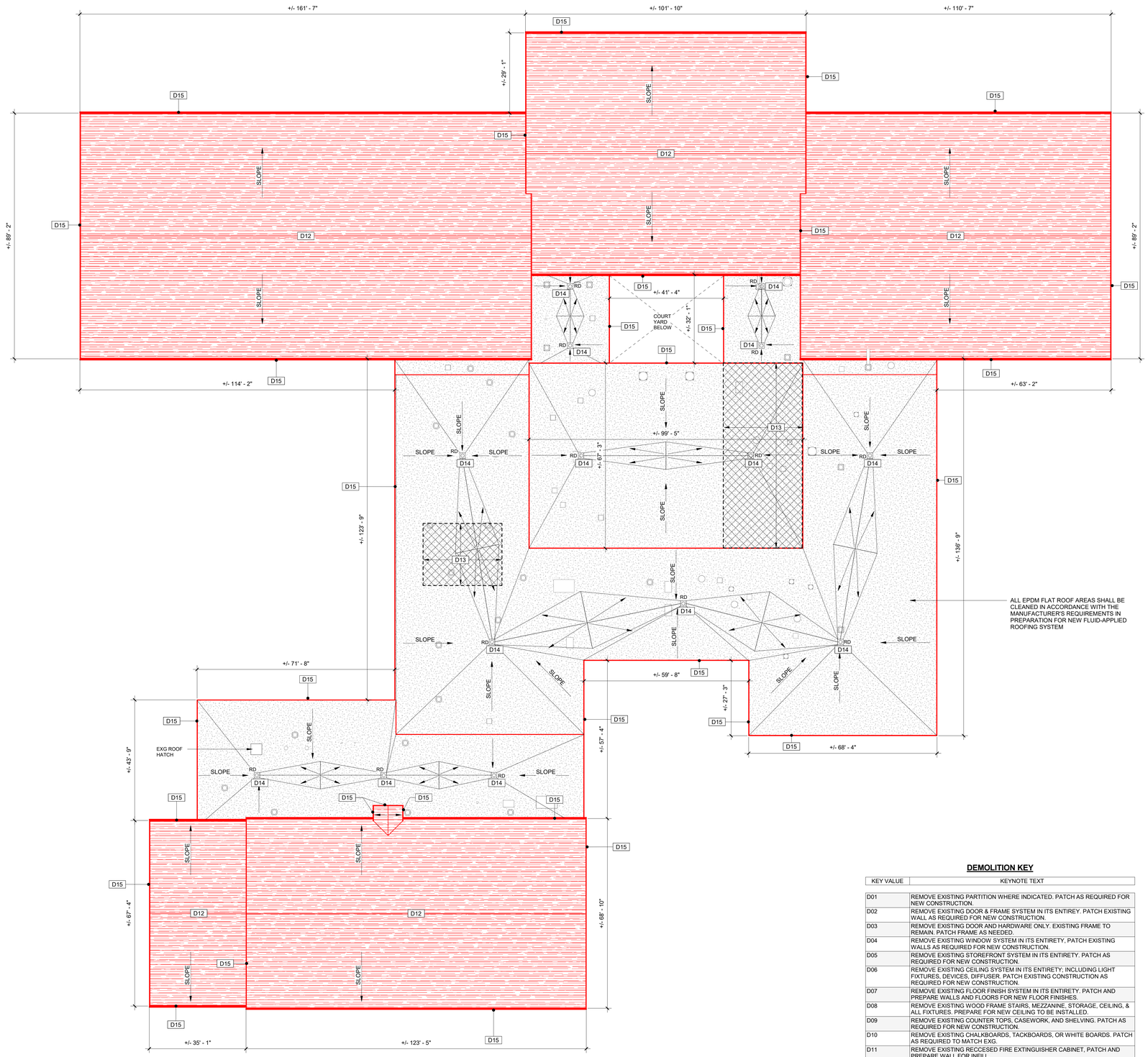


Drawing Title:
FIRST FLOOR DEMOLITION PLAN

Drawing Number:
AD101.A



ALL EPDM FLAT ROOF AREAS SHALL BE CLEANED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS IN PREPARATION FOR NEW FLUID-APPLIED ROOFING SYSTEM

1 COMPOSITE ROOF PLAN

AD140 SCALE: 1/16" = 1'-0"

DEMOLITION KEY

KEY VALUE	KEYNOTE TEXT
D01	REMOVE EXISTING PARTITION WHERE INDICATED. PATCH AS REQUIRED FOR NEW CONSTRUCTION.
D02	REMOVE EXISTING DOOR & FRAME SYSTEM IN ITS ENTIREY. PATCH EXISTING WALL AS REQUIRED FOR NEW CONSTRUCTION.
D03	REMOVE EXISTING DOOR AND HARDWARE ONLY. EXISTING FRAME TO REMAIN. PATCH FRAME AS NEEDED.
D04	REMOVE EXISTING WINDOW SYSTEM IN ITS ENTIRETY, PATCH EXISTING WALLS AS REQUIRED FOR NEW CONSTRUCTION.
D05	REMOVE EXISTING STOREFRONT SYSTEM IN ITS ENTIRETY. PATCH AS REQUIRED FOR NEW CONSTRUCTION.
D06	REMOVE EXISTING CEILING SYSTEM IN ITS ENTIRETY; INCLUDING LIGHT FIXTURES, DEVICES, DIFFUSER. PATCH EXISTING CONSTRUCTION AS REQUIRED FOR NEW CONSTRUCTION.
D07	REMOVE EXISTING FLOOR FINISH SYSTEM IN ITS ENTIRETY. PATCH AND PREPARE WALLS AND FLOORS FOR NEW FLOOR FINISHES.
D08	REMOVE EXISTING WOOD FRAME STAIRS, MEZZANINE, STORAGE, CEILING, & ALL FIXTURES. PREPARE FOR NEW CEILING TO BE INSTALLED.
D09	REMOVE EXISTING COUNTER TOPS, CASEWORK, AND SHELVING. PATCH AS REQUIRED FOR NEW CONSTRUCTION.
D10	REMOVE EXISTING CHALKBOARDS, TACKBOARDS, OR WHITE BOARDS. PATCH AS REQUIRED TO MATCH EXG.
D11	REMOVE EXISTING RECCESED FIRE EXTINGUISHER CABINET, PATCH AND PREPARE WALL FOR INFILL.
D12	REMOVE EXISTING ROOF SHINGLES IN ENTIRETY.
D13	REMOVE EXISTING ROOF SYSTEM IN ENTIRETY THROUGH TO EXISTING DECK WHERE INDICATED.
D14	REMOVE AND REPLACE ROOF DRAIN ASSEMBLY WHERE INDICATED.
D15	REMOVE EXISTING GUTTER / COPING SYSTEM & ASSOCIATED FASTENERS.
D16	REMOVE EXISTING WATER COOLER. PATCH AS REQUIRED FOR NEW CONSTRUCTION.

ROOF NOTES

1. REVIEW ALL CONTRACT DOCUMENTS RELATING TO THE ROOF SYSTEM PRIOR TO BEGINNING WORK.
2. CERTIFY THAT ALL ROOFING AND SUBSTRATE MATERIALS ARE CHEMICALLY AND PHYSICALLY COMPATIBLE WITH EACH OTHER AND THE ROOFING SYSTEM.
3. GUARANTEE THAT THE ROOFING SYSTEM IS DESIGNED APPROPRIATELY TO BE CERTIFIED FOR THE REQUESTED WARRANTY PERIOD AND MEETS STANDARDS OF I-90.
4. SHOW PROOF THAT THE ROOFING CONTRACTOR IS AN APPROVED APPLICATOR OF THE ROOFING SYSTEM TO BE INSTALLED.
5. PROVIDE CERTIFICATION FROM THE ROOFING MANUFACTURER THAT ALL MATERIALS USED IN ROOFING SYSTEMS ARE COVERED IN THE WARRANTY.
6. PROVIDE A DAILY REPORT TO THE ARCHITECT COVERING:
   A. ROOF DECK CONDITIONS
   B. LAYOUT AND ATTACHMENT OF INSULATION
   C. WEATHER CONDITIONS
   D. SIZE OF CREW
   E. EQUIPMENT USED
7. INSTALL ALL ROOFING MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED REQUIREMENTS.
8. BE RESPONSIBLE FOR VERIFYING THE CONDITION OF THE ROOF DECK PRIOR TO BEGINNING WORK AND SHALL NOTIFY ARCHITECT OF ANY ADVERSE CONDITIONS REQUIRING ATTENTION.
9. CONTRACTOR SHALL COORDINATE WORK WITH ALL OTHER CONTRACTORS REGARDING LOCATION AND SEALING OF ROOF TOP PENETRATIONS.
10. PROVIDE AND INSTALL TAPERED INSULATION TO ACHIEVE POSITIVE SLOPE (MIN. 1/4"/1'-0") OF ROOF SURFACE TO DRAINS SCUPPERS AND GUTTERS.
11. ALL GUTTERS DISCHARGING ONTO LOWER ROOFS TO RECEIVE SPLASH BLOCKS ON 3x3 WALKWAY PAD BELOW DISCHARGING AREA.
12. ALL ROOF NAILERS SHALL BE SECURELY ANCHORED TO THE DECK TO RESIST A MINIMUM FORCE OF 300 POUNDS PER LINEAR FOOT. REFER TO FACTORY MUTUAL DATA SHEET 1-49.
13. REFERENCE ROOFING SPECIFICATIONS FOR ENTIRE ROOF SYSTEM PERFORMANCE CRITERIA.
14. ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY AND SHALL BE FINAL VERIFIED IN FIELD BY THE CONTRACTOR.

ROOF DRAIN TESTING

A. PRE-CONSTRUCTION TESTING: PRIOR TO THE START OF ANY WORK ON THE ROOF, THE CONTRACTOR SHALL WATER-FLOW TEST ALL ROOF DRAINS (5 MINUTES AT EACH DRAIN), TO DETERMINE IF ANY FULL OR PARTIAL DRAIN CLOGS EXIST IN THE DRAINAGE SYSTEM.
   1. THE OWNER SHALL HAVE A REPRESENTATIVE AT THE TEST.
   2. THE RESULTS OF THE TESTING SHALL BE REPORTED TO THE OWNER, IN WRITING, PRIOR TO THE START OF WORK.
   3. THE OWNER WILL BE RESPONSIBLE FOR THE CORRECTION OF ANY DRAINAGE PROBLEMS REPORTED BY THE CONTRACTOR PRIOR TO THE START OF WORK.
   4. ANY DRAINS, PIPING OR OTHER COMPONENTS, WHETHER EXPOSED, CONCEALED, BELOW GRADE, ETC., FOUND TO BE CLOGGED AFTER THE START OF CONSTRUCTION, AND NOT REPORTED TO THE OWNER PRIOR TO THE START OF CONSTRUCTION, SHALL BE CLEARED, REPAIRED OR REPLACED AS REQUIRED TO RESTORE FULL DRAINAGE CAPACITY. ALL WORK SHALL BE PERFORMED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER, INCLUDING PATCHING, REPAIR, OR REPLACEMENT OF ANY MATERIALS, FINISHES, LANDSCAPING, ETC., DISTURBED IN GAINING ACCESS TO DRAINAGE COMPONENTS.

B. POST-CONSTRUCTION TESTING: WHEN ALL WORK REACHES SUBSTANTIAL COMPLETION, THE CONTRACTOR SHALL WATER-FLOW TEST ALL ROOF DRAINS (5 MINUTES AT EACH DRAIN), TO DETERMINE IF ANY FULL OR PARTIAL DRAIN CLOGS EXIST IN THE DRAINAGE SYSTEM.
   1. THE OWNER SHALL HAVE A REPRESENTATIVE AT THE TEST.
   2. REPORT THE RESULTS OF THE TESTING TO THE OWNER, IN WRITING, PRIOR TO THE PREPARATION OF THE FINAL PUNCHLIST INSPECTION.
   3. ANY DRAINS, PIPING OR OTHER COMPONENTS, WHETHER EXPOSED, CONCEALED, BELOW GRADE, ETC., FOUND TO BE CLOGGED SHALL BE CLEARED, REPAIRED OR REPLACED AS REQUIRED TO RESTORE FULL DRAINAGE CAPACITY. ALL WORK SHALL BE PERFORMED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER, INCLUDING PATCHING, REPAIR, OR REPLACEMENT OF ANY MATERIALS, FINISHES, LANDSCAPING, ETC., DISTURBED IN GAINING ACCESS TO DRAINAGE COMPONENTS.

ROOF DRAIN PROTECTION

A. CONTRACTOR IS TO MAKE EVERY EFFORT TO PREVENT MATERIALS FROM ENTERING ROOF DRAINS. CONTRACTOR IS TO INSTALL ROOF DRAIN FILTERS PRIOR TO REMOVAL OF ANY ROOF MATERIALS.

B. TIDY GUTTER DF100001 ROOF DRAIN FOAM FILTER OR SIMILAR.

C. ALL DEBRIS IS TO BE CLEARED AWAY FROM DRAINS AT THE END OF EACH DAY.

EXISTING ROOF LEGEND

- EXISTING ASPHALT SHINGLE ROOF SYSTEM (REMOVE SHINGLES, UNDERLAYMENTS, ETC., IN ENTIRETY, DOWN TO SHEATHING)
- EXISTING EPDM ROOF; PREP FOR RE-ROOF COATING SYSTEM
- REMOVE EXISTING ROOFING SYSTEM, INCLUDING INSULATION, IN ENTIRETY, DOWN TO ROOF DECK AT LOCATIONS INDICATED BY THIS HATCH.

N

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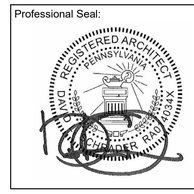
Professional Seal:



Owner:
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POTTSTOWN, PA 19465

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ISSUED FOR:

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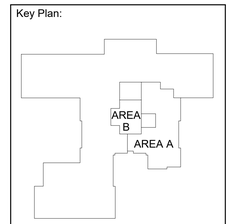
DATE: 07/24/2026

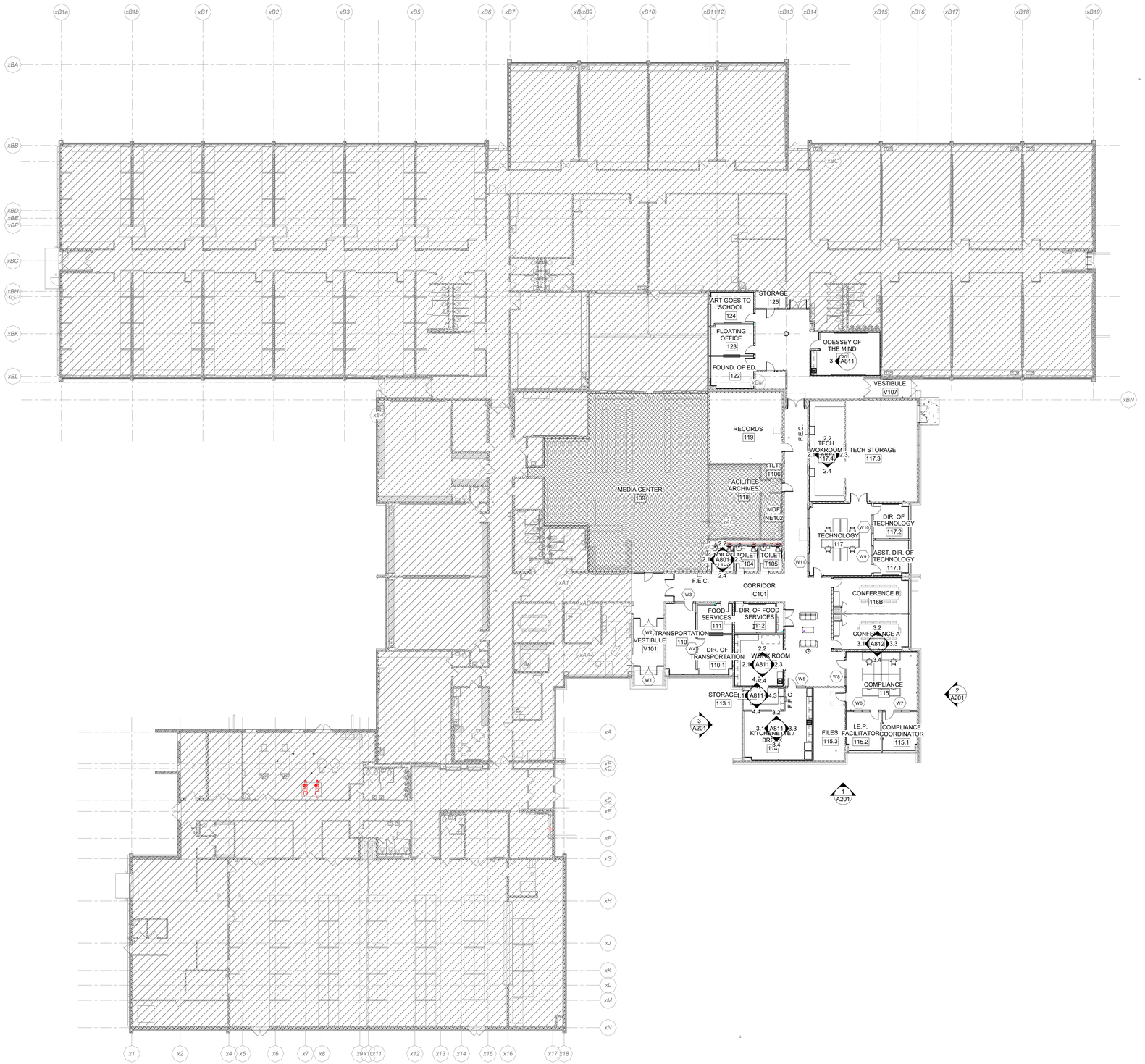
SG PROJECT NUMBER: 225180.00

Key Plan:



Drawing Title:
COMPOSITE ROOF DEMOLITION PLAN

Drawing Number:
AD140



1 COMPOSITE FIRST FLOOR PLAN
A101 SCALE: 1/16" = 1'-0"

GENERAL PLAN NOTES

1. ALL DIMENSIONS ARE TO OUTSIDE FACE OF FOUNDATIONS, COLUMN LINE, OR FACE OF FRAMING UNLESS NOTED OTHERWISE. CONTRACTOR SHALL VERIFY DIMENSIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES.
2. SEE ENLARGED PLANS FOR TYPICAL INTERIOR ELEVATIONS.

AREA NOT IN SCOPE (N.I.S.)

AREA OF WORK TO BE MEP IMPROVEMENTS ONLY

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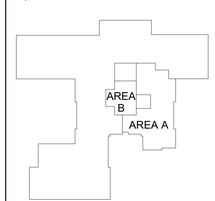
Key Plan:

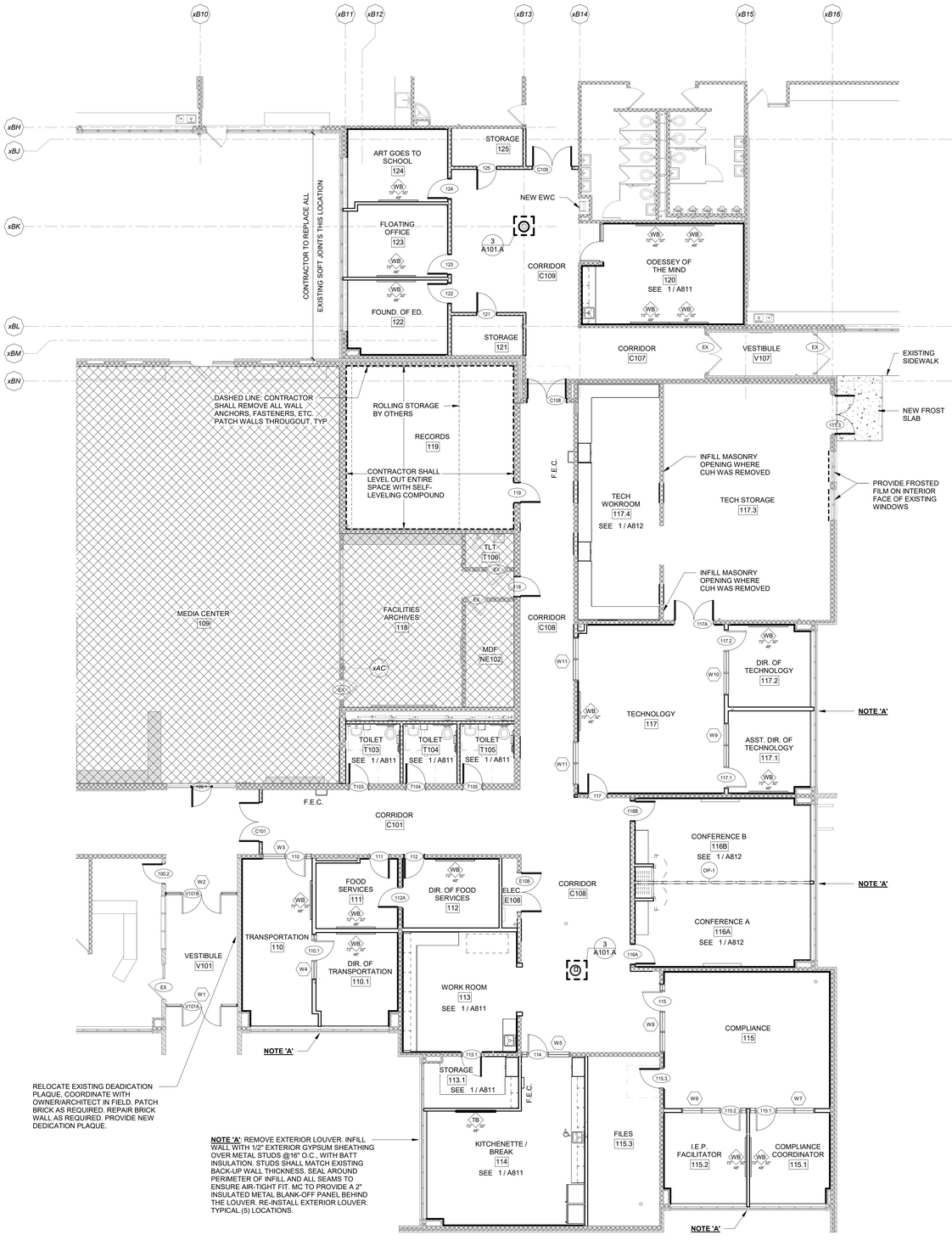


Drawing Title:

COMPOSITE FIRST FLOOR PLAN

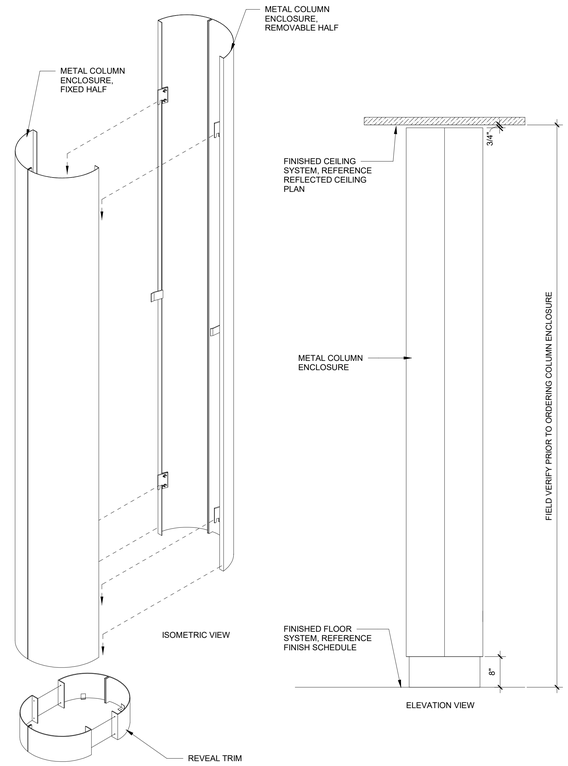
Drawing Number:

A101



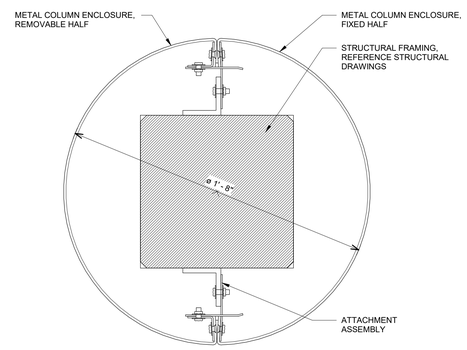
1 PARTIAL FIRST FLOOR PLAN - AREA A

A101.A SCALE: 1/8" = 1'-0"



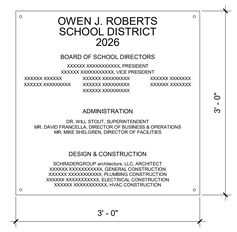
2 METAL COLUMN ENCLOSURE ISOMETRIC AND ELEVATION

A101.A SCALE: 3/4" = 1'-0"



3 METAL COLUMN ENCLOSURE PLAN DETAIL - CIRCULAR 2 PIECES

A101.A SCALE: 3" = 1'-0"



4 DEDICATION PLAQUE

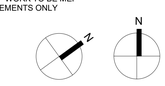
A101.A SCALE: 1" = 1'-0"

GENERAL PLAN NOTES

1. ALL DIMENSIONS ARE TO OUTSIDE FACE OF FOUNDATIONS, COLUMN LINE, OR FACE OF FRAMING UNLESS NOTED OTHERWISE. CONTRACTOR SHALL VERIFY DIMENSIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES.
2. SEE ENLARGED PLANS FOR TYPICAL INTERIOR ELEVATIONS.

AREA NOT IN SCOPE (N.I.S.)

AREA OF WORK TO BE MEP IMPROVEMENTS ONLY



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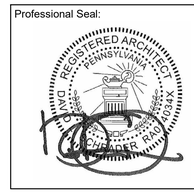

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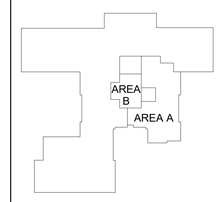
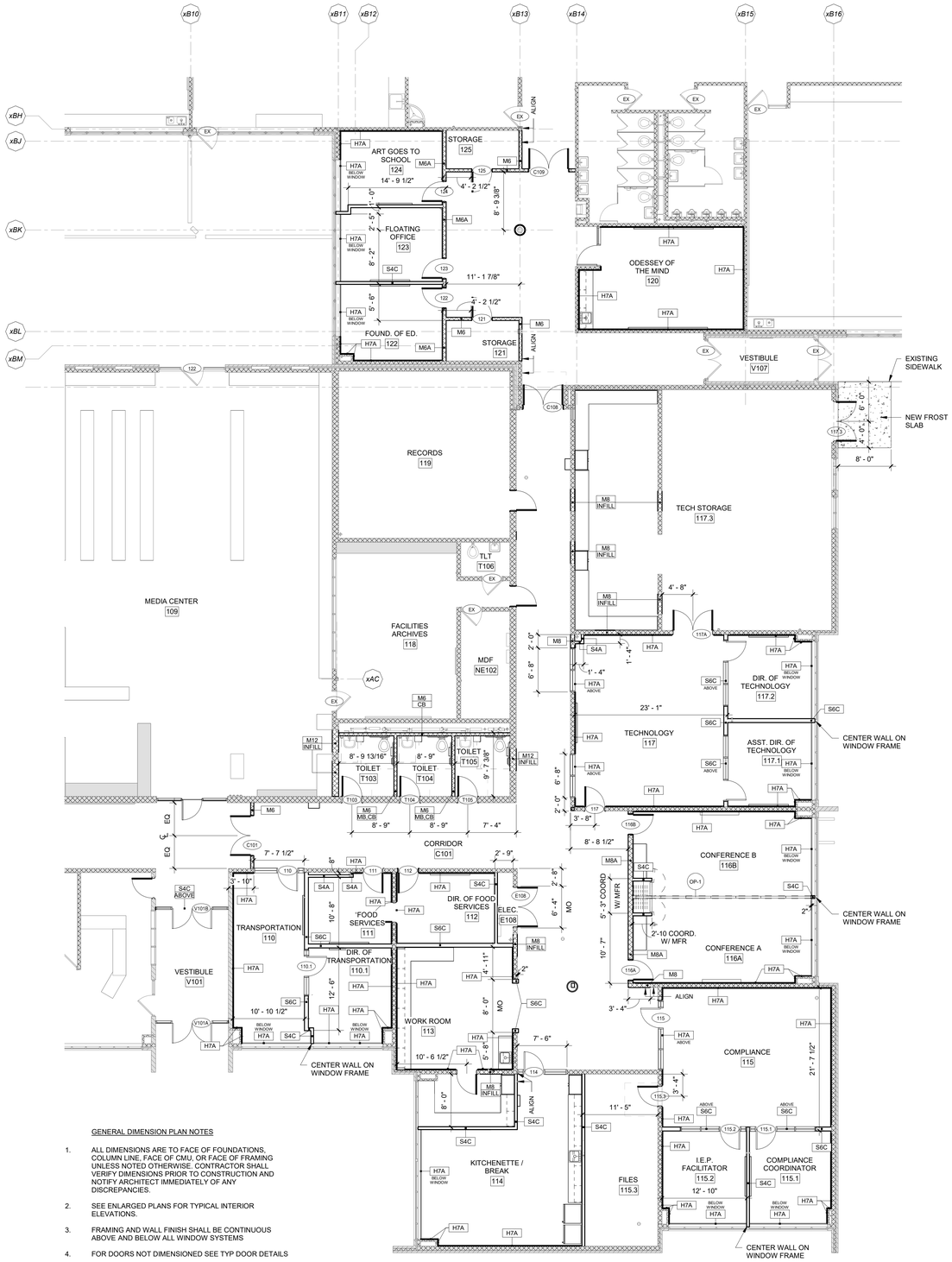


Drawing Title:

FIRST FLOOR PLAN - AREA A

Drawing Number:

A101.A



GENERAL DIMENSION PLAN NOTES

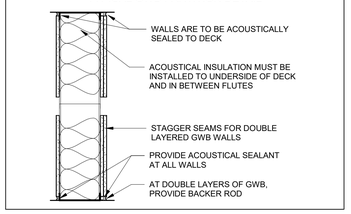
1. ALL DIMENSIONS ARE TO FACE OF FOUNDATIONS, COLUMN LINE, FACE OF CMU, OR FACE OF FRAMING UNLESS NOTED OTHERWISE. CONTRACTOR SHALL VERIFY DIMENSIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES.
2. SEE ENLARGED PLANS FOR TYPICAL INTERIOR ELEVATIONS.
3. FRAMING AND WALL FINISH SHALL BE CONTINUOUS ABOVE AND BELOW ALL WINDOW SYSTEMS
4. FOR DOORS NOT DIMENSIONED SEE TYP DOOR DETAILS
5. ALL WALL INFILL SHALL MATCH EXISTING CONSTRUCTION AND BE FLUSH TO ADJACENT CONSTRUCTION. ALL MASONRY WALLS SHALL BE TOOTHED IN.

1 PARTIAL FIRST FLOOR DIMENSION PLAN - AREA A
A110.A SCALE: 1/8" = 1'-0"

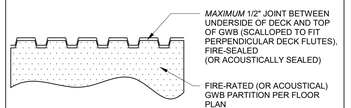
PARTITION SCHEDULE

WALL TYPE	WALL CONSTRUCTION	WALL FRAMING			WALL RATING		
		TYPE	SIZE	SPACING	FIRE RATING	UL#	STC
H7A	7/8" METAL HAT CHANNEL; 5/8" GWB; WALL ASSEMBLY TO UNDERSIDE OF DECK	METAL	7/8"	16" O.C.	-	-	-
M6	6" CONCRETE MASONRY UNIT; WALL ASSEMBLY TO UNDERSIDE OF DECK	-	-	-	-	-	44
M6A	6" CONCRETE MASONRY UNIT; 5/8" GWB; 7/8" HAT CHANNEL; WALL ASSEMBLY TO UNDERSIDE OF DECK	METAL	7/8"	16" O.C.	-	-	45
M8A	8" CONCRETE MASONRY UNIT; 5/8" GWB; 7/8" HAT CHANNEL; WALL ASSEMBLY TO UNDERSIDE OF DECK	METAL	7/8"	16" O.C.	-	-	47
M12	12" CONCRETE MASONRY UNIT; WALL ASSEMBLY TO UNDERSIDE OF DECK	-	-	-	-	-	50
S4A	4" METAL STUD; 5/8" GWB; ACOUSTICAL BATT INSULATION; WALL ASSEMBLY TO UNDERSIDE OF DECK	METAL	4"	16" O.C.	-	-	34
S4C	4" METAL STUD; 5/8" GWB; ACOUSTICAL BATT INSULATION; WALL ASSEMBLY TO UNDERSIDE OF DECK	METAL	4"	16" O.C.	-	-	40
S6C	6" METAL STUD; 5/8" GWB; ACOUSTICAL BATT INSULATION; WALL ASSEMBLY TO UNDERSIDE OF DECK	METAL	6"	16" O.C.	-	-	40

TYPICAL GWB PARTITION DETAIL



TYPICAL FIRE-RATED OR ACOUSTICALLY-RATED GWB PARTITION DETAIL



THIS DETAIL APPLICABLE TO ALL GWB PARTITIONS AND SHAFTWALLS THAT ARE DESIGNED TO IBC TABLE 720.1 AND/OR 'UL' DESIGN STANDARDS PER THE PRECEDING PARTITION TYPES

PARTITION SCHEDULE NOTES:

1. REFERENCE STRUCTURAL DRAWINGS FOR TYPICAL T.O. WALL DETAIL WHEN MASONRY PARTITION IS CONTINUOUS TO UNDERSIDE OF DECK ABOVE.
2. IN THE EVENT OF THE ROOF STRUCTURE INTERRUPTING A PROPOSED PARTITION'S PATH TO THE UNDERSIDE OF THE DECK, CONTRACTOR IS RESPONSIBLE FOR PROVIDING CLOSURE / PARTITION OF EQUAL OR GREATER FIRE, SOUND AND RESILIENCE RATINGS TO UNDERSIDE OF DECK TO MAINTAIN ALL PROPOSED FIRE, SOUND AND SAFETY RATINGS AT NO ADDITIONAL COST TO THE OWNER. IN THE EVENT OF SAID CONFLICT, CONTRACTOR TO SUBMIT ALL PROPOSED PARTITION SUBSTITUTION REQUESTS DUE TO CONFLICTS WITH ROOF FRAMING TO ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.
3. ALL WET WALLS TO RECEIVE MOISTURE RESISTANT GYPSUM WALL BOARD, REFERENCE PLANS FOR LOCATIONS.
4. ALL WALLS UTILIZING WALL WASH LIGHT FIXTURES OR LIGHT FIXTURES LOCATED WITHIN 24" OF WALL ARE TO RECEIVE A 'LEVEL 5' FINISH.
5. ALL FIRE WALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS AND SMOKE PARTITIONS OR ANY OTHER WALL REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS SHALL BE EFFECTIVELY AND PERMANENTLY IDENTIFIED WITH SIGNS OR STENCILING PER IBC 703.7.
6. EXTERIOR PARTITION TYPES DO NOT SHOW OR DICTATE INTERIOR FINISHES. WALL CONSTRUCTION SHOWN STOPS AT WALL STRUCTURE / BACK-UP.
7. ALL INTERIOR PARTITIONS WHICH RECEIVE CERAMIC TILE FINISH INSTALLED MORE THAN 5' IN HEIGHT SHALL BE FRAMED WITH 20 GA. MIN. STUDS AT 12" O.C. W/ HORIZONTAL COLD ROLLED STIFFENER CHANNELS AT 4'-0" O.C. (MAX.) AND EXTEND FROM FINISHED FLOOR TO STRUCTURE ABOVE. 20 GA. DIAGONAL STUD KICKERS MUST ALSO BE INSTALLED AT EVERY OTHER VERTICAL STUD ABOVE CEILING.
8. ALL INTERIOR CORRIDOR PARTITIONS ARE TO RECEIVE "IMPACT RESISTANT" GYPSUM WALL BOARD UP TO A MINIMUM OF 10' A.F.F. UNLESS OTHERWISE NOTED. REFERENCE SPECIFICATIONS FOR CLASS OF IMPACT RATED DRYWALL.

PARTITION SCHEDULE LEGEND:

1. PREFIX CODES (CORE TYPES)

S	METAL STUD
M	MASONRY
W	WOOD STUD
H	FURRING / HAT CHANNEL
U	SHAFTWALL

2. FINISH CODES

A	(1) LAYER OF FINISH ON ONE SIDE
B	(2) LAYERS OF FINISH ON ONE SIDE
C	(1) LAYER OF FINISH ON BOTH SIDES
D	(2) LAYER OF FINISH ON BOTH SIDES
E	(1) LAYER OF FINISH ON ONE SIDE, (2) LAYERS ON THE OTHER SIDE

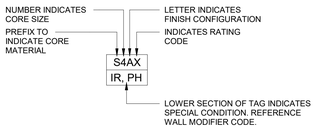
3. RATING CODES

R	BALLISTIC RESISTANT
Q	ACOUSTIC RATED
X	1 HOUR FIRE RATED
Z	2 HOUR FIRE RATED

4. SPECIAL CONDITION CODES

SP	SMOKE PARTITION - SEAL ALL PENETRATIONS AND TOP/BOTTOM OF PARTITION. SEE DETAIL ABOVE.
PH	PARTIAL HEIGHT - FINISH TO TERMINATE 12" ABOVE FINISHED CEILING; FRAMING TO CONTINUE TO DECK ABOVE
MR	MOISTURE RATED GYPSUM WALL BOARD
CB	1/2" CEMENT BACKING PANEL; PROVIDE 1/2" GWB ABOVE WHERE WALL TILE STOPS IN ORDER TO PROVIDE FLUSH FINISH.
PW	PROVIDE 3/4" FIRE RATED TREATED PLYWOOD BEHIND FINISH
IR	IMPACT RESISTANT GYPSUM WALL BOARD TO 10' ABOVE FINISHED FLOOR
NB	BATT INSULATION IS NOT REQUIRED
HW	HALF HEIGHT WALL, REFERENCE DETAILS FOR SPECIFIC WALL HEIGHT
CT	WALL RECEIVES CERAMIC TILE FINISH OVER 5', REFERENCE GENERAL NOTE 41 ON A003.
INFILL	PROVIDE WALL INFILL WITH CONSTRUCTION TYPE TO MATCH EXISTING, FINISHES ARE TO BE FLUSH AND SMOOTH WITH ADJACENT EXISTING CONSTRUCTION

PARTITION TAG SYMBOL LEGEND:



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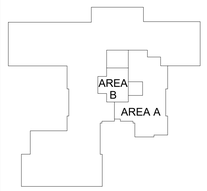
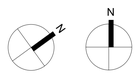
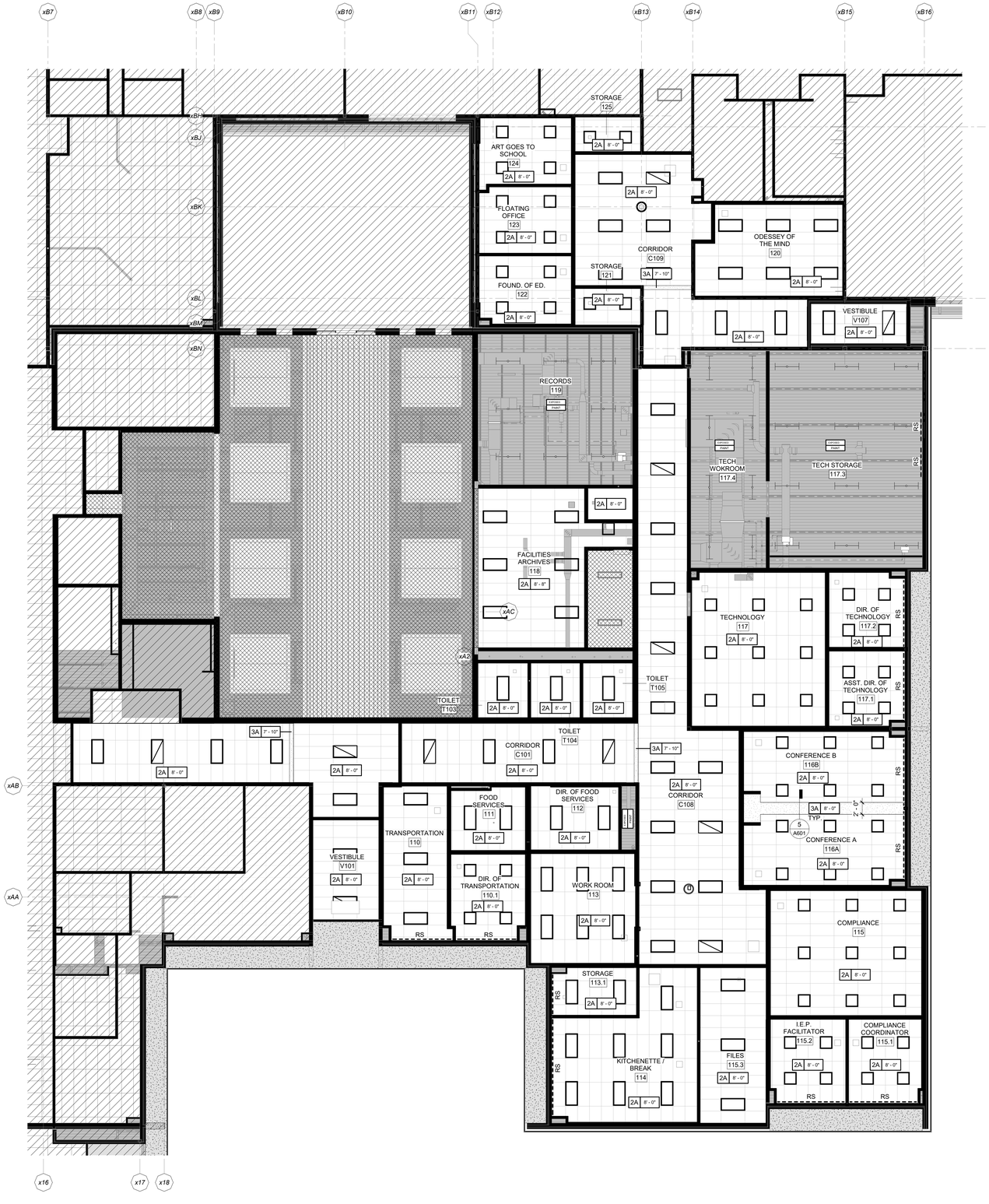


Drawing Title:
DIMENSION PLAN - AREA A

Drawing Number:
A110.A





1 PARTIAL FIRST REFLECTED CEILING PLAN - AREA A

A120.A SCALE: 1/8" = 1'-0"

CEILING NOTES

1. ALL CEILING TILE TO BE CENTERED IN ROOMS, UNLESS OTHERWISE NOTED.
2. CEILING HEIGHTS REFERENCE ROOMS FINISHED FLOOR ELEVATION.
3. CONTRACTOR TO PROVIDE CEILING EXPANSION JOINTS PER SPECIFICATION REQUIREMENTS AND MANUFACTURER'S RECOMMENDATIONS AT ALL BUILDING EXPANSION JOINT LOCATIONS.
4. REFERENCE MECHANICAL DRAWINGS FOR CEILING MOUNTED DUCTS, PIPES, ETC.
5. REFERENCE ELECTRICAL DRAWINGS FOR LIGHTING FIXTURE TYPES AND LOCATIONS.
6. "EXPOSED, PTD" INCLUDES STRUCTURE, DUCTWORK, PIPING, CONDUIT, HANGERS AND ACCESSORIES.
7. REFERENCE FLOOR PLANS FOR WALL LOCATIONS AND INFORMATION.

GENERAL NOTES

1. ALL DIMENSIONS ARE TO FACE OF MASONRY, ROUGH FRAME OR CENTER LINE OF COLUMN - TYPICAL, UNLESS OTHERWISE NOTED. CONTRACTOR SHALL VERIFY **ALL** DIMENSIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES.

RCP LEGEND

6A 10' - 0" / P-1	INDICATES CEILING TYPE (SEE LEGEND), HEIGHT ABOVE FINISHED FLOOR & FINISH
EXPOSED P-1	EXPOSED TO STRUCTURE ABOVE, PAINTED; INCLUDES ALL STRUCTURAL AND MEP EQUIPMENT NOTE: GRAY HATCH REPRESENTS EXPOSED STRUCTURE
RS	MANUAL ROLLER SHADE

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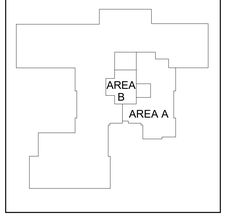
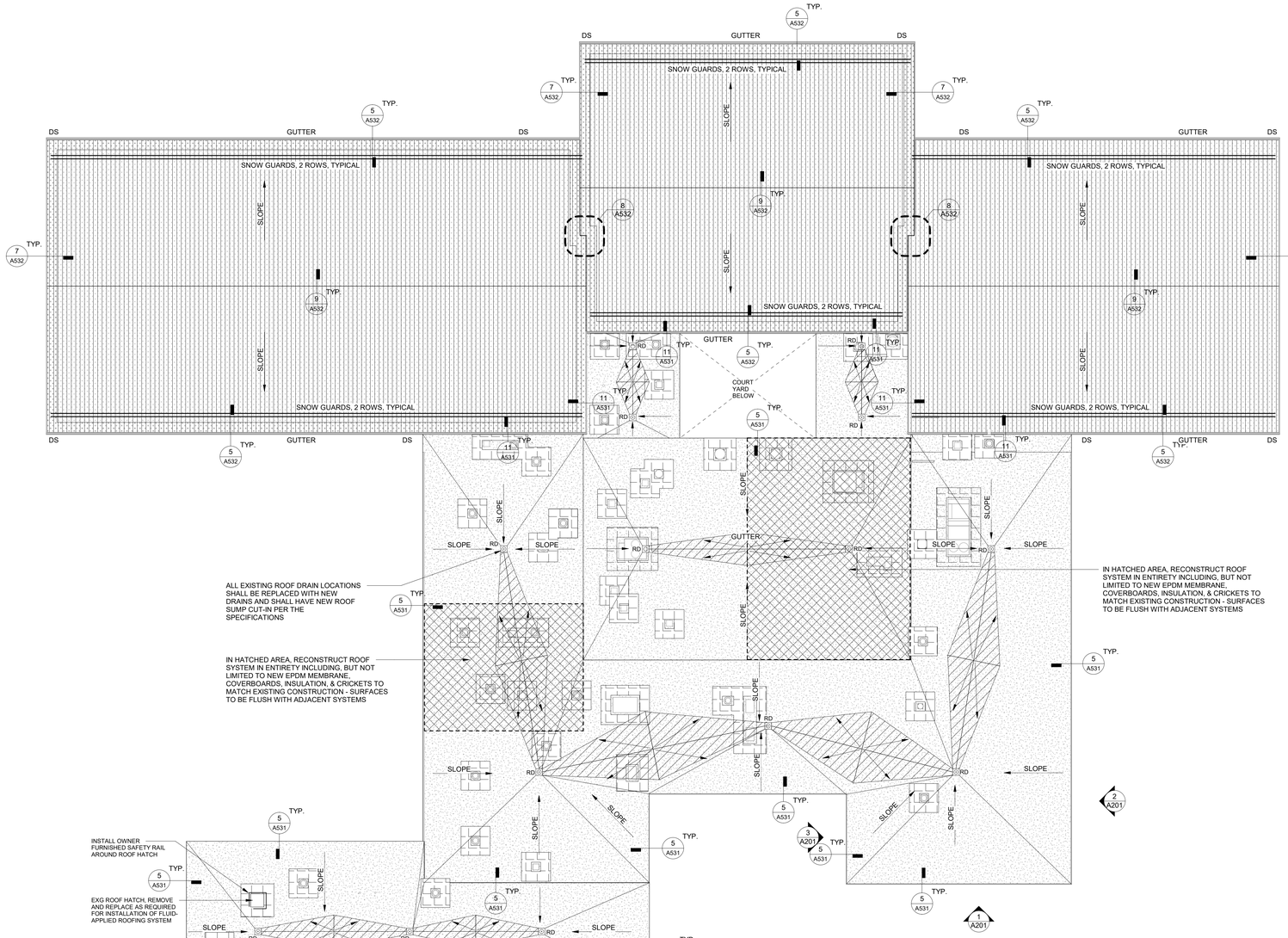


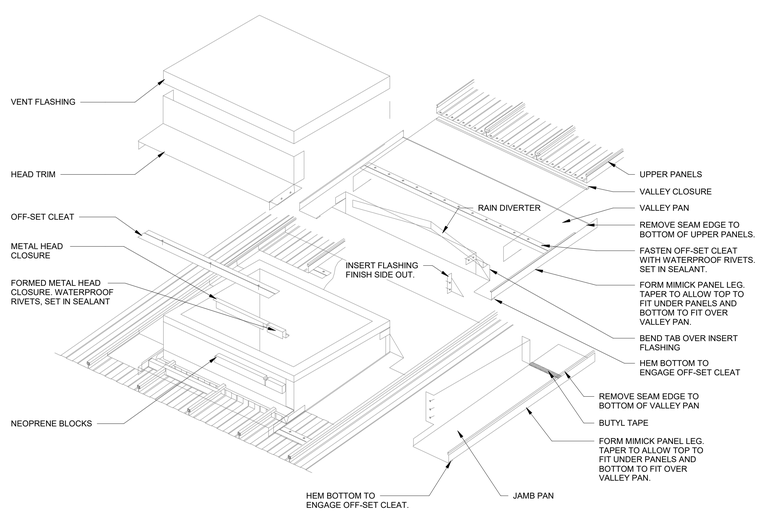
Drawing Title:
FIRST FLOOR REFLECTED CEILING PLAN - AREA A

Drawing Number:
A120.A



1 COMPOSITE ROOF PLAN

A140 SCALE: 1/16" = 1'-0"



2 STANDING SEAM - ROOF CURB DETAIL

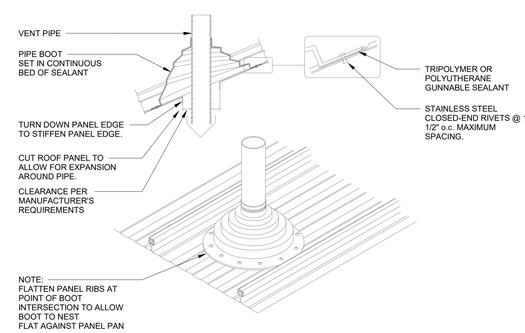
A140 SCALE: 3" = 1'-0"

ROOF NOTES

1. REVIEW ALL CONTRACT DOCUMENTS RELATING TO THE ROOF SYSTEM PRIOR TO BEGINNING WORK.
2. CERTIFY THAT ALL ROOFING AND SUBSTRATE MATERIALS ARE CHEMICALLY AND PHYSICALLY COMPATIBLE WITH EACH OTHER AND THE ROOFING SYSTEM.
3. GUARANTEE THAT THE ROOFING SYSTEM IS DESIGNED APPROPRIATELY TO BE CERTIFIED FOR THE REQUESTED WARRANTY PERIOD.
4. SHOW PROOF THAT THE ROOFING CONTRACTOR IS AN APPROVED APPLICATOR OF THE ROOFING SYSTEM TO BE INSTALLED.
5. PROVIDE CERTIFICATION FROM THE ROOFING MANUFACTURER THAT ALL MATERIALS USED IN ROOFING SYSTEMS ARE COVERED IN THE WARRANTY.
6. INSTALL ALL ROOFING MATERIALS IN ACCORDANCE WITH ROOFING INDUSTRY RECOMMENDED STANDARDS AND PRACTICES.
7. VERIFY THE CONDITION OF THE ROOF DECK PRIOR TO BEGINNING WORK AND NOTIFY ARCHITECT OF ANY ADVERSE CONDITIONS REQUIRING ATTENTION.
8. PROVIDE PROPER COORDINATION AND APPLICATION OF FASTENERS TO ENSURE THAT NO FASTENER PROTRUDES THROUGH EXPOSED ROOF DECKING.
9. CONTRACTOR SHALL COORDINATE WORK WITH ALL OTHER CONTRACTORS REGARDING LOCATION AND SEALING OF ROOF TOP PENETRATIONS.
10. PROVIDE AND INSTALL TAPERED INSULATION TO ACHIEVE POSITIVE SLOPE (MIN. 1/4"/1'-0") OF ROOF SURFACE TO DRAINS SCUPPERS AND GUTTERS.
11. REFER TO PLUMBING DRAWINGS FOR VENT STACK LOCATIONS.
12. REFER TO MECHANICAL DRAWINGS FOR ROOF TOP EQUIPMENT LOCATIONS, PENETRATIONS AND REQUIREMENTS AND CURB DETAILS. PROVIDE GUSSETS AND CRICKETS AS REQUIRED AROUND ALL MECHANICAL ROOF TOP EQUIPMENT.
13. REFER TO ARCHITECTURAL WALL SECTIONS AND ROOF DETAILS DRAWINGS FOR ADDITIONAL DETAILS.
14. SEE PLUMBING DRAWING FOR PIPING OF ROOF BACK-UP OVERFLOW SCUPPERS AND DOWNSPOUTS.
15. ALL GUTTERS DISCHARGING ONTO LOWER ROOFS TO RECEIVE SPLASH BLOCKS ON 3x3 WALKWAY PAD BELOW DISCHARGING AREA.
16. ALL ROOF NAILERS SHALL BE SECURELY ANCHORED TO THE DECK TO RESIST A MINIMUM FORCE OF 300 POUNDS PER LINEAR FOOT. REFER TO FACTORY MUTUAL DATA SHEET 1-49.
17. ROOFING VAPOR BARRIER SHALL BE SEALED AT ALL EDGES.
18. REFERENCE ROOFING SPECIFICATIONS FOR ENTIRE ROOF SYSTEM PERFORMANCE CITERIA.
19. PROVIDE A DAILY REPORT TO THE ARCHITECT COVERING:
    - ROOF DECK CONDITIONS
    - LAYOUT AND ATTACHMENT OF INSULATION
    - WEATHER CONDITIONS
    - SIZE OF CREW
    - EQUIPMENT USED
20. GUTTER SEAMS & JOINTS ARE NOT PERMITTED OVER WALKWAYS, SIDEWALKS, OR DOORS.

ROOF LEGEND

SLOPE	INDICATES ROOF DOWN SLOPE
DS	DOWNSPOUT
SC	SCUPPER
RD	NEW ROOF DRAIN TO BE INSTALLED IN LOCATION OF DEMOLISHED EXISTING ROOF DRAINS. PROBIDE 8'X8' SUMPS AT ALL ROOF DRAIN LOCATIONS.
	WALKWAY PAD
	ICE AND WATER SHIELD
	TAPERED ROOFING INSULATION
	METAL STANDING SEAM ROOFING
	FLUID-APPLIED ROOFING SYSTEM



3 STANDING SEAM - PIPE PENETRATION

A140 SCALE: 3" = 1'-0"

True Project

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Structural Engineer
Schradergroup
153 East King Street, Suite 211-212
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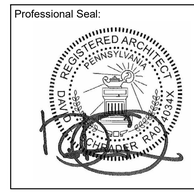
Professional Seal:



Owner:
OWEN J. ROBERTS SCHOOL DISTRICT
901 RIDGE RD.
POTTSTOWN, PA 19465

Additions and Renovations to:
OJR DISTRICT SERVICES CENTER
932 SANATOGA ROAD
POTTSTOWN, PA 19465

ISSUED FOR:

NO.	DESCRIPTION	DATE
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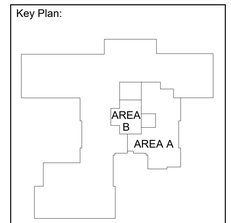
DATE: 07/24/2026

SG PROJECT NUMBER: 225180.00

Key Plan:



Drawing Title:
COMPOSITE ROOF PLAN

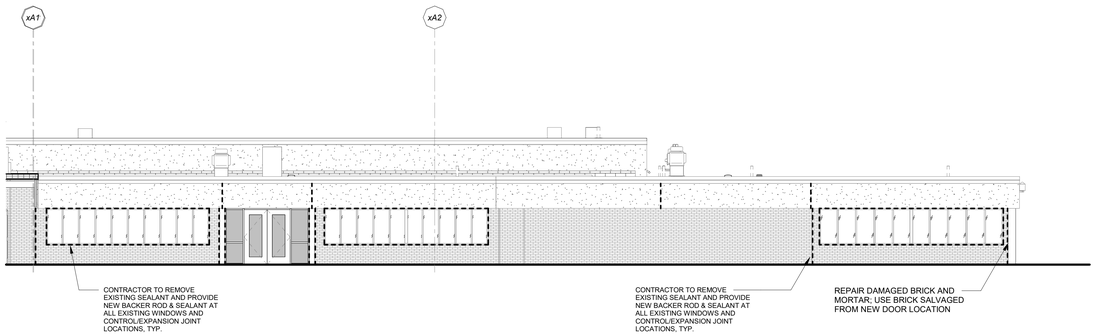
Drawing Number:
A140

ELEVATION KEY

CLEAR GLAZING

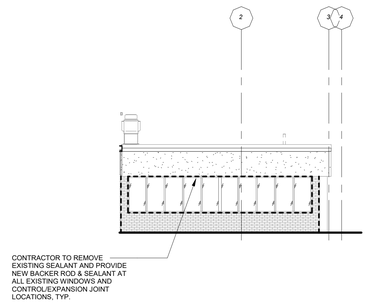
SPANDREL GLAZING

CONTRACTOR TO REMOVE EXISTING SEALANT AND PROVIDE NEW BACKER ROD & SEALANT AT ALL EXISTING SOFT JOINT LOCATIONS



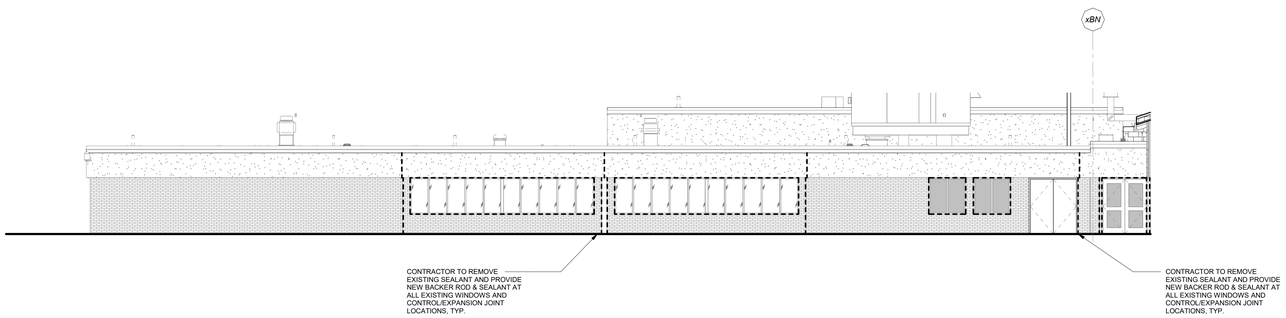
1 ELEVATION 1

A201 SCALE: 1/8" = 1'-0"



3 ELEVATION 3

A201 SCALE: 1/8" = 1'-0"



2 ELEVATION 2

A201 SCALE: 1/8" = 1'-0"

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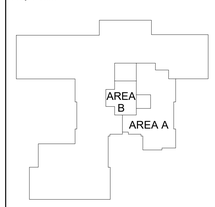
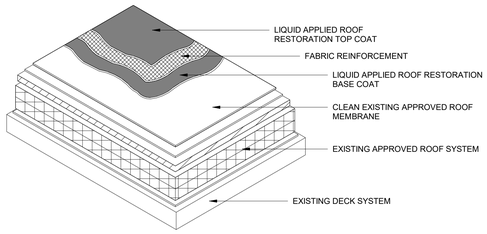


Drawing Title:

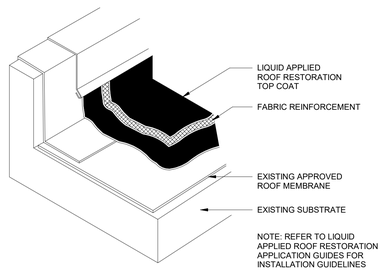
COMPOSITE BUILDING ELEVATIONS

Drawing Number:

A201



1 FLUID APPLIED - TYPICAL SECTION
A531 SCALE: 1 1/2" = 1'-0"



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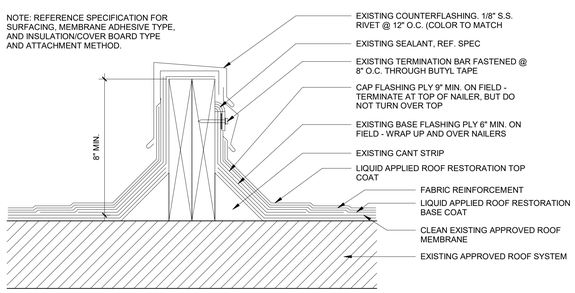
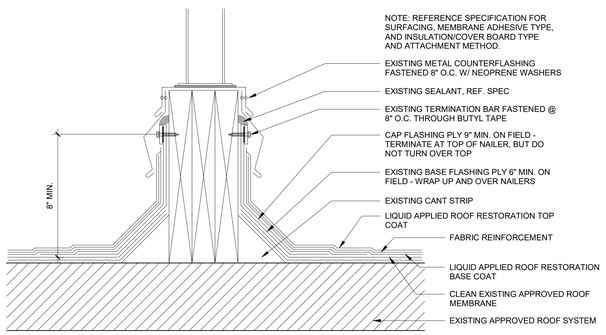


3 FLUID APPLIED - AREA DIVIDER
A531 SCALE: 3" = 1'-0"



4 FLUID APPLIED - EXISTING EQUIPMENT SUPPORT
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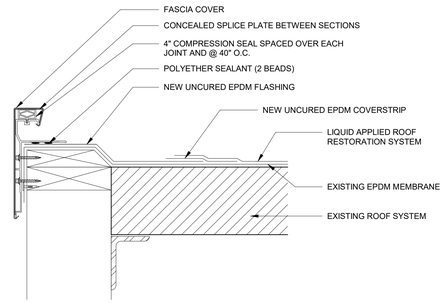

5 FLUID APPLIED - ROOF EDGE FASCIA
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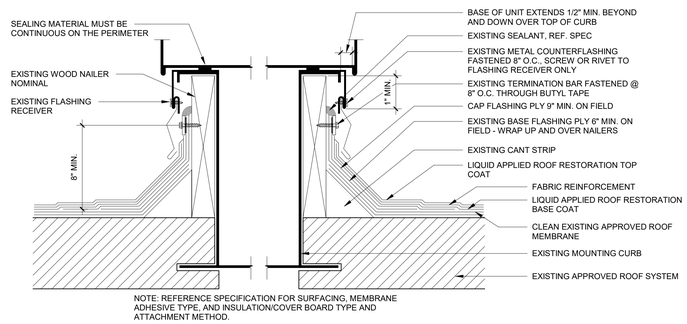

6 FLUID APPLIED - EXISTING HVAC CURB
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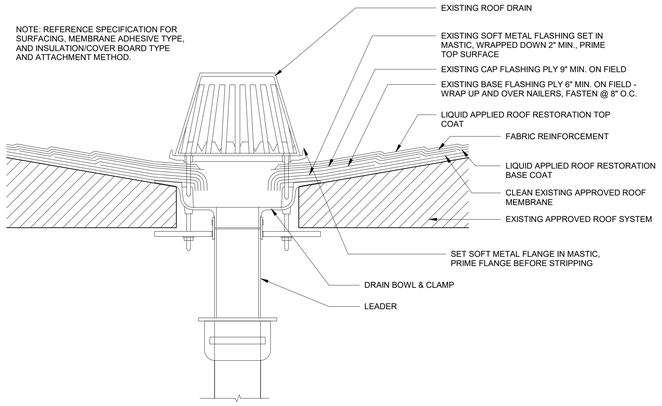

7 FLUID APPLIED - ROOF DRAIN
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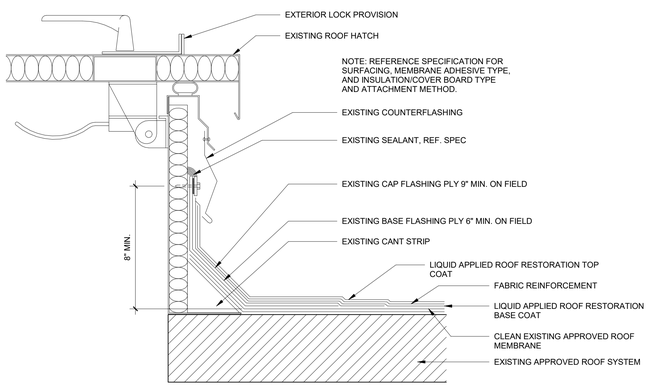

8 FLUID APPLIED - EXISTING HATCH
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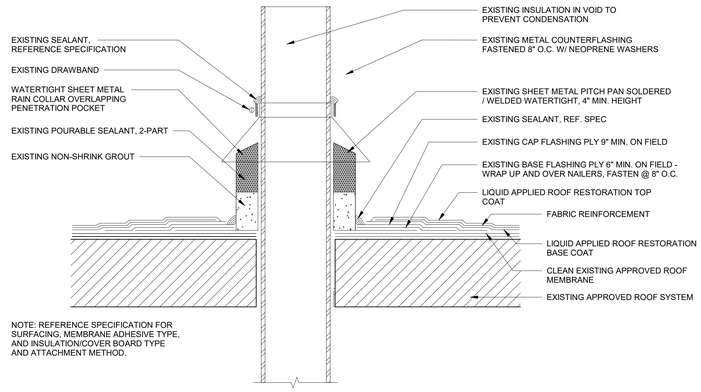
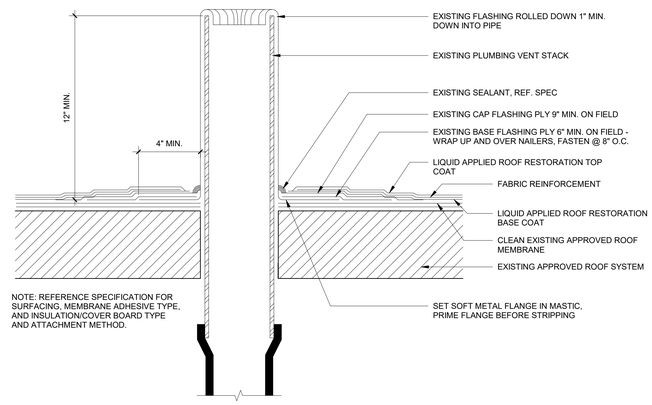
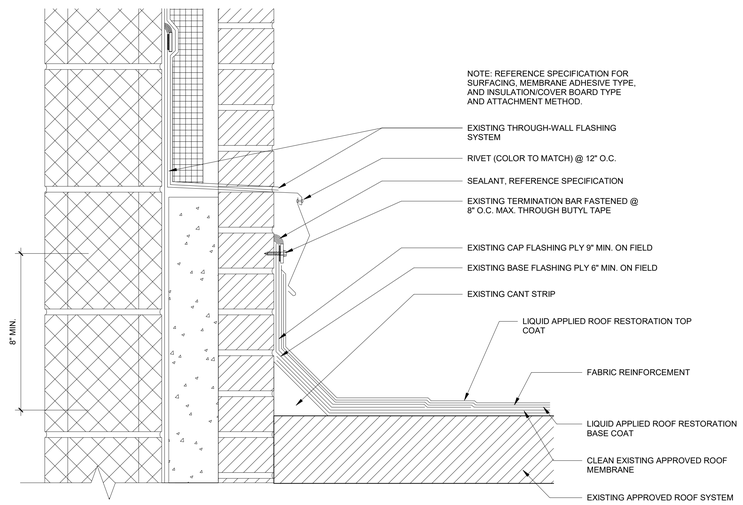


9 FLUID APPLIED - PITCH POCKET
A531 SCALE: 3" = 1'-0"



10 FLUID APPLIED - PLUMBING STACK
A531 SCALE: 3" = 1'-0"



11 FLUID APPLIED - WALL FLASHING
A531 SCALE: 3" = 1'-0"

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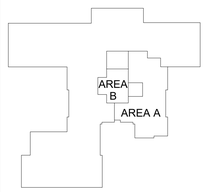
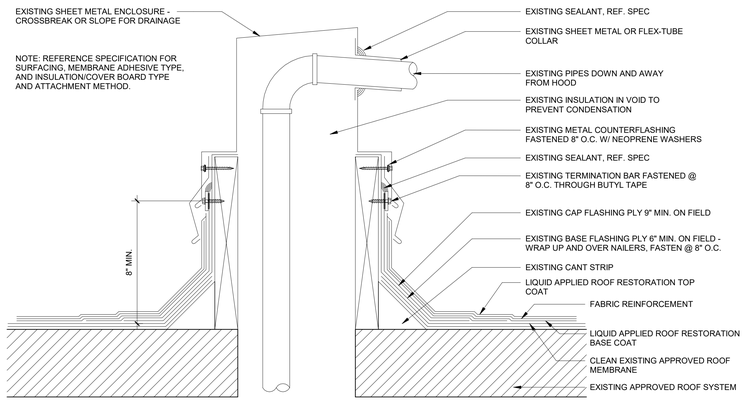
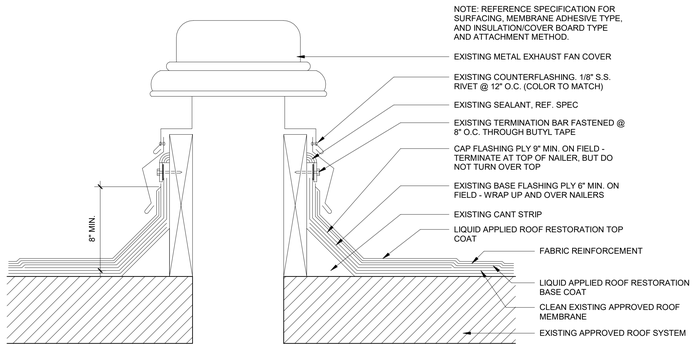


Drawing Title:
TYPICAL ROOF DETAILS

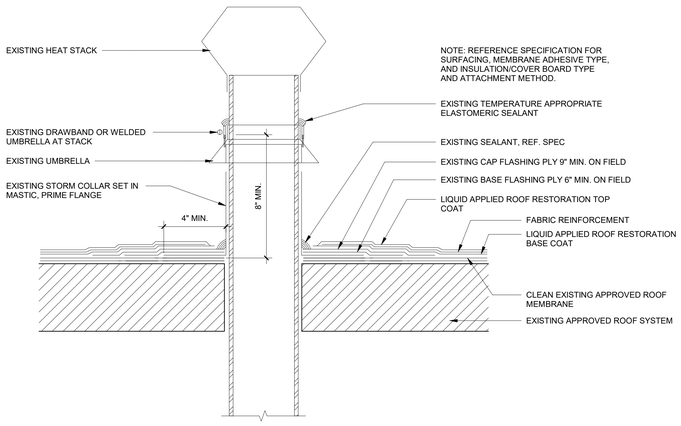
Drawing Number:
A531



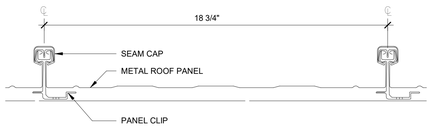
1 | FLUID APPLIED - PIPE HOUSING
A532 | SCALE: 3" = 1'-0"



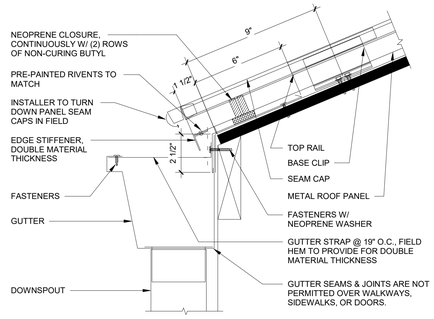
2 | FLUID APPLIED - EXISTING FAN
A532 | SCALE: 3" = 1'-0"



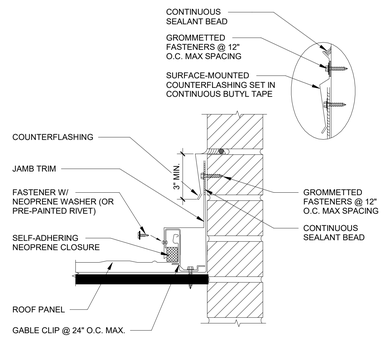
3 | FLUID APPLIED - HEAT STACK
A532 | SCALE: 3" = 1'-0"



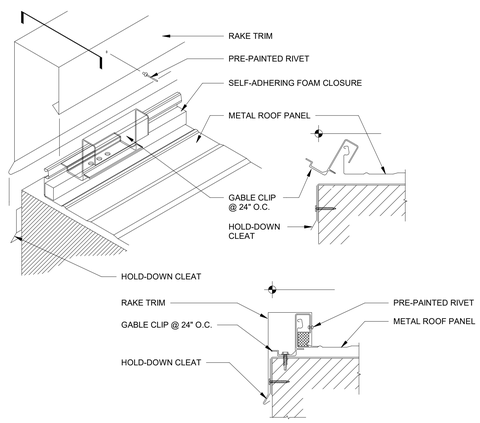
4 | STANDING SEAM - PANEL DETAIL
A532 | SCALE: 3" = 1'-0"



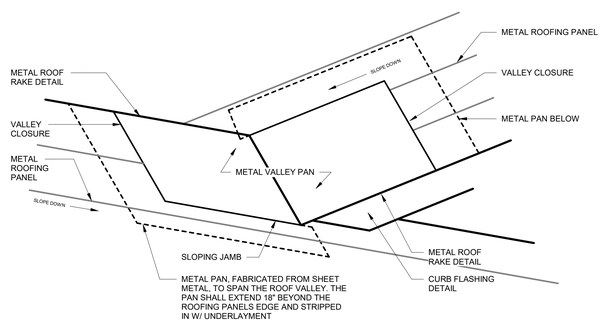
5 | STANDING SEAM - EAVE @ GUTTER
A532 | SCALE: 3" = 1'-0"



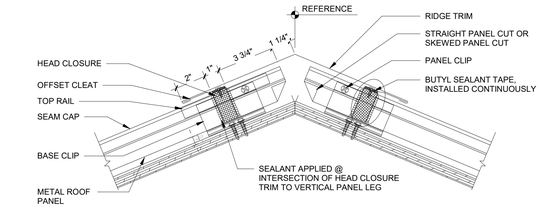
6 | STANDING SEAM - JAMB AT WALL RISE
A532 | SCALE: 3" = 1'-0"



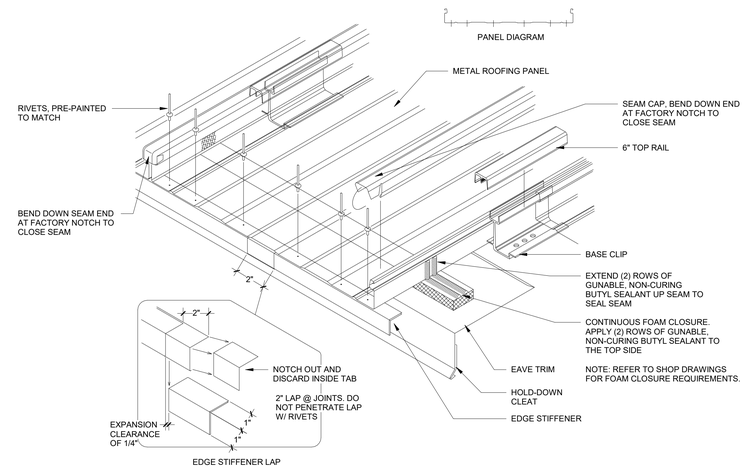
7 | STANDING SEAM - RAKE CLOSURE
A532 | SCALE: 3" = 1'-0"



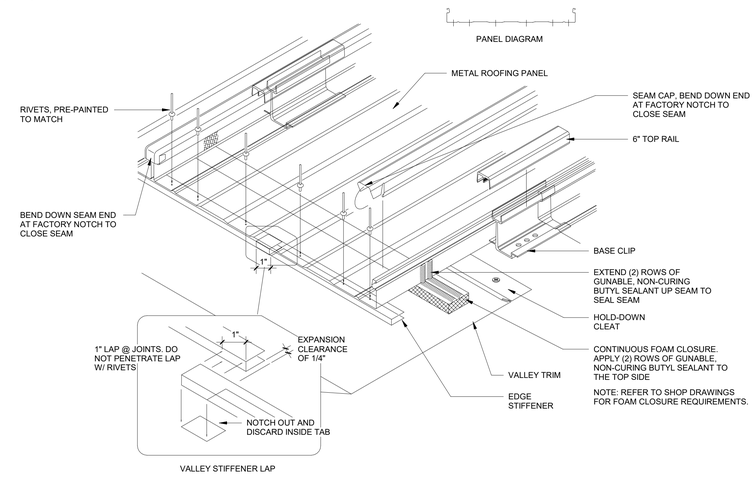
8 | STANDING SEAM - VALLEY CLOSURE @ DOUBLE SLOPE
A532 | SCALE: 3" = 1'-0"



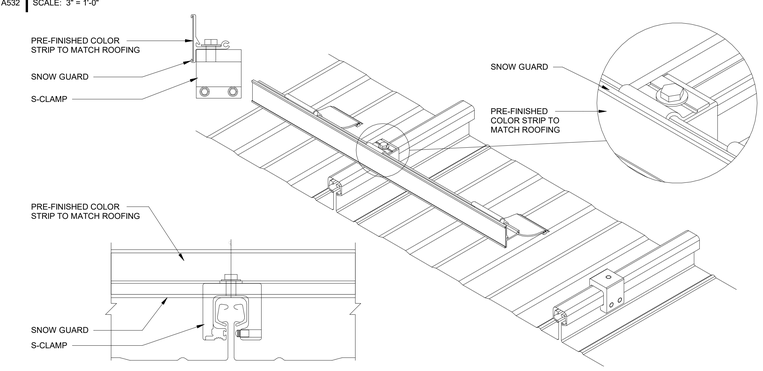
9 | STANDING SEAM - FIXED RIDGE
A532 | SCALE: 3" = 1'-0"



10 | STANDING SEAM - EAVE CLOSURE
A532 | SCALE: 3" = 1'-0"



11 | STANDING SEAM - VALLEY CLOSURE
A532 | SCALE: 3" = 1'-0"



12 | STANDING SEAM - SNOW GUARD
A532 | SCALE: 3" = 1'-0"

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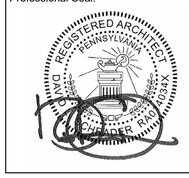

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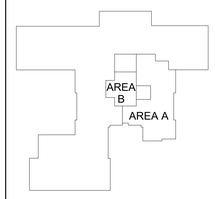

Drawing Title:
TYPICAL ROOF DETAILS

Drawing Number:
A532

DOOR AND FRAME SCHEDULE

NO.	DOOR TYPE	DOOR WIDTH	DOOR HEIGHT	DOOR THICKNESS	DOOR MATERIAL	DOOR FINISH	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	GLAZING TYPE	FIRE RATING	COMMENTS
100.2	TW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	EX	Hollow Metal	Paint	T	-	EXISTING FRAME; CARD READER (EXISTING)
109.1	TW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	EX	Hollow Metal	Paint	T	-	EXISTING FRAME
110	TW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	W3	Hollow Metal	Paint	T	-	
110.1	TW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	W4	Hollow Metal	Paint	T	-	
111	TW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	T	-	
112	TW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	T	-	
112A	TW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	T	-	
113.1	TW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	T	-	
114	DW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	W5	Hollow Metal	Paint	T	-	
115	TW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	W8	Hollow Metal	Paint	T	-	
115.1	TW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	W7	Hollow Metal	Paint	T	-	
115.2	TW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	W6	Hollow Metal	Paint	T	-	
115.3	SW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	-	-	
116A	TW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	T	-	
116B	TW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	T	-	
117	DW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	T	-	
117.1	TW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	W9	Hollow Metal	Paint	T	-	
117.2	TW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	W10	Hollow Metal	Paint	T	-	
117.3	SH	6' - 0"	7' - 2"	1 3/4"	Hollow Metal	Paint	2	Hollow Metal	Paint	-	-	EXTERIOR DOOR - TO BE INSULATED
117A	SW	6' - 0"	7' - 2"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	-	-	
118	TW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	EX	Hollow Metal	Paint	T	-	EXISTING FRAME
119	TW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	EX	Hollow Metal	Paint	T	-	EXISTING FRAME
120	TW	3' - 0"	7' - 0"	1 3/4"	Wood	Stain	EX	Hollow Metal	Paint	T		EXISTING FRAME
121	SW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	-	-	
122	TW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	T	-	
123	TW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	T	-	
124	TW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	T	-	
125	SW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	-	-	
C101	DW	6' - 0"	7' - 2"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	T		
C108	SW	6' - 0"	7' - 0"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	-	90 MIN	
C109	SW	6' - 0"	7' - 2"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	-	-	
E108	SW	6' - 0"	7' - 2"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	-	-	
T103	SW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	-	-	
T104	SW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	-	-	
T105	SW	3' - 0"	7' - 2"	1 3/4"	Wood	Stain	2	Hollow Metal	Paint	-	-	
V101A	FA	6' - 0"	7' - 2"	1 3/4"	Aluminum	Anodized	W2	Aluminum	Anodized	T,L	-	CARD READER (EXISTING)
V101B	FA	6' - 0"	7' - 2"	1 3/4"	Aluminum	Anodized	W2	Aluminum	Anodized	T,L	-	CARD READER

OPERABLE PARTITION SCHEDULE

NO.	LENGTH	CEILING HEIGHT	POCKET DOOR	COMMENTS
OP-1	27' - 0"	8' - 0"	Yes	PROVIDE MARKER BOARD SURFACE ON BOTH SIDES

DOOR NOTES

1. ALL GLAZING IN FIRE RATED DOORS TO BE FIRE GLASS COMPLYING WITH ANSI IMPACT REQUIREMENTS.
2. ALL CLOSERS TO HAVE CLOSING SPECS SET 90º - 12º, 5 SECONDS MIN.
3. ALL DOOR LOCKS, LATCHES, PANIC HARDWARE AND PULLS TO BET SET 34"-48" AFF.
4. ALL DOOR OPERATING DEVICES (OTHER THAN PANIC HARDWARE) TO BE LEVER OPERATED.
5. ALL THRESHOLDS TO BE 1/2" MAX. HEIGHT, BEVELED TO 1:2 SLOPE.
6. ALL GLASS IN DOORS AND WITHIN 24" OF A DOOR TO BE SAFETY TEMPERED GLASS (T).
7. *SEE DOOR TYPES* DIMENSION NOTED IS FROM FINISHES FLOOR TO BOTTOM OF GLAZING.
8. ALL DOOR HARDWARE TO BE MOUNTED A MINIMUM OF 34 INCHES ABOVE FINISHED FLOOR AND A MAXIMUM OF 48 INCHES ABOVE FINISHED FLOOR.

GLAZING KEY

T TEMPERED GLAZING
L LAMINATED GLAZING
B BALLISTIC RATED GLAZING
F FIRE RATED GLAZING
S SECURITY GLAZING
M LARGE MISSILE IMPACT RATED GLAZING

NOTE: REFERENCE SPECIFICATIONS FOR FULL GLAZING TINT/ ASSEMBLY / PERFORMANCE REQUIREMENTS. GLAZING IDENTIFICATION NOTED IN THE DRAWINGS ARE NOT INTENDED TO REPLACE OR SUPERCEDE ANY ADDITIONAL PERFORMANCE REQUIREMENTS INDICATED IN THE SPECIFICATION FOR EACH OF THE GLAZING TYPES NOTED IN THE LEGEND BELOW.

SCHRADERGROUP
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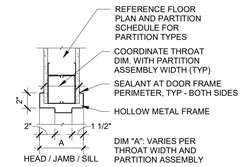
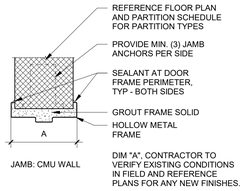
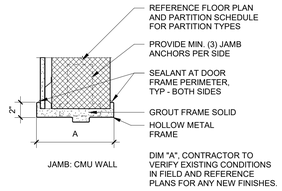


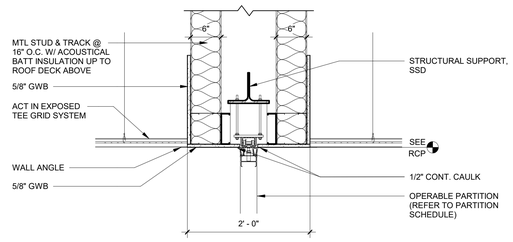
1 HM FRAME - GYPSUM WALL
A601 SCALE: 1 1/2" = 1'-0"



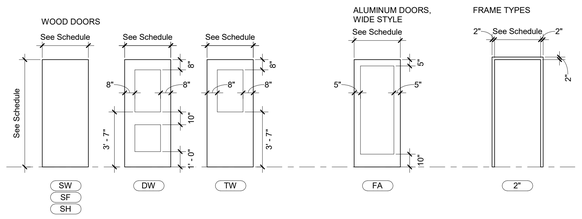
2 HM FRAME - MASONRY JAMB
A601 SCALE: 1 1/2" = 1'-0"



3 HM FRAME - MASONRY JAMB W/ GWB
A601 SCALE: 1 1/2" = 1'-0"



5 GWB BULKHEAD @ OPERABLE PARTITION
A601 SCALE: 1" = 1'-0"



PANELS:
S = SOLID
D = DOUBLE LITE
T = TOP LITE
V = VISION LITE
F = FULL LITE

FRAMES:
2" = 2" HEAD
4" = 4" HEAD

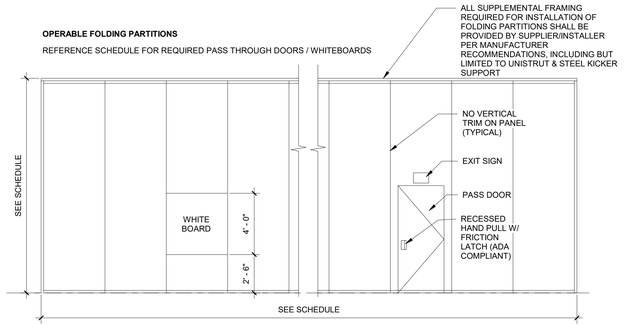
MATERIALS:
A = ALUMINUM
W = WOOD
H = HOLLOW METAL
F = F.R.P.

CW = COUNTER WINDOW DOOR
CD = OVERHEAD COILING DOOR
CG = OVERHEAD GARAGE DOOR
PD = OVERHEAD PANEL DOOR
SG = SIDE-FOLDING GRILLE
AD = SIDE-FOLDING ACCORDION DOOR
PP = PANEL PARTITION
RC = ROLL-DOWN CURTAIN
FC = FIRE-RATED CURTAIN

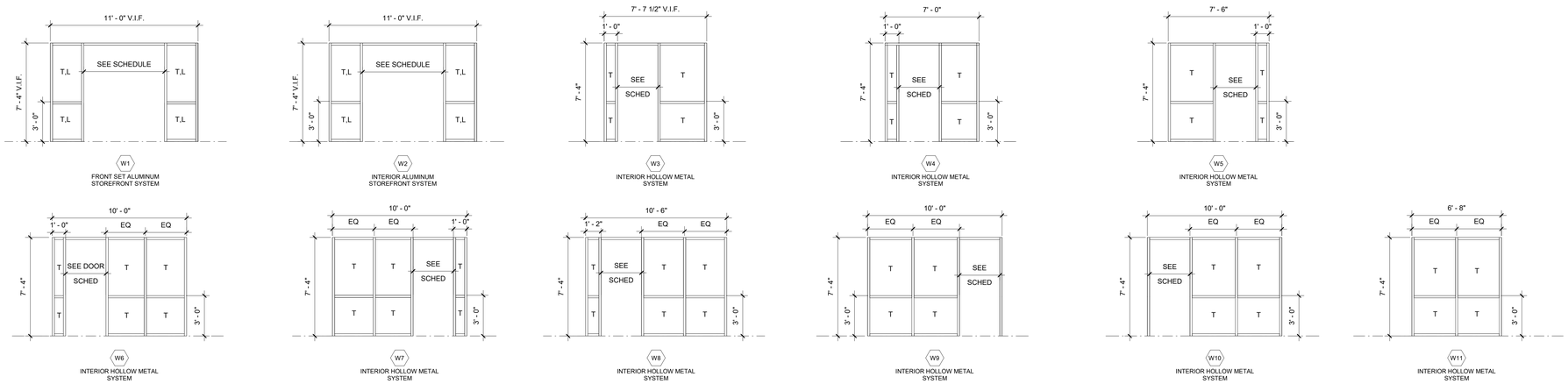
DOOR AND FRAME TYPES
SCALE: 1/4" = 1'-0"

OPERABLE FOLDING PARTITIONS

REFERENCE SCHEDULE FOR REQUIRED PASS THROUGH DOORS / WHITEBOARDS



6 OPERABLE PARTITION ELEVATION
A601 SCALE: 1/4" = 1'-0"



WINDOW NOTES

1. ALL GLAZING TO BE INSULATED UNITS AND FRAMES ARE TO BE THERMALLY BROKEN EXCEPT FOR TYPES MARKED AS INTERIOR.
2. ALL DIMENSIONS SHOW APPROXIMATE ROUGH OPENING.
3. HOLLOW METAL AND STOREFRONT FRAMES TO HAVE 2 INCH FRAME UNLESS OTHERWISE NOTED. CURTAIN WALL FRAMES TO HAVE 2-1/2 INCH FRAME UNLESS OTHERWISE NOTED
4. BALLISTIC AND FIRE RATED WINDOWS SHOULD HAVE CONSISTENT RATINGS FOR FRAMES AND GLAZING.
5. ALL GLASS WITHIN 24" OF A DOOR TO BE SAFETY TEMPERED GLASS (T) UNLESS OTHERWISE NOTED.
6. SEE SECURITY SPECIFICATIONS FOR ALL SECURITY WINDOW INFORMATION NOT SHOWN.
7. WINDOW FRAME AND GLAZING DETAILS TO BE CONSISTENT WITH BALLISTIC OR FIRE RATING OF ENTIRE ASSEMBLY AND ASSOCIATED PARTITION.
8. GROUT FULL, REINFORCE AND ANCHOR AS REQUIRED.

WINDOW KEY

T TEMPERED GLAZING
L LAMINATED GLAZING
B BALLISTIC RATED GLAZING
F FIRE RATED GLAZING
S SECURITY GLAZING
M LARGE MISSILE IMPACT RATED GLAZING

NOTE: REFERENCE SPECIFICATIONS FOR FULL GLAZING TINT/ ASSEMBLY / PERFORMANCE REQUIREMENTS. GLAZING IDENTIFICATION NOTED IN THE DRAWINGS ARE NOT INTENDED TO REPLACE OR SUPERCEDE ANY ADDITIONAL PERFORMANCE REQUIREMENTS INDICATED IN THE SPECIFICATION FOR EACH OF THE GLAZING TYPES NOTED IN THE LEGEND BELOW.

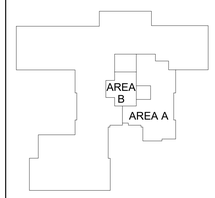
ISSUED FOR:

NO.	DESCRIPTION	DATE
	ISSUED FOR BIDDING	07/24/2026

DATE: 07/24/2026

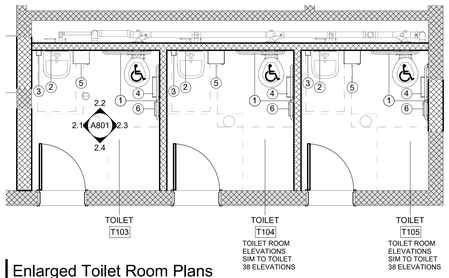
SG PROJECT NUMBER: 225180.00

Key Plan:



Drawing Title:
DOOR SCHEDULE

Drawing Number:
A601



1 Enlarged Toilet Room Plans
A801 SCALE: 1/4" = 1'-0"

TOILET ACCESSORY LEGEND

1	HANDICAP GRAB BAR (BOBRICK B-6806X36, B-6806X42, AND B-6806X18 VERTICAL)
2	SURFACE MOUNTED MIRROR (BOBRICK B-290 1830)
3	SURFACE MOUNTED SOAP DISPENSER (OWNER FURNISHED / CONTRACTOR INSTALLED)
4	SURFACE MOUNTED TOILET TISSUE DISPENSER (OWNER FURNISHED / CONTRACTOR INSTALLED)
5	SURFACE MOUNTED PAPER TOWEL DISPENSER (OWNER FURNSHED / CONTRACTOR INSTALLED)
6	SURFACE MOUNTED SANITARY NAPKIN DISPOSAL (BOBRICK B-254)

NOTES:

DENOTES HDCP ACCESSIBLE FIXTURE/ACCESSORY COMPLYING WITH ANSI 117.1

SEE DETAILS THIS SHEET FOR TYPICAL FIXTURE AND ACCESSORY MOUNTING INFORMATION.

ALL DIMENSIONS NOTED ON TOILET ROOM PLANS ARE FROM FINISHED SURFACE.

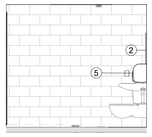
PROVIDE DOOR PULLS ON BOTH SIDES OF STALL DOORS

DOORS TO ACCESSIBLE STALLS TO BE 32" MIN. CLEAR AND SELF-CLOSING

GARMENT HOOK TO BE MOUNTED 48" MAX TO TOP OF HOOK

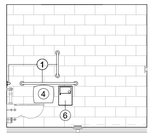
ALL ACCESSIBLE GRAB BARS TO SUPPORT A LOAD OF 250 LBS MIN.

INSTALL HANDICAPPED SYMBOL STICKER TO ALL HANDICAPPED LAVATORIES AND LOCKERS WHEN MORE THAN ONE FIXTURE / LOCKER IS LOCATED WITHIN ROOM.



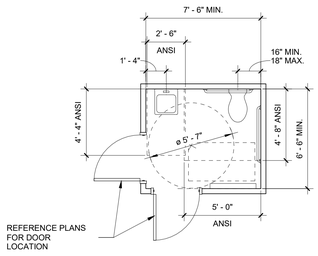
2.1 IE - 38 - TOILET - A
A801 SCALE: 1/4" = 1'-0"

2.2 IE - 38 - TOILET - B
A801 SCALE: 1/4" = 1'-0"

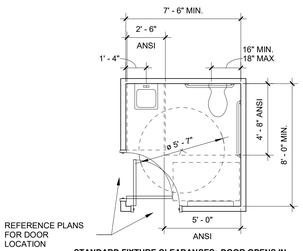


2.3 IE - 38 - TOILET - C
A801 SCALE: 1/4" = 1'-0"

2.4 IE - 38 - TOILET - D
A801 SCALE: 1/4" = 1'-0"

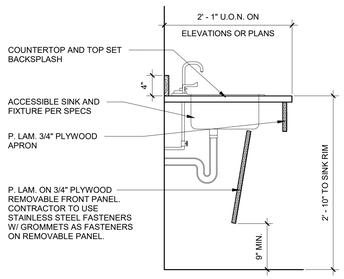


STANDARD FIXTURE CLEARANCES: DOOR OPENS OUT



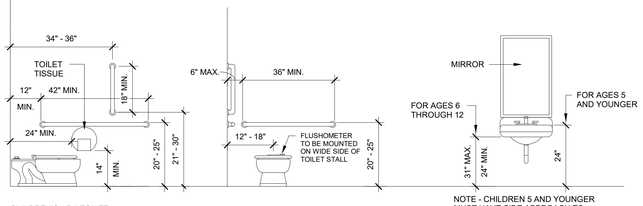
STANDARD FIXTURE CLEARANCES: DOOR OPENS IN

800 - ADA Clearances
SCALE: 1/4" = 1'-0"



11 ADA SINK BASE PANEL
A801 SCALE: 1" = 1'-0"

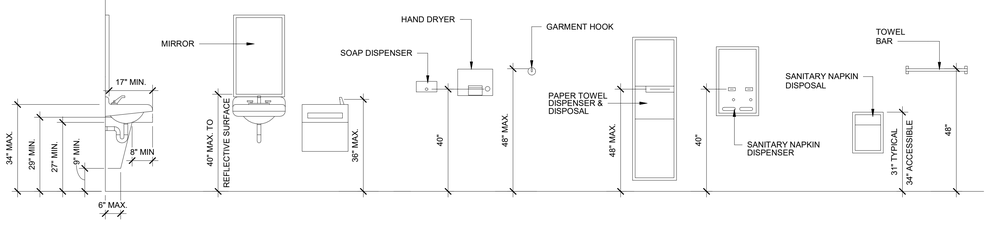
NOTE: CONTRACTOR SHALL FURNISH AND INSTALL ALL BLOCKING AND SUPPLEMENTAL SUPPORT REQUIRED FOR SECURE AND PROPER INSTALLATION OF TOILET ROOM FIXTURES AND ACCESSORIES.
ALL EXPOSED WATER LINES UNDER LAVATORIES OR SINK SHALL BE INSULATED CABO/ANSI A117.1-4.17.5



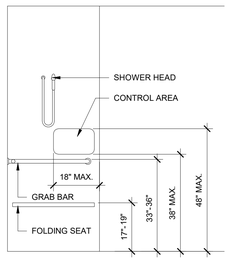
CHILDREN'S ADA TOILET

NOTE - CHILDREN 5 AND YOUNGER MUST HAVE SIDE APPROACH TO LAVORATORIES AND SINKS

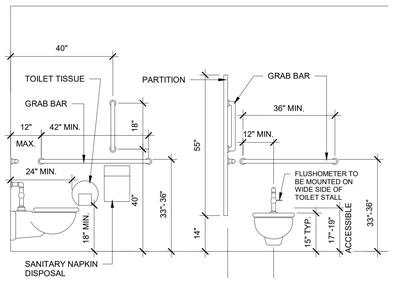
NOTE: CONTRACTOR SHALL FURNISH AND INSTALL ALL BLOCKING AND SUPPLEMENTAL SUPPORT REQUIRED FOR SECURE AND PROPER INSTALLATION OF TOILET ROOM FIXTURES AND ACCESSORIES.
ALL EXPOSED SUPPLY AND DRAINPIPES UNDER LAVATORIES AND SINKS SHALL BE INSULATED ANSI A117.1-606.6



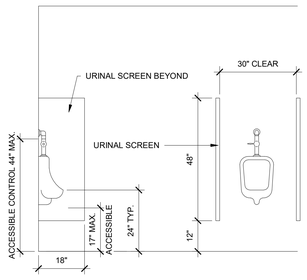
LAVATORY AND MIRROR — FOUNTAIN — MISCELLANEOUS ACCESSORIES



ACCESSIBLE SHOWER STALL



TOILET — ACCESSIBLE TOILET STALL DOOR WIDTH 32" MIN.



URINAL — ACCESSIBLE URINAL SCREEN NOT TO EXTEND BEYOND URINAL RIM

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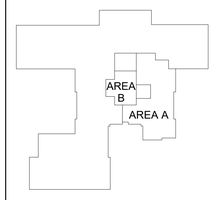
DATE: 07/24/2026

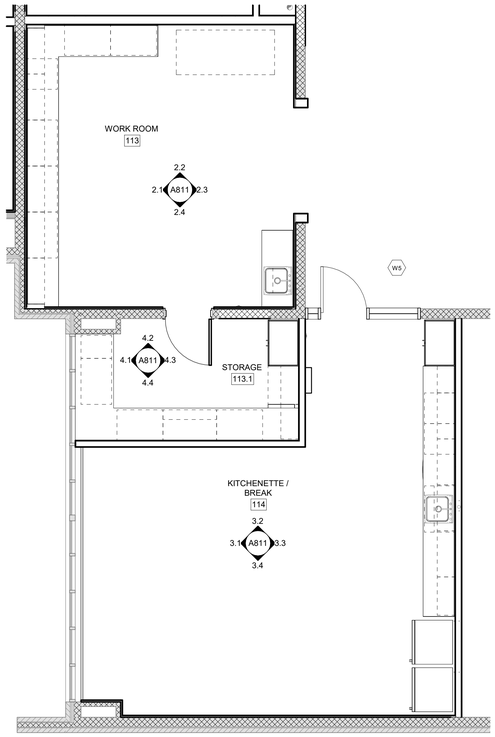
SG PROJECT NUMBER: 225180.00

Key Plan:

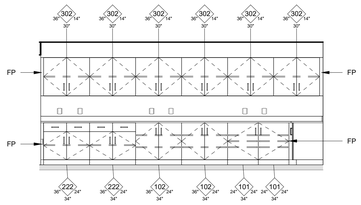


Drawing Title:
ENLARGED TOILET ROOM PLANS & DETAILS

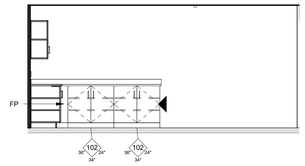
Drawing Number:
A801



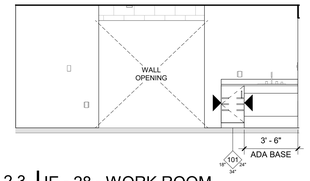
1 WORK ROOM, STORAGE, & KITCHENETTE / BREAK
A811 SCALE: 1/4" = 1'-0"



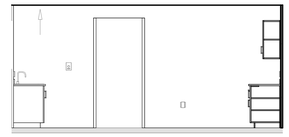
2.1 IE - 28 - WORK ROOM
A811 SCALE: 1/4" = 1'-0"



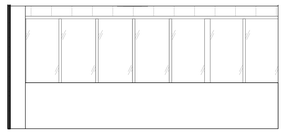
2.2 IE - 28 - WORK ROOM
A811 SCALE: 1/4" = 1'-0"



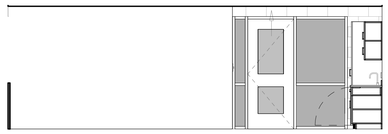
2.3 IE - 28 - WORK ROOM
A811 SCALE: 1/4" = 1'-0"



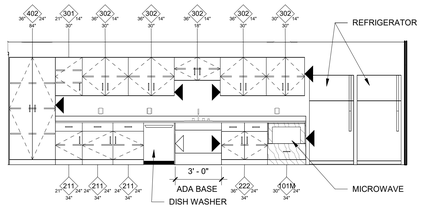
2.4 IE - 28 - WORK ROOM
A811 SCALE: 1/4" = 1'-0"



3.1 IE - 29 - KITCHENETTE / BREAK
A811 SCALE: 1/4" = 1'-0"

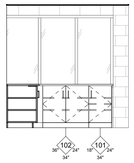


3.2 IE - 29 - KITCHENETTE / BREAK
A811 SCALE: 1/4" = 1'-0"

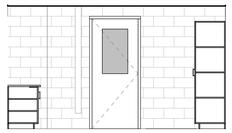


3.3 IE - 29 - KITCHENETTE / BREAK
A811 SCALE: 1/4" = 1'-0"

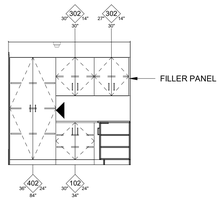
3.4 IE - 29 - KITCHENETTE / BREAK
A811 SCALE: 1/4" = 1'-0"



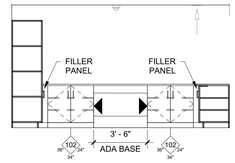
4.1 IE - 56 - STORAGE
A811 SCALE: 1/4" = 1'-0"



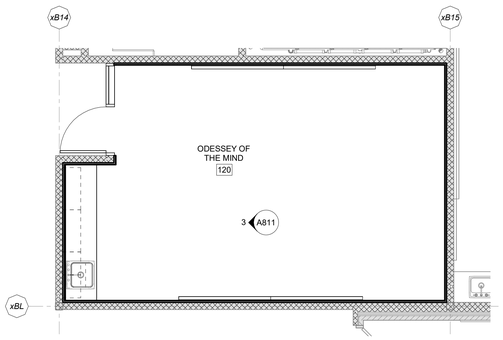
4.2 IE - 56 - STORAGE
A811 SCALE: 1/4" = 1'-0"



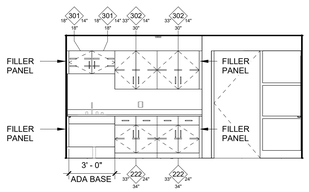
4.3 IE - 56 - STORAGE
A811 SCALE: 1/4" = 1'-0"



4.4 IE - 56 - STORAGE
A811 SCALE: 1/4" = 1'-0"



2 ODESSEY OF THE MIND
A811 SCALE: 1/4" = 1'-0"



3 IE - ODESSEY OF THE MIND
A811 SCALE: 1/4" = 1'-0"

CASEWORK SCHEDULE

101	WIDTH / HEIGHT	PLAM BASE CABINET WITH SINGLE DOOR W/ ADJUSTABLE SHELF
101M	WIDTH / HEIGHT / OPEN SHELF	PLAM BASE CABINET WITH A DRAWER AND OPEN SHELF FOR MICROWAVE
102	WIDTH / HEIGHT	PLAM BASE CABINET WITH DOUBLE DOORS W/ ADJUSTABLE SHELF
211	WIDTH / HEIGHT	PLAM BASE CABINET WITH SINGLE DRAWER & DOOR W/ ADJUSTABLE SHELF
222	WIDTH / HEIGHT	PLAM BASE CABINET WITH DOUBLE DRAWER & DOUBLE DOORS W/ ADJUSTABLE SHELF NOTE: ALL CASEWORK LOCATED IN ALL SCIENCE ROOMS (BIOLOGY, CHEMISTRY, PHYSICS), PREP ROOMS, AND CHEM. STORAGE ARE TO BE SOLID WOOD LABORATORY CASEWORK.

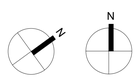
CASEWORK SCHEDULE

301	WIDTH / HEIGHT / SEE INTERIOR ELEVATION	PLAM UPPER CABINET WITH SINGLE DOOR AND ADJUSTABLE SHELVES
302	WIDTH / HEIGHT / SEE INTERIOR ELEVATIONS	PLAM UPPER CABINET WITH DOUBLE DOORS AND ADJUSTABLE SHELVES
402	WIDTH / HEIGHT	PLAM TALL CABINET WITH DOUBLE DOORS AND ADJUSTABLE SHELVES NOTE: ALL CASEWORK LOCATED IN ALL SCIENCE ROOMS (BIOLOGY, CHEMISTRY, PHYSICS), PREP ROOMS, AND CHEM. STORAGE ARE TO BE SOLID WOOD LABORATORY CASEWORK.
FP		PLAM FILLER PANEL TO MATCH CASEWORK
TB		
WB		

NOTES:
1. CONTRACTOR TO PROVIDE CASEWORK FILLER PANELS TO MATCH CASEWORK FINISH WHERE NECESSARY TO COMPLETE A LINE OF CASEWORK.
2. CONTRACTOR TO REVIEW ALL MECHANICAL, PLUMBING, ELECTRICAL, AND A/V DRAWINGS TO COORDINATE LOCATION OF ALL SERVICES THAT MAY BE ROUTED THROUGH AND AROUND CASEWORK.
3. FOR EXACT ELEVATION OF DOORS AND WINDOWS, REFER TO DOOR AND WINDOW ELEVATION DRAWINGS.
4. ALL BASE CASEWORK WITH HEIGHT @ 2'-10" SHALL HAVE ACTUAL DIMENSIONS TO ENSURE HEIGHT OF SINK DOES NOT EXCEED 34" A.F.F. THIS APPLIES TO ALL BASE CASEWORK WITH AND WITHOUT SINKS IN ORDER TO KEEP HEIGHTS UNIFORM.

▶ CASEWORK FINISH END

▷ CASEWORK FINISH END PANEL



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NO.	DESCRIPTION	DATE
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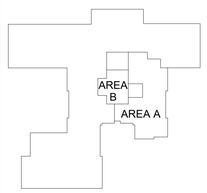
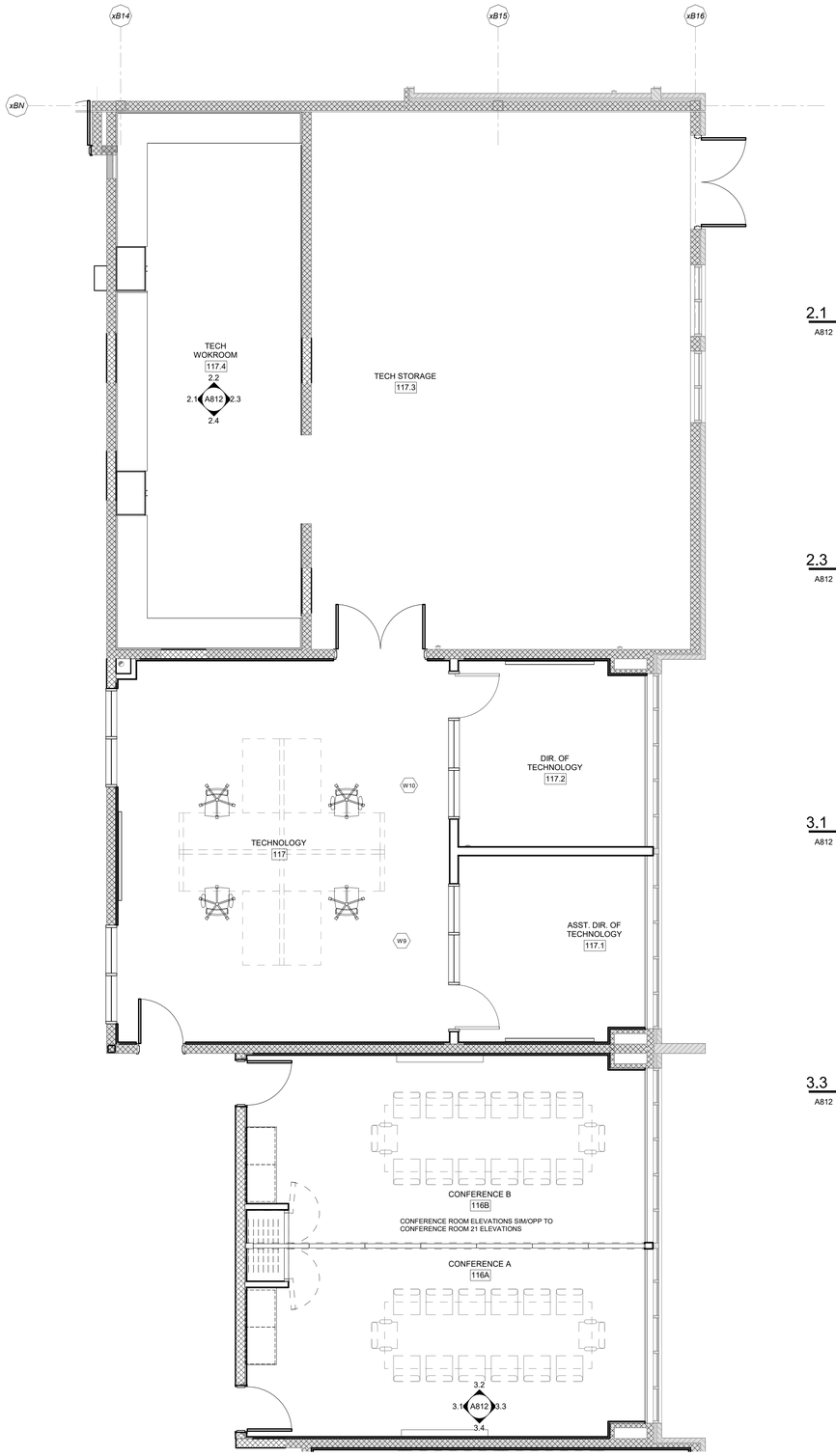
Key Plan:

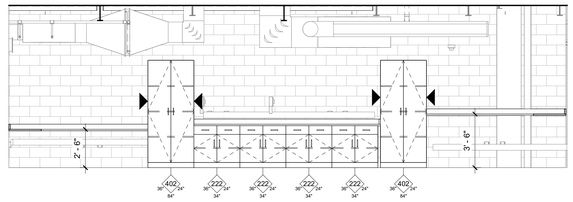


Drawing Title:
ENLARGED PLANS & ELEVATIONS

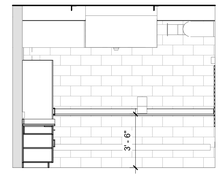
Drawing Number:
A811



1 | CONFERENCE ROOMS & TECH SUITE
A812 | SCALE: 1/4" = 1'-0"



2.1 | IE - 30 - TECH WOKROOM / STORAGE
A812 | SCALE: 1/4" = 1'-0"



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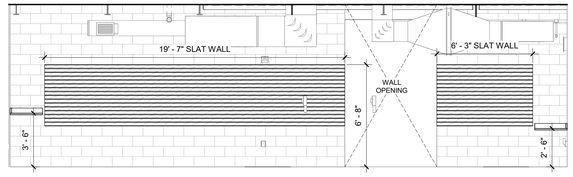

2.3 | IE - 30 - TECH WOKROOM / STORAGE
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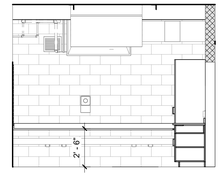
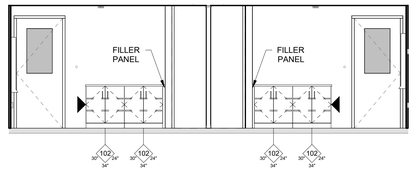
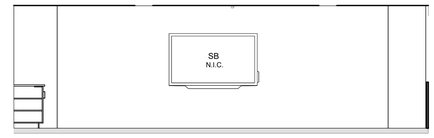


2.4 | IE - 30 - TECH WOKROOM / STORAGE
A812 | SCALE: 1/4" = 1'-0"



3.1 | IE - 21 - CONFERENCE
A812 | SCALE: 1/4" = 1'-0"



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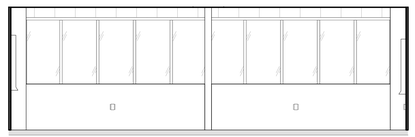

3.3 | IE - 21 - CONFERENCE
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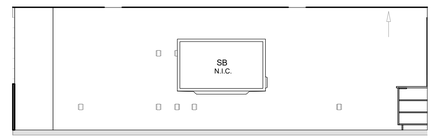

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▶ CASEWORK FINISH END

▷ CASEWORK FINISH END PANEL

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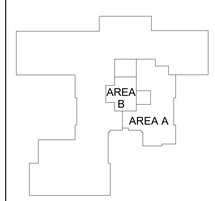

Drawing Title:
ENLARGED PLANS & ELEVATIONS

Drawing Number:
A812

ROOM FINISH SCHEDULE

ROOM #	Name	FLOOR FINISH	BASE TYPE	WALL FINISH	WINDOW SILL FINISH	CEILING		CASEWORK FINISH		COMMENTS
						MATERIAL	FINISH	COUNTERTOP	CABINET	
109	MEDIA CENTER	EX	EX	EX	-	EX	EX	EX	EX	ALL EXISTING FINISHES TO REMAIN
110	TRANSPORTATION	CPT-1	RB-1	PNT-1	SSM-1	ACT-1	-	-	-	
110.1	DIR. OF TRANSPORTATION	CPT-1	RB-1	PNT-1	SSM-1	ACT-1	-	-	-	
111	FOOD SERVICES	CPT-1	RB-1	PNT-1	-	ACT-1	-	-	-	
112	DIR. OF FOOD SERVICES	CPT-1	RB-1	PNT-1	-	ACT-1	-	-	-	
113	WORK ROOM	VCT-1	RB-1	PNT-1	-	ACT-1	-	SSM-1	PLAM-1	
113.1	STORAGE	VCT-1	RB-1	PNT-1	SSM-1	ACT-1	-	SSM-1	PLAM-1	
114	KITCHENETTE / BREAK	VCT-1	RB-1	PNT-1	SSM-1	ACT-1	-	-	-	
115	COMPLIANCE	CPT-1	RB-1	PNT-1	-	ACT-1	-	-	-	
115.1	COMPLIANCE COORDINATOR	CPT-1	RB-1	PNT-1	SSM-1	ACT-1	-	-	-	
115.2	I.E.P. FACILITATOR	CPT-1	RB-1	PNT-1	SSM-1	ACT-1	-	-	-	
115.3	FILES	VCT-1	RB-1	PNT-1	-	ACT-1	-	-	-	
116A	CONFERENCE A	CPT-1	RB-1	PNT-1	SSM-1	ACT-1/GWB	- / PNT-1	SSM-1	PLAM-1	
116B	CONFERENCE B	CPT-1	RB-1	PNT-1	SSM-1	ACT-1/GWB	- / PNT-1	SSM-1	PLAM-1	
117	TECHNOLOGY	SDT-1	RB-1	PNT-1	-	ACT-1	-	-	-	
117.1	ASST. DIR. OF TECHNOLOGY	SDT-1	RB-1	PNT-1	SSM-1	ACT-1	-	-	-	
117.2	DIR. OF TECHNOLOGY	SDT-1	RB-1	PNT-1	SSM-1	ACT-1	-	-	-	
117.3	TECH STORAGE	VCT-1	RB-1	PNT-1	SSM-1	EXPOSED	PNT-1	-	-	
117.4	TECH WOKROOM	VCT-1	RB-1	PNT-1	SSM-1	EXPOSED	PNT-1	SSM-1	PLAM-1	
118	FACILITIES ARCHIVES	EX	EX	EX	EX	EX	EX	EX	EX	ALL EXISTING FINISHES TO REMAIN
119	RECORDS	VCT-1	RB-1	PNT-1	-	EXPOSED	PNT-1	-	-	
120	ODESSEY OF THE MIND	VCT-1	RB-1	PNT-1	-	ACT-1	-	-	-	
121	STORAGE	VCT-1	RB-1	PNT-1	-	ACT-1	-	-	-	
122	FOUND. OF ED.	CPT-1	RB-1	PNT-1	SSM-1	ACT-1	-	-	-	
123	FLOATING OFFICE	CPT-1	RB-1	PNT-1	SSM-1	ACT-1	-	-	-	
124	ART GOES TO SCHOOL	CPT-1	RB-1	PNT-1	SSM-1	ACT-1	-	-	-	
125	STORAGE	VCT-1	RB-1	PNT-1	-	ACT-1	-	-	-	
C101	CORRIDOR	EX	EX	PNT-1	-	ACT-1	-	-	-	
C107	CORRIDOR	EX	EX	PNT-1	-	ACT-1	-	-	-	
C108	CORRIDOR	EX / TZ-1	TZ-1	PNT-1	-	ACT-1	-	-	-	
C109	CORRIDOR	EX / TZ-1	TZ-1	PNT-1	-	ACT-1	-	-	-	
E108	ELEC.	VCT-1	RB-1	PNT-1	-	EXPOSED	PNT-1	-	-	
NE102	MDF	EX	EX	EX	EX	EX	EX	EX	EX	ALL EXISTING FINISHES TO REMAIN
T103	TOILET	CT-1	CT-1	PNT-1	-	ACT-1	-	-	-	
T104	TOILET	CT-1	CT-1	PNT-1	-	ACT-1	-	-	-	
T105	TOILET	CT-1	CT-1	PNT-1	-	ACT-1	-	-	-	
T106	TLT	EX	EX	EX	EX	EX	EX	EX	EX	ALL EXISTING FINISHES TO REMAIN
V101	VESTIBULE	EX / TZ-1	EX	EX / PNT-1	EX	ACT-1	-	EX	EX	
V107	VESTIBULE	EX	EX	EX / PNT-1	EX	ACT-1	-	EX	EX	

FINISH SPECIFICATIONS

TAG	BASIS OF DESIGN					INSTALLATION METHOD	COMMENTS
	MATERIAL	MANUFACTURER	PRODUCT	COLOR	SIZE		
ACT-1	ACOUSITC CEILING TILE	ARMSTRONG	ULTIMA - SQUARE LAY-IN (1913)	WHITE	2'X4'X3/4"		
CPT-1	CARPET TILE	INTERFACE	CUBIC COLOURS	MATCH EXISTING OFFICE	20"X20"		
CT-1	CERAMIC TILE	CROSSVILLE	ARGENT	MATCH EXISTING TOILET ROOM	12"X24"		
PLAM-1	PLASTIC LAMINATE	WILSONART	VERTICAL SURFACES	MATCH EXISTING			
PNT-1	TYPICAL PAINT	SHERWIN WILLIAMS		MATCH EXISTING OFFICE AREA			
PNT-2	TRIM PAINT	SHERWIN WILLIAMS		MATCH EXISTING TRIM			
PNT-3	BATHROOM PAINT - EPOXY	SHERWIN WILLIAMS		MATCH EXISTING TOILET ROOM			
RB-1	RUBBER BASE	JOHNSONITE		MATCH EXISTING OFFICE	4"		
SDT-1	STATIC DISSIPATIVE CARPET TILE	STATIC SMART	LAN 4.1	HEMINGWAY	24"X24"		
SSM-1	SOLID SURFACE COUNTERTOP	CORIAN	COUNTERTOP	MATCH EXISTING	1 1/8" Thick		
STN-1	WOOD STAIN			MATCH EXISTING DOORS			
SW-1	SLAT WALL	MARLITE		STONE GRAY			
TZ-1	TERRAZZO	ROMAN MOSAIC		MATCH EXISTING			
VCT-1	VINYL COMPOSITE TILE	ARMSTRONG	EXCELON IMPERIAL	MATCH EXISTING BREAK ROOM	12"X12"		

FINISH NOTES

1. REFER TO INTERIOR FINISH PLANS (A900's) FOR FINISH LOCATIONS, DESIGNATIONS, TERMINATION POINTS & PATTERNS.
2. REFER TO INTERIOR ELEVATIONS & INTERIOR DETAILS (A800's) FOR FINISH LOCATIONS, DESIGNATIONS, TERMINATION POINTS & PATTERNS.
3. SEE REFLECTED CEILING PLANS (A120's) FOR APPLICABLE CEILING HEIGHTS, FINISH LOCATIONS & DESIGNATIONS.
4. IN ALL CASES WHERE EXPOSED CEILINGS ARE TO BE PAINTED ALL DUCTWORK AND OTHER EXPOSED MECHANICAL, ELECTRICAL AND PLUMBING EQUIPMENT TO BE PAINTED.
5. PROVIDE 3/4" AC FIRE RATED PLYWOOD FROM FINISH FLOOR TO 8'-0" A.F.F. BEHIND TELECOM EQUIPMENT. COORDINATE WITH TELECOM REQUIREMENTS. PROVIDE PAINT FINISH TO MATCH ADJACENT CONSTRUCTION PRIOR TO PLACEMENT OF EQUIPMENT.
6. FLOOR FINISHES TO BE CONTINUOUS UNDER ALL CASEWORK, MILLWORK, CABINETRY, PLUMBING AND FLOOR FIXTURES UNLESS OTHERWISE NOTED.
7. PAINT EXTENT DESIGNATION INDICATED ON FINISH SCHEDULE ONLY APPLIES TO WALLS AND CEILINGS. DO NOT PAINT INTERIOR BRICK VENEER, GROUND FACED MASONRY SURFACES, GLAZING, DOOR AND WINDOW FRAMES UNLESS OTHERWISE NOTED.
8. REFER TO PARTITION TYPES AND INTERIOR ELEVATIONS FOR EXTENT OF WALL FINISHES.
9. REFER TO WINDOW AND DOOR SCHEDULES FOR APPLICABLE FINISHES.
10. FLOORING TRANSITIONS UNDER DOORS TO BE CENTERED ON DOOR; NOT OPENING.
11. FLOORING TRANSITIONS AT CASED OR UNCASED OPENINGS TO BE CENTERED ON OPENING, UNLESS SHOWN OTHERWISE ON FINISH PLANS.

ROOM FINISH LEGEND

- NOT IN SCOPE
- EXISTING TO REMAIN
- TERRAZZO
- STATIC DISSIPATIVE CARPET TILE
- VCT
- CERAMIC TILE
- CARPET TILE
- PLAM

FINISH ABBREVIATIONS

ACT	ACOUSTICAL CEILING PANEL
CPT	CARPET
CT	CERAMIC TILE
EF	EPOXY FLOOR
EP	EPOXY PAINT
PLAM	PLASTIC LAMINATE
PT	PAINT
RB	RUBBER BASE
SDT	STATIC DISSIPATIVE
SSM	SOLID SURFACE MATERIAL
STN	STAIN
TZ	TERRAZZO
VCT	VINYL COMPOSITE TILE

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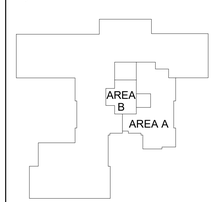
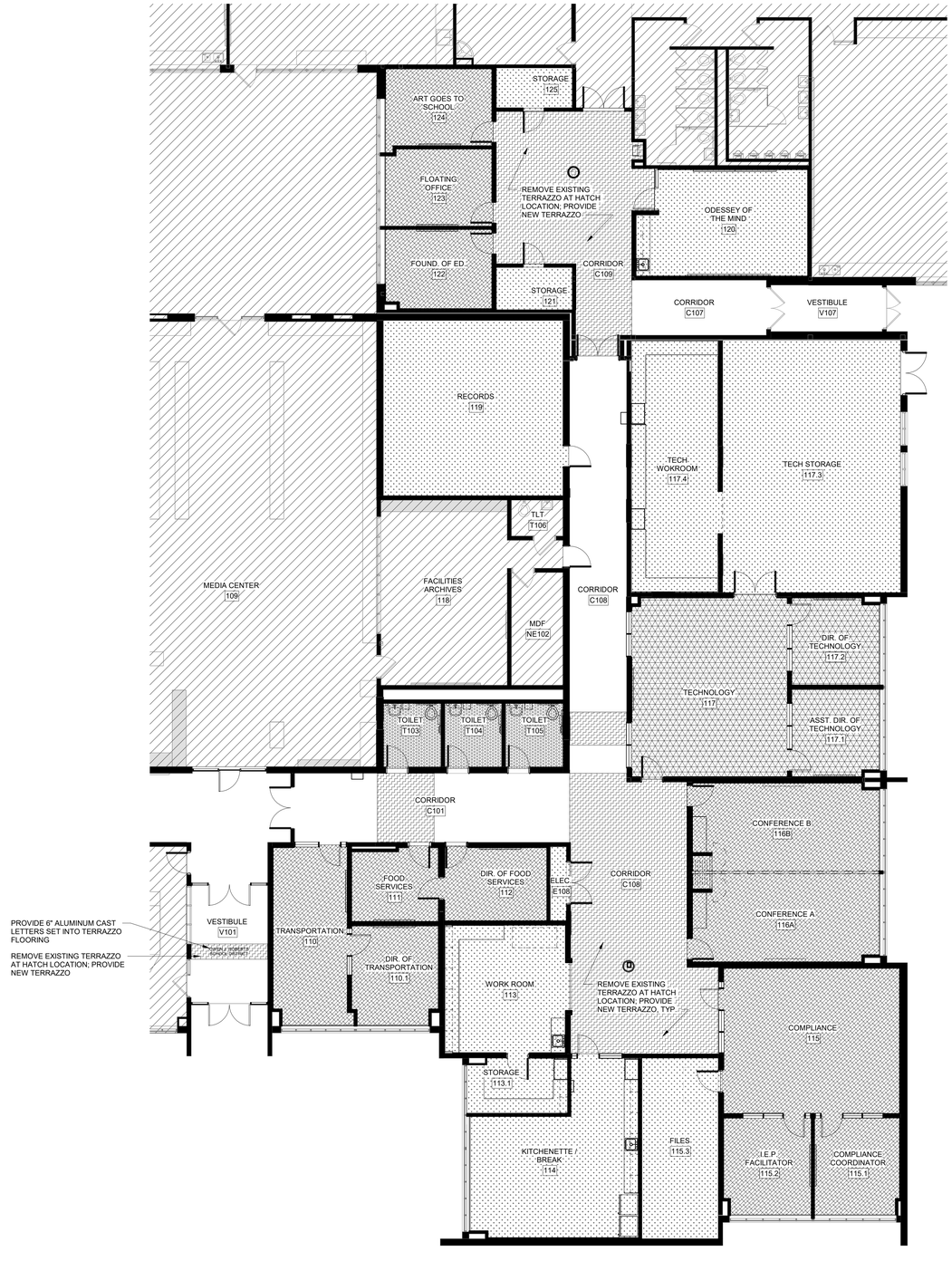


Drawing Title:

FINISH SCHEDULE & SPECIFICATIONS

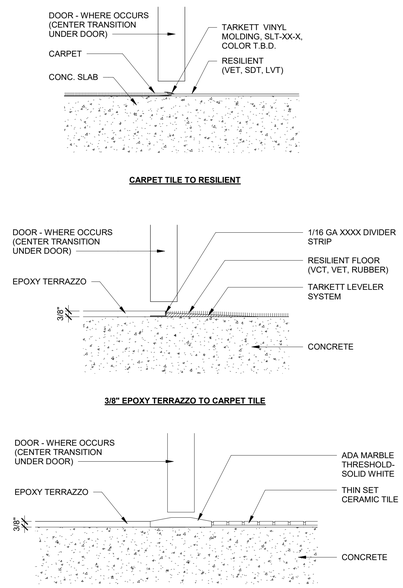
Drawing Number:

A901



1 | 01 - PARTIAL FIRST FLOOR FINISH PLAN - AREA 'X'

A902 | SCALE: 1/8" = 1'-0"



3 | FLOOR TRANSITION DETAILS - TERRAZZO

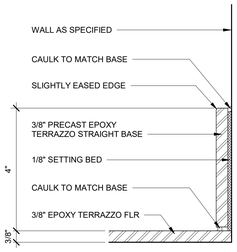
A902 | SCALE: 3" = 1'-0"

FINISH NOTES

1. REFER TO INTERIOR FINISH PLANS (A900's) FOR FINISH LOCATIONS, DESIGNATIONS, TERMINATION POINTS & PATTERNS.
2. REFER TO INTERIOR ELEVATIONS & INTERIOR DETAILS (A800's) FOR FINISH LOCATIONS, DESIGNATIONS, TERMINATION POINTS & PATTERNS.
3. SEE REFLECTED CEILING PLANS (A120's) FOR APPLICABLE CEILING HEIGHTS, FINISH LOCATIONS & DESIGNATIONS.
4. IN ALL CASES WHERE EXPOSED CEILINGS ARE TO BE PAINTED ALL DUCTWORK AND OTHER EXPOSED MECHANICAL, ELECTRICAL AND PLUMBING EQUIPMENT TO BE PAINTED.
5. PROVIDE 3/4" AC FIRE RATED PLYWOOD FROM FINISH FLOOR TO 8'-0" A.F.F. BEHIND TELECOM EQUIPMENT. COORDINATE WITH TELECOM REQUIREMENTS. PROVIDE PAINT FINISH TO MATCH ADJACENT CONSTRUCTION PRIOR TO PLACEMENT OF EQUIPMENT.
6. FLOOR FINISHES TO BE CONTINUOUS UNDER ALL CASEWORK, MILLWORK, CABINETRY, PLUMBING AND FLOOR FIXTURES UNLESS OTHERWISE NOTED.
7. PAINT EXTENT DESIGNATION INDICATED ON FINISH SCHEDULE ONLY APPLIES TO WALLS AND CEILINGS. DO NOT PAINT INTERIOR BRICK VENEER, GROUND FACED MASONRY SURFACES, GLAZING, DOOR AND WINDOW FRAMES UNLESS OTHERWISE NOTED.
8. REFER TO PARTITION TYPES AND INTERIOR ELEVATIONS FOR EXTENT OF WALL FINISHES.
9. REFER TO WINDOW AND DOOR SCHEDULES FOR APPLICABLE FINISHES.
10. FLOORING TRANSITIONS UNDER DOORS TO BE CENTERED ON DOOR; NOT OPENING.
11. FLOORING TRANSITIONS AT CASED OR UNCASED OPENINGS TO BE CENTERED ON OPENING, UNLESS SHOWN OTHERWISE ON FINISH PLANS.

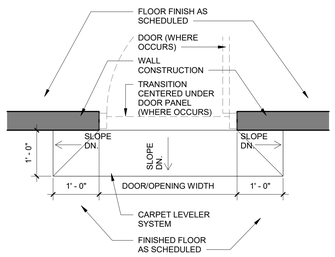
ROOM FINISH LEGEND

- NOT IN SCOPE
- EXISTING TO REMAIN
- TERRAZZO
- STATIC DISSIPATIVE CARPET TILE
- VCT
- CERAMIC TILE
- CARPET TILE



2 | 3/8" EPOXY TERRAZZO BASE

A902 | SCALE: 6" = 1'-0"



INT - DTL - CARPET LEVELER PLAN DETAIL

SCALE: 3/4" = 1'-0"

SCHRADERGROUP
322 North Shore Drive, Building B, Suite 200, Pittsburgh, PA 15212
p: 215 482 7440
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2201 N Front Street, Suite 200
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717.635.2835

MEP:
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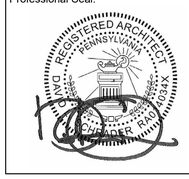
1005 W Lehigh St,
Bethleham, PA 18018
610.694.8020

Structural Engineer
Schradergroup
153 East King Street, Suite 211-212
Lancaster, PA 17602
610.694.8020

Professional Seal:



Owner:
OWEN J. ROBERTS SCHOOL DISTRICT
901 RIDGE RD.
POTTSTOWN, PA 19465

Additions and Renovations to:
OJR DISTRICT SERVICES CENTER
932 SANATOGA ROAD
POTTSTOWN, PA 19465

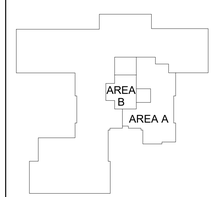
ISSUED FOR:

NO.	DESCRIPTION	DATE
	ISSUED FOR BIDDING	07/24/2026

DATE: 07/24/2026

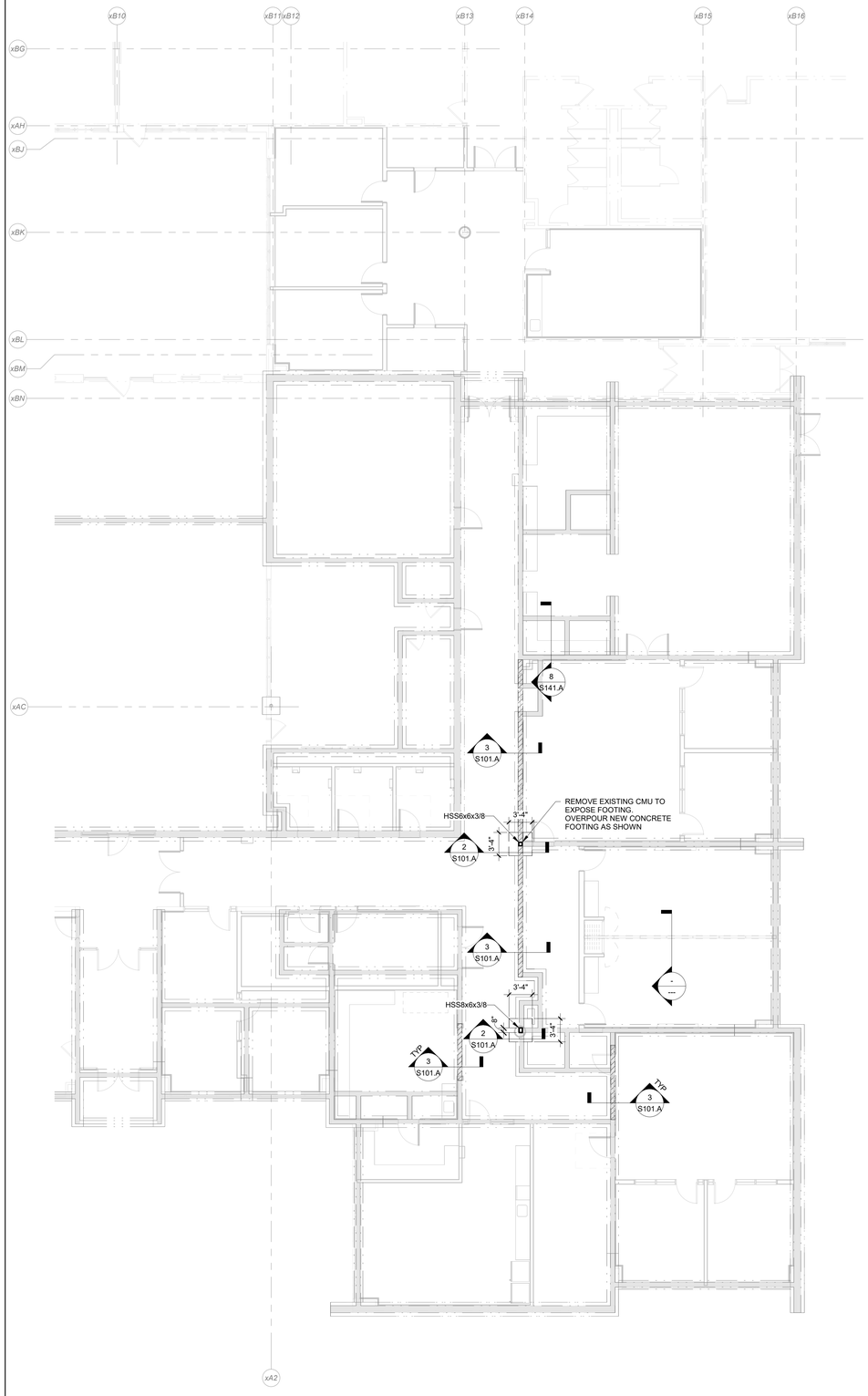
SG PROJECT NUMBER: 225180.00

Key Plan:



Drawing Title:
FINISH PLANS & DETAILS

Drawing Number:
A902



1 EXISTING FOUNDATION PLAN - AREA A

S101.A SCALE: 1/8" = 1'-0"

STRUCTURAL DESIGN LOAD DATA

THE FOLLOWING DESIGN LOADS ARE APPLICABLE TO THIS FACILITY IN ACCORDANCE WITH IBC 2018

DESIGN SNOW LOADING DATA		
GROUND SNOW LOAD	P_g	30 PSF
EXPOSURE FACTOR	C_e	1.0
SLOPE FACTOR	C_s	1.0
THERMAL FACTOR	C_t	1.0
IMPORTANCE FACTOR	I	1.0
FLAT ROOF SNOW LOAD	P_f	21 PSF

DESIGN WIND LOADING DATA		
RISK CATEGORY		II
BASIC WIND SPEED	V_{ult}	114 MPH
NOMINAL WIND SPEED	V_{asd}	88 MPH
EXPOSURE		C
MEAN ROOF HEIGHT	h	12 FT
DIRECTIONALITY FACTOR	K_d	0.85
TOPOGRAPHIC FACTOR	K_{zt}	1.0
GROUND ELEVATION FACTOR	K_e	1.0
MAX VELOCITY PRESSURE COEFFICIENT	K_z	0.85
INTERNAL PRESSURE COEFFICIENT	GC_{pi}	±0.18
MAX VELOCITY PRESSURE	q_z	24 PSF

DESIGN PRESSURES (C&C) EXPOSURE C

H	TRIB. AREA	ROOF				WALL	
		ZONE 1'	ZONE 1	ZONE 2	ZONE 3	ZONE 4	ZONE 5
≤15'	10	+11.5/-25.9	+11.5/-45.1	+11.5/-59.5	+11.5/-81.1	+28.3/-30.7	+28.3/-37.9
	100	+9.1/-25.9	+9.1/-35.5	+9.1/-47.5	+9.1/-54.7	+23.5/-25.9	+23.5/-30.7

* WIND LOADS SHOWN ARE ULTIMATE LOADS
* USE 16 PSF MIN
* CONTRACTORS MAY CALCULATE ALTERNATE WIND LOADING APPLICABLE TO INDIVIDUAL SYSTEMS
* LOADS BASED ON CH. 30 PART 2 (SIMPLIFIED METHOD) FOR FLAT/HIP/GABLE 0≤ θ ≤7

GENERAL NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE (IBC) 2018, INCLUDING ALL CURRENT REFERENCED STANDARDS PER CHAPTER 35, AND TO ALL OTHER APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS INCLUDING BUT NOT LIMITED TO OSHA AND ADA REQUIREMENTS.
2. ANY AND ALL QUESTIONS PERTAINING TO THE WORK DESCRIBED IN THESE CONTRACT DOCUMENTS SHALL BE SUBMITTED IN WRITTEN FORM, IN ACCORDANCE WITH THE ESTABLISHED 'REQUEST FOR INFORMATION' (RFI) PROCEDURES.
3. COORDINATE ALL SPECIFICATION REQUIREMENTS WITH THE INFORMATION SHOWN ON DRAWINGS AND IN THESE STRUCTURAL NOTES.
4. DO NOT SCALE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ARCHITECT/ENGINEER TO RESOLVE ANY DIMENSIONAL DISCREPANCIES RELATED TO THE DRAWINGS AND/OR EXISTING FIELD CONDITIONS WHERE APPROPRIATE.
5. DO NOT MODIFY SIZE, SHAPE, LOCATION, OR SPACING OF STRUCTURAL ELEMENTS WITHOUT APPROVAL FROM THE ENGINEER.
6. TYPICAL DETAILS ARE NOT INDICATED ON PLANS AND ARE REQUIRED TO BE APPLIED AND INTEGRATED INTO THE CONSTRUCTION WHERE APPLICABLE.
7. CONTRACTOR IS RESPONSIBLE FOR PRECISELY LOCATING ALL EXISTING UTILITIES PRIOR TO COMMENCING WORK. ANY DAMAGE INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO DO SO IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
8. THE GC SHALL BE RESPONSIBLE FOR COORDINATING, OBTAINING AND TRANSMITTING ALL GEOMETRY AND REQUIRED FIELD DIMENSIONING TO THE VARIOUS TRADES IN ORDER TO PERFORM THE WORK. THE GC SHALL BE SOLELY RESPONSIBLE FOR COORDINATING WORK AND FIELD DIMENSIONS AMONG THE VARIOUS TRADES.
9. THE CONTRACTOR IS RESPONSIBLE FOR ALL PATCHING, REPAIR, AND RESTORATION OF INSTALLED MATERIALS WHERE SUCH MATERIALS ARE DAMAGED OR DEMOLISHED DURING THE COURSE OF CONSTRUCTION. ALL PATCHING, REPAIR, AND RESTORATION SHALL MATCH THE PREVIOUSLY EXISTING CONDITIONS.
10. ANY ADDITIONAL WORK REQUIRED BY THE ARCHITECT/ENGINEER (DESIGN, SKETCHES, DRAWING DOCUMENTATION, FIELD VISITS, ETC) TO CORRECT OR REVISE CONTRACTOR CONSTRUCTION ERRORS SHALL BE AT THE SOLE EXPENSE OF THE CONTRACTOR.
11. THE COMBINATION OF DRAWINGS AND WRITTEN SPECIFICATIONS REPRESENTS THE DESCRIPTION OF WORK, AND THE CONTRACTOR IS SOLELY RESPONSIBLE TO ENSURE THAT ALL WORK DESCRIBED IS IN ACCORDANCE WITH BOTH THE CONTRACT DRAWINGS AND SPECIFICATIONS. IN THE CASE OF CONFLICT BETWEEN NOTES, DRAWINGS, AND SPECIFICATIONS, THE MOST STRINGENT REQUIREMENT WILL GOVERN.
12. THE INFORMATION CONTAINED IN THE CONTRACT DOCUMENTS REPRESENT FINISHED DESIGNS AND IN NO WAY CONSIDER OR CONVEY VARIOUS "IN CONSTRUCTION" CONDITIONS. CONSTRUCTION PROCEDURES, INCLUDING BUT NOT LIMITED TO MEANS, METHODS, PROTECTION OF BUILDING COMPONENTS, TEMPORARY WORK (INCLUDING BUT NOT LIMITED TO TEMPORARY FORMWORK, BRACING, SHORING, GUYS, ERECTION ATTACHMENTS), VERIFICATION OF ALL EXISTING CONDITIONS AND CONSTRUCTION, COORDINATION AND SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR, U.N.O. THE CONTRACTOR SHALL ENGAGE A LICENSED PROFESSIONAL ENGINEER TO DESIGN ALL TEMPORARY SUPPORT ELEMENTS AND SYSTEMS. ANY REPAIRS, REPLACEMENTS, REINFORCEMENT OR OTHER ALTERATIONS DUE TO CONSTRUCTION PROCEDURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WHO HAS PERFORMED THEM.
13. SPECIAL INSPECTIONS AND SITE OBSERVATION OF THE STRUCTURAL ASPECTS OF THE PROJECT SHALL BE DONE UNDER THE DIRECT SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER AND IS THE RESPONSIBILITY OF THE OWNER. INSPECTION OR SITE OBSERVATION OF THE WORK BY THE SPECIAL INSPECTOR DOES NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF CONFORMING TO THE DRAWINGS AND SPECIFICATIONS FOR ALL CONSTRUCTION.

EARTHWORK

1. FOUNDATIONS SHALL BEAR ON UNDISTURBED, NATURAL SOIL, OR ON COMPACTED STRUCTURAL FILL THAT OVERLAYS UNDISTURBED, NATURAL SOIL. TYP UNO
2. ALL WORK PERTAINING TO SOIL CONDITIONS (VERIFICATION OF MATERIALS, PLACEMENT OF FILL, COMPACTION, ETC) SHALL BE OVERSEEN BY A LICENSED GEOTECHNICAL ENGINEER.
3. BEARING AND SUBGRADE CONDITIONS SHALL BE OBSERVED AND VERIFIED BY A LICENSED GEOTECHNICAL ENGINEER PRIOR TO INSTALLATION OF ALL FOUNDATION AND ON-GRADE CONCRETE SLAB ELEMENTS.
4. EXCAVATION SHALL BE PERFORMED SO AS NOT TO DISTURB OR UNDERMINE ANY EXISTING ADJACENT BUILDINGS, STREETS, AND UTILITY LINES. VERIFY LOCATIONS OF ALL BELOW GRADE FEATURES AND UTILITIES PRIOR TO COMMENCEMENT OF WORK. HAND EXCAVATE AROUND UTILITIES AS REQUIRED.
5. ALL EXCAVATIONS TO HAVE NEAT CUT BOTTOM CORNERS TO PROVIDE FOR BEARING ON THE FULL BOTTOM AREA OF THE FOOTING.
6. ALL EXCAVATIONS SHALL BE KEPT FREE OF WATER, LOOSE MATERIAL AND DEBRIS PRIOR TO CONCRETE PLACEMENT. CONCRETE SHALL NOT BE PLACED IN ANY WET AREA OR UPON ANY SOFT OR FROZEN MATERIAL. CONTRACTOR SHALL DEWATER EXCAVATIONS AS REQUIRED TO MAINTAIN DRY CONDITIONS.

FOUNDATIONS

1. UNLESS SHOWN OTHERWISE, CENTER ALL FOOTING ELEMENTS UNDER WALLS AND AT COLUMN GRID INTERSECTIONS.
2. FOUNDATIONS ARE DESIGNED FOR THE FOLLOWING PRESUMED MINIMUM BEARING PRESSURE(S): 2,000 PSF
3. WHERE EARTH-FORMED FOOTINGS ARE USED, IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE SPECIFIED ELEVATIONS AND DIMENSIONS ARE PROVIDED. ANY AND ALL MODIFICATIONS OR CHANGES REQUIRED BY OTHER TRADE CONTRACTORS TO ACCOMMODATE FOOTINGS THAT ARE NOT INSTALLED AT THE SPECIFIED ELEVATIONS AND DIMENSIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR RESPONSIBLE FOR PLACEMENT OF THE FOOTINGS.
4. REFER TO PROJECT SPECIFICATIONS FOR ALL CONCRETE MATERIAL, STRENGTH, MIXTURE, PLACEMENT, AND CURING REQUIREMENTS.

CONCRETE

1. CONCRETE SHALL BE DETAILED AND CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING CODES AND STANDARDS. IF A STANDARD IS LISTED AS A "REFERENCED STANDARD" WITHIN THE APPLICABLE BUILDING CODE, USE OF NON-REFERENCED EDITIONS IS PROHIBITED. IF A STANDARD IS NOT REFERENCED IN THE BUILDING CODE, THE LATEST EDITION OF THE APPLICABLE STANDARD SHOULD BE USED:
   A. ACI 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
   B. ACI MANUAL OF CONCRETE PRACTICE - PARTS 1 THROUGH 5
   C. ACI 301, SPECIFICATIONS FOR STRUCTURAL CONCRETE
   D. ACI 347, GUIDE TO FORMWORK OF CONCRETE
   E. ACI 315, GUIDE TO PRESENTING REINFORCING STEEL DESIGN DETAILS
   F. ACI 305, GUIDE TO HOT WEATHER CONCRETING
   G. ACI 306, GUIDE TO COLD WEATHER CONCRETING
   H. CRSI MANUAL OF STANDARD PRACTICE
2. DETAIL, FABRICATE, AND INSTALL ALL STEEL REINFORCEMENT IN ACCORDANCE WITH ACI AND CRSI STANDARDS.
3. POSITION AND SECURELY FASTEN ALL REINFORCEMENT IN LOCATION PRIOR TO PLACING CONCRETE. POST-PLACEMENT OF REINFORCEMENT (WET STICKING) IS NOT PERMITTED.
4. THROUGHOUT CONSTRUCTION, THE CONCRETE WORK SHALL BE ADEQUATELY PROTECTED AGAINST DAMAGE DUE TO EXCESSIVE LOADING, CONSTRUCTION EQUIPMENT, MATERIAL OR METHODS, ICE, RAIN, SNOW, EXCESSIVELY HOT OR COLD TEMPERATURES AND ANY OTHER DETRIMENTAL ENVIRONMENTAL FACTORS. ANY REPAIRS, REPLACEMENTS, ALTERATIONS OR OTHER ADDITIONAL WORK DUE TO IMPROPER PROTECTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
5. ON GRADE SLAB CONTRACTION AND CONSTRUCTION JOINTS ARE REQUIRED WHERE SHOWN ON DRAWINGS. REFER TO CONCRETE SPECIFICATIONS FOR SLAB JOINT PLACEMENT WHEN JOINT LAYOUT AND LOCATIONS ARE NOT SHOWN ON PLANS.
6. CURE CONCRETE ELEMENTS IN ACCORDANCE WITH THE SPECIFICATIONS.
7. CHAMFER ALL EXPOSED CONCRETE CORNERS U.N.O. ON THE DRAWINGS.
8. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL LOCATIONS AND DIMENSIONS OF RECESSED SLAB AREAS, PLATFORMS, CURBS, AND MECHANICAL EQUIPMENT PADS.

MASONRY

1. MASONRY SHALL BE DETAILED AND CONSTRUCTED IN ACCORDANCE WITH FOLLOWING CODES AND STANDARDS. IF A STANDARD IS LISTED AS A "REFERENCED STANDARD" WITHIN THE APPLICABLE BUILDING CODE, USE OF NON-REFERENCED EDITIONS IS PROHIBITED. IF A STANDARD IS NOT REFERENCED IN THE BUILDING CODE, THE LATEST EDITION OF THE APPLICABLE STANDARD SHOULD BE USED:
   A. TMS 402, BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES
   B. TMS 602, SPECIFICATION FOR MASONRY STRUCTURES.
2. GROUT MAY BE EITHER 'FINE' OR 'COARSE' AS APPROPRIATE FOR EACH SPECIFIC APPLICATION.
3. PROVIDE MORTAR IN ACCORDANCE WITH ASTM C270, TYPE AS INDICATED IN PROJECT SPECIFICATIONS FOR APPLICABLE USE.
4. ADMIXTURES IN GROUT AND MORTAR ARE NOT PERMITTED.
5. USE OF MASONRY CEMENT IS NOT PERMITTED.
6. ALL REINFORCING IN CONCRETE MASONRY CONSTRUCTION MUST BE IN PLACE PRIOR TO INSTALLATION OF GROUT. REINFORCING BARS SHALL BE HELD IN PLACE WITH BAR POSITIONERS OR OTHER APPROPRIATE MEANS TO PREVENT DISPLACEMENT. DO NOT WET-SET OR PLUNGE REINFORCING BARS INTO GROUTED AREAS.

STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE FOLLOWING CODES AND STANDARDS. IF A STANDARD IS LISTED AS A "REFERENCED STANDARD" WITHIN THE APPLICABLE BUILDING CODE, USE OF NON- REFERENCED EDITIONS IS PROHIBITED. IF A STANDARD IS NOT REFERENCED IN THE BUILDING CODE, THE LATEST EDITION OF THE APPLICABLE STANDARD SHOULD BE USED.:
   A. AISC MANUAL OF STEEL CONSTRUCTION
   B. AISC 360, SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS AND BRIDGES
   C. RCSC, SPECIFICATION FOR STRUCTURAL STEEL JOINTS USING HIGH STRENGTH BOLTS
   D. AISC 303, CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES
2. PROVIDE STRUCTURAL STEEL SHAPES USING AISC STANDARDS SECTIONS AND GRADES AS FOLLOWS, UNO

SECTION TYPE	MATERIAL GRADE
W & WT	ASTM A992
M, S, MT & ST	ASTM A36
HP	ASTM A572, GRADE 50
L	ASTM A36
C & MC	ASTM A36
HSS	ASTM A500, GRADE B
STEEL PIPE	ASTM A53, GRADE B
PLATES & BARS	ASTM A36
BOLTS	ASTM A325
HEAVY HEX HEADED ANCHOR RODS	ASTM F1554, GRADE 36

3. FIELD MODIFICATIONS TO ALL STRUCTURAL STEEL COMPONENTS INCLUDING, BUT NOT LIMITED TO MEMBERS, CONNECTIONS, ATTACHMENTS, AND REINFORCEMENT ARE PROHIBITED WITHOUT APPROVAL FROM THE ENGINEER AND FABRICATOR. ANY REPAIRS, REPLACEMENT, REINFORCING OR FURTHER ALTERATIONS DUE TO UNAPPROVED FIELD MODIFICATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR THAT MADE THE MODIFICATIONS.
5. THE GENERAL CONTRACTOR AND STEEL ERECTOR SHALL NOTIFY THE ENGINEER OF ANY FABRICATION OR ERECTION ERRORS OR DEVIATIONS. FIELD MODIFICATIONS ARE PROHIBITED WITHOUT APPROVAL FROM THE ENGINEER.
6. ALL BELOW-GRADE STRUCTURAL STEEL (COLUMNS, BASE PLATES, LEVELING PLATES, ANCHOR RODS, ETC) THAT WILL BE EXPOSED TO SUBBASE MATERIALS SHALL RECEIVE TWO COATS OF RUST-INHIBITIVE COATING PRIOR TO PLACEMENT OF FILL. COATING SHOULD BE FIELD-APPLIED AFTER STEEL ELEMENTS ARE IN PLACE.

STRUCTURAL STEEL CONNECTIONS:

1. EXCEPT WHERE OTHERWISE SHOWN ON THESE DOCUMENTS, THE DESIGN OF ALL STRUCTURAL STEEL CONNECTIONS IS DELEGATED TO A LICENSED PROFESSIONAL ENGINEER WORKING FOR THE STRUCTURAL STEEL FABRICATOR IN ACCORDANCE WITH THE FOLLOWING CRITERIA:
   A. ANY AISC-APPROVED OR AISC-PRE-QUALIFIED CONNECTION MAY BE USED AS DETERMINED BY THE FABRICATOR AND FABRICATOR'S LICENSED PROFESSIONAL ENGINEER.
   B. ALL FORCES TO BE USED FOR CONNECTION DESIGN ARE INDICATED ON THESE DRAWINGS
   C. ALL FORCES SHOWN ARE SERVICE-LEVEL (UNFACTORED), AND THE ASD METHOD SHALL BE USED TO SELECT, COMPLETE, AND/OR DESIGN CONNECTION DETAILS
   D. SEALED/SIGNED CALCULATIONS SHALL BE INCLUDED WITH THE APPROVAL DRAWINGS FOR ALL CONNECTIONS DESIGNED AND DETAILED BY THE FABRICATOR'S LICENSED PROFESSIONAL ENGINEER. THIS SHALL INCLUDE ANY TABULATED OR OTHERWISE PRE-DETERMINED DATA FOR ANY PROPOSED AISC-APPROVED OR AISC-PRE-QUALIFIED CONNECTIONS.
2. PRIOR TO THE SUBMISSION OF APPROVAL DRAWINGS, THE FABRICATOR SHALL SUBMIT FOR REVIEW AND ACCEPTANCE REPRESENTATIVE SAMPLES OF THE PROPOSED CONNECTION TYPES AND CORRESPONDING CALCULATIONS
3. MEMBER REINFORCING AT CONNECTIONS CONTAINED IN THE CONTRACT DOCUMENTS IS CONCEPTUAL. THE CONTRACTOR'S DESIGNER SHALL DETERMINE REINFORCING THICKNESSES, WIDTHS, LENGTHS, ETC. AS REQUIRED AT ALL CONNECTIONS.
4. FOR CONNECTIONS SPECIFIED ON THESE DOCUMENTS, THE FABRICATOR MAY PROPOSE ALTERNATIVE CONNECTION DETAILS. REQUESTS FOR ALTERNATE DETAILS SHALL BE MADE PRIOR TO THE SUBMISSION OF APPROVAL DRAWINGS
5. MINIMUM BOLT FOR STRUCTURAL CONNECTIONS: 3/4" DIAM.
6. ALL BOLTED CONNECTIONS SHALL HAVE MINIMUM 2 BOLTS U.N.O. ON THE CONTRACT DOCUMENTS
7. ALL BOLTED CONNECTIONS SHALL BE DESIGNED FOR 'SNUG TIGHT' CONDITION U.N.O ON THE CONTRACT DOCUMENTS.

POST-INSTALLED ANCHORS/FASTENERS

1. THESE ANCHOR/FASTENER PRODUCTS ARE SPECIFIED AS 'BASIS OF DESIGN'. CONTRACTORS MAY SUBMIT OTHER MANUFACTURERS PRODUCTS FOR REVIEW AND APPROVAL. INCLUDE ALL CORRESPONDING PRODUCT DATA TO SHOW THAT THE SUBMITTED PRODUCT MEETS OR EXCEEDS THE PERFORMANCE OF THE BASIS OF DESIGN:

EPOXY ANCHORS:	PLAIN A36 THREADED ROD W/HILTI HIT-HY 200 ADHESIVE (SIZE AND EMBED PER DETAILS)
EXPANSION ANCHORS:	PLAIN CARBON STEEL HILTI KWIK BOLT 3 (SIZE AND EMBED PER DETAILS)
SCREW ANCHORS:	PLAIN CARBON STEEL HILTI KWIK HUS (SIZE AND EMBED PER DETAILS)

2. WHEN INSTALLING MECHANICAL AND ADHESIVE ANCHORS, THE CONTRACTOR SHALL TAKE MEASURES TO AVOID DRILLING OR CUTTING OF ANY EXISTING REINFORCING AND DESTRUCTION OF CONCRETE. HOLES SHALL BE FREE OF DUST, DIRT, WATER AND DEBRIS PRIOR TO INSTALLING MECHANICAL OR ADHESIVE ANCHORS.

SUBMITTAL REQUIREMENTS

1. WORK SHOULD PROCEED ONLY AFTER SUBMITTALS HAVE BEEN REVIEWED AND APPROVED. APPROVAL OF SHOP DRAWINGS DOES NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF COMPLYING WITH THE CONTRACT DOCUMENTS. ALL DEVIATIONS FROM THE CONTRACT DOCUMENTS, INCLUDING BUT NOT LIMITED TO PRODUCT SUBSTITUTIONS, MATERIAL SUBSTITUTIONS, AND RELOCATION OR ALTERATION OF ELEMENTS ARE PROHIBITED WITHOUT APPROVAL FROM THE ENGINEER. SHALL DEVIATIONS FROM THE CONTRACT DOCUMENT REQUIREMENTS EXIST, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR REVISING SHOP DRAWINGS TO BRING THEM INTO COMPLIANCE WITH THE CONTRACT DOCUMENTS.
2. REPRODUCTION OF ANY PORTION OF THE STRUCTURAL CONTRACT DRAWINGS FOR RESUBMITTAL AS SHOP DRAWINGS IS PROHIBITED. SHOP DRAWINGS PRODUCED IN SUCH A MANNER WILL BE REJECTED AND RETURNED
3. MAINTAIN COPIES OF APPROVED SHOP DRAWINGS ON SITE DURING CONSTRUCTION
4. PRIOR TO SHOP DRAWING SUBMITTAL THE CONTRACTOR SHALL FURNISH A SUBMITTAL SCHEDULE SHOWING THE ANTICIPATED TRADE SUBMITTALS AND THEIR APPROXIMATE DATES AS WELL AS ANY OTHER PERTINENT INFORMATION SUCH AS PRIORITIZATION, PHASING OF FABRICATION AND ERECTION, ETC.
5. ANY ADDITIONAL WORK REQUIRED BY THE ARCHITECT/ENGINEER (DESIGN, SKETCHES, DRAWING DOCUMENTATION, FIELD VISITS, ETC) TO CORRECT OR REVISE CONTRACTOR CONSTRUCTION ERRORS RELATED TO WORK PERFORMED WITHOUT APPROVED SUBMITTALS SHALL BE AT THE SOLE EXPENSE OF THE CONTRACTOR.
6. SHOP DRAWINGS SHALL CLEARLY INDICATE COORDINATED DIMENSIONS OF MECHANICAL UNIT AND ROOF PENETRATION SIZES. SHOP DRAWINGS SHALL ALSO CLEARLY INDICATE ALL SHOP AND FIELD WELDS.

SUBMITTAL REQUIREMENTS - CONCRETE

1. CONCRETE MIX DESIGNS FOR EACH TYPE INDICATED OR SPECIFIED
2. REINFORCING BAR SHOP DRAWINGS. REINFORCING BAR SHOP DRAWINGS MUST INCLUDE DETAILED ELEVATION DRAWINGS OF ALL WALLS AND OTHER CAST-IN-PLACE CONCRETE ELEMENTS TO SHOW PLACEMENT, SIZE, LOCATION, AND CONFIGURATION OF ALL REINFORCING STEEL ELEMENTS. REINFORCING BAR SUBMITTALS THAT DO NOT INCLUDE THIS INFORMATION WILL BE REJECTED ON THE BASIS OF BEING INADEQUATE AND INCOMPLETE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK ALL DIMENSIONS AND ELEVATIONS AS A PART OF THE SHOP DRAWING REVIEW PROCESS PRIOR TO SUBMITTAL TO THE ENGINEER FOR REVIEW.

SUBMITTAL REQUIREMENTS - MASONRY

1. MIX DESIGNS AND PROCEDURES FOR ALL MORTAR AND GROUT
3. PRODUCT DATA AND INSTALLATION PROCEDURES FOR ALL ANCHORS, TIES, JOINT REINFORCEMENT, BAR POSITIONERS, ETC USED IN THE CONSTRUCTION OF THE SPECIFIED MASONRY WALLS AND ASSEMBLIES.

SUBMITTAL REQUIREMENTS - STEEL

1. ANCHOR ROD DRAWINGS: PROVIDE DETAILED, DIMENSIONAL LAYOUT OF ALL BASE PLATE, LEVELING PLATE, AND ANCHOR ROD CONDITIONS.
2. STRUCTURAL STEEL AND MISCELLANEOUS STEEL FABRICATIONS SHOP DRAWINGS: STEEL FABRICATION AND ERECTION SHOP DRAWINGS SHALL BE SUBMITTED TO REVIEW GENERAL CONFORMANCE WITH THE CONTRACT DOCUMENTS. SHOP DRAWINGS SHALL INCLUDE ALL INFORMATION REQUIRED TO FABRICATE AND ERECT STEEL ELEMENTS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK ALL DIMENSIONS AND ELEVATIONS AS PART OF THE SHOP DRAWING REVIEW PROCESS PRIOR TO SUBMITTAL TO THE ENGINEER FOR REVIEW. ANY REPAIRS, REPLACEMENTS OR ALTERATIONS DUE TO FABRICATION OR ERECTION PRIOR TO SHOP DRAWING APPROVAL SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. FIELD ALTERATION TO APPROVED COMPONENTS IS PROHIBITED WITHOUT APPROVAL OF THE ENGINEER AND FABRICATOR.
3. STRUCTURAL STEEL CONNECTION CALCULATIONS: THE CONTRACTOR SHALL SUBMIT CONNECTION CALCULATIONS AS REQUIRED PER "STRUCTURAL STEEL CONNECTIONS" GENERAL NOTES.
4. ALL EXISTING GEOMETRY AND/OR FIELD MEASUREMENTS REQUIRED FOR FABRICATION IS THE RESPONSIBILITY OF THE CONTRACTOR AND SUBMITTAL TO THE ENGINEER WILL BE FOR REVIEW/RECORD ONLY.

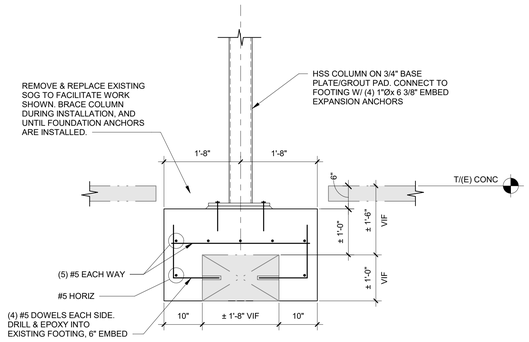
CONCRETE MASONRY REINFORCEMENT LAP SPLICE LENGTH

BAR SIZE	SPLICE LENGTH
#4	14"
#5	22"
#6	43"

* BASED ON f'_m = 1,500 PSI AND GRADE 60 UNCOATED REINFORCING

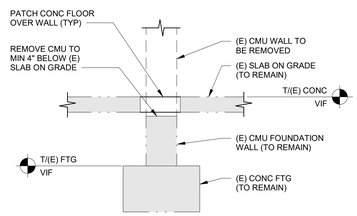
MINIMUM CONCRETE COVER FOR CAST-IN-PLACE CONCRETE MEMBERS

CONCRETE EXPOSURE	MEMBERS	REINFORCEMENT	SPECIFIED COVER, IN.
CAST AGAINST AND PERMANENTLY IN CONTACT WITH GROUND	ALL	ALL	3"
EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	ALL	#3 - #5 BARS	1 1/2"
		≥ #6 BARS	2"
NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	SLAB, JOISTS AND WALLS	#3 - #11 BARS	3/4"
		#14, #18 BARS	1 1/2"
	BEAMS, COLUMNS, PEDESTALS AND TENSION TIES	PRIMARY REINFORCEMENT, STIRRUPS, TIES, SPIRALS, AND HOOPS	1 1/2



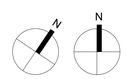
2 SECTION

S101.A SCALE: 3/4" = 1'-0"



3 SECTION

S101.A SCALE: 3/4" = 1'-0"



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Professional Seal:

Owner:
OWEN J. ROBERTS SCHOOL DISTRICT
Owner Address

New Construction of:
OJR DISTRICT SERVICES CENTER

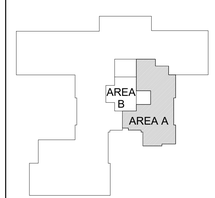
ISSUED FOR:

NO.	DESCRIPTION	DATE
	ISSUED FOR BIDDING	07/24/2026

DATE: 07/24/2026

SGA PROJECT NUMBER: 225180.00

Key Plan:

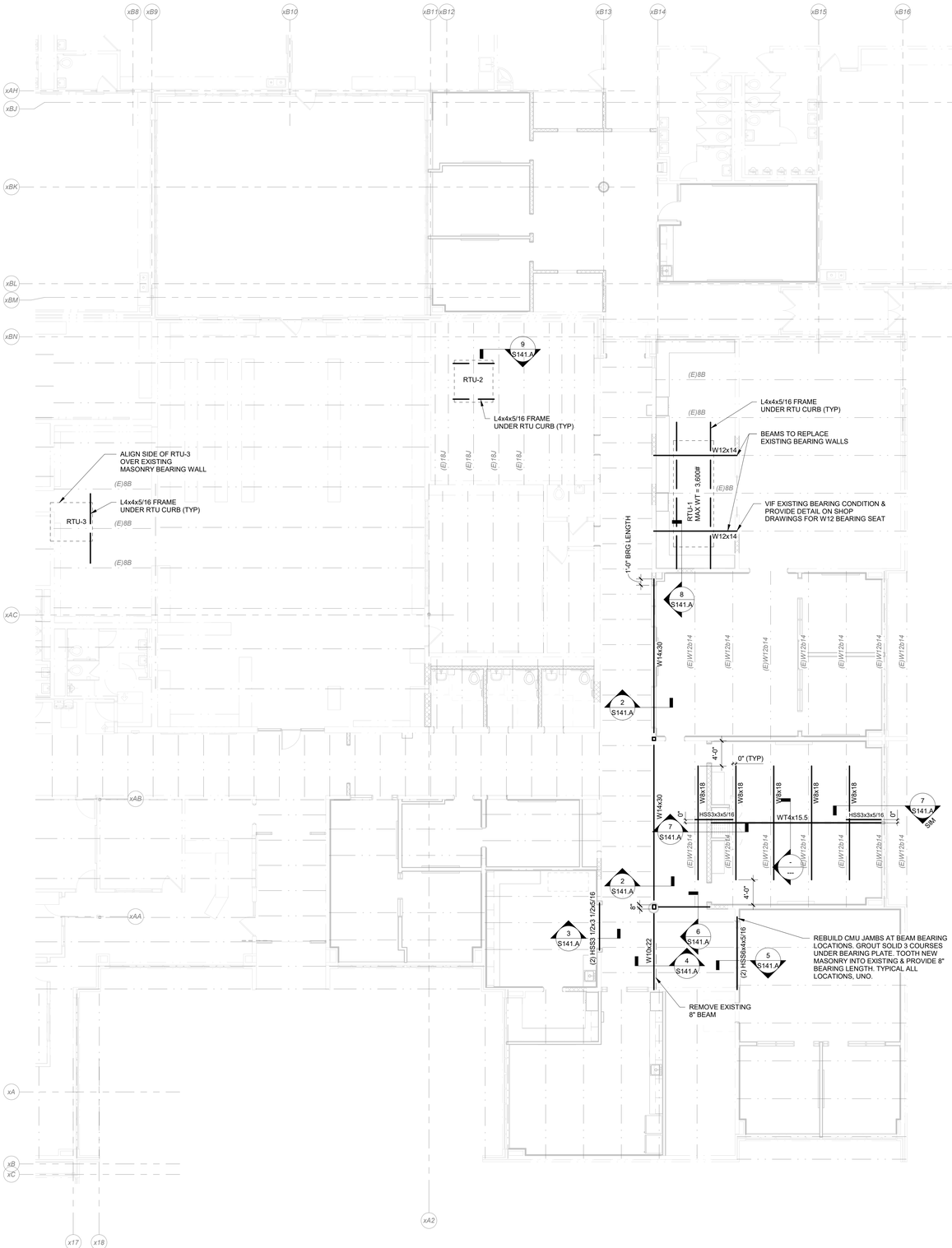


Drawing Title:

FOUNDATION PLAN, SECTIONS AND STRUCTURAL NOTES

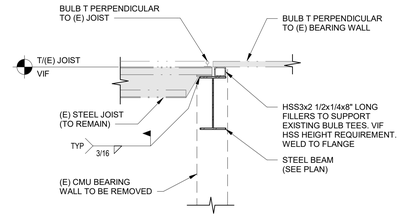
Drawing Number:

S101.A

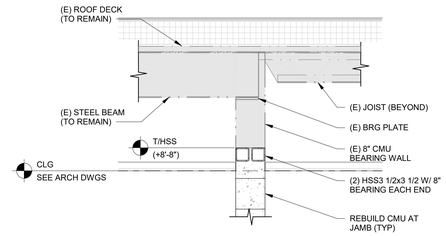


1 EXISTING ROOF FRAMING PLAN - AREA A
S141.A SCALE: 1/8" = 1'-0"

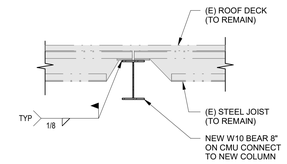
NOTES:
1. FIELD VERIFY ALL CONDITIONS AND DIMENSIONS NECESSARY TO COMPLETE WORK.
2. PROVIDE SHORING FOR ALL EXISTING ROOF FRAMING TO FACILITATE REMOVAL OF BEARING WALLS & INSTALLATION OF NEW WORK



2 SECTION
S141.A SCALE: 3/4" = 1'-0"



3 SECTION
S141.A SCALE: 3/4" = 1'-0"



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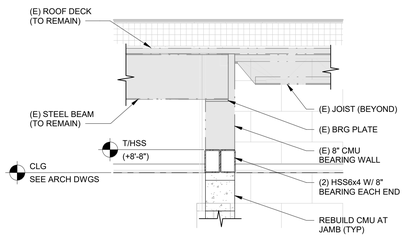
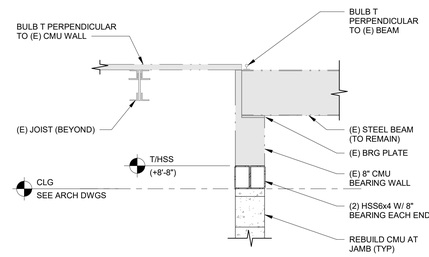
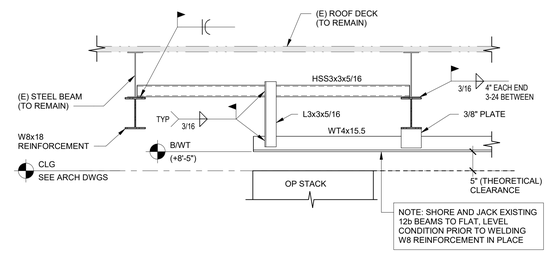


5 SECTION
S141.A SCALE: 3/4" = 1'-0"



6 SECTION
S141.A SCALE: 3/4" = 1'-0"



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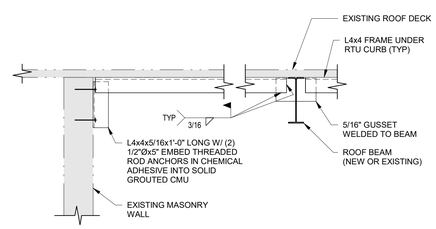
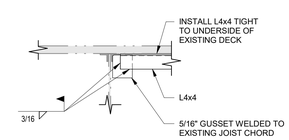


8 SECTION
S141.A SCALE: 3/4" = 1'-0"



9 SECTION
S141.A SCALE: 3/4" = 1'-0"

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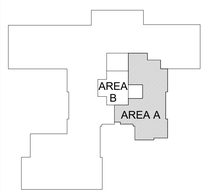

Drawing Title:
ROOF FRAMING PLAN AND SECTIONS

Drawing Number:
S141.A

MECHANICAL GENERAL NOTES

1.	THE DRAWINGS INDICATE THE GENERAL SCOPE OF WORK ASSOCIATED WITH THE INSTALLATION OF HVAC EQUIPMENT AND SYSTEMS BUT ARE NOT NECESSARILY INCLUSIVE OF ACTUAL CONDITIONS. THE FULL EXTENT OF THE WORK SHALL BE DETERMINED IN THE FIELD BASED ON THE ACTUAL CONDITIONS ENCOUNTERED AND AS REQUIRED FOR THE SATISFACTORY EXECUTION OF THE NEW WORK.
2.	THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE EQUIPMENT AND SYSTEMS IN ACCORDANCE WITH THE PROJECT CONSTRUCTION SCHEDULE.
3.	THE CONTRACTOR SHALL COORDINATE THE INSTALLATION AND SCHEDULING OF THEIR WORK WITH ALL OTHER TRADES (PLUMBING, ELECTRICAL, GENERAL ETC.). ANY CONFLICTS DUE TO FAILURE OF THIS CONTRACTOR TO COORDINATE WORK WITH OTHER TRADES SHALL BE THEIR RESPONSIBILITY TO RESOLVE.
4.	ALL CUTTING AND PATCHING OF WALLS, FLOORS, ROOFS, AND CEILINGS, AS REQUIRED TO INSTALL DUCTWORK, PIPING, ROOF CURBS ETC. SHALL BE PERFORMED BY THIS CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS. PATCHING SHALL MATCH EXISTING METHODS, MATERIALS OF CONSTRUCTION, AND ADJACENT FINISHES.
5.	WHERE THE DRAWINGS SPECIFICALLY INDICATE, CUTTING AND PATCHING IS TO BE PERFORMED BY THE GENERAL CONTRACTOR. THE CONTRACTOR SHALL VERIFY THE DIMENSIONS AND EXACT LOCATIONS OF THE OPENINGS.
6.	THE CONTRACTOR SHALL PROVIDE ALL METHODS AND MATERIALS FOR SUPPORTING ALL EQUIPMENT, PIPING, AND DUCTWORK FURNISHED UNDER THIS CONTRACT. IN AREAS OF BAR JOIST CONSTRUCTION ALL PIPING, DUCTWORK, AND SUSPENDED EQUIPMENT WITH A CONCENTRATED LOAD (I.E. HANGERS) IN EXCESS OF 150 LBS. SHALL BE SUPPORTED FROM THE TOP CHORD OF THE BAR JOISTS. DO NOT HANG ANY PIPING OR DUCTWORK FROM THE ROOF DECK.
7.	VERIFY THE FINAL MOUNTING HEIGHTS AND LOCATIONS OF LOUVERS, BRICK VENTS, CABINET HEATERS, SIDEWALL GRILLES AND REGISTERS, AND ALL OTHER VISIBLE EQUIPMENT WITH THE ARCHITECTURAL INTERIOR AND EXTERIOR ELEVATIONS.
8.	COORDINATE FINAL CEILING GRILLE AND DIFFUSER LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS, FIRE PROTECTION PLANS, AND ELECTRICAL/TECHNOLOGY PLANS.
9.	SEAL ALL DUCT AND PIPING PENETRATIONS OF FIRE AND SMOKE RATED PARTITIONS AND FLOORS WITH FIRE STOPPING MATERIALS AS SPECIFIED IN THE DIVISION 1 SPECIFICATIONS. WHERE FIRESTOPPING MATERIALS ARE NOT SPECIFIED IN DIVISION 1, ALL FIRESTOPPING MATERIALS SHALL BE U.L. LISTED FOR USE AND AS MANUFACTURED BY 3M OR EQUAL.
10.	PROVIDE ACOUSTICAL SEALS AROUND ALL DUCTWORK AND PIPING PENETRATIONS OF INTERIOR ACOUSTICALLY RATED PARTITIONS. REFER TO THE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF ACOUSTICAL PARTITIONS.
11.	PROVIDE AUTOMATIC AIR VENTS ON ALL PIPING SYSTEM HIGH POINTS AND DRAIN VALVES ON ALL LOW POINTS.
12.	PROVIDE SHUT-OFF VALVES AND FILL AND DRAIN PORTS TO PERMIT CHEMICAL CLEANING AND FLUSHING.
13.	PROVIDE PIPING SWING JOINTS AT ALL CONNECTIONS TO PIPING MAINS.
14.	ALL ADJUSTABLE THERMOSTATS, SENSORS AND SWITCHES INTENDED FOR NORMAL USE BY THE BUILDING'S OCCUPANTS SHALL BE MOUNTED 48" A.F.F. TO THE TOP OF THE DEVICE IN ACCORDANCE WITH ADA REQUIREMENTS.
15.	DO NOT UTILIZE AIR HANDLING EQUIPMENT AND DUCTED AIR SYSTEMS FURNISHED UNDER THIS CONTRACT AS A MEANS OF TEMPORARY HEAT DURING CONSTRUCTION. OBTAIN WRITTEN APPROVAL FROM THE ENGINEER PRIOR TO PLACING EQUIPMENT IN SUSTAINED OPERATION.
16.	BOTTOM OF DUCT AND BOTTOM OF PIPE ELEVATIONS ARE FOR REFERENCE ONLY, FINAL ELEVATIONS ARE SUBJECT TO ACTUAL FIELD CONDITIONS. FIELD VERIFY ALL CLEARANCES AND DIMENSIONS PRIOR TO FABRICATING AND INSTALLING DUCTWORK AND PIPING. COORDINATE DUCT AND PIPING INSTALLATIONS WITH ALL OTHER TRADES TO AVOID INTERFERENCE WITH LIGHT FIXTURES, SPRINKLERS, SPEAKERS, ETC.
17.	ALL DUCT DIMENSIONS ARE CLEAR INSIDE DIMENSIONS. FIELD VERIFY ACTUAL CLEARANCES AND CONDITIONS PRIOR TO FABRICATING DUCTWORK. DO NOT ORDER FIRE DAMPERS UNTIL VERIFYING ACTUAL CONDITIONS AND DIMENSIONS.
18.	SUBMIT SHEET METAL SHOP DRAWINGS TO SCALE 3/8" = 1'-0", DETAILING DUCTWORK, HVAC EQUIPMENT AND DIFFUSERS. SHOP DRAWINGS SHALL BE DIMENSIONED, SHALL INDICATE DUCT ELEVATIONS, AND SHALL DEPICT CEILING GRID, STRUCTURAL STEEL, LIGHT FIXTURES, SPRINKLER HEADS, AND PLUMBING AND HVAC PIPING MAINS.
19.	THE CONTRACTOR SHALL FURNISH ALL ACCESS DOORS IN WALLS AND PLASTER CEILINGS AS REQUIRED TO ACCESS VOLUME DAMPERS, FIRE DAMPERS, AND OTHER SERVICEABLE DEVICES. ACCESS DOORS SHALL BE UL LISTED WHEN INSTALLED IN RATED CONSTRUCTION. FIELD VERIFY ACCESS DOOR LOCATIONS AND SIZES WITH ARCHITECT.
20.	PROVIDE LOCATION/IDENTIFICATION MARKERS ON CEILING T-BAR GRIDS (OR ON CEILING ACCESS DOORS AS APPLICABLE) JUST BELOW CONCEALED SHUT-OFF VALVES, CONTROL VALVES, AND HVAC EQUIPMENT.
21.	ALL ROUND DUCTWORK SHALL BE ROUND SPIRAL DUCT EXCEPT WHERE NOTED AS FLEXIBLE. ROUND FLEXIBLE DUCTWORK IS LIMITED TO LOCATIONS ONLY AS SHOWN ON THE DRAWINGS. MAXIMUM LENGTH SHALL NOT EXCEED 6'-0".
22.	THE CONTRACTOR SHALL COORDINATE THE RIGGING, MOVING AND HOISTING OF EQUIPMENT FURNISHED UNDER THIS CONTRACT WITH EXISTING ARCHITECTURAL CONSTRAINTS.
23.	DUCT SMOKE DETECTORS SHALL BE FURNISHED BY E.C., INSTALLED BY H.C. WIRING TO SHUT DOWN UNIT/ CLOSE DAMPER SHALL BE BY H.C. AND WIRING TO FIRE ALARM PANEL SHALL BE BY E.C.
24.	ALL CONDENSATE AND CLEAN, CLEAR WATER FROM MECHANICAL EQUIPMENT MUST BE PIPED TO A DRAIN CONNECTED TO THE STORM SYSTEM AND NOT SANITARY.
25.	PROVIDE FLEXIBLE CONNECTIONS IN DUCTWORK AND PIPING AT ALL LOCATIONS WHERE DUCTWORK AND PIPING CROSS HORIZONTAL OR VERTICAL BUILDING EXPANSION JOINTS. REFER TO ARCHITECTURAL DRAWINGS FOR BUILDING EXPANSION JOINT LOCATIONS.

MECHANICAL SYMBOLS & ABBREVIATIONS

G.C.	GENERAL CONTRACTOR	C.D.	CONDENSATE DRAIN
H.C. / M.C.	MECHANICAL CONTRACTOR	F.D.	FLOOR DRAIN
E.C.	ELECTRICAL CONTRACTOR	RS	REFRIGERANT SUCTION
P.C.	PLUMBING CONTRACTOR	RL	REFRIGERANT LIQUID
S/A	SUPPLY AIR	—— HWS ——	HOT WATER SUPPLY
R/A	RETURN AIR	---- HWR ----	HOT WATER RETURN
T/A	TRANSFER AIR	—— CWS ——	CHILLED WATER SUPPLY
E/A	EXHAUST AIR	---- CWR ----	CHILLED WATER RETURN
O/A	OUTSIDE AIR	—— CS ——	CONDENSER WATER SUPPLY
A.F.F.	ABOVE FINISHED FLOOR	----- CR -----	CONDENSER WATER RETURN
AL	ACOUSTCAL LINING	—— FOS ——	FUEL OIL SUPPLY
O.E.D.	OPEN END DUCT	---- FOR ----	FUEL OIL RETURN
NC	NORMALLY CLOSED	—— LPS ——	LOW PRESSURE STEAM SUPPLY
NO	NORMALLY OPEN	---- LPR ----	LOW PRESSURE STEAM RETURN
DISC	DISCONNECT SWITCH		GATE/BUTTERFLY VALVE
	REMOVE EXISTING		BALL VALVE
	CONNECT TO EXISTING		BALANCING VALVE
	SUPPLY AIR DIFFUSER/DROP/RISE		3-WAY ATC VALVE
	RETURN AIR GRILLE/DROP/RISE		2-WAY ATC VALVE
	EXHAUST AIR GRILLE/DROP/RISE		AUTOMATIC FILL VALVE
SD	DUCT MOUNTED SMOKE DETECTOR		RELIEF VALVE
T	TEMPERATURE/HUMIDITY SENSOR		CHECK VALVE
C	CARBON DIOXIDE SENSOR		TRIPLE DUTY VALVE
S	SWITCH		STRAINER
P	PRESSURE SENSOR		PIPE ANCHOR
	VOLUME DAMPER		PIPE GUIDE
ATC	AUTOMATIC TEMPERATURE CONTROL DAMPER	FC	FLEXIBLE CONNECTION
BDD	BACKDRAFT DAMPER		THERMOMETER
SD	SMOKE DAMPER		PRESSURE GAUGE
AP	ACCESS PANEL		OS&Y VALVE
FD	FIRE DAMPER		PRESSURE REDUCING VALVE
DP	DIFFERENTIAL PRESSURE SENSOR		UNION

NOTE: NOT ALL SYMBOLS & ABBREVIATIONS SHOWN ARE USED ON THIS PROJECT.

DESIGN CODE COMPLIANCE

PA - UCC	PENNSYLVANIA UNIFORM CONSTRUCTION CODE; 2018
IBC	ICC - INTERNATIONAL BUILDING CODE; 2018
IMC	ICC - INTERNATIONAL MECHANICAL CODE; 2018
IEEC	ICC - INTERNATIONAL ENERGY CONSERVATION CODE; 2018
IFGC	ICC - INTERNATIONAL FUEL GAS CODE; 2018
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NEC	NATIONAL ELECTRIC CODE; 2017

MECHANICAL EQUIPMENT TAGS

AAC #	AMBIENT AIR CLEANER # = MARK	FCU #	FAN COIL UNIT # = MARK
ACC #	AIR-COOLED CHILLER # = MARK	FOP #	FUEL OIL TRANSFER PUMP # = MARK
AHU #	AIR HANDLING UNIT # = MARK	FPV #	FAN POWERED VAV BOX # = MARK
B #	BOILER # = MARK	GF #	GAS FURNACE # = MARK
BCU #	BLOWER COIL UNIT # = MARK	GRV #	GRAVITY RELIEF VENT # = MARK
C #	CONVECTOR # = MARK	GUH #	GAS-FIRED UNIT HEATER # = MARK
CH #	CABINET HEATER # = MARK	H #	HUMIDIFIER # = MARK
CHL #	WATER-COOLED CHILLER # = MARK	HEX #	HEAT EXCHANGER # = MARK
CP #	CONDENSATE PUMP # = MARK	HP #	HEAT PUMP # = MARK
CRAC #	COMPUTER ROOM AC UNIT # = MARK	HRU #	HEAT RECOVERY UNIT # = MARK
CT #	COOLING TOWER # = MARK	HWC #	HOT WATER COIL # = MARK
CU #	CONDENSING UNIT # = MARK	L #	LOUVER # = MARK
CWC #	CHILLED WATER COIL # = MARK	MAU #	MAKE-UP AIR UNIT # = MARK
DC #	DUST COLLECTOR # = MARK	OAI #	OUTSIDE AIR INTAKE # = MARK
DHU #	DEHUMIDIFICATION UNIT # = MARK	P #	PUMP # = MARK
DS #	DUCT SILENCER # = MARK	PTAC #	PACKAGED TERMINAL AC UNIT # = MARK
DSS #	DUCTLESS SPLIT SYSTEM # = MARK	R #	RADIATION # = MARK
ECH #	ELECTRIC CABINET HEATER # = MARK	RF #	RETURN FAN # = MARK
EDC #	ELECTRIC DUCT COIL # = MARK	RTU #	ROOFTOP AIR HANDLING UNIT # = MARK
EF #	EXHAUST FAN # = MARK	SF #	SUPPLY FAN # = MARK
ER #	ELECTRIC RADIATION # = MARK	SV #	SMOKE VENT # = MARK
ERU #	ENERGY RECOVERY UNIT # = MARK	UH #	UNIT HEATER # = MARK
EUH #	ELECTRIC UNIT HEATER # = MARK	UV #	UNIT VENTILATOR # = MARK
EWH #	ELECTRIC WALL HEATER # = MARK	VAV #	VAV BOX # = MARK
EXP #	EXPANSION TANK # = MARK	# V CFM	GRILLE / DIFFUSER TAG V = VOLUME

NOTE: NOT ALL TAGS SHOWN ARE USED ON THIS PROJECT.

MECHANICAL SYSTEM RESPONSIBILITY MATRIX

SYSTEM	REMOVE	FURNISH	INSTALL
PUMPS & ACCESSORIES	M.C.	M.C.	M.C.
VAV, DUCTWORK & PIPING	M.C.	M.C.	M.C.
ROOFTOP UNITS (RTUs)	M.C.	M.C.	M.C.
ROOFTOP UNIT CURBS	M.C.	M.C.	G.C.
TESTING, BALANCING & ADJUSTMENT (TAB)	M.C.	M.C.	M.C.
BUILDING AUTOMATION SYSTEM (BAS)	M.C.	M.C.	M.C.

NOTES:

1. SYSTEMS NOT INDICATED IN MATRIX BUT SHOWN ON DRAWINGS OR SPECIFICATIONS SHALL BE FURNISHED AND INSTALLED BY THE M.C.

True Project

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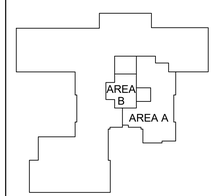
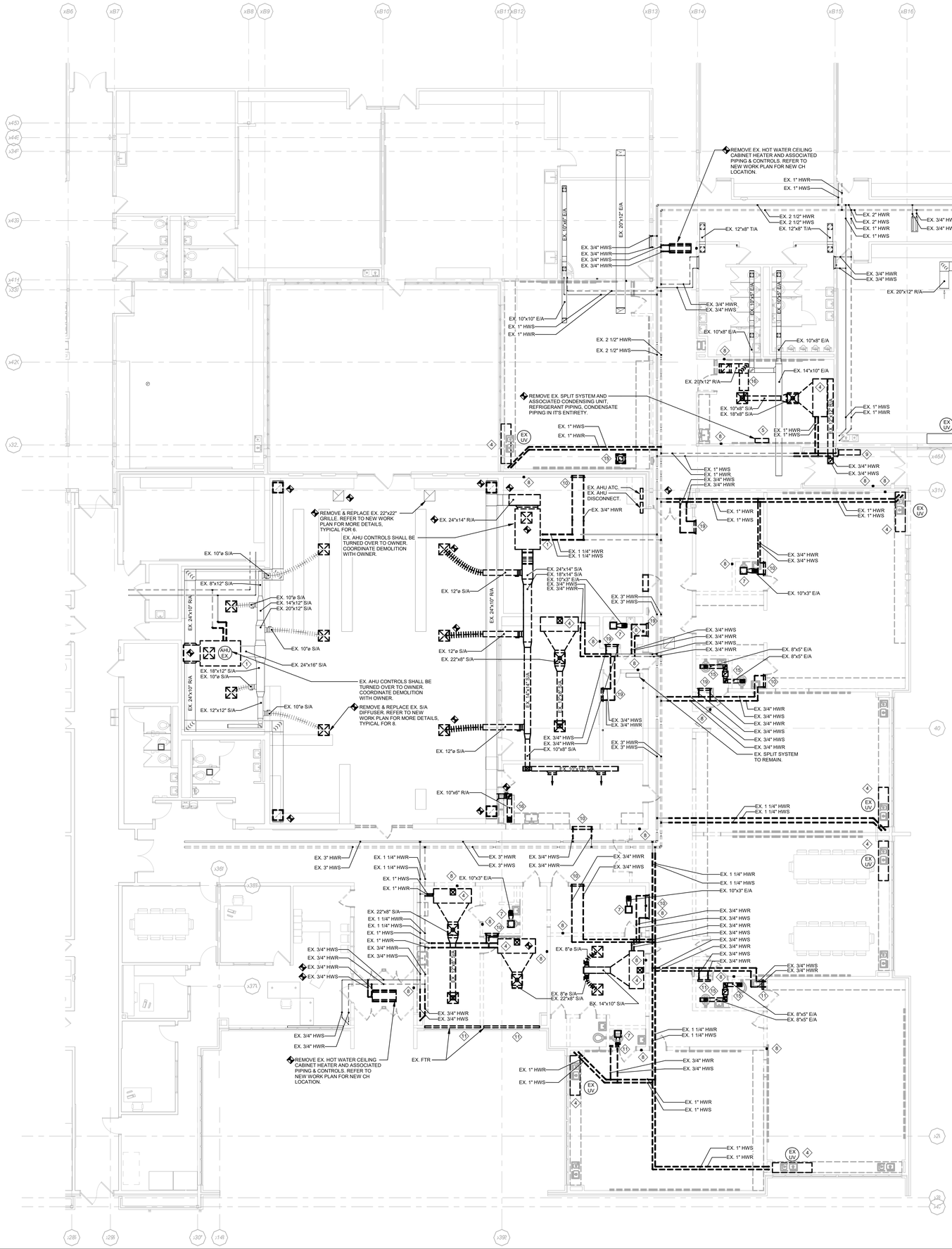


Drawing Title:
COVERSHEET - MECHANICAL

Drawing Number:
M000



DEMOLITION NOTES - MECHANICAL

GENERAL NOTE: ANY FLOOR/WALL OPENING AS A RESULT OF PIPING AND DUCTWORK REMOVAL SHALL BE CAPPED BY THE CONTRACTOR TO MATCH EX. MATERIAL OF CONSTRUCTION UNLESS REUSED IN NEW WORK PLAN.

1. REMOVE EX. INDOOR AIR HANDLING UNIT AND ASSOCIATED DUCTWORK AS INDICATED, PIPING, FAN VFDS, AND CONTROLS.
2. REMOVE EX. 2-PIPE DX FAN COIL UNIT AND ASSOCIATED DUCTWORK, DIFFUSERS, PIPING, CONTROLS, REMOTE CONDENSING UNIT, AND SUPPORTS.
3. REMOVE EX. HOT WATER FAN COIL UNIT AND ASSOCIATED DUCTWORK, DIFFUSERS, PIPING, CONTROLS, AND SUPPORTS
4. REMOVE EX. UNIT VENTILATORS AND ASSOCIATED PIPING, CONTROLS, WALL SLEEVE, WALL LOUVER, AND PIPE ENCLOSURES. G.C. SHALL INFILL EXISTING WALL OPENING. COORDINATE WORK WITH G.C.
5. REMOVE EX. WALL MOUNTED SPLIT SYSTEM AND ASSOCIATED CONDENSING UNIT, REFRIGERANT PIPING, COND. PIPING, AND CONTROLS.
6. REMOVE EX. CONDENSING UNIT AND ALL ASSOCIATED PIPING, INDOOR AIR HANDLING UNIT, CONTROLS AND SUPPORTS.
7. REMOVE EX. EXHAUST FAN AND ASSOCIATED DUCTWORK, CONTROLS, AND EX. ROOF CURB.
8. REMOVE EX. THERMOSTAT AND ASSOCOATED CONTROL WIRING. FILL, PATCH & FINISH WALL TO MATCH ADJACENT SURFACE.
9. REMOVE EX. HOT WATER CABINET HEATER AND ASSOCIATED PIPING & CONTROLS. FILL, PATCH, AND FINISH WALL TO MATCH ADJACENT SURFACE.
10. REMOVE EX. CONVECTOR AND ASSOCIATED HOT WATER PIPING, CONTROLS, SUPPORTS. FILL, PATCH, AND FINISH WALL TO MATCH ADJACENT SURFACE.
11. REMOVE EX. FINTUBE RADIATION AND ASSOCIATED HOT WATER PIPING, CONTROLS, SUPPORTS. FILL, PATCH, AND FINISH WALL TO MATCH ADJACENT SURFACE.
12. REMOVE EXISTING HOT WATER UNIT HEATER AND ASSOCIATED PIPING, CONTROLS, AND SUPPORTS.
13. REMOVE EX. SUPPLY AIR DIFFUSER/GRILLE AND ASSOCIATED DUCTWORK, FLEX DUCT, AND VOLUME DAMPER.
14. REMOVE EX. TRANSFER AIR SLEEVE AND SUPPORTS.
15. REMOVE EX. EXHAUST AIR GRILLE & ASSOCIATED DUCTWORK & VOLUME DAMPER AS INDICATED.
16. REMOVE EX. TRANSFER/RETURN AIR DUCTWORK & GRILLES AS INDICATED. CAP EX. OPENING TO MATCH ADJACENT SURFACE (EXCEPT CEILING).
17. REMOVE EX. GRAVITY RELIEF/INTAKE HOOD AND ASSOCIATED DUCTWORK, DAMPER, AND ROOF CURB.
18. EXISTING MECHANICAL EQUIPMENT. PROVIDE NEW ROOF SUPPORT CURBS. TEMPORARILY SUPPORT UNIT WHILE NEW ROOF BEING INSTALLED AS NECESSARY. FIELD VERIFY & MATCH CURB HEIGHT & LENGTH REQUIREMENTS FOR EXISTING UNITS WITH PIPING & ELECTRICAL CONDUIT LENGTH CONSTRAINTS.
19. REMOVE EX. HOT WATER PIPING AND CONTROLS FROM EXISTING TERMINAL UNIT. ABANDON UNIT IN PLACE.

1 FIRST FLOOR DEMOLITION PLAN
MD101 SCALE: 1/8" = 1'-0"

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Owner:
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Owner Address

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OJR DISTRICT SERVICES CENTER

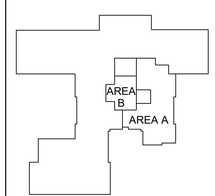
ISSUED FOR:

NO.	DESCRIPTION	DATE
	ISSUED FOR BIDDING	07/27/2026

DATE: 07/24/2026

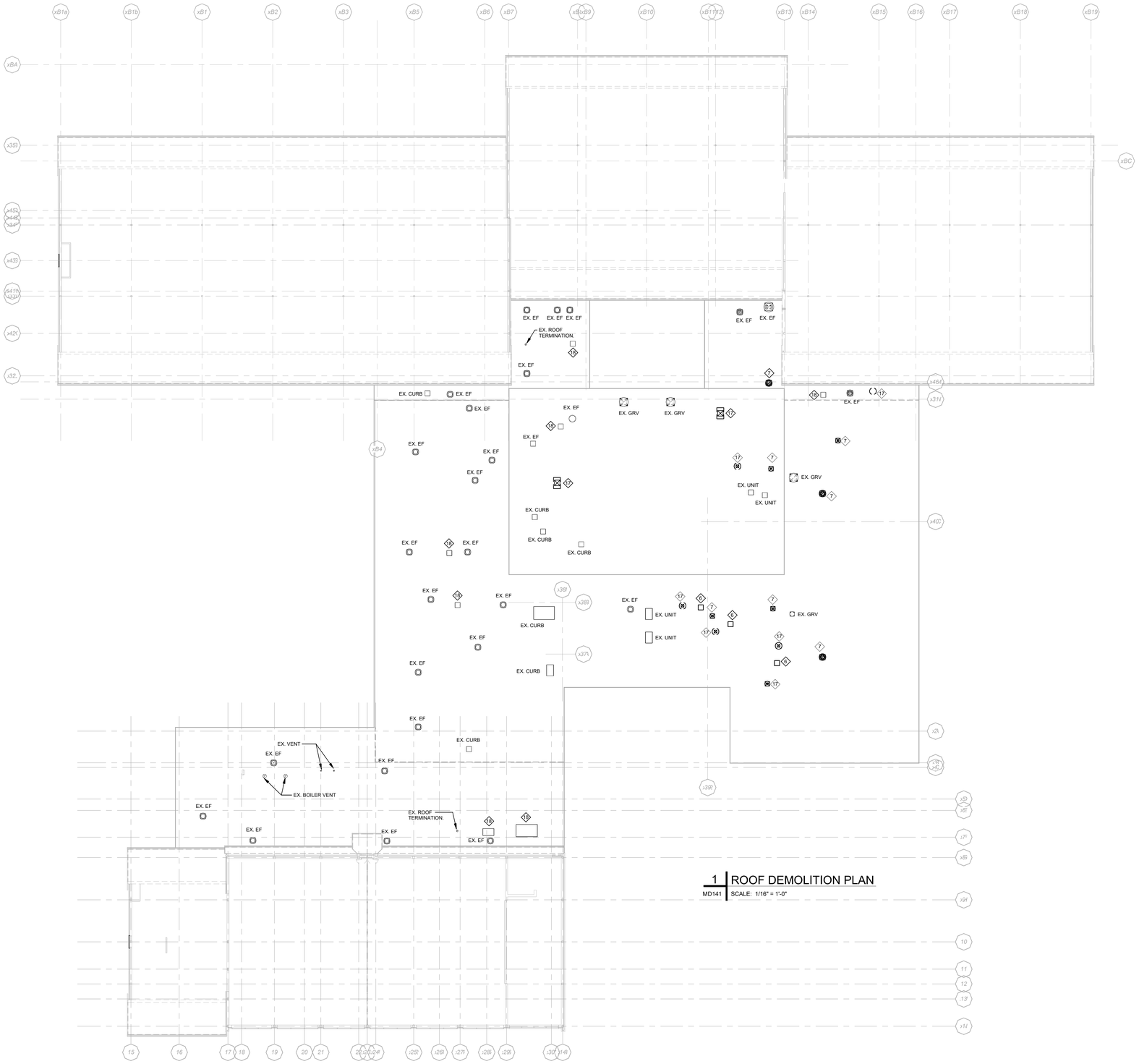
SG PROJECT NUMBER: 225180.00

Key Plan:



Drawing Title:
FIRST FLOOR DEMOLITION PLAN - MECHANICAL

Drawing Number:
MD101



1 ROOF DEMOLITION PLAN
MD141 SCALE: 1/16" = 1'-0"

DEMOLITION NOTES - MECHANICAL

GENERAL NOTE: ANY FLOOR/WALL OPENING AS A RESULT OF PIPING AND DUCTWORK REMOVAL SHALL BE CAPPED BY THE CONTRACTOR TO MATCH EX. MATERIAL OF CONSTRUCTION UNLESS REUSED IN NEW WORK PLAN.

1. REMOVE EX. INDOOR AIR HANDLING UNIT AND ASSOCIATED DUCTWORK AS INDICATED, PIPING, FAN VFDS, AND CONTROLS.
2. REMOVE EX. 2-PIPE DX FAN COIL UNIT AND ASSOCIATED DUCTWORK, DIFFUSERS, PIPING, CONTROLS, REMOTE CONDENSING UNIT, AND SUPPORTS.
3. REMOVE EX. HOT WATER FAN COIL UNIT AND ASSOCIATED DUCTWORK, DIFFUSERS, PIPING, CONTROLS, AND SUPPORTS
4. REMOVE EX. UNIT VENTILATORS AND ASSOCIATED PIPING, CONTROLS, WALL SLEEVE, WALL LOUVER, AND PIPE ENCLOSURES. G.C. SHALL INFILL EXISTING WALL OPENING. COORDINATE WORK WITH G.C.
5. REMOVE EX. WALL MOUNTED SPLIT SYSTEM AND ASSOCIATED CONDENSING UNIT, REFRIGERANT PIPING, COND. PIPING, AND CONTROLS.
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19. REMOVE EX. HOT WATER PIPING AND CONTROLS FROM EXISTING TERMINAL UNIT. ABANDON UNIT IN PLACE.

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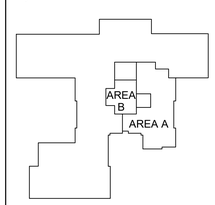
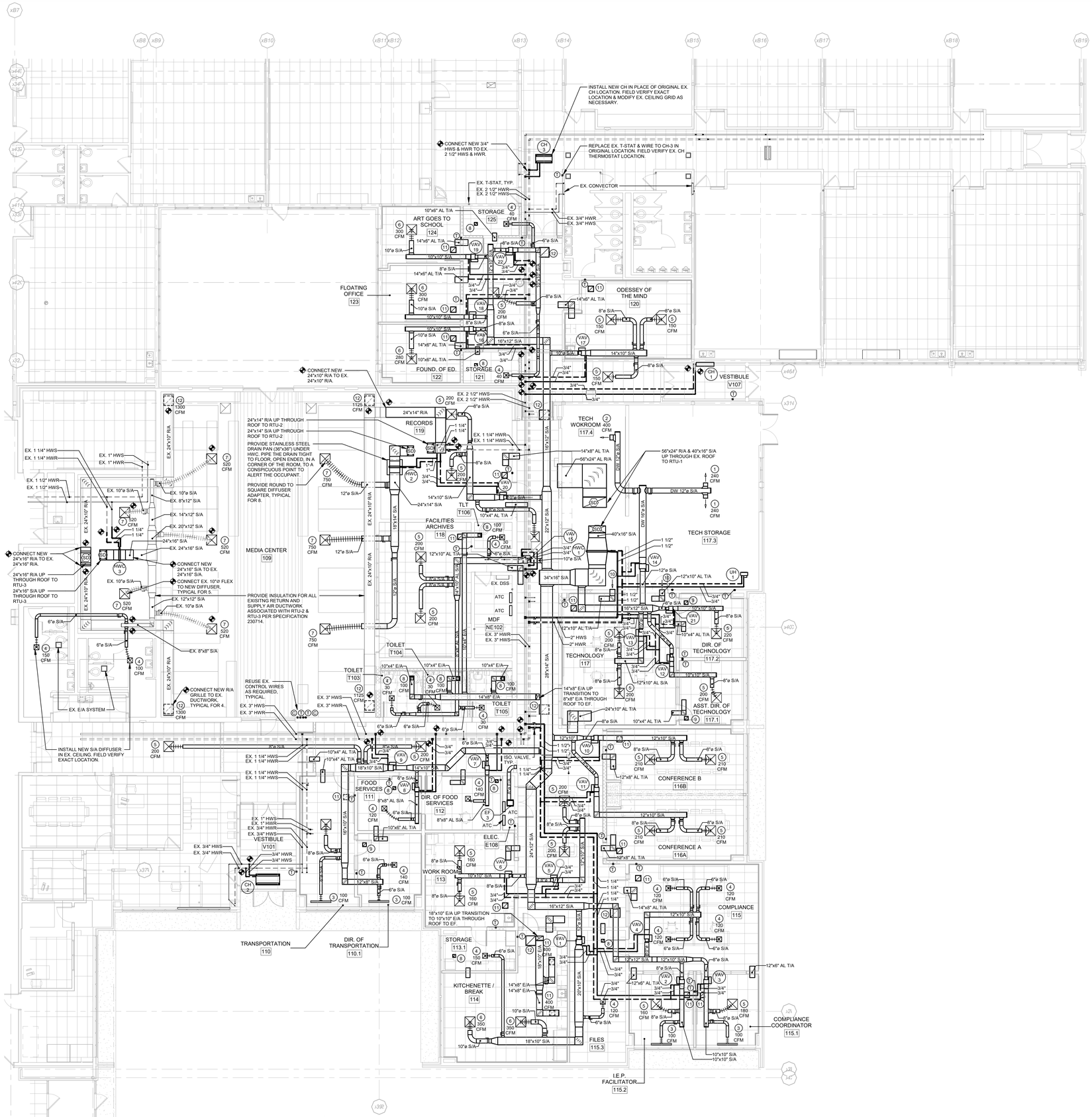


Drawing Title:
ROOF DEMOLITION PLAN - MECHANICAL

Drawing Number:
MD141



1 FIRST FLOOR PLAN

M101.1 SCALE: 1/8" = 1'-0"

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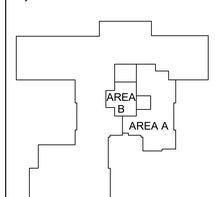

Drawing Title:

FIRST FLOOR PLAN - MECHANICAL

Drawing Number:

M101.1

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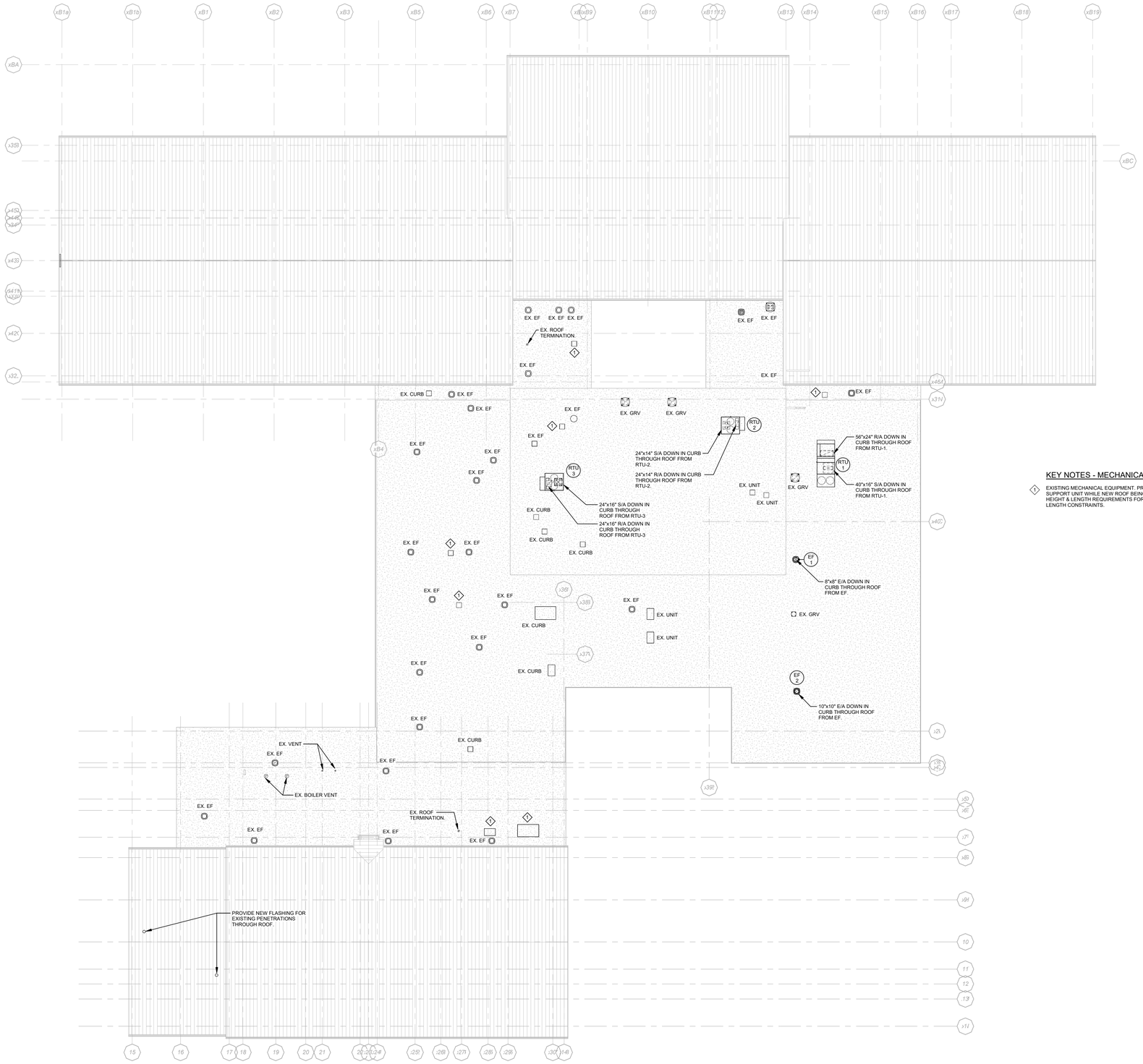

1 ROOF PLAN
M141 SCALE: 1/16" = 1'-0"

KEY NOTES - MECHANICAL

1. EXISTING MECHANICAL EQUIPMENT. PROVIDE NEW ROOF SUPPORT CURBS. TEMPORARILY SUPPORT UNIT WHILE NEW ROOF BEING INSTALLED AS NECESSARY. FIELD VERIFY & MATCH CURB HEIGHT & LENGTH REQUIREMENTS FOR EXISTING UNITS WITH PIPING & ELECTRICAL CONDUIT LENGTH CONSTRAINTS.

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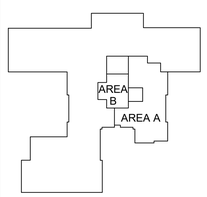

Drawing Title:
ROOF PLAN - MECHANICAL

Drawing Number:
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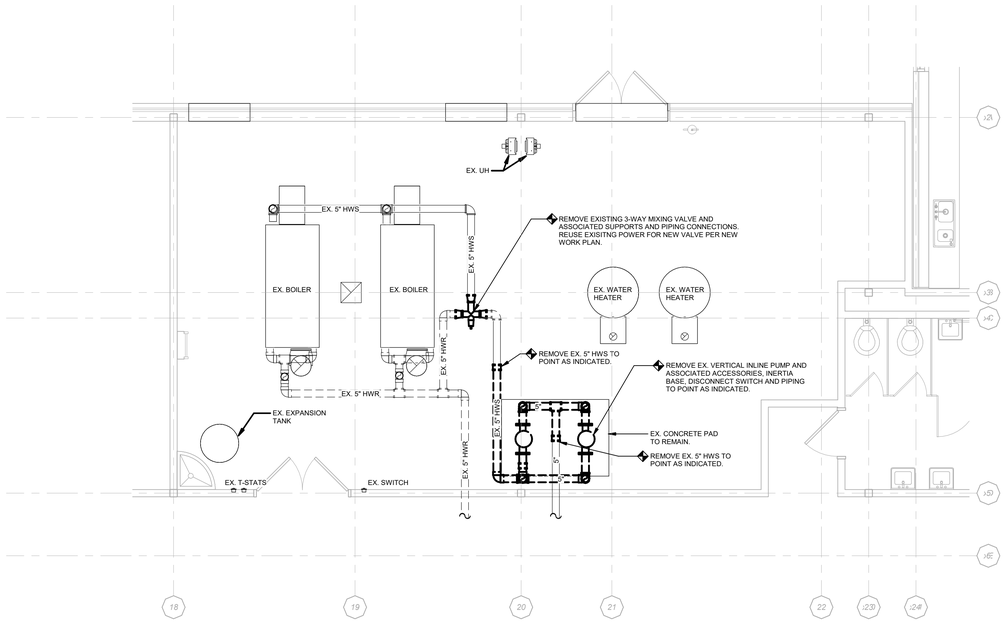
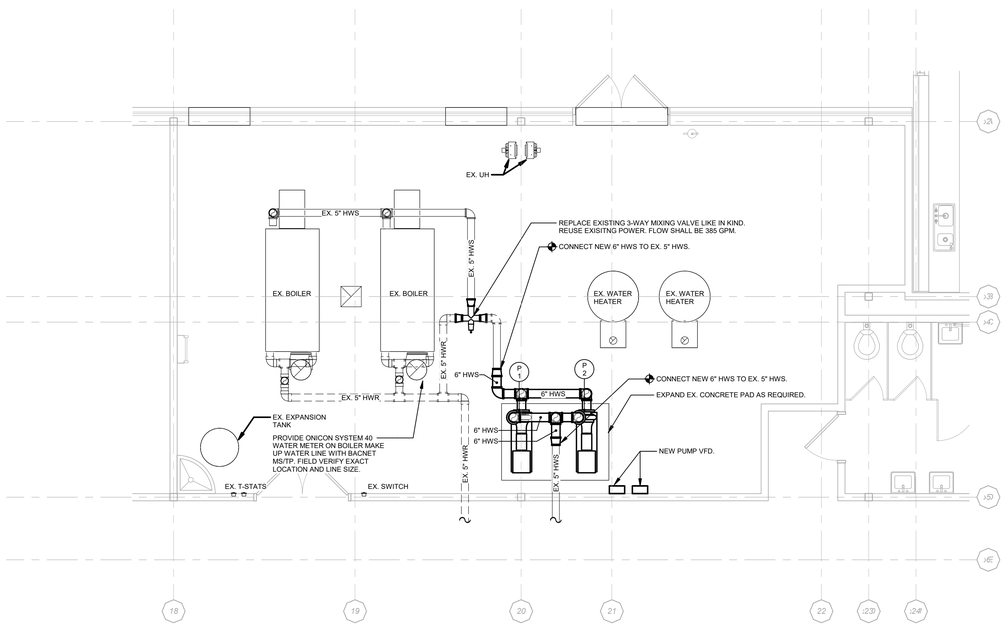


2 FIRST FLOOR DEMOLITION PLAN - BOILER ROOM

M401 SCALE: 1/4" = 1'-0"



1 FIRST FLOOR PLAN - BOILER ROOM

M401 SCALE: 1/4" = 1'-0"

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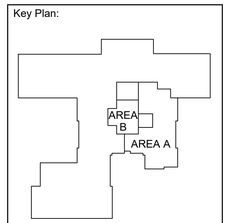
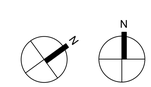


Drawing Title:

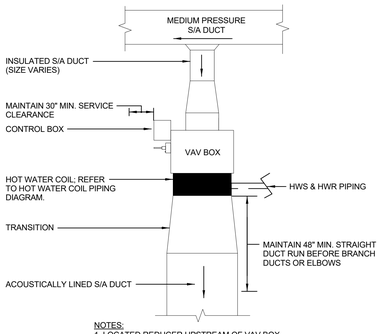
ENLARGED BOILER ROOM PLANS

Drawing Number:

M401

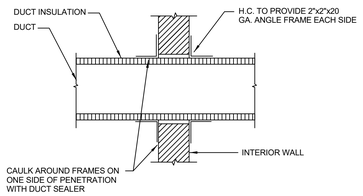


True Project



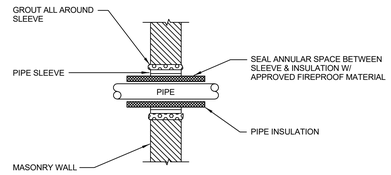
NOTES:
1. LOCATED REDUCER UPSTREAM OF VAV BOX MINIMUM OF 3 DUCT DIAMETERS.
2. PROVIDE SWING JOINTS ON HW BRANCH PIPES.

VAV BOX WITH HW COIL DETAIL
NO SCALE

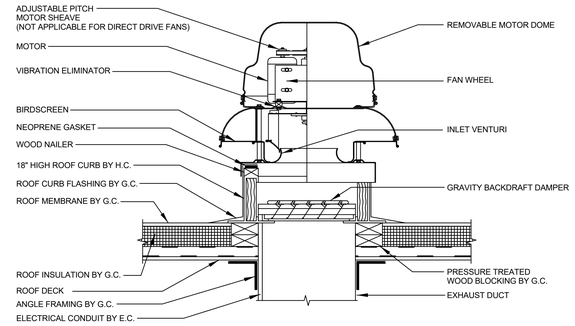


NOTE:
1. FOR PIPING PENETRATIONS OF INTERIOR WALLS, PROVIDE ESCUTHEONS ON EACH SIDE OF WALL.
2. WHERE THE DUCT PENETRATES A CORRIDOR WALL, THE CAULKING SHALL BE APPLIED ON THE CORRIDOR SIDE.

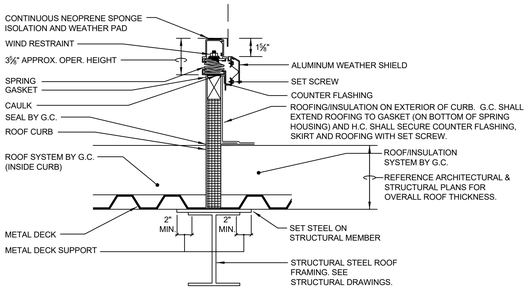
WALL PENETRATION DETAIL, DUCT
NO SCALE



PIPE SLEEVE DETAIL
NO SCALE

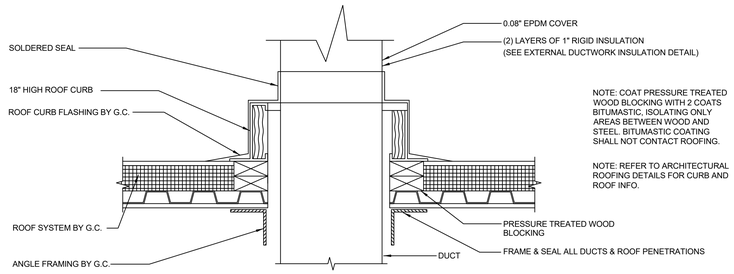


ROOF EXHAUST FAN DETAIL
NO SCALE
NOTES: THE DETAIL APPLIES TO BOTH DIRECT AND BELT DRIVEN FANS.



NOTES:
1. G.C. TO PROVIDE INSULATED ROOF DECK BENEATH ROOFTOP EQUIPMENT. H.C. SHALL COORDINATE.
2. H.C. TO COORDINATE ALL ROOF OPENINGS AND LOCATIONS PRIOR TO ROOF CONSTRUCTION.
3. CURB HEIGHT SHALL BE AS REQUIRED TO MAINTAIN 12" CLEAR BETWEEN THE FINISHED ROOF SURFACE AND BOTTOM OF EQUIPMENT. CURB SHALL EXTEND DOWN TO STRUCTURAL STEEL. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR SLOPING STEEL ELEVATION AND MATERIAL THICKNESS. H.C. SHALL PROVIDE ALL MISCELLANEOUS STEEL REQUIRED TO LEVEL CURB.

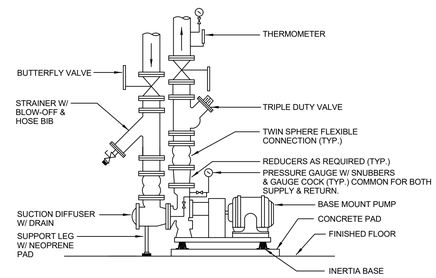
RTU SUPPORT CURB DETAIL
NO SCALE



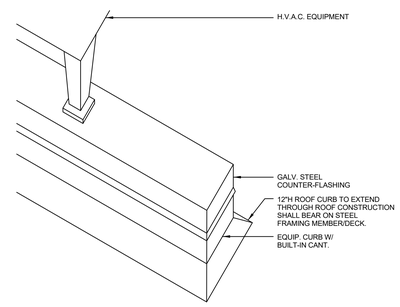
NOTE: COAT PRESSURE TREATED WOOD BLOCKING WITH 2 COATS BITUMASTIC, ISOLATING ONLY AREAS BETWEEN WOOD AND STEEL. BITUMASTIC COATING SHALL NOT CONTACT ROOFING.

NOTE: REFER TO ARCHITECTURAL ROOFING DETAILS FOR CURB AND ROOF INFO.

DUCT THRU ROOF PENETRATION DETAIL
NO SCALE

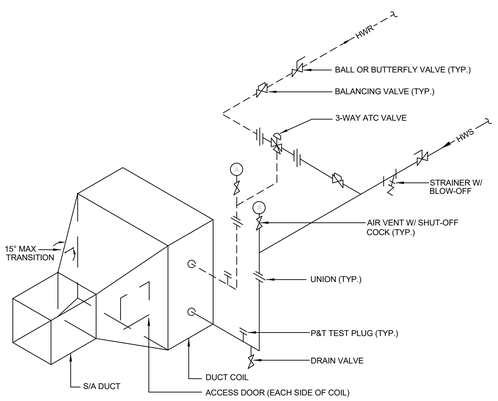


BASE MOUNT PUMP DETAIL (END SUCTION) W/ INERTIA BASE
NO SCALE



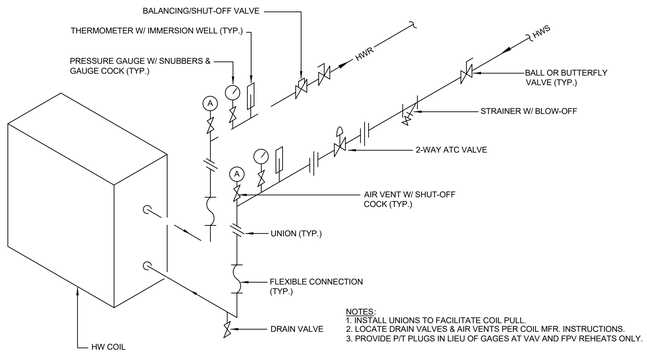
NOTES: TWO CURBS PER UNIT.

EQUIPMENT ROOF CURB DETAIL



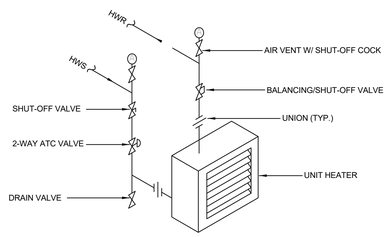
NOTES:
1. INSTALL UNIONS TO FACILITATE COIL PULL.
2. LOCATE DRAIN VALVES & AIR VENTS PER COIL MFR. INSTRUCTIONS.

HW DUCT COIL PIPING DIAGRAM, 3-WAY VALVE
NO SCALE

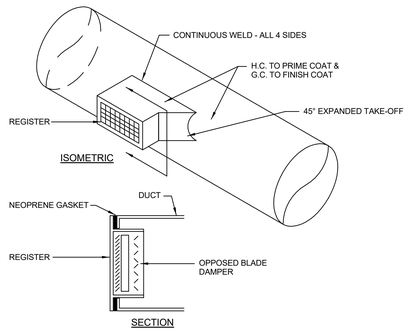


NOTES:
1. INSTALL UNIONS TO FACILITATE COIL PULL.
2. LOCATE DRAIN VALVES & AIR VENTS PER COIL MFR. INSTRUCTIONS.
3. PROVIDE P/T PLUGS IN LIEU OF GAGES AT VAV AND FPV REHEATS ONLY.

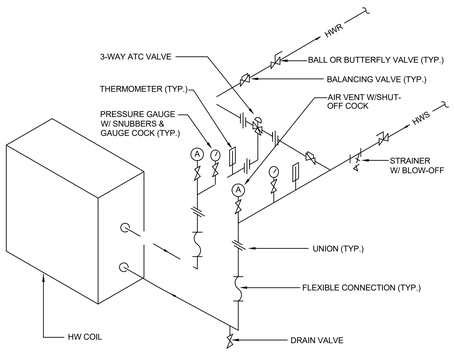
HW COIL PIPING DIAGRAM, 2-WAY VALVE
NO SCALE



HOT WATER UNIT HEATER PIPING DIAGRAM (VERTICAL)
NO SCALE



SPIRAL DUCT REGISTER DETAIL
NO SCALE



NOTES:
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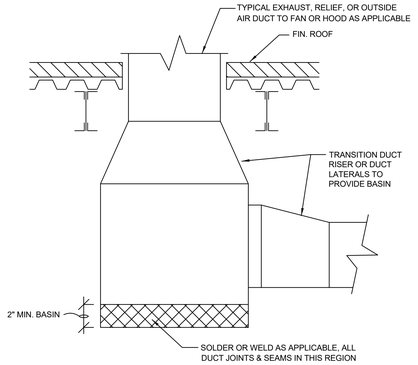
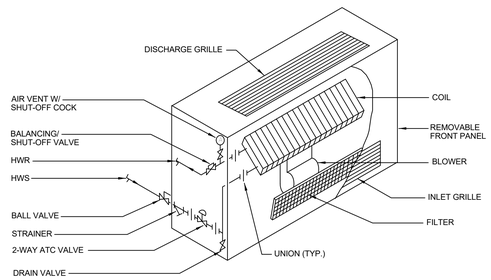
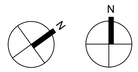
HW COIL PIPING DIAGRAM, 3-WAY VALVE
NO SCALE



DUCT THRU ROOF RISER DETAIL
NO SCALE



HW CABINET HEATER PIPING DIAGRAM, 2-WAY VALVE
NO SCALE



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Professional Seal:

Owner:
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Additions and Renovations to:
OJR DISTRICT SERVICES CENTER

ISSUED FOR:

NO.	DESCRIPTION	DATE
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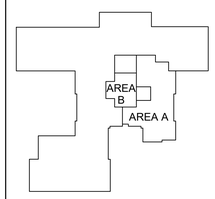
DATE: 07/24/2026

SG PROJECT NUMBER: 225180.00

Key Plan:



Drawing Title:
DETAILS - MECHANICAL

Drawing Number:
M501

RTU # — RTU = ROOFTOP UNIT, # = MARK

ROOFTOP UNIT SCHEDULE

TAG No.	AREA SERVED	MFR.	MODEL No.	TYPE	SUPPLY FAN CFM	SUPPLY FAN ESP"	SUPPLY FAN TSP"	SUPPLY FAN BHP	SUPPLY FAN HP	RELIEF FAN CFM	RELIEF FAN ESP"	RELIEF FAN TSP"	RELIEF FAN BHP	RELIEF FAN HP	COOLING COIL (DX) EAT DB°F	EAT WB°F	LAT DB°F	LAT WB°F	COIL CFM	SENSIBLE MBH	TOTAL MBH	EER	IEER	ELECTRIC MCA	MOCP	V/P/Hz	OA CFM DESIGN	OA CFM MAX	FILTERS	OPERATING WEIGHT LBS.	NOTES
RTU-1	OFFICES	DAIKIN	DPS018A	MULTI-ZONE - VAV	9,000	1.70	3.03	7.80	10.0	9,000	1.70	3.03	6.61	7.5	78.8	65.5	54.3	54.3	9,000	229.6	291.8	10.8	20.7	131.0	175	208/3/60	1,700	9,000	MERV13	3,800	1,2,3,4,5
RTU-2	MEDIA CENTER	DAIKIN	DPS010A	SINGLE ZONE	2,250	1.00	1.59	0.89	1.7	2,250	1.00	1.59	0.89	1.7	81.7	67.3	53.0	53.0	2,250	67.0	93.8	13.3	21.3	45.3	70	208/3/60	750	2,250	MERV13	2,100	1,2,3,4,5
RTU-3	MEDIA CENTER	DAIKIN	DPS010A	SINGLE ZONE	2,850	1.00	1.68	1.25	3.0	2,850	1.00	1.68	1.25	3.0	81.7	67.3	55.6	55.6	2,850	77.1	99.4	13.3	21.3	47.9	70	208/3/60	950	2,850	MERV13	2,100	1,2,3,4,5

NOTES:

1. UNIT SHALL CONSIST OF: RELIEF FAN W/ VFD, ECONOMIZER, RECIRCULATION DAMPER, DX COOLING COIL WITH MODULATING CAPACITY, & SUPPLY FAN W/ VFD.
2. PROVIDE SINGLE POINT CONNECTION WITH UNIT MOUNTED NON-FUSED DISCONNECT SWITCH.
3. PROVIDE TWO STAGE COOLING AND HOT GAS REHEAT CAPABLE OF 15°F DELTA (DEHUMIDIFICATION).
4. PROVIDE OUTSIDE AIRFLOW MONITORING STATION.
5. PROVIDE SEPARATE 115V POWER CONNECTION FOR CONVENIENCE OUTLET BY E.C.

EF # — EF = EXHAUST FAN, # = MARK

FAN SCHEDULE

TAG	AREA(S) SERVED	MFR	MODEL	CFM	ESP"	RPM	DRIVE	SONES	MOTOR HP/W	V/Hz/P	CONTROL	DAMPER	WEIGHT LBS	NOTES
EF-1	TLT 38,39,40,& 53	GREENHECK	G-095-VG	400	0.6	1,491	DIRECT	9.3	1/6 HP	115/1/60	ATC	BDD	33	1
EF-2	29 KITCHENETTE/BREAK	GREENHECK	G-120-VG	800	0.5	1,048	DIRECT	6.9	1/4 HP	115/1/60	ATC	BDD	46	1
EF-3	36 ELEC.	GREENHECK	SP-A200	100	0.3	663	DIRECT	1.4	19 W	115/1/60	T-STAT	BDD	26	1,2,3

NOTES:

1. PROVIDE DISCONNECT SWITCH.
2. PROVIDE WALL MOUNTED THERMOSTAT WITH AUTO/MANUAL CONTROLS.
3. PROVIDE ALUMINUM FAN WHEEL AND EXTERNAL SPEED CONTROLLER.

VAV # — VAV = VAV BOX, # = MARK

SHUT-OFF VAV BOX SCHEDULE

TAG No.	AREA SERVED	MFR.	MODEL No.	SYSTEM	CFM MIN.	CFM HTG.	CFM MAX.	INLET DIA."	INLET APD"	HEATING COIL (WATER) EAT DB°F	LAT DB°F	MBH	EWT°F	LWT°F	GPM	WPD'	APD"	ROWS	DISCHARGE NC LEVEL	RADIATED NC LEVEL	NOTES
VAV-1	STORAGE 56, FILES 23 & BREAK 29	ENVIRO-TEC	SDR	RTU-1	600	600	970	10	0.75	55.0	94.3	25.2	140.0	126.5	3.80	0.41	0.29	2	16	20	1,2,3
VAV-2	I.E.P. FACILITATOR 22	ENVIRO-TEC	SDR	RTU-1	240	240	260	5	0.75	55.0	90.0	10.2	140.0	121.2	1.10	0.26	0.08	2	21	16	1,2,3
VAV-3	COMPLIANCE COORD. 24	ENVIRO-TEC	SDR	RTU-1	240	240	280	5	0.75	55.0	95.4	10.8	140.0	123.1	1.30	0.30	0.09	2	21	16	1,2,3
VAV-4	COMPLIANCE 37	ENVIRO-TEC	SDR	RTU-1	300	300	480	10	0.75	55.0	92.9	12.8	140.0	121.4	1.40	0.10	0.09	2	<15	<15	1,2,3
VAV-5	CORRIDOR C1	ENVIRO-TEC	SDR	RTU-1	190	190	400	6	0.75	55.0	90.0	8.0	140.0	119.7	0.80	0.17	0.17	2	15	16	1,2,3
VAV-6	WORK ROOM 28	ENVIRO-TEC	SDR	RTU-1	220	220	320	5	0.75	55.0	91.4	9.4	140.0	120.9	1.00	0.23	0.12	2	22	19	1,2,3
VAV-7	FSMC DIRECTOR 35	ENVIRO-TEC	SDR	RTU-1	90	90	140	4	0.75	55.0	90.0	3.7	140.0	124.9	0.50	0.01	0.03	2	<15	<15	1,2,3
VAV-8	FSMC ADMIN ASST. 34	ENVIRO-TEC	SDR	RTU-1	90	90	120	4	0.75	55.0	90.0	3.7	140.0	124.9	0.50	0.01	0.02	2	<15	<15	1,2,3
VAV-9	CORRIDOR C1	ENVIRO-TEC	SDR	RTU-1	500	500	940	10	0.75	55.0	90.0	19.5	140.0	111.6	1.40	0.48	0.19	2	<15	<15	1,2,3
VAV-10	CONFERENCE 20	ENVIRO-TEC	SDR	RTU-1	250	250	420	6	0.75	55.0	92.8	10.7	140.0	121.9	1.20	0.28	0.18	2	15	16	1,2,3
VAV-11	CONFERENCE 21	ENVIRO-TEC	SDR	RTU-1	250	250	420	6	0.75	55.0	92.8	10.7	140.0	121.9	1.20	0.28	0.18	2	15	16	1,2,3
VAV-12	ASST. DIR. OF TECHNOLOGY 27	ENVIRO-TEC	SDR	RTU-1	150	150	200	4	0.75	55.0	96.0	7.4	140.0	123.2	0.90	0.20	0.05	2	22	19	1,2,3
VAV-13	TECH 32	ENVIRO-TEC	SDR	RTU-1	200	200	400	6	0.75	55.0	90.0	8.6	140.0	120.5	0.90	0.20	0.17	2	15	16	1,2,3
VAV-14	TECH STORAGE 30 & TECH WORKROOM 30.1	ENVIRO-TEC	SDR	RTU-1	600	600	880	12	0.75	55.0	95.8	27.1	140.0	122.2	3.10	0.35	0.15	2	<15	<15	1,2,3
VAV-15	STUDY SKILLS 51, TLT 38, 39, 40 & 53	ENVIRO-TEC	SDR	RTU-1	300	300	520	6	0.75	55.0	90.0	12.1	140.0	121.0	1.30	0.30	0.26	2	16	19	1,2,3
VAV-16	FOUND. OF ED. 43	ENVIRO-TEC	SDR	RTU-1	160	160	280	5	0.75	55.0	94.1	7.4	140.0	121.3	0.80	0.17	0.09	2	21	16	1,2,3
VAV-17	ODESSEY OF THE MIND 42	ENVIRO-TEC	SDR	RTU-1	160	160	450	6	0.75	55.0	90.0	6.3	140.0	127.1	1.00	0.04	0.20	2	16	19	1,2,3
VAV-18	FLOATING OFFICE 50	ENVIRO-TEC	SDR	RTU-1	200	200	300	5	0.75	55.0	91.7	9.0	140.0	121.8	1.00	0.23	0.11	2	22	19	1,2,3
VAV-19	ART GOES TO SCHOOL 41	ENVIRO-TEC	SDR	RTU-1	200	200	300	5	0.75	55.0	93.1	9.0	140.0	121.8	1.00	0.23	0.11	2	22	19	1,2,3
VAV-20	RECORDS 31	ENVIRO-TEC	SDR	RTU-1	300	300	600	8	0.75	55.0	90.0	12.6	140.0	118.7	1.20	0.30	0.24	2	<15	16	1,2,3
VAV-21	DIR. OF TECHNOLOGY 26	ENVIRO-TEC	SDR	RTU-1	200	200	220	4	0.75	55.0	94.4	9.3	140.0	122.9	1.10	0.25	0.06	2	22	19	1,2,3
VAV-22	STORAGE 47 & CORRIDOR C1	ENVIRO-TEC	SDR	RTU-1	160	160	280	5	0.75	55.0	90.0	6.3	140.0	127.1	1.00	0.04	0.09	2	21	16	1,2,3

NOTES:
1. TRANSITION DUCTWORK AS REQUIRED TO MATCH INLET AND OUTLET DIMENSIONS FOR EACH VAV.
2. INSTALL ALL UNITS FOLLOWING THE MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION AND CLEARANCES.
3. ATC CONTRACTOR SHALL PROVIDE 24V CIRCUIT DIRECTLY TO VAV BOX.

V CFM — # = TAG, V = VOLUME

GRILLE, REGISTER, & DIFFUSER SCHEDULE

TAG	MFR	MODEL	SIZE	PATTERN	TYPE	MOUNT	FINISH	MAX N.C.	NOTES
1	TITUS	300 RL	10x6	3/4" SPACING 2X DEFLECTION	S/A	SURFACE	BWE	25	1,2,3
2	TITUS	300 RL	12x8	3/4" SPACING 2X DEFLECTION	S/A	SURFACE	BWE	25	1,2,3
3	TITUS	ML-38	48x6	3/4" SPACING, 3 SLOTS 6" DIA NECK	S/A	SURFACE	BWE	25	1,4
4	TITUS	TDV	6x6	6" DIA. NECK 4-WAY	S/A	SURFACE	BWE	25	1
5	TITUS	TDV	12x12	8" DIA. NECK 4-WAY	S/A	SURFACE	BWE	25	1
6	TITUS	TDV	12x12	10" DIA. NECK 4-WAY	S/A	SURFACE	BWE	25	1
7	TITUS	TDV	18x18	4-WAY	S/A	SURFACE	BWE	25	1
8	TITUS	350 RL	6x6	3/4" SPACING 35° DEFLECTION	T/A, E/A	SURFACE	BWE	25	1
9	TITUS	350 RL	8x8	3/4" SPACING 35° DEFLECTION	T/A	SURFACE	BWE	25	1
10	TITUS	350 RL	12x10	3/4" SPACING 35° DEFLECTION	T/A	SURFACE	BWE	25	1
11	TITUS	350 RL	12x12	3/4" SPACING 35° DEFLECTION	T/A, E/A	SURFACE	BWE	25	1
12	TITUS	350 RL	22x22	3/4" SPACING 35° DEFLECTION	T/A, R/A	SURFACE	BWE	25	1

NOTES:

1. ALL GRILLES, REGISTERS AND DIFFUSERS SHALL BE FURNISHED WITH A FRAME STYLE SUITABLE FOR THE MATERIAL IT IS TO BE INSTALLED IN.
2. PROVIDE AN OPPOSED BLADE DAMPER TO MATCH GRILLE CONSTRUCTION MATERIAL.
3. PROVIDE A CUSTOM COLOR AND FINISH AS SELECTED BY THE ARCHITECT.
4. PROVIDE AN INSULATED SHEET METAL PLENUM TO MATCH DIFFUSER.

CH # — CH =CABINET HEATER, # = MARK

HOT WATER CABINET HEATER SCHEDULE

TAG No.	LOCATION	MFR	MODEL No.	MBH	CFM	GPM	WPD'	LAT°F	ROWS	HP	FAN SPEED	V/P/Hz	MOUNTING	NOTES
CH-1	V107 VESTIBULE	RITTLING	RC/WI-350-02	12.9	220	1.5	0.2	118.8	1	1/30	HIGH	120/1/60	FLOOR, INVERTED FLOW	1,2
CH-2	V101 VESTIBULE	RITTLING	RC/WI-350-06	22.2	620	2.3	0.9	92.5	1	1/15	HIGH	120/1/60	CEILING	1,2
CH-3	CORRIDOR	RITTLING	RC/WI-350-03	10.6	300	1.1	0.2	92.1	1	1/15	HIGH	120/1/60	CEILING	1,2

NOTES:

1. MBH RATED FOR 140° EWT, 120° LWT, 60° EAT.
2. PROVIDE EC MOTOR AND FACTORY MOUNTED DISCONNECT SWITCH.

UH # — UH = UNIT HEATER, # = MARK

HOT WATER UNIT HEATER SCHEDULE

TAG No.	LOCATION	MFR	MODEL No.	MBH	CFM	GPM	WPD'	LAT°F	HP	V/P/Hz	TYPE	NOTES
UH-1	30 TECH STORAGE	RITTLING	RH-24	11.6	350	1.2	0.4	95.2	1/30	120/1/60	HORIZONTAL	1,2

NOTES:

1. PROVIDE FACTORY MOUNTED DISCONNECT SWITCH.
2. PROVIDE HANGER BRACKETS FOR MOUNTING.

HWC # — HWC = HOT WATER DUCT COIL, # = MARK

HOT WATER DUCT COIL SCHEDULE

TAG No.	UNIT SERVED	MFR.	MODEL No.	SYSTEM	CFM	COIL SIZE WIDTH"	COIL SIZE HEIGHT"	HEATING COIL (WATER) EAT DB°F	LAT DB°F	MBH	EWT°F	LWT°F	GPM	WPD'	APD"	ROWS	NOTES
HWC-1	RTU-1	DAIKIN	5WQ1203B	MZ VAV	9,000	48	30	55.0	90.0	345.9	140.0	100.0	17.2	7.8	0.86	3	1
HWC-2	RTU-2	DAIKIN	5BD1002B	SZ VAV	2,250	24	18	46.0	91.2	111.2	140.0	100.0	5.4	5.3	0.38	2	1
HWC-3	RTU-3	DAIKIN	5BD1002B	SZ VAV	2,850	26	21	46.0	91.9	143.0	140.0	100.0	6.9	9.8	0.38	2	1

NOTES:

1. PROVIDE 3-WAY HOT WATER CONTROL VALVE.

P # — P = PUMP, # = MARK

PUMP SCHEDULE

TAG No.	MFR.	MODEL No.	TYPE	SYSTEM	G.P.M.	FT. HD.	RPM	MIN FLOW	DUTY HP	HP	V/P/Hz	EFFICIENCY	NOTES
P-1	B & G	e-1510 3EB	BASE MOUNTED END SUCTION	HOT WATER LEAD	390.0	90.0	1724	200.0	11.3	15.0	208/3/60	77.2%	1
P-2	B & G	e-1510 3EB	BASE MOUNTED END SUCTION	HOT WATER LAG	390.0	90.0	1724	200.0	11.3	15.0	208/3/60	77.2%	1

NOTES:

1. PROVIDE VARIABLE FREQUENCY DRIVE WITH DISCONNECT SWITCH.

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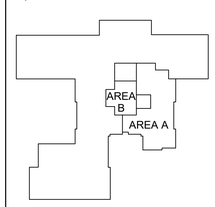
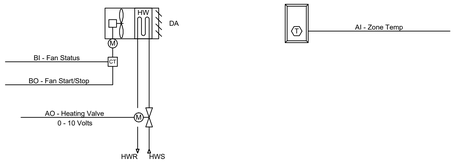
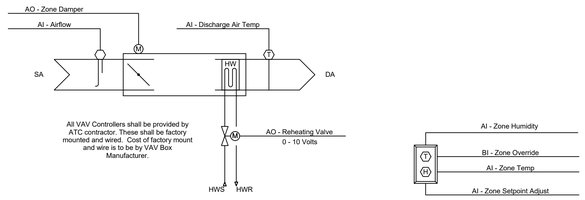


Drawing Title:
SCHEDULES - MECHANICAL

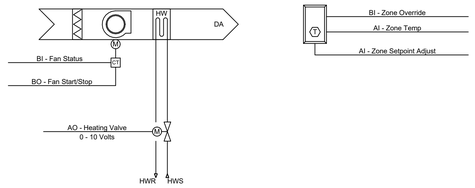
Drawing Number:
M601



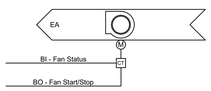
UNIT HEATER CONTROL SCHEMATIC



VAV CONTROL SCHEMATIC

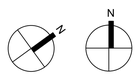


CABINET UNIT HEATER CONTROL SCHEMATIC



EXHAUST FAN (ATC) CONTROL SCHEMATIC

EXHAUST FAN (THERMOSTAT) CONTROL SCHEMATIC



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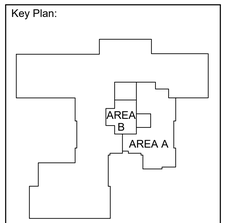

Drawing Title:

ATC SCHEMATICS - MECHANICAL

Drawing Number:

M701

PLUMBING MISCELLANEOUS LEGEND

NOTE: NOT ALL ITEMS USED THIS PROJECT

	FLOW ARROWS
	PIPE CAP
	CLEANOUT ABOVE CEILING
	CLEANOUT TO GRADE
	EXPANSION LOOPS
	PIPE CROSS
	PIPE DROP
	PIPE RISE
	PIPE STACK
	PIPE TEE DROP/RISE
	VENT THRU ROOF - TYPICAL
WCO	WALL CLEANOUT - TYPICAL

PLUMBING DRAIN LEGEND

NOTE: NOT ALL ITEMS USED THIS PROJECT

	FLOOR CLEANOUT
	FLOOR DRAIN - ROUND
	FLOOR DRAIN - SQUARE
	ROOF DRAIN - TYPICAL
	ROOF DRAIN - EMERGENCY

PLUMBING VALVE LEGEND

NOTE: NOT ALL ITEMS USED THIS PROJECT

	ANCHOR - PIPE
	BALL VALVE - TYPICAL
	BUTTERFLY VALVE
	CHECK VALVE
	CIRCUIT SETTER VALVE
	GATE VALVE
	GAUGE VALVE
	GLOBE VALVE
	GUIDE, PIPE
	HOSE BIBB
	MANUAL BALANCING VALVE
	NON FREEZE WALL HYDRANT
	OS&Y VALVE
	PRESSURE REDUCING VALVE
	RECIRCULATING PUMP
	REDUCE PRESSURE BACKFLOW PREVENTER
	SHOCK ABSORBER
	SOLENOID VALVE
	STRAINER
	TEMPERING VALVE
	THERMOMETER
	UNION, PIPE

PLUMBING TAG LEGEND

NOTE: NOT ALL ITEMS USED THIS PROJECT

	ADA SYMBOL
	CONNECT TO EXISTING
	DEMOLITION SYMBOL
NOTE/NOTE	DRAWING TAG
	INVERT ELEVATION TAG
	LIMIT OF DEMOLITION
#	NOTE TAG - CIRCLE
#	NOTE TAG - DEMOLITION
#	NOTE TAG - HEXAGONAL
#	NOTE TAG - RENOVATION
	NOTE TAG - SQUARE
#	NOTE TAG - TO BE REMOVED
FIXT	PLUMBING FIXTURE TAG
	TITLE REVISION TAG

PIPING SYSTEMS LEGEND

NOTE: NOT ALL ITEMS USED THIS PROJECT
(Refer to Project Specifications for Material specifications)

WATER & GAS PIPING	
140º H	Domestic Hot Water (140 Deg.F)
140º R	Domestic Hot Water Return (140 Deg.F)
C / CW	Domestic Cold Water
CA	Compressed Air
CAE	Combustion Air Exhaust
CAI	Combustion Air Intake
G	Gas
H / HW	Domestic Hot Water (110-120 deg.F)
R / HWR	Domestic Hot Water Return (110-120 deg.F)
T	Tempered Water (85-110 deg.F)

DRAIN & VENT PIPING	
CD	Condensate Drain
ERW	Emergency Rainwater
FM	Forced Main/Pumped Drain
SAN	Sanitary (Below Slab/Grade)
ST	Storm (Below Slab/Grade)
REP	Radon Evacuation Piping
RW	Rain Water (Above Slab/Grade)
V	Vent
W	Waste (Above Slab/Grade)

PLUMBING MISC. PIPING LEGEND

	FLOW ARROWS
	CONTINUATION
	PIPE CAP
	PIPE CROSS
	PIPE DROP
	PIPE RISE
	PIPE STACK
	PIPE TEE RISE
	PIPE TEE DROP

PLUMBING ABBREVIATION LEGEND

NOTE: NOT ALL ITEMS USED THIS PROJECT

AAC		Above Accessible Ceiling		G	Gas
AFF		Above Finished Floor		G.C.	General Contractor
AFG		Above Finished Grade		G.I.	Grease Interceptor
AB		Above		GSAN	Grease Sanitary
AD		Area Drain		GV	Gas Valve
Arch		Architecturals		GW	Grease Waste
ASAN		Acid Sanitary		H / HW	Hot Water
AV		Acid Vent		H.C.	Heating Contractor
AW		Acid Waste		HB	Hose Bibb
AWC		Automatic Washer Connection		HR	Hose Reel
BF		Below Floor		HWH	Hot Water Heater
BFG		Below Finished Grade		HWR / R	Hot Water Return
BFP		Backflow Preventer		I.E. / Inv.	Invert Elevation
BV		Balancing Valve		IG	Interruptible Gas
C / CW		Cold Water		IWH	Instantaneous Water Heater
C.I.		Cast Iron		JAN	Janitor
C.O.		Clean Out		KD	Kitchen Drain
CA		Compressed Air		KS	Kitchen Sanitary
CAE		Combustion Air Exhaust		KW	Kitchen Waste
CAI		Combustion Air Intake		LAV	Lavatory
CD		Condensate Drain		LPG	Liquid Petroleum Gas/Propane
CFH		Cubic Feet per Hour		LT	Laundry Tub
CLG.		Ceiling		MAX	Maximum
Conn.		Connection		MIN	Minimum
Coord.		Coordinate		MR	Mop Receptor
CTE		Connect To Existing		MTD	Mounted
CTG		Clean Out To Grade		MU	Make-up Water
CV		Circuit Vent		NFWH	Non-Freeze Wall Hydrant
CWV		Combination Waste & Vent		NG	Natural Gas
D		Drain		NT	Neutralizing Tank
DBF		Down Below Floor		OS	Oil Sanitary
DF		Drinking Fountain		P.C.	Plumbing Contractor
DFU		Drainage Fixture Units		PIV	Post Indicating Valve
DN		Down		PRV	Pressure Reducing Valve
DWG		Drawing		PSI	Pounds per Square Inch
DWH		Domestic Water Heater		PT	Plaster Trap
E.C.		Electrical Contractor		R	Return Piping (Hot Water)
E.T.R.		Existing To Remain		RCP	Re-circulating Pump
Ea.		Each		RD	Roof Drain
EEW		Emerg. Eyewash		RW	Rain Water
ERW / ERC		Emerg. Rainwater Conductor		RWC	Rainwater Conductor
ERD		Emerg. Roof Drain		RWS	Rain Water Stack
ESEW		Emerg. Shower / Eyewash		S.F./Sq. Ft.	Square Foot
ES		Emerg. Station		SA	Shock Absorber
ETV		Emerg. Tempering Valve		SAN	Sanitary
EWC		Electric Water Cooler		SAN I.E.	Sanitary Invert Elevation
Ext.		Exterior		ST	Storm
F.F.		Finished Floor		T	Tempered Water
F.P.C.		Fire Protection Contractor		T&P	Temperature and Pressure
FAI		Fresh Air Inlet		T.B.R.	To Be Removed
FCO		Floor Cleanout		TV	Tempering Valve
FD		Floor Drain		TYP.	Typical
FH		Fire Hydrant		UR	Urinal
FHC		Fire Hose Cabinet		V	Vent
Fin. Flr.		Finished Floor		V.I.F.	Verify In Field
Flr.		Floor		V.T.R.	Vent Through Roof
FM		Forced Main		VS	Vent Stack
FP		Fire Protection		W	Waste
FPZ		Fire Protection Zone		WF	Wash Fountains
FS		Floor Sink		WB	Wash Box (Toilet Rooms)
FSC		Food Service Contractor		WC	Water Closet
FVC		Fire Valve Cabinet		WCO	Wall Cleanout
				WSFU	Water Supply Fixture Units
				WSV	Waste Stack Vent

REFERENCED DESIGN STANDARDS

NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA 13	NATIONAL FIRE PROTECTION ASSOCIATION - STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS; 2016 EDITION OR MOST RECENT EDITION ADOPTED BY AUTHORITY HAVING JURISDICTION, INCLUDING ALL APPLICABLE AMENDMENTS AND SUPPLEMENTS.
NFPA 101	NATIONAL FIRE PROTECTION ASSOCIATION - CODE FOR SAFETY TO LIFE FROM FIRE IN BUILDINGS AND STRUCTURES; 2015 EDITION OR MOST RECENT EDITION ADOPTED BY AUTHORITY HAVING JURISDICTION, INCLUDING ALL APPLICABLE AMENDMENTS AND SUPPLEMENTS.

DESIGN CODE REFERENCES

PA - UCC	PENNSYLVANIA UNIFORM CONSTRUCTION CODE;
IBC	ICC - INTERNATIONAL BUILDING CODE; 2018
IFGC	ICC - INTERNATIONAL FUEL GAS CODE; 2018 (LPG REQUIREMENTS SUPERCEDED BY THE REQUIREMENTS OF PENNSYLVANIA'S PROPANE AND LIQUEFIED PETROLEUM GAS ACT)
IMC	ICC - INTERNATIONAL MECHANICAL CODE; 2018
IPC	ICC - INTERNATIONAL PLUMBING CODE; 2018
IFC	ICC - INTERNATIONAL FIRE CODE; 2018 (AS REFERENCED IN INTERNATIONAL BUILDING CODE)
IECC	ICC - INTERNATIONAL ENERGY CONSERVATION CODE; 2018

PLUMBING/FIRE PROTECTION PIPING SPECIALTIES LEGEND

	ANCHOR - PIPE
	BACKFLOW PREVENTER DOUBLE CHECK ASSEMBLY
	BACKFLOW PREVENTER REDUCED PRESSURE ZONE
	COMPRESSED AIR OUTLET
	EXPANSION FITTINGS
	GAS REGULATOR
	PRESSURE GAUGE W/VALVE
	GUIDE, PIPE
	HOSE BIBB
	MANUAL BALANCING VALVE
	NON FREEZE WALL HYDRANT
	PRESSURE REGULATOR
	RECIRCULATING PUMP
	SHOCK ABSORBER
	STRAINER
	TEMPERING VALVE
	THERMOMETER
	UNION, PIPE
	VALVE - BALL VALVE - NORMALLY OPEN
	VALVE - BALL VALVE - NORMALLY CLOSED
	VALVE - BUTTERFLY VALVE
	VALVE - CHECK VALVE
	VALVE - CIRCUIT SETTER VALVE
	VALVE - GAS COCK
	VALVE - GATE VALVE
	VALVE - GLOBE VALVE
	VALVE - OS&Y VALVE
	VALVE - SOLENOID VALVE
	VALVE IN VERTICAL PIPING

PLUMBING TAG LEGEND

	ADA SYMBOL
	CONNECT TO EXISTING
	DEMOLITION SYMBOL
# DWG#	CALLOUT TAG
???.#### ##	INVERT ELEVATION TAG
#	PLUMBING DRAWING NOTE TAG
#	DEMOLITION NOTE TAG
#	CONSTRUCTION REVISION ITEM TAG
#	CONSTRUCTION REVISION ITEM TAG
	ADDENDA REVISION ITEM TAG
FIXT	PLUMBING FIXTURE TAG

PLUMBING DRAIN & VENT LEGEND

	AIR GAP FITTING
	CLEANOUT - FLOOR CLEANOUT
	CLEANOUT - AB. CEILING CLEANOUT
WCO	CLEANOUT - WALL CLEANOUT
	EMERGENCY RAIN WATER OUTLET
	FLOOR DRAIN - FUNNEL
	FLOOR DRAIN - INDIRECT
	FLOOR DRAIN - ROUND
	FLOOR DRAIN - SQUARE
	FLOOR SINK - FULL GRATE
	FLOOR SINK - HALF GRATE
	FLOOR SINK - NO GRATE
	FLOOR SINK - ¼ GRATE
RD	ROOF DRAIN - TYPICAL
ERD	ROOF DRAIN - EMERGENCY
	VENT THRU ROOF - TYPICAL
	VENT THRU ROOF - ACID

PLUMBING DEMOLITION - GENERAL NOTES

1.	Existing piping which is removed from service, shall be removed in its entirety, as indicated by plans or required by scope of work. Verify exact location of all branch piping in field. removals shall not be limited to only the piping on the demolition plans. Verify all conditions and notify Architect / Engineer of any piping not shown on removals prior to any demolition. No demolition shown on this plan shall be performed until all required new piping, equipment, and etc. or necessary temporary connections, are installed and operational.
2.	Equipment and piping locations, quantity and conditions are approximate. Field verify all conditions, locations and quantities prior to bid. The demolition drawings are intended to convey the basics of the existing system components. Not all conditions and components have been identified on these drawings. All abandoned plumbing piping discovered during the work of this project shall be removed unless directed otherwise, Contractor shall verify extent of removals in field.
3.	In general where existing fixtures, equipment, pipe risers and drops etc. occur at / in existing walls to be removed, the existing fixture and related piping shall be removed and related piping capped or plugged at mains. Piping within walls that are to remain, shall be capped or plugged within the existing construction and abandoned. Sanitary piping shall be capped below the floor slab and abandoned unless noted otherwise. Patch any affected construction to match existing adjacent finished surface.
4.	All existing systems shall remain functional for as long as required, until replacement with new or reworked as required (see new work plans and phasing plans). Provide temporary connections to keep systems functioning properly as required. Some additional work may be required to be performed after hours, weekends, or during vacation breaks. All demolition work shall in no way inconvenience or interrupt the normal workday schedule for this facility (coordinate with Architect/Owner). Any demolition work done which affects the operation of this facility shall be replaced with new, repaired to original conditions or replaced by temporary means for however long as required at no cost to the Owner.
5.	Coordinate all demolition and new work. Demolition work shall be coordinated so that no existing systems are demolished out-of-phase or ahead of the new piping system replacement schedule. Provide necessary temporary system connections as required to maintain all existing systems until which time the new systems area installed (during its proper phase) or until new mains can be extended and reconnected to existing. Verify in field. All temporary connections required to maintain existing systems or to replace existing connection terminated out-of-phase shall be installed immediately and at no additional cost to the owner.
6.	Remove/Rework existing work, materials, etc. in the way of any new work, even if not indicated to be removed on the demolition plans.
7.	Protect existing materials, equipment and finishes that are to remain. any damage caused by this contractor shall be repaired/replaced as necessary by this contractor.
8.	Remove all items that are to remain but conflict with the installation of any new work. Re-install the same items (or new if damaged during this task) once new work is completed.
9.	P.C. is responsible for all plumbing demo work. In all areas where patching is required, the plumbing contractor shall patch the sub-surface where the new surface is to be finished by the General Contractor. This sub-surface must be provided so that it does not inhibit the installation of or affect the appearance of the new finish. If a new finish will not be provided by the General Contractor, The Plumbing Contractor is responsible to patch the surrounding finished surface to match existing. Patch existing openings from demolished piping in fire rated floors and walls as required to maintain fire rating . Refer to the specifications for additional information and coordinate all work in field.
10.	Existing materials scheduled to remain may be required to be temporarily removed, to allow installation of new materials, finishes, etc. These materials must be re-installed in their previous locations in equal or better condition.
11.	At all locations where existing below slab drainage piping is indicated to be demolished, the piping shall be permanently capped and abandoned below floor slab. Any existing abandoned mains below floor which are encountered and conflict with new underground utilities shall be cut off with ample space on both sides of new main and both ends of existing sealed permanently as noted above. All pipe caps/plugs of removed floor penetration piping shall be at elevation that allows patching and restoration of existing floor with new finish materials.(Coordinate with General Contractor in field)
12.	Remove existing ceiling tiles and grids as required to obtain access to ceiling space for the installation of new piping above ceiling. Store the existing ceiling tiles and grids in a safe location and re-install the same once his work is completed and inspected. Provide additional temporary hangers/cables required to support remaining ceiling structure, light fixtures, ceiling devices, etc. during this contractor's work. remove all temporary facilities once work is completed.
13.	Upon reactivation of existing systems following temporary shutdowns, P.C. shall verify proper functioning of all connected fixtures and equipment All system outlets, stops, and equipment shutoffs shall be returned to normal operating positions.

PLUMBING GENERAL NOTES

1.	Provide all labor, material, and equipment required for the completion and operation of all systems specified within the Division 22 specification sections and Plumbing drawings of work in accordance with all applicable codes including but not limited to PA Uniform Construction Code (PA-UCC), International Plumbing Code (IPC), ICC/ANSI A117.1 - Accessible and Usable Buildings and Facilities, International Building Code (IBC), International Fuel Gas Code (IFGC). Verify the latest adopted code editions and any additional adopted amendments with the Local Authority Having Jurisdiction(AHJ) Prior to beginning work.
2.	Provide a complete domestic water and waste/vent systems to all fixtures and or equipment requiring such. verify all rough-in locations and coordinate piping locations with work under other divisions of the specifications to avoid conflicts.
3.	Provide all plumbing fixtures and appliances complete with all required supplies, stops, valves, faucets, drains, traps, tail pieces, escutcheons, etc. All fixture traps shall be semi-cast style, removable and/or provided with access for cleanout. All stops and shutoff valves shall be quarter turn style and installed in a readily accessible locations.
4.	All plumbing fixtures, equipment, and materials shall be new and shall fit the space available. Verify dimensions at site are adequate prior to order of any materials.
5.	All piping, apparatus, equipment, etc. shall be properly supported, braced vertically and horizontally in accordance with applicable codes and as required to prevent excessive movement during seismic conditions.
6.	Do not scale the plans. See architectural plans for exact location of doors, windows, fixtures, wall dimensions, equipment, devices, etc. Coordinate exact locations of fixtures, equipment, specialties, and piping in field prior to rough-in.
7.	All valves, cleanouts, plumbing specialties, etc., shall be so located and installed to permit access for service without damage to building or finished materials. Where plumbing appurtenances are installed in inaccessible locations the P.C. shall furnish access panels to the G.C. for installation in finished wall or ceiling construction to permit access.
8.	Drainage and vent piping systems, and water distribution piping systems shall be tested with air or water in accordance with IPC Section 312. Coordinate and schedule all required testing with local A.H.J. prior to testing.
9.	Sanitize domestic water piping in accordance with IPC requirements, Local Health Department, and American Water Works Association's (AWWA) specifications. Provide Final reports and test results to Owner.
10.	All domestic water piping shall be hung level without pitch unless noted otherwise on plans.
11.	Protect copper piping against contact with dissimilar metals. All hangers, supports, anchors, and clips shall be copper or copper plated. Where copper piping is carried on iron trapeze hangers with other piping, satisfactory and permanent electrolytic isolation material shall prevent contact with other metals.
12.	Protect copper piping against contact with all masonry. Where copper is sleeved through masonry, copper or red brass sleeves shall be used. Where copper must be concealed in or against masonry partitions, contact shall be prevented by coating the copper heavily with asphaltic enamel and #15 asphalt saturated felt between the pipe and the masonry partition.
13.	Install piping in areas not subject to freezing temperatures. Water piping in exterior walls shall be installed on conditioned side of the wall insulation.
14.	Provide drain valves at all low points of domestic water piping systems for complete drainage and indicate location of same on record drawings.
15.	Provide vacuum breakers as required by code.
16.	Vent all plumbing fixture drains in accordance with all applicable codes.
17.	Provide sleeves at all wall/floor penetrations. Coordinate sleeves with GC for installation in wall/floor construction. In exposed areas provide chrome plated escutcheons at pipe penetrations. Seal all fire rated floor and wall penetrations with fire stopping materials as specified in the Div. 7 specifications. Where firestopping materials are not specified in Div. 7, provide firestopping materials U.L. listed for use and as manufactured by 3m or equal.
18.	Shutoff valves installed in domestic water piping systems shall be ball valve style. Ball valves shall be furnished with full port design, blowout proof stem, insulated extension handles, and stainless steel or chrome plated ball.
19.	Insulate all domestic water piping as noted in Div. 22 specifications and in accordance with minimum thickness specified in IECC Section C404 and Table C403.11.3. Insulate all vertical and horizontal above slab rainwater and emergency rainwater piping as noted in Div. 22 specifications.
20	Seal all fixtures to walls, floor, counters, etc. using a sanitary-type one-part, mildew resistant, silicone sealant. match sealant color to fixture color.
21.	Install all underground sanitary/storm piping at 2% slope unless noted otherwise).
22.	Install all above ground waste, rainwater, emergency rainwater piping at 2% slope (unless noted otherwise).
23.	Install all above ground vent piping at 1% slope (unless noted otherwise).
24.	Coordinate all equipment floor drain locations with the work of all other trades and with associated equipment in filed prior to rough in. Coordinate all general area floor drains with architectural plans and with G.C. in field prior to rough-in.
25.	Provide all floor drains with P-traps and trap seal protection. Provide mechanical trap seals as approved by IPC. Where required by local AHJ, provide trap primers and floor drains with threaded tap for primer connection.
26.	Install all horizontal and vertical piping in a neat arrangement in locations coordinated with the work of other trades. Vertical piping risers and drops to fixtures shall be coordinated and installed within chases, walls, soffits and coordinated with other mechanical / electrical feeds. All such locations are to be coordinated between all trades prior to installation. Locations requiring piping to be installed exposed in finished spaces shall be reviewed with the Owner Representative and Architect in field prior to installation.
27.	Include in this bid the cost for the removal of 5 feet of pipe insulation, fitting insulation, etc. on both sides of the point where a new domestic water (hot, cold, return), rainwater, emergency rainwater, etc. is made to the existing mains/branches throughout the building. Also include in this bid the cost associated with reinsulating the existing pipe/fittings/etc. once new connection is completed. Verify in field.
28.	Where Connection is made to existing below slab sanitary sewer mains/laterals, provide high pressure hydro-flushing (similar to service provided by Mr. Rooter Hydro Scrubber 4000 machine) from point of connection to building exterior. Notify owners representative at the time the process is started. Keep detailed drawings of work completed, indicating areas of difficulty or concern. Provide owners representative with complete and detailed drawings/documentation of this entire process once work is completed.

PLUMBING FIXTURE LIST - OWEN J. ROBERTS SCHOOL DISTRICT - DISTRICT STORAGE CENTER

**********Note: Refer to Specification Sections 22 1006 and 22 4000 for complete fixture specifications.**********

FIXTURE TAG	FIXTURE DESCRIPTION (Location)	FIXTURE SPECIFICATIONS	DRAIN ROUGH IN CONNECTION	WATER ROUGH IN CONNECTION HOT	WATER ROUGH IN CONNECTION COLD
FD-1	Floor Drain General Purpose (Toilet Rooms)	Floor Drain - Cast iron body with flashing clamp - 5" Nickel Bronze strainer - Deep Seal P-Trap w/ProSet Trap Guard seal protection. Basis of Design: Refer to Specification Section: 221106 for requirements.	Refer to Plans	----	----
LAV-1	Lavatory (Toilet Rooms)	**Basin:** - Wall hung, Vitreous China, ADA/ANSI A117.1 compliant Basis of Design: Refer to Specification Section: 224000 for requirements. **Faucet:** - Chrome Plated Cast Brass, Ecco Power Faucet - 0.5 gpm Vandal Resistant aerator. Basis of Design: Refer to Specification Section: 224000 for requirements. **Accessories:** - Mixing Valve: Below deck thermostatic tempering valve conforming to ASSE-1070 - Chrome plated 17 gage brass P-Trap with clean-out plug and arm with escutcheon. - Chrome plated, Lead Free, Commercial grade, quarter turn Loose Key Angle Stops - Flexible chrome plated copper supplies. - Lav Shield Drain and supply shield: Conforming to IAPMO standard PS94-2008 Section 3.5, ASTM E84, ANSI A117.1/ADA Compliant. Basis of Design: Refer to Specification Section: 224000 for requirements.	1-1/2"	1/2"	1/2"
SINK-1	Sink (Work Room 28)	**Basin:** Drop In - 18 ga. Stainless Steel - ADA/ANSI A117.1 compliant. Basis of Design: Refer to Specification Section: 224000 for requirements **Faucet:** - Chrome Plated Brass Gooseneck Faucet, 4" wrist blade handles, Vandal Resistant, 1.5gpm Aerator Basis of Design: Refer to Specification Section: 224000 for requirements **Accessories**: - Mixing Valve: Below deck thermostatic tempering valve conforming to ASSE-1070 - Chrome plated 17 gage brass P-Trap with clean-out plug and arm with escutcheon. - Chrome plated, Lead Free, Commercial grade, quarter turn Loose Key Angle Stops - Flexible chrome plated copper supplies. - Drain & Supply insulating covers: Conforming to IAPMO standard PS94-2008 Section 3.5, ASTM E84, Basis of Design: Refer to Specification Section: 224000 for requirements	2"	1/2"	1/2"
SINK-2	Sink (Kitchenette / Break 29)	**Basin:** Drop In - 18 ga. Stainless Steel - ADA/ANSI A117.1 compliant. Basis of Design: Refer to Specification Section: 224000 for requirements **Faucet:** - Chrome Plated Brass Gooseneck Faucet, 4" wrist blade handles, Vandal Resistant, 1.5gpm Aerator Basis of Design: Refer to Specification Section: 224000 for requirements **Accessories**: - Mixing Valve: Below deck thermostatic tempering valve conforming to ASSE-1070 - Chrome plated 17 gage brass P-Trap with clean-out plug and arm with escutcheon. - Chrome plated, tailpiece with dishwasher connection - Chrome plated, Lead Free, Commercial grade, quarter turn Loose Key Angle Stops - Flexible chrome plated copper supplies. - Drain & Supply insulating covers: Conforming to IAPMO standard PS94-2008 Section 3.5, ASTM E84, Basis of Design: Refer to Specification Section: 224000 for requirements	2"	1/2"	1/2"
WC-1	Water Closet Wall Hung (Toilet Rooms)	**Bowl:** - Elongated, Wall Hung - ICC/ANSI A117.1 & ASME A112.19 compliant. - Vitreous China, white w/evercleanantimicrobial finish Basis of Design: Refer to Specification Section: 224000 for requirements. **Carrier:** - Compatible closet flange, Fixture Bolts, Trim and Stud Protectors Basis of Design: Refer to Specification Section: 224000 for requirements. **Seat:** Anti-microbial plastic open front, white, with self sustaining check hinge Basis of Design: Refer to Specification Section: 224000 for requirements. **Flush Valve:** - 1.6 gpf, Exposed chrome plated cast brass,w/integral angle stop - Ecco Power Basis of Design: Refer to Specification Section: 224000 for requirements.	4"	----	1"

NOTES:
1. P.C. shall coordinate all "Accessible" fixture locations with Architectural plans prior to rough in.
2. Refer to Architectural drawings for all fixture mounting heights.
3. At all "Accessible" water closet compartments, installation of flush controls shall comply with ANSI 117.1. Flush controls shall be mounted on the wide/accessible side of toilet compartments, no more than 44 inches above the floor. Where sensor operated flush controls are provided, the rough in of the flush control shall be opposite the wide/accessible side of the compartment to permit conversion to manual controls installed in accordance with the above requirements.
4. Provide deep seal trap and Proset Trapguard trap seal protection in all floor drains. Refer to plans for outlet size/trap size.

True N Project

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Professional Seal:

Owner:
OWEN J. ROBERTS SCHOOL DISTRICT
Owner Address

Additions and Renovations to:
OJR DISTRICT SERVICES CENTER

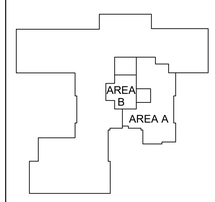
ISSUED FOR:

NO.	DESCRIPTION	DATE
	ISSUED FOR BIDDING	07/27/2026

DATE: 07/24/2026

SG PROJECT NUMBER: 225180.00

Key Plan:



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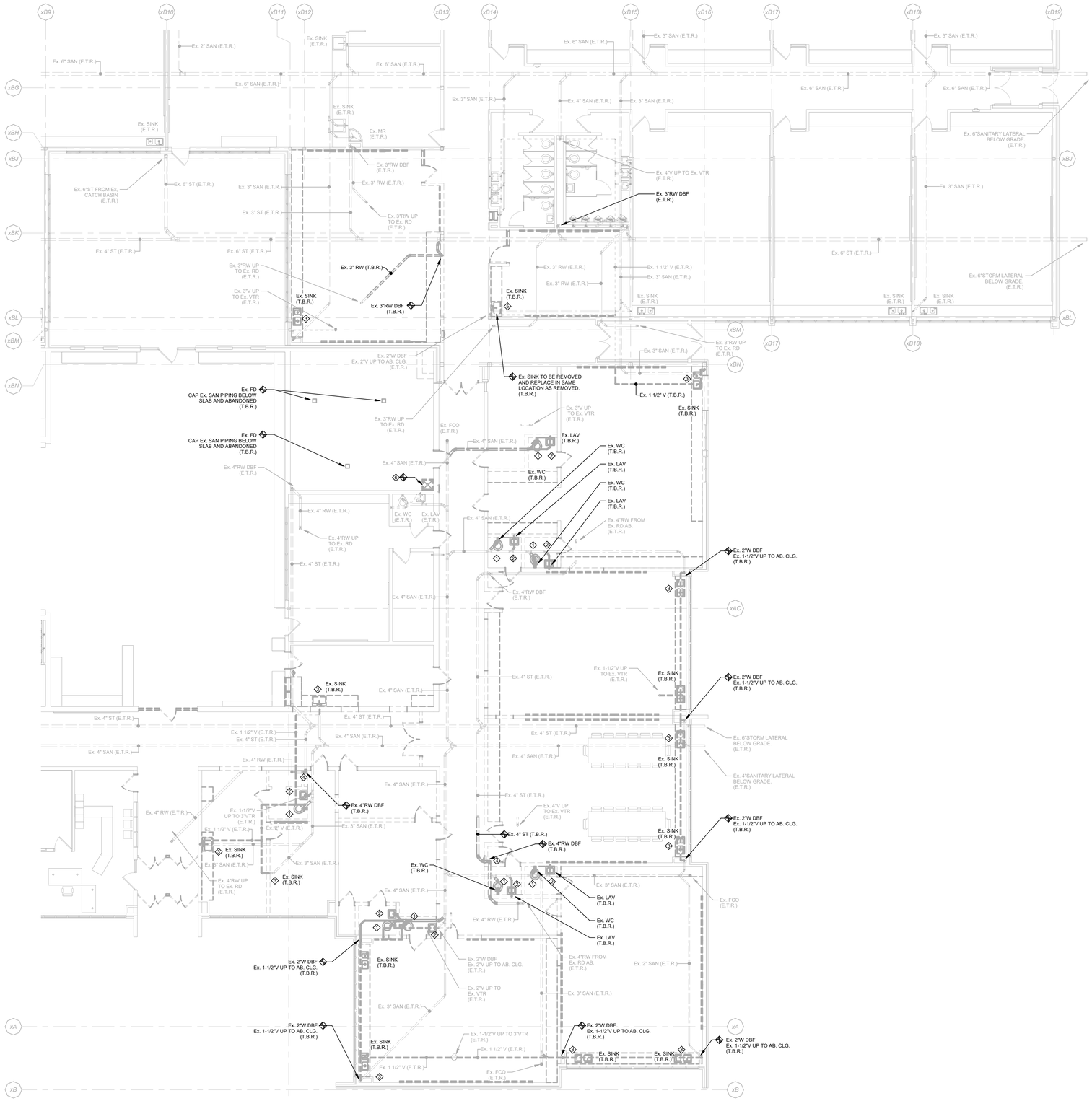
COVER SHEET - PLUMBING

Drawing Number:
P000



1 FIRST FLOOR - DEMOLITION PLAN - DRAIN & VENT PIPING

PD101.1 SCALE: 1/8" = 1'-0"

PLUMBING DEMOLITION NOTES:

1. DISCONNECT AND REMOVE EXISTING WATER CLOSET, FLUSH VALVE, ALL ACCESSORIES AND TRIM. CAP EXISTING WASTE PIPING BELOW FLOOR AND ABANDON REMOVE EXISTING COLD WATER SUPPLY BACK TO MAIN.
2. DISCONNECT AND REMOVE EXISTING LAVATORY, FAUCET, ALL ACCESSORIES AND TRIM. CAP EXISTING WASTE PIPING BELOW FLOOR AND ABANDON OR WITHIN WALL CONSTRUCTION. REMOVE EXISTING VENT PIPING IN IT'S ENTIRETY. REMOVE EXISTING HOT AND COLD WATER SUPPLY BACK TO MAIN.
3. DISCONNECT AND REMOVE EXISTING SINK, FAUCET, ALL ACCESSORIES AND TRIM. CAP EXISTING WASTE PIPING BELOW FLOOR AND ABANDON OR WITHIN WALL CONSTRUCTION. REMOVE EXISTING VENT PIPING IN IT'S ENTIRETY. REMOVE EXISTING HOT AND COLD WATER SUPPLY BACK TO MAIN.
4. EXISITING RAINWATER STACK TO BE REMOVED. CAP EXISTING STORM PIPING BELOW FLOOR AND ABANDONED. REFER TO NEW WORK PLAN FOR RELOCATION OF RAINWATER STACK
5. DISCONNECT AND REMOVE EXISTING SINK, FAUCET, ALL ACCESSORIES AND TRIM. NEW SINK WILL BE INSTALLED IN SAME LOCATION AS REMOVED. P.C. SHALL RECONNECT TO EXISTING DRAINAGE PIPING AS REQUIRED. P.C. SHALL CONNECT NEW H&C SUPPLIES TO EXISTING SUPPLY PIPING.
6. DISCONNECT AND REMOVE EXISTING MOP RECEPTOR, FAUCET, ALL ACCESSORIES AND TRIM. CAP EXISTING WASTE PIPING BELOW FLOOR AND ABANDON OR WITHIN WALL CONSTRUCTION. REMOVE EXISTING VENT PIPING IN IT'S ENTIRETY. REMOVE EXISTING HOT AND COLD WATER SUPPLY BACK TO MAIN.

True Project

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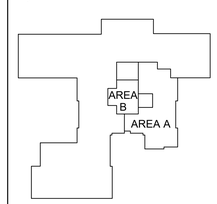
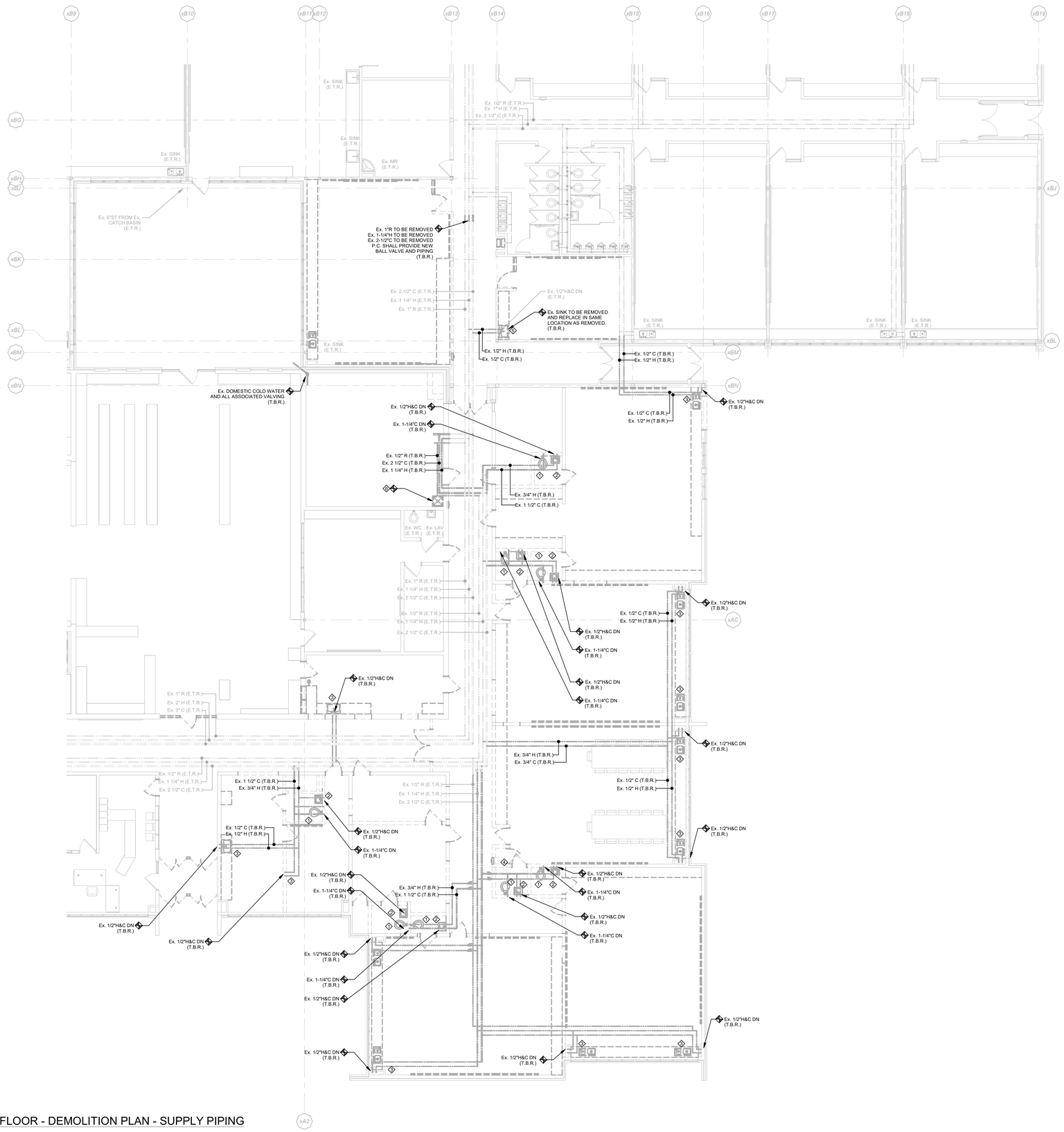


Drawing Title:
PARTAIL FIRST FLOOR DEMOLITION PLAN - DRAINAGE & VENT PIPING

Drawing Number:
PD101.1



1 FIRST FLOOR - DEMOLITION PLAN - SUPPLY PIPING

PD101.2 SCALE: 1/8" = 1'-0"

PLUMBING DEMOLITION NOTES:

1. DISCONNECT AND REMOVE EXISTING WATER CLOSET, FLUSH VALVE, ALL ACCESSORIES AND TRIM. CAP EXISTING WASTE PIPING BELOW FLOOR AND ABANDON REMOVE EXISTING COLD WATER SUPPLY BACK TO MAIN.
2. DISCONNECT AND REMOVE EXISTING LAVATORY, FAUCET, ALL ACCESSORIES AND TRIM. CAP EXISTING WASTE PIPING BELOW FLOOR AND ABANDON OR WITHIN WALL CONSTRUCTION. REMOVE EXISTING VENT PIPING IN IT'S ENTIRETY. REMOVE EXISTING HOT AND COLD WATER SUPPLY BACK TO MAIN.
3. DISCONNECT AND REMOVE EXISTING SINK, FAUCET, ALL ACCESSORIES AND TRIM. CAP EXISTING WASTE PIPING BELOW FLOOR AND ABANDON OR WITHIN WALL CONSTRUCTION. REMOVE EXISTING VENT PIPING IN IT'S ENTIRETY. REMOVE EXISTING HOT AND COLD WATER SUPPLY BACK TO MAIN.
4. EXISTING RAINWATER STACK TO BE REMOVED. CAP EXISTING STORM PIPING BELOW FLOOR AND ABANDONED. REFER TO NEW WORK PLAN FOR RELOCATION OF RAINWATER STACK.
5. DISCONNECT AND REMOVE EXISTING SINK, FAUCET, ALL ACCESSORIES AND TRIM. NEW SINK WILL BE INSTALLED IN SAME LOCATION AS REMOVED. P.C. SHALL RECONNECT TO EXISTING DRAINAGE PIPING AS REQUIRED. P.C. SHALL CONNECT NEW H&C SUPPLIES TO EXISTING SUPPLY PIPING.
6. DISCONNECT AND REMOVE EXISTING MOP RECEPTOR, FAUCET, ALL ACCESSORIES AND TRIM. CAP EXISTING WASTE PIPING BELOW FLOOR AND ABANDON OR WITHIN WALL CONSTRUCTION. REMOVE EXISTING VENT PIPING IN IT'S ENTIRETY. REMOVE EXISTING HOT AND COLD WATER SUPPLY BACK TO MAIN.

True Project

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Professional Seal:

Owner:
OWEN J. ROBERTS SCHOOL DISTRICT
Owner Address

Additions and Renovations to:
OJR DISTRICT SERVICES CENTER

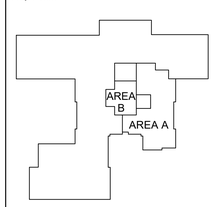
ISSUED FOR:

NO.	DESCRIPTION	DATE
	ISSUED FOR BIDDING	07/27/2026

DATE: 07/24/2026

SG PROJECT NUMBER: 225180.00

Key Plan:



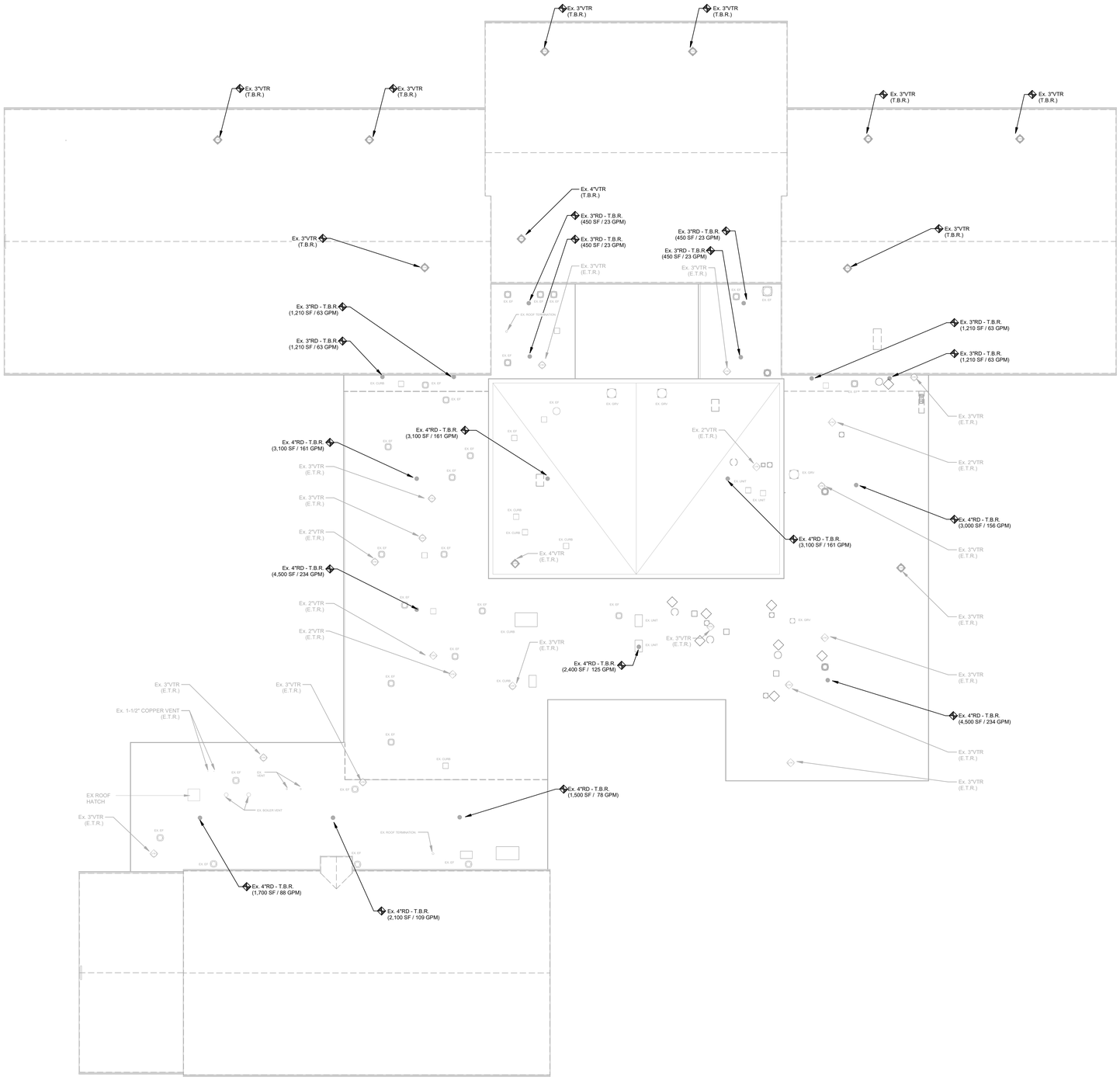
Drawing Title:
PARTAIL FIRST FLOOR DEMOLITION PLAN - SUPPLY PIPING

Drawing Number:
PD101.2

PLUMBING ROOF DEMOLITION DRAWING NOTES:

ALL ROOF DRAINS:
DISCONNECT AND REMOVE Ex. ROOF DRAIN AND ALL ACCESSORIES. REPLACE WITH NEW ROOF DRAIN IN SAME LOCATION AS REMOVED. RE-CONNECT TO Ex. RAINWATER PIPING IN CEILING SPACE BELOW.
(VERIFY SIZE OF RAINWATER PIPING IN FIELD).

ALL VENT THRU ROOFS:
DISCONNECT AND REMOVE Ex. ROOF DRAIN AND ALL ACCESSORIES. REPLACE WITH NEW VTR IN SAME LOCATION AS REMOVED. RE-CONNECT TO Ex. VENT PIPING IN CEILING SPACE BELOW.
(VERIFY SIZE OF VENT PIPING IN FIELD)



1 ROOF DEMOLITION PLAN - PLUMBING

PD141 SCALE: 1/16" = 1'-0"

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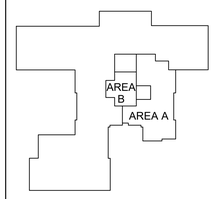
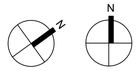


Drawing Title:

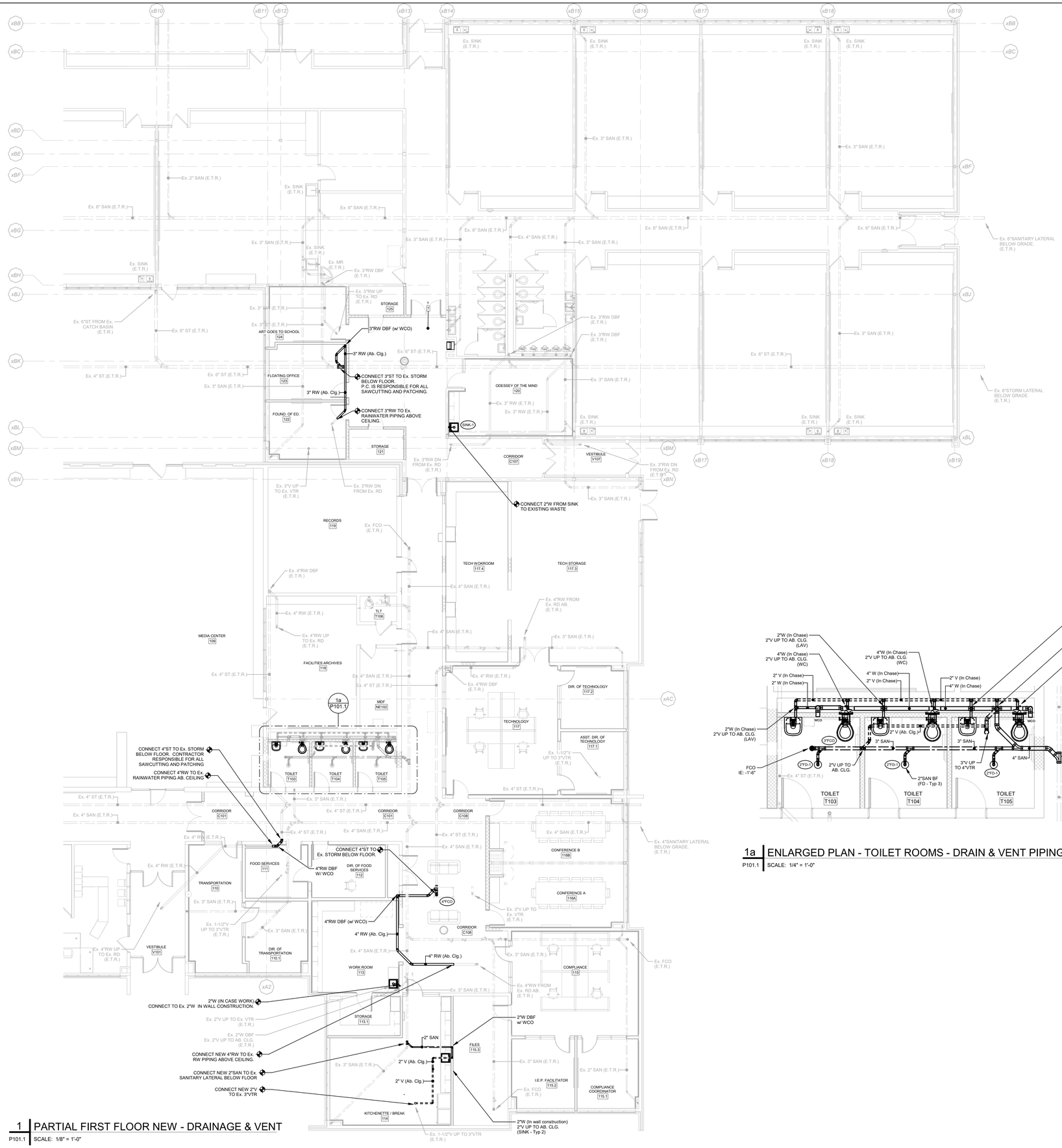
ROOF PLAN - DEMOLITION - PLUMBING

Drawing Number:

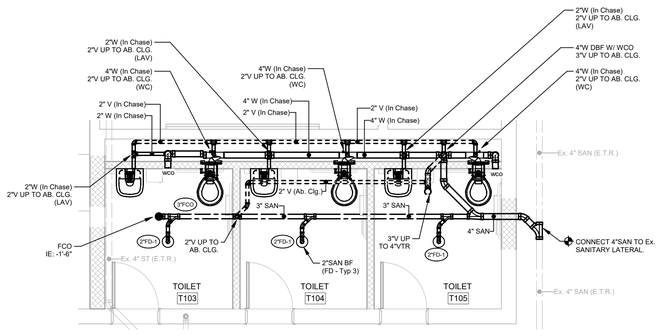
PD141



True Project



1 PARTIAL FIRST FLOOR NEW - DRAINAGE & VENT
P101.1 SCALE: 1/8" = 1'-0"



1a ENLARGED PLAN - TOILET ROOMS - DRAIN & VENT PIPING
P101.1 SCALE: 1/4" = 1'-0"

True Project

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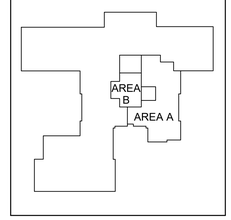
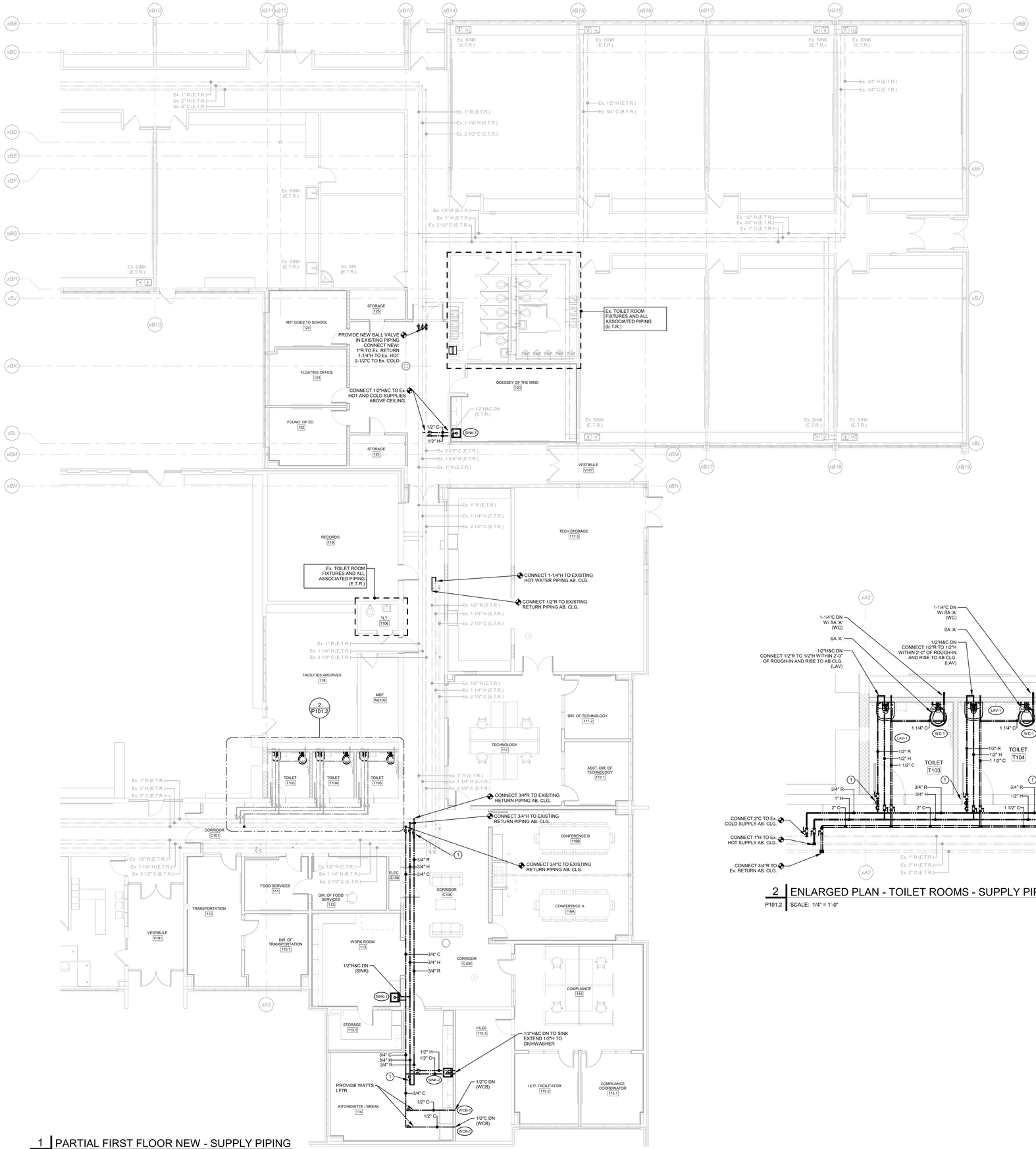
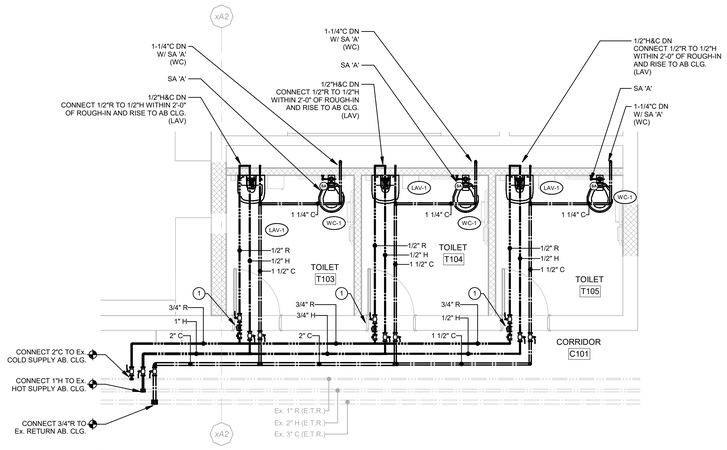


Drawing Title:
FIRST FLOOR PLAN - AREA A - DRAINAGE & VENT PIPING

Drawing Number:
P101.1



1 PARTIAL FIRST FLOOR NEW - SUPPLY PIPING
P101.2 SCALE: 1/8" = 1'-0"



2 ENLARGED PLAN - TOILET ROOMS - SUPPLY PIPING
P101.2 SCALE: 1/4" = 1'-0"

PLUMBING DRAWING NOTES:

1. PROVIDE BALL VALVE, CHECK VALVE AND CIRCUIT SETTER VALVE ABOVE ACCESSIBLE CEILING

True Project

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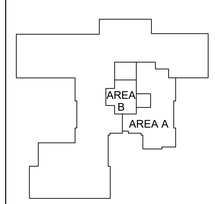
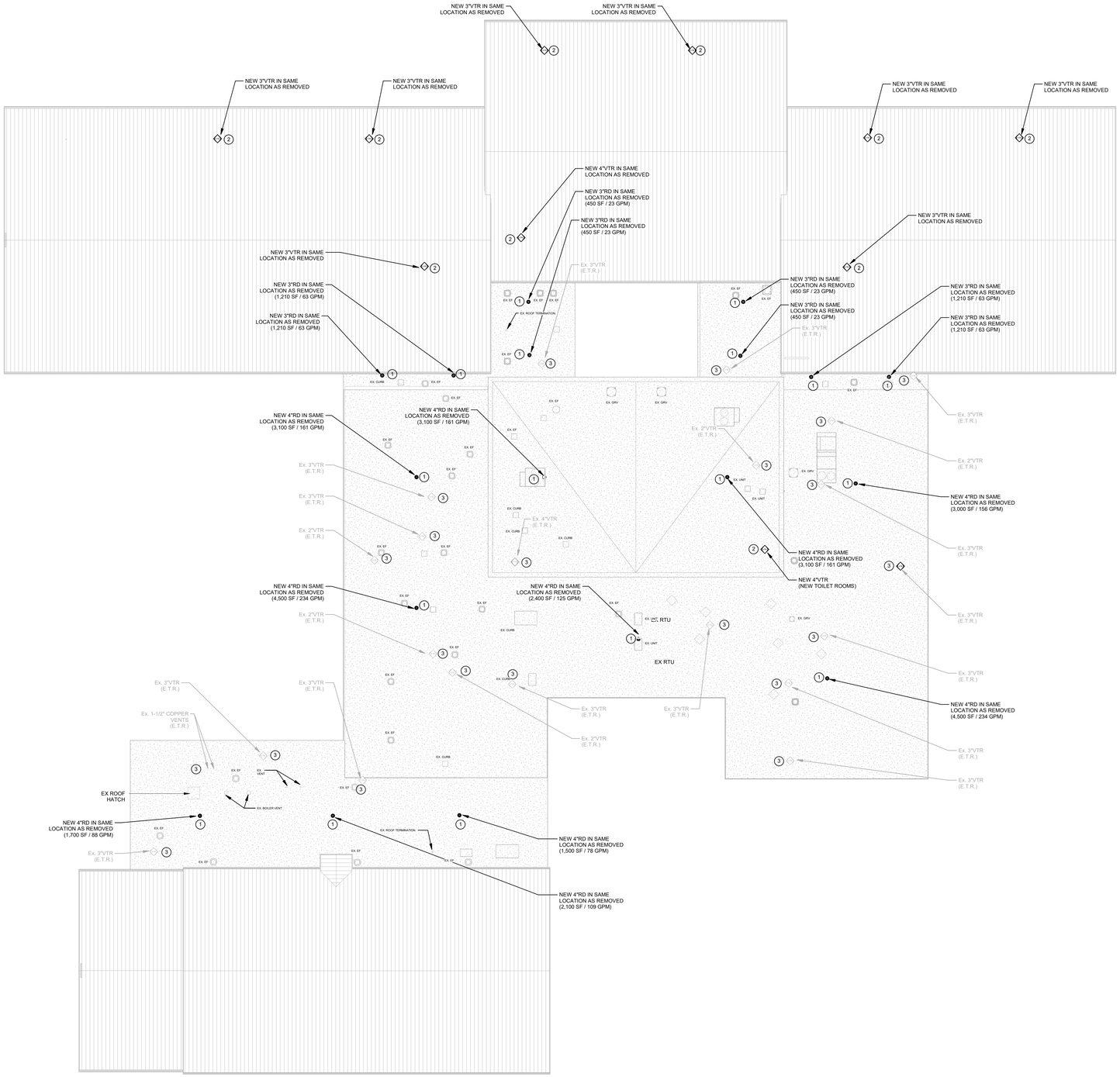


Drawing Title:
FIRST FLOOR PLAN - AREA A - SUPPLY PIPING

Drawing Number:
P101.2

PLUMBING ROOF DRAWING NOTES:

1. NEW ROOF DRAIN IN SAME LOCATION AS REMOVED. RE-CONNECT TO Ex. RAINWATER PIPING IN CEILING SPACE BELOW. (VERIFY SIZE OF RAINWATER PIPING IN FIELD). COORDINATE WITH ROOFING MANF. WARRANTY.
2. NEW VTR IN SAME LOCATION AS REMOVED. RE-CONNECT TO Ex. VENT PIPING IN CEILING SPACE BELOW. (VERIFY SIZE OF VENT PIPING IN FIELD) COORDINATE WITH ROOFING MANF. WARRANTY.
3. EXISTING VTR TO REMAIN. COORDINATE WITH NEW ROOF INSTALLATION AS REQUIRED AND PROVIDE ANY NEW FLASHING AS REQUIRED AS TO NOT VOID ANY ROOF WARRANTIES. COORDINATE WITH ROOFING CONTRACTOR.



1 ROOF PLAN - PLUMBING
P141 SCALE: 1/16" = 1'-0"

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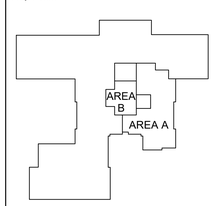
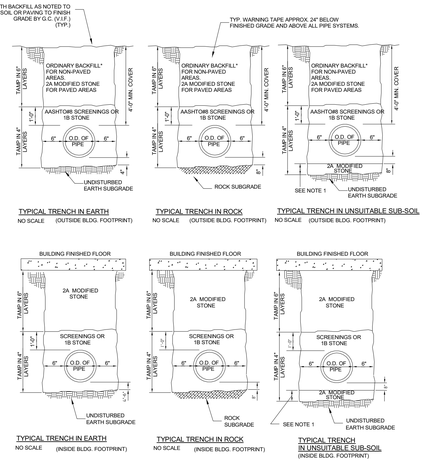
Key Plan:



True N Project

Drawing Title:
ROOF PLAN - PLUMBING

Drawing Number:
P141

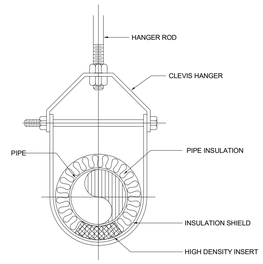


1. MINIMUM 12", EXACT DEPTH TO BE DETERMINED BY ARCHITECT / ENGINEER IN FIELD BASED ON EXISTING UNSUITABLE SUB-SOIL CONDITION.

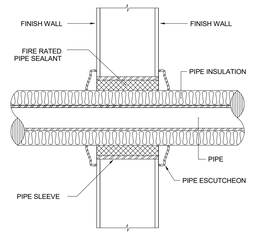
2. IT IS THE INTENT THAT THE MATERIALS EXCAVATED FROM THE TRENCHES IS NOT TO BE USED FOR TRENCH BACKFILL. REFER TO DETAILS ABOVE FOR APPROVED BACKFILL MATERIALS. RAW EXCAVATED MATERIALS MUST BE DISPOSED OF PROPERLY OFF SITE BY THIS CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

*WITHIN ROAD RIGHT-OF-WAYS, SURFACE RESTORATION, BACKFILL MATERIALS, AND METHODS SHALL MEET THE APPROPRIATE MUNICIPAL OR PENN-DOT REQUIREMENTS.

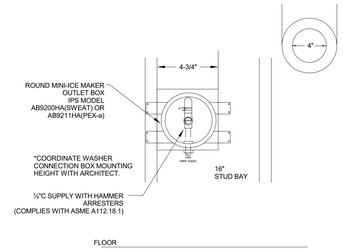
Typical Pipe Trench Details
Scale: None



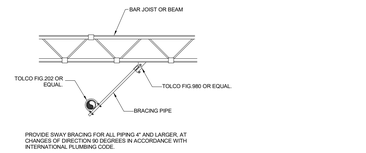
Typical Clevis Hanger Detail
Scale: None

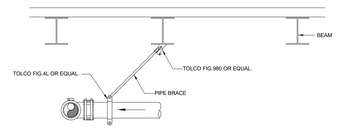


Pipe Sleeve Through Wall Detail
Scale: None

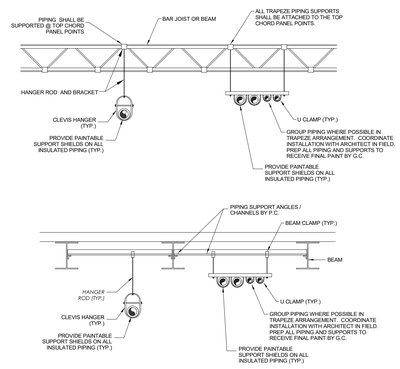


Refrigerator Outlet Box Installation Detail
Scale: None

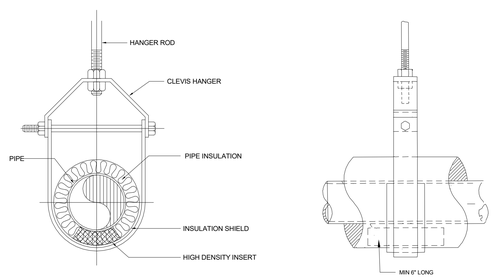




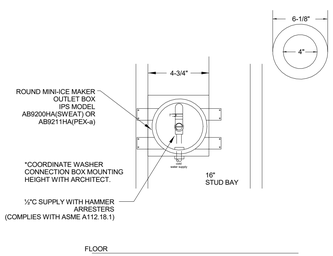
Typical Lateral Sway Brace Detail (Drainage Piping 4" and Larger)
Scale: None



Typical Piping Support Details
Scale: None

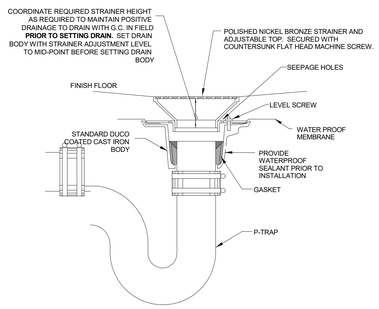


Typical Clevis Hanger Detail
Scale: None

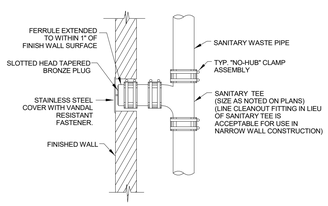


Refrigerator Outlet Box Installation Detail
Scale: None

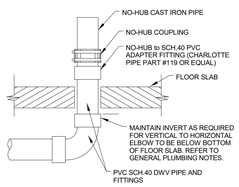
P.C. SHALL PROVIDE PRO SET TRAPGUARD SYSTEM WITHIN ALL FLOOR DRAINS UNLESS NOTED OTHERWISE



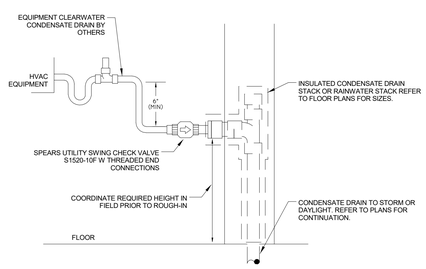
Typical Floor Drain Detail
Scale: None



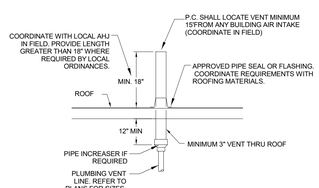
Typical Wall Cleanout Detail
Scale: None



Typical No-Hub Cast Iron Above Slab to PVC Below Slab Transition
Scale: None



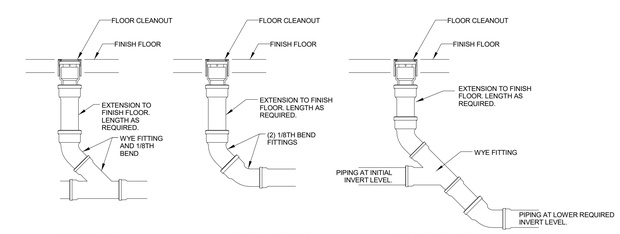
Condensate Drain Connection Detail
Scale: None



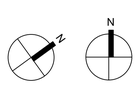
NOTES:

1. FLASHING AND SEALING OF VTR PENETRATIONS WITHIN NEW ROOF CONSTRUCTION SHALL BE PROVIDED BY THE ROOFING INSTALLER. P.C. SHALL COORDINATE ALL WORK AND INSTALLATION REQUIREMENTS WITH THE ROOFING INSTALLER IN FIELD.
1. FLASHING AND SEALING OF NEW VTR PENETRATIONS WITHIN EXISTING ROOF CONSTRUCTION SHALL BE PROVIDED BY THE P.C. AND SHALL BE PERFORMED IN ACCORDANCE WITH ALL REQUIREMENTS OF THE EXISTING ROOF MANUFACTURER TO MAINTAIN ANY EXISTING ROOF WARRANTY. COORDINATE ALL REQUIREMENTS WITH OWNER AND EXISTING ROOF MANUFACTURER IN FIELD.

Vent Thru Roof Detail
Scale: None



Typical Floor Cleanout Connection/Installation Details
Scale: None



True Project

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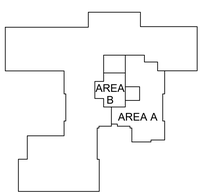

Drawing Title:
DETAILS - PLUMBING

Drawing Number:
P501

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LIGHTING LEGEND

NOTE: NOT ALL DEVICES SHOWN ON THE LEGEND ARE USED ON THIS PROJECT

	LED LIGHT FIXTURE (UPPER CASE LETTER DENOTES TYPE, LOWER CASE LETTER DENOTES SWITCHING GROUP)
	LED LINEAR SUSPENDED LIGHT FIXTURE (UPPER CASE LETTER DENOTES TYPE, LOWER CASE LETTER DENOTES SWITCHING GROUP)
	LED INDUSTRIAL LIGHT FIXTURE (UPPER CASE LETTER DENOTES TYPE, LOWER CASE LETTER DENOTES SWITCHING GROUP)
	INCANDESCENT, LED, FLUORESCENT OR H.I.D. LIGHT FIXTURE
	NORMAL-EMERGENCY LIGHT FIXTURE
	EMERGENCY ONLY LIGHT FIXTURE
	WALL SCONCE
	EXIT SIGN
	EMERGENCY BATTERY UNIT
	SINGLE/DOUBLE REMOTE HEAD
	POLE-MOUNTED SITE LIGHT FIXTURE
	SINGLE POLE SWITCH. UPPER CASE LETTER/NUMBER DENOTES TYPE. LOWER CASE LETTER DENOTES GROUP TO BE SWITCHED. - NO LETTER DENOTES SINGLE POLE SWITCH. - 3 - 3-WAY SWITCH. - 4 - 4-WAY SWITCH. - D - DIMMER SWITCH. - F - FAN SWITCH. - K - KEYED SWITCH. - LV - LOW VOLTAGE SWITCH. - M - MOMENTARY CONTACT SWITCH. - OR - OVERRIDE SWITCH. - P - PILOT LIGHT SWITCH. - T - CAPACITIVE TOUCH SCREEN LIGHTING CONTROL PANEL.
OS	OCCUPANCY SENSOR (CEILING-MOUNTED)
DS	DAYLIGHT SENSOR (CEILING-MOUNTED)
OS	OCCUPANCY SENSOR (WALL-MOUNTED). D INDICATES DIMMING.
DS	DUAL-TECH OCCUPANCY SENSOR (CORNER-MOUNTED)
OS	CORRIDOR OCCUPANCY SENSOR
US	ULTRASONIC 360° OCCUPANCY SENSOR (CEILING-MOUNTED)
BR / DTD	UL 1008 EMERGENCY LIGHTING RELAY
CP	OCCUPANCY SENSOR CONTROL/ POWER PACK
DM	DIGITAL LIGHTING ROOM CONTROLLER

WIRING DEVICES LEGEND

NOTE: NOT ALL DEVICES SHOWN ON THE LEGEND ARE USED ON THIS PROJECT

	DUPLEX / DOUBLE DUPLEX (QUADRUPLEX) CONVENIENCE OUTLET. LETTER DENOTES TYPE/MOUNTING HEIGHT - CT - COUNTERTOP HEIGHT - DC - OUTLET SUSPENDED FROM DROP CORD - EM - LIFE-SAFETY OUTLET (PROVIDE RED RECEPTACLE) - GFI - GROUND FAULT INTERRUPTING - ISO - ISOLATED GROUND - TB - TABLETOP IN-SURFACE RECEPTACLE WITH INTEGRAL USB 'A'. PROVIDE LEGRAND CAT #DQFF20UBK. COORDINATE MOUNTING WITH COUNTERTOP. - USB - INTEGRAL USB 'A' AND USB 'C' CHARGING OUTLETS - WP - WEATHER PROOF RECEPTACLE COVER
	DUPLEX / DOUBLE DUPLEX (QUADRUPLEX) EQUIPMENT BRANCH OUTLET (PROVIDE YELLOW RECEPTACLE)
	DUPLEX / DOUBLE DUPLEX (QUADRUPLEX) SWITCHED BRANCH OUTLET (PROVIDE GREEN RECEPTACLE)
	SPECIAL PURPOSE OUTLET
R	RANGE OUTLET, 50AMP 3 WIRE
	BLANK PLATE
PL	DIGITAL PLUG LOAD CONTROLLER
SB	SMARTBOARD
PP	PROJECTOR PLATE
	FLOOR OUTLET/PEDESTAL - DUPLEX RECEPTACLE, COMPUTER JACK, AND AV INPUTS. REFER TO FLOOR PLANS FOR ADDITIONAL INFORMATION.
CR	CORD REEL WITH 20A 120V OUTLET
E E	EXISTING DEVICES TO REMAIN

LOW VOLTAGE DEVICES LEGEND

NOTE: NOT ALL DEVICES SHOWN ON THE LEGEND ARE USED ON THIS PROJECT

	TELEPHONE OUTLET (POTS LINE)
	TELEPHONE OUTLET (PROVIDE (1) DATA DROP)
W	WALL-MOUNTED TELEPHONE OUTLET (PROVIDE (1) DATA DROP AND MOUNTING PLATE)
#	COMPUTER OUTLET (NUMBER DENOTES NUMBER OF JACKS. (WHERE NO NUMBER IS SHOWN, PROVIDE TWO JACKS MINIMUM.)
V	VAPE DETECTOR. PROVIDE (1) DATA DROP FOR EACH LOCATION INDICATED.
	WIRELESS ACCESS POINT. PROVIDE TWO DATA DROPS IN CEILING OR ON WALL FOR EACH LOCATION INDICATED. FIELD COORDINATE TERMINATION/ PLATE TYPE WITH OWNER PROVIDED DEVICE REQUIREMENTS.
	A/V INPUT/OUTPUT JACK
F	FIBER CONNECTION
	TELEVISION CABLE OUTLET
	CLOCK, SPEAKER UNIT
#	WALL MOUNTED CLOCK. 2 INDICATES DOUBLE FACE CLOCK.
M	MICROPHONE JACK - SOUND SYSTEM
S	PUBLIC ADDRESS/INTERCOM SPEAKER (FLUSH, CEILING-MOUNTED)
S	PUBLIC ADDRESS/INTERCOM SPEAKER (SURFACE, CEILING-MOUNTED)
	PUBLIC ADDRESS/INTERCOM SPEAKER (SURFACE, WALL-MOUNTED)
	PUBLIC ADDRESS/INTERCOM SPEAKER (FLUSH, WALL-MOUNTED)
V	PUBLIC ADDRESS/INTERCOM VOLUME CONTROL
C	PUBLIC ADDRESS/INTERCOM CALL/TALKBACK BUTTON

FIRE ALARM LEGEND

NOTE: NOT ALL DEVICES SHOWN ON THE LEGEND ARE USED ON THIS PROJECT

F	FIRE ALARM PULL STATION
F #	WALL-MOUNTED AUDIOVISUAL FIRE ALARM DEVICE. # INDICATES CANDELA RATING. WHERE NO NUMBER IS INDICATED, PROVIDE DEVICE WITH 15 CANDELA RATING.
VO F #	WALL-MOUNTED VISUAL-ONLY FIRE ALARM DEVICE. # INDICATES CANDELA RATING. WHERE NO NUMBER IS INDICATED, PROVIDE DEVICE WITH 15 CANDELA RATING.
F	FIRE ALARM BELL
F #	CEILING-MOUNTED AUDIOVISUAL FIRE ALARM DEVICE. # INDICATES CANDELA RATING. WHERE NO NUMBER IS INDICATED, PROVIDE DEVICE WITH 15 CANDELA RATING.
VO F #	CEILING-MOUNTED VISUAL-ONLY FIRE ALARM DEVICE. # INDICATES CANDELA RATING. WHERE NO NUMBER IS INDICATED, PROVIDE DEVICE WITH 15 CANDELA RATING.
A	CEILING-MOUNTED AUDIO ONLY FIRE ALARM DEVICE.
	SMOKE DETECTOR
H	HEAT DETECTOR
D	DUCT SMOKE DETECTOR
RTS	DUCT SMOKE DETECTOR REMOTE TEST STATION
B T/R	BEAM SMOKE DETECTOR. T INDICATES TRANSMITTER. R INDICATES RECEIVER
CO	CARBON MONOXIDE DETECTOR
FS	SPRINKLER SYSTEM FLOW SWITCH (BY OTHERS)
TS	SPRINKLER SYSTEM TAMPER SWITCH (BY OTHERS)
PS	SPRINKLER SYSTEM PRESSURE SWITCH (BY OTHERS)
RAC	ELEVATOR EMERGENCY TWO-WAY COMMUNICATION REMOTE CALL STATION
RAM	ELEVATOR EMERGENCY TWO-WAY COMMUNICATION MASTER STATION/ANNUNCIATOR PANEL
D	DOOR HOLDER - FIRE ALARM SYSTEM
IAM	INDIVIDUAL ADDRESSABLE MODULE - FIRE ALARM SYSTEM
ZAM	ZONE ADDRESSABLE MODULE - FIRE ALARM SYSTEM
CZAM	CONTROL RELAY ZONE ADDRESSABLE MODULE - F/A SYSTEM
KB	KNOX BOX. PROVIDE FIRE ALARM MONITORING SUPERVISORY RELAY.

SECURITY LEGEND

NOTE: NOT ALL DEVICES SHOWN ON THE LEGEND ARE USED ON THIS PROJECT

I	INTERCOM DOOR STATION
IM	INTERCOM MASTER STATION
	MOTION DETECTOR - SECURITY SYSTEM
D	CEILING MOUNTED, 360° MOTION DETECTOR
	DOOR MAGNET CONTACT - SECURITY SYSTEM
	SECURITY CAMERA
B	ALARM HORN - SECURITY SYSTEM
ES	ELECTRIC DOOR STRIKE
REX	REQUEST-TO-EXIT DETECTOR
CR	CARD READER
K	KEY PAD
P	PUSH PLATE
	LOCAL ALARM FOR DOOR PROP - PROVIDE LOCAL AUDIBLE ALARM AND ALL NECESSARY LOW VOLTAGE WIRING AND APPURTENANCES.

CONTROL EQUIPMENT LEGEND

NOTE: NOT ALL DEVICES SHOWN ON THE LEGEND ARE USED ON THIS PROJECT

	MOTOR
	DISCONNECT SWITCH (FUSED OR NON-FUSED AS INDICATED ON DRAWING)
	FRACTIONAL HORSEPOWER MANUAL MOTOR STARTER/DISCONNECT
	COMBINATION MOTOR STARTER/DISCONNECT SWITCH
	MOTOR STARTER
	FRACTIONAL MOTOR STARTER
PP	POWER POLE
	JUNCTION BOX. HD INDICATES HAND DRYER. AF INDICATES AUTO FLUSH/AUTO FAUCET.
	PUSHBUTTON
	START/STOP STATION
	OVERHEAD DOOR OPERATOR (UP, DOWN AND STOP)
	EMERGENCY OFF PUSH-BUTTON
K	EMERGENCY KILLSWITCH WITH KEY RESET.
T	TRANSFORMER
D	DOORBELL

CIRCUITING LEGEND

NOTE: NOT ALL DEVICES SHOWN ON THE LEGEND ARE USED ON THIS PROJECT

	WIRING CONCEALED ABOVE CEILING OR IN WALL. CROSS LINES INDICATE NUMBER OF #12 A.W.G. WIRES IN A 3/4" CONDUIT. GROUND WIRES ARE NOT SHOWN. NO CROSS LINES INDICATE (2)#12 A.W.G., (1)#12 A.W.G. GROUND IN A 3/4" CONDUIT.
	CIRCUIT HOME RUN WITH CIRCUIT NUMBER INDICATED
	WIRING CONCEALED BELOW GRADE OR FLOOR
	NORMAL-EMERGENCY OR EMERGENCY ONLY BRANCH CIRCUIT WIRING
	CRITICAL BRANCH CIRCUIT WIRING
	HORIZONTAL AND VERTICAL SURFACE RACEWAY. REFER TO FLOOR PLANS FOR ADDITIONAL INFORMATION

ELECTRICAL ABBREVIATIONS

A/a	AMPERE
A.F.F.	ABOVE FINISHED FLOOR
AFI	ARC FAULT INTERRUPTER RECEPTACLE
ARCH.	ARCHITECT
ATC	AUTOMATIC TEMPERATURE CONTROL
ATS	AUTOMATIC TRANSFER SWITCH
AUX.	AUXILIARY
A/V	AUDIOVISUAL
AWG.	AMERICAN WIRE GAUGE
BEPs	BUILDING ENTRANCE PROTECTORS
BKR.	BREAKER
CKT.	CIRCUIT
CLG.	CEILING
COND.	CONDUIT
CT	COUNTERTOP
DISC.	DISCONNECT
DN	DOWN
DWG.	DRAWING
E.C.	ELECTRICAL CONTRACTOR
EM.	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EWC	ELECTRIC WATER COOLER (PROVIDE GROUND FAULT PROTECTION)
EXIST./EX./E	EXISTING
F.A.	FIRE ALARM
G.C.	GENERAL CONTRACTOR
GEN.	GENERATOR
GFI	GROUND FAULT INTERRUPTER RECEPTACLE
GND.	GROUND
H.C.	HEATING CONTRACTOR
HD	HAND DRYER
HWH	HOT WATER HEATER
IDF	INTERMEDIATE DISTRIBUTION FRAME
MAX.	MAXIMUM
M.C.	MECHANICAL CONTRACTOR
MDF	MAIN DISTRIBUTION FRAME
MIN.	MINIMUM
MTD.	MOUNTED
N/E	NORMAL EMERGENCY
P	POLE
P.C.	PLUMBING CONTRACTOR
PNL.	PANEL
POTS	PLAIN OLD TELEPHONE SERVICE
PTZ	PAN, TILT, ZOOM
S.F.	SQUARE FEET
SW.	SWITCH
TBR	TO BE REMOVED
TR	TAMPER RESISTANT
TYP.	TYPICAL
U/E	UNDERGROUND ELECTRIC
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLT
W/	WITH
W/O	WITHOUT
WG	WIRE GUARD
WP	WEATHERPROOF
XFMR	TRANSFORMER

EQUIPMENT TAG LEGEND

NOTE : NOT ALL TAGS SHOWN ON THE LEGEND ARE USED ON THIS PROJECT

ACC X	AIR-COOLED CHILLER - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
ACU X	AIR-COOLED CONDENSOR - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
AHU X	AIR HANDLING UNIT - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
B X	BOILER - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
BCU X	BLOWER COIL UNIT - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
BF X	BOOSTER FAN - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
CH X	CABINET HEATER - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
CP X	CONDENSATE PUMP - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
CT X	COOLING TOWER - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
CU X	CONDENSING UNIT - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
DC X	DUST COLLECTOR - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
DHU X	DEHUMIDIFICATION UNIT - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
DSS X	DUCTLESS SPLIT SYSTEM - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
ECH X	ELECTRIC CABINET HEATER - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
EDC X	ELECTRIC DUCT COIL - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
EF X	EXHAUST FAN - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
ER X	ELECTRIC RADIATION - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
ERU X	ENERGY RECOVERY UNIT - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
EUH X	ELECTRIC UNIT HEATER - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
EWH X	ELECTRIC WALL HEATER - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
FOP X	FUEL OIL TRANSFER PUMP - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
FPV X	FAN-POWERED VAV BOX - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
GF X	GAS FURNACE - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
GUH X	GAS-FIRED UNIT HEATER - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
H X	HUMIDIFIER - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
HP X	HEAT PUMP - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
HRU X	HEAT RECOVERY UNIT - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
IFR X	INFRARED HEATER - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
MAU X	MAKEUP AIR UNIT - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
P X	PUMP - SUPPLIED AND INSTALLED BY OTHERS, FINAL CONNECTION BY E.C.
PTAC X	PACKAGED THRU-WALL A/C UNIT - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
RF X	RETURN AIR FAN - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
RTU X	ROOFTOP UNIT - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
SF X	SUPPLY FAN - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
SV X	SMOKE VENT - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
UH X	UNIT HEATER - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
UV X	UNIT VENTILATOR - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.
VAV X	VARIABLE AIR VOLUME BOX - SUPPLIED AND INSTALLED BY H.C., FINAL CONNECTION BY E.C.

ELECTRICAL GENERAL NOTES

1.	UNLESS OTHERWISE INDICATED, WIRE SIZES SHALL BE AS FOLLOWS: 20A #12, 30A #10, 40A #8, 50A #6, 70A #4, 100A #1.
2.	LIGHTING LAYOUT IS DIAGRAMMATICAL. E.C. SHALL COORDINATE LIGHTS WITH ARCHITECTURAL REFLECTED CEILING PLANS AND OTHER TRADES AND ADJUST AS REQUIRED.
3.	ALL ROOF AND EXTERIOR-MOUNTED, GROUND-FAULT RECEPTACLES SHALL HAVE LOCKABLE "IN-USE" WEATHERPROOF COVERS. IN ADDITION TO THE WEATHERPROOF GFI RECEPTACLES SHOWN ON THE DRAWINGS, THE E.C. SHALL PROVIDE AND INSTALL (1) ADDITIONAL WEATHERPROOF GFI RECEPTACLES TO BE MOUNTED AS DIRECTED IN THE FIELD BY THE OWNER. EACH OF THE RECEPTACLES SHALL HAVE 50' OF BRANCH CIRCUIT WIRING TO CONNECT TO THE NEAREST AVAILABLE RECEPTACLE CIRCUIT. E.C. SHALL ASSUME COMPLETE CONSTRUCTION DURING THE INSTALLATION OF THESE RECEPTACLES.
4.	E.C. SHALL REFER TO ARCHITECTURAL INTERIOR AND EXTERIOR ELEVATIONS TO COORDINATE THE ELECTRICAL DEVICE LOCATIONS. WHERE CONFLICTS OCCUR, CONTACT THE ARCHITECT FOR A MOUNTING HEIGHT AND LOCATION PRIOR TO ROUGHING IN.
5.	THE E.C. SHALL COORDINATE THE INSTALLATION OF THE DOOR HARDWARE WITH THE G.C. TO INSURE THAT THE DOORS OPERATE PROPERLY. THE E.C. SHALL INCLUDE THE MAGNETIC LOCKS, MAGNETIC DOOR HOLDERS, SECURITY CONTACTS, FIRE DOOR OPERATORS, ETC. PROVIDE ANY NECESSARY INTERFACE DEVICES SUCH AS TRANSFORMERS OR RELAYS AND POWER FEED WIRING AS REQUIRED TO SUIT THE INSTALLATION OR SYSTEM. PROVIDE POWER BRANCH CIRCUIT WIRING FOR ALL ELECTRIC DOOR STRIKES AS REQUIRED.
6.	IN ADDITION TO THE QUANTITIES SHOWN ON THE DRAWING, THE E.C. SHALL PROVIDE AND INSTALL THE FOLLOWING ELECTRICAL EQUIPMENT WHERE DIRECTED IN THE FIELD: (2) OCCUPANCY SENSORS OF EACH TYPE USED ON THE PROJECT AND POWER PACKS FOR SENSORS, (3) DUPLEX RECEPTACLES, (3) DATA OUTLETS, (1) TELEPHONE OUTLETS, (1) EXIT SIGNS, (1) SMOKE DETECTORS, (1) DUCT DETECTORS EACH WITH REMOTE TEST STATION, (1) MANUAL PULL STATIONS, (1) AUDIO/VISUAL DEVICES, (1) VISUAL ONLY DEVICES, AND (2) PA SYSTEM CEILING SPEAKERS. INCLUDE THE COST OF INSTALLATION WITH UP TO 100' OF SYSTEM WIRING PER DEVICE AND ASSUME INSTALLATION WILL BE AFTER FINISHES ARE COMPLETE AND CEILINGS HAVE BEEN INSTALLED. CONNECT EACH DEVICE TO ITS RESPECTIVE SYSTEM AND INCLUDE THE COST TO REPROGRAM THE OPERATING SYSTEM TO ADD ANY OF THE ABOVE MENTIONED DEVICES. THE E.C. SHALL TURN OVER TO THE OWNER ANY DEVICES THAT ARE NOT UTILIZED ON THE PROJECT AS SPARE PARTS.
7.	THE E.C. SHALL PROVIDE A 4" HIGH CONCRETE PAD UNDER ALL FLOOR-MOUNTED ELECTRICAL EQUIPMENT PROVIDED UNDER THE ELECTRICAL CONTRACT. THIS SHALL INCLUDE SWITCHBOARDS, EMERGENCY GENERATOR, AND OTHER ELECTRICAL FLOOR-MOUNTED EQUIPMENT. THE EQUIPMENT MOUNTED ON THE PADS SHALL CONFORM TO THE SEISMIC REQUIREMENTS.
8.	THE E.C. SHALL NOT INSTALL ANY CONDUITS WITHIN ANY OF THE ELEVATED FLOOR SLABS. ANY CONDUITS INSTALLED BELOW THE SLAB ON GRADE SHALL BE INSTALLED IN THE STONE BASE AND NOT WITHIN THE CONCRETE.
9.	GFI RECEPTACLES SHOWN ON DRAWINGS ARE NOT ALL-INCLUSIVE. E.C. SHALL PROVIDE GFI RECEPTACLES IN KITCHEN, SERVING AREAS, AND WHERE LOCATED WITHIN 6FT OF SINK BASINS AS REQUIRED PER THE NEC. E.C. SHALL ALSO PROVIDE ALL ARC-FAULT, TAMPER RESISTANT, WEATHER-RESISTANT, AND GFI RECEPTACLES WHERE REQUIRED BY THE NEC FOR EACH RECEPTACLE LOCATION SHOWN ON THE DRAWINGS AND AS REQUIRED FOR BUILDING TYPE AND OCCUPANCY GROUP.
10.	THE E.C. SHALL VERIFY ROUGH-IN LOCATION FOR ELECTRIC WATER COOLER (EWC) RECEPTACLE WITH P.C. BEFORE DOING ANY WORK. PROVIDE OUTLET, CORD AND PLUG FOR REMOTE CHILLER MOUNTED ABOVE CEILING. PROVIDE GFI-TYPE RECEPTACLES FOR ALL EWCs.
11.	THE E.C. SHALL INCLUDE IN THE ELECTRICAL BID FOR THE POST-CONSTRUCTION ADJUSTMENT OF THE OCCUPANCY SENSORS AS DIRECTED BY THE ARCHITECT OR OWNER. THIS SHALL INCLUDE ADJUSTMENT OF THE TIME AND SENSITIVITY OF THE DEVICES. ALSO INCLUDE THE COST TO RELOCATE (2) SENSORS UP TO 25' IN ORDER TO ELIMINATE FALSE TRIPPING OF THE SENSORS.
12.	DEVICE MOUNTING HEIGHTS AS FOLLOWS: RECEPTACLES — 18" ABOVE FINISHED FLOOR TO CENTER OF BOX CT RECEPTACLES — 3" ABOVE COUNTERTOP OR 1" ABOVE BACKSPLASH SWITCHES — 48" ABOVE FINISHED FLOOR TO TOP OF BOX FIRE ALARM PULL STATIONS — THE OPERABLE PART (PULL HANDLE) OF EACH MANUAL FIRE ALARM BOX SHALL BE NOT LESS THAN 42" AND NOT MORE THAN 48" A.F.F. PANELS — 54" TO CENTERLINE FIRE ALARM A/V UNITS — UNLESS OTHERWISE NOTED, ALL WALL-MOUNTED AUDIOVISUAL OR VISUAL-ONLY DEVICES SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80" AND NOT GREATER THAN 96" A.F.F. WALL MOUNTED TELEPHONES — 48" ABOVE FINISHED FLOOR TO TOP OF BOX
13.	ALL 15A AND 20A 120V AND 250V NON-LOCKING RECEPTACLES SHALL BE LISTED AS TAMPER RESISTANT IN ALL EDUCATIONAL BUILDINGS AND PEDIATRIC CARE SPACES AND ALL ADDITIONAL SPACES AS REQUIRED PER NEC SECTION 406.12

OCCUPANCY SENSOR SCHEDULE

SYMBOL	MANUFACTURER	MODEL #	COVERAGE AREA SQ. FT.	SENSOR TYPE	ADDITIONAL REMARKS
OS	WATTSTOPPER	WS-301	900	INFRARED	WALL MOUNTING
OS D	WATTSTOPPER	WS-311	900	DUAL TECHNOLOGY	WALL MOUNTING
OS	WATTSTOPPER	DT-200	2000	DUAL TECHNOLOGY	WALL OR CEILING MOUNTING
OS	WATTSTOPPER	DT-300	1000	DUAL TECHNOLOGY	360° CEILING MOUNTING
OS	WATTSTOPPER	UT-300-3	90 LINEAL FEET	ULTRASONIC	CEILING MOUNTED CORRIDOR SENSOR
US	WATTSTOPPER	UT-300-2	1000	ULTRASONIC	CEILING MOUNTED

NOTES: DISABLE SMART SET TECHNOLOGY IN ALL SPACES.

CONTRACTOR SHALL VERIFY LOCATIONS OF ALL OCCUPANCY SENSORS WITH MANUFACTURER PRIOR TO ROUGH-IN

LOW-VOLTAGE SYSTEMS RESPONSIBILITY MATRIX

SYSTEM	REMOVE	CONDUIT AND BACK BOXES	CABLING	DEVICES FURNISHED	DEVICES INSTALLED	PROGRAM / AIM
CAMERAS	E.C.	E.C.	E.C.	OWNER	OWNER	OWNER
WAPS	E.C.	E.C.	E.C.	OWNER	OWNER	OWNER
CARD ACCESS	E.C.	E.C.	E.C.	E.C.	E.C.	E.C.
INTRUSION	E.C.	E.C.	E.C.	E.C.	E.C.	E.C.
DISPLAY	E.C.	E.C.	E.C.	E.C.	E.C.	E.C.
DATA OUTLETS	E.C.	E.C.	E.C.	E.C.	E.C.	E.C.
PA SPEAKERS	E.C.	E.C.	E.C.	E.C.	E.C.	E.C.

NOTES:

1. SYSTEMS NOT INDICATED IN MATRIX, BUT SHOWN ON DRAWINGS OR SPECIFICATIONS SHALL BE FURNISHED AND INSTALLED BY THE E.C.

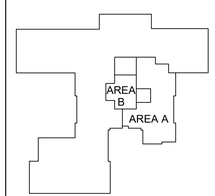
ISSUED FOR:

NO.	DESCRIPTION	DATE
	ISSUED FOR BIDDING	07/27/2026

DATE: 07/24/2026

SG PROJECT NUMBER: 225180.00

Key Plan:

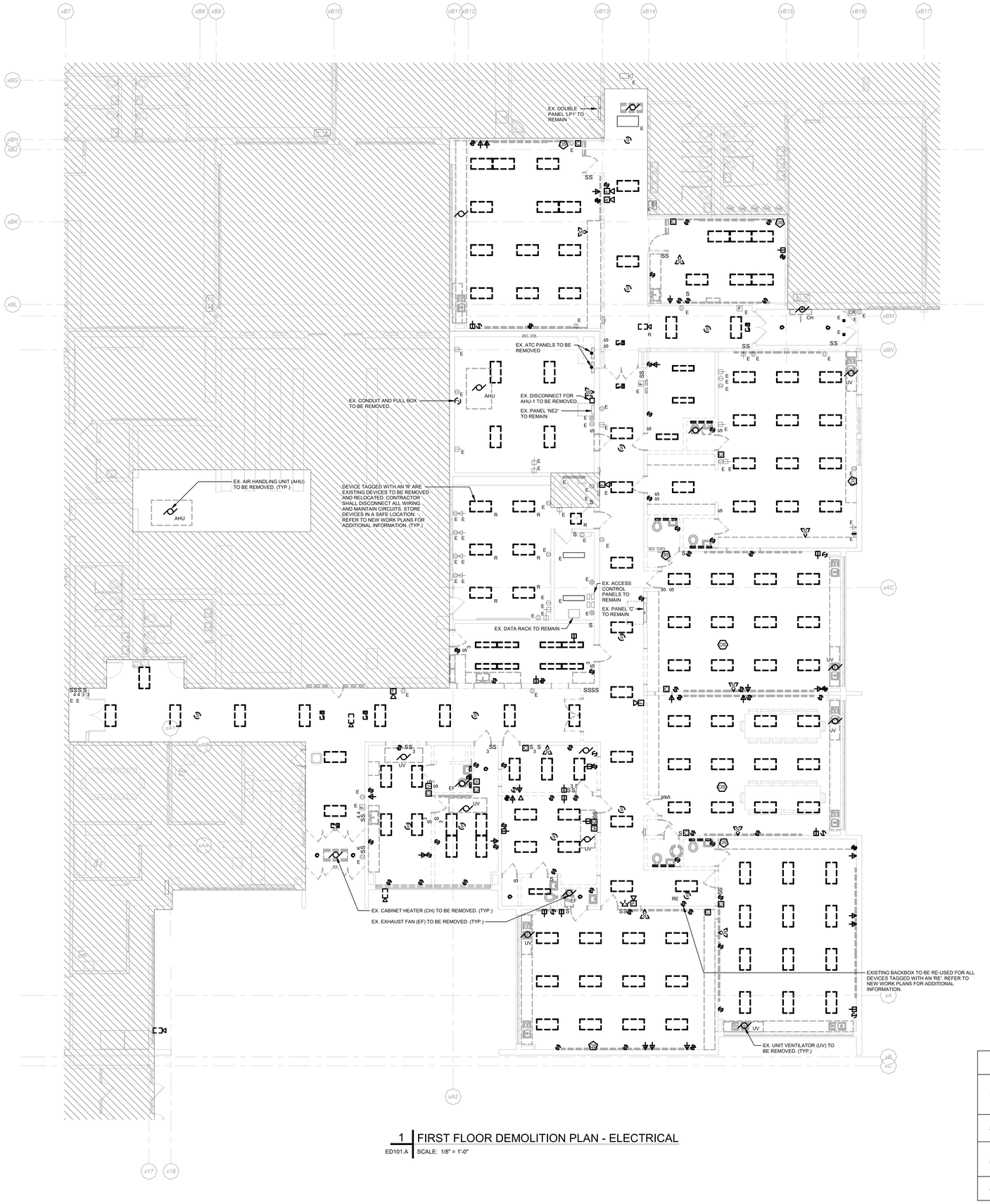


Drawing Title:

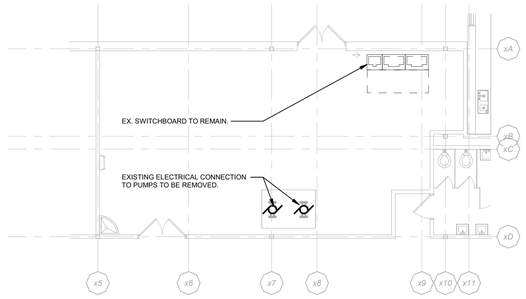
COVER SHEET - ELECTRICAL

Drawing Number:

E000

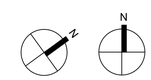


1 FIRST FLOOR DEMOLITION PLAN - ELECTRICAL
ED101.A SCALE: 1/8" = 1'-0"



2 BOILER ROOM DEMOLITION PLAN - ELECTRICAL
ED101.A SCALE: 1/8" = 1'-0"

DEMOLITION NOTES	
1.	UNLESS OTHERWISE INDICATED OR NOTED, ALL ELECTRICAL ITEMS SHOWN ARE TO BE REMOVED. THIS REMOVAL INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING ITEMS: LIGHTING FIXTURES, RECEPTACLES, JUNCTION BOXES, VARIOUS LOW-VOLTAGE OUTLETS AND JACKS, AND ALL OTHER ELECTRICAL ITEMS SHOWN ON THIS DRAWING. THIS INCLUDES ANY ASSOCIATED BRANCH CIRCUIT OR LOW VOLTAGE WIRING BACK TO ITS SOURCE. THE E.C. IS ALSO RESPONSIBLE FOR THE REMOVAL OF MOUNTING DEVICES, HANGERS, ETC. ASSOCIATED WITH THIS EQUIPMENT.
2.	AN ATTEMPT HAS BEEN MADE TO SHOW ALL THE LIGHTING FIXTURES, RECEPTACLES, JUNCTION BOXES, VARIOUS LOW-VOLTAGE JACKS, AND ALL OTHER ELECTRICAL ITEMS ON THE DEMOLITION DRAWINGS. HOWEVER, THE E.C. SHALL BE RESPONSIBLE FOR THE REMOVAL OF ANY AND ALL OF THESE COMPONENTS THAT EXIST IN THE FIELD AND ARE IN THE WAY OF THE NEW CONSTRUCTION.
3.	NO WIRING SHALL BE ABANDONED IN PLACE, IT SHALL BE REMOVED. ALL CONDUIT SHALL BE REMOVED EXCEPT WHERE IT IS BURIED IN MASONRY WALLS AND IN OR BELOW FLOOR SLABS. IN THESE CASES CUT THE ENDS OF THE CONDUIT FLUSH WITH THE WALL OR FLOOR AND FILL WITH PATCHING MATERIALS TO MATCH ADJACENT SURFACES.
4.	THE E.C. SHALL BE RESPONSIBLE FOR RECONNECTING ANY EXISTING DEVICE WHICH IS TO REMAIN ENERGIZED AND HAS BEEN DISCONNECTED DUE TO THE DEMOLITION. PROVIDE ALL WIRING AND DEVICES NECESSARY TO RECONNECT.



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Structural Engineer
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610.694.8020

Professional Seal:

Owner:
OWEN J. ROBERTS SCHOOL DISTRICT
Owner Address

Additions and Renovations to:
OJR DISTRICT SERVICES CENTER

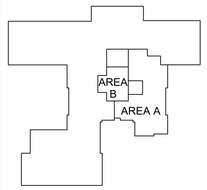
ISSUED FOR:

NO.	DESCRIPTION	DATE
	ISSUED FOR BIDDING	07/27/2026

DATE: 07/24/2026

SG PROJECT NUMBER: 225180.00

Key Plan:



Drawing Title:
FIRST FLOOR DEMOLITION PLAN - ELECTRICAL

Drawing Number:
ED101.A

1 OVERALL FIRST FLOOR REFERENCE PLAN - ELECTRICAL

E001 SCALE: 1/16" = 1'-0"

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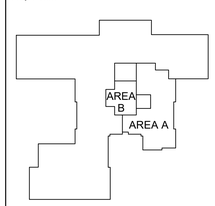

Drawing Title:

OVERALL FIRST FLOOR REFERENCE PLAN - ELECTRICAL

Drawing Number:

E001

True Project

1 FIRST FLOOR PLAN - AREA A - SIGNAL

E201.A SCALE: 1/8" = 1'-0"

GENERAL SIGNAL NOTES:

1. REFER TO E000 FOR LEGEND AND GENERAL NOTES.
2. REFER TO POWER PLANS FOR PANEL DESIGNATIONS.
3. PROVIDE SURGE PROTECTION FOR ALL EXTERIOR DATA DROPS. PERLE CAT# DT-LAN-CAT6 OR EQUAL.
4. HATCHED AREA NOT IN SCOPE OF WORK.

True Project

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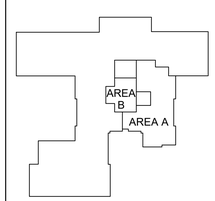
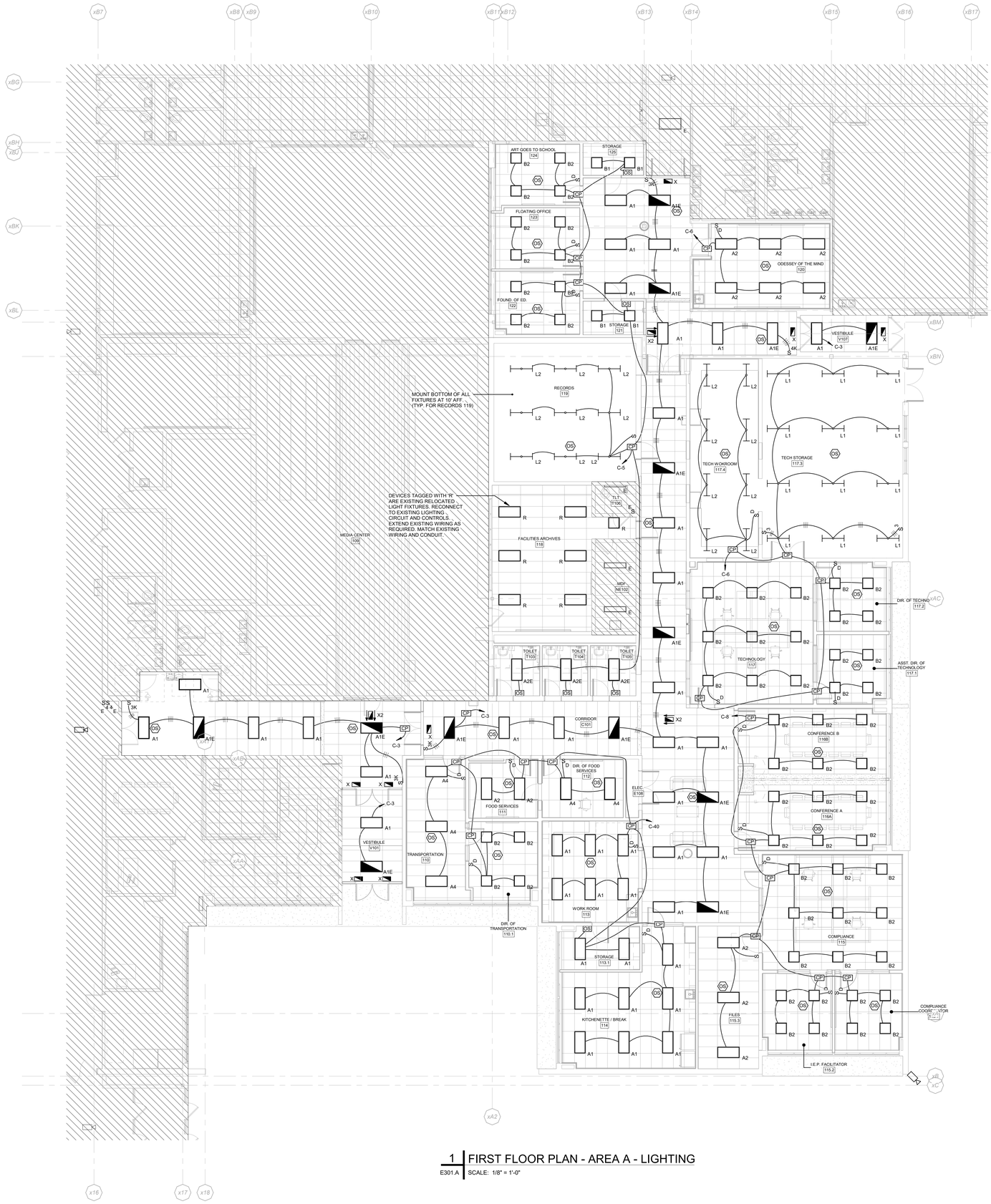


Drawing Title:

FIRST FLOOR PLAN - AREA A - SIGNAL

Drawing Number:

E201.A



1 FIRST FLOOR PLAN - AREA A - LIGHTING

E301.A SCALE: 1/8" = 1'-0"

GENERAL LIGHTING NOTES:

1. REFER TO E000 FOR LEGEND AND GENERAL NOTES.
2. REFER TO POWER PLANS FOR PANEL DESIGNATIONS.
3. NOT ALL WIRING SHOWN, E.C. SHALL PROVIDE ALL WIRING INCLUDING LOW VOLTAGE AND DIMMING WIRING FOR FULLY FUNCTIONING SYSTEMS.
4. PROVIDE SURGE PROTECTION FOR ALL EXTERIOR DATA DROPS. PERLE CAT# DT-LAN-CAT6 OR EQUAL.
5. CIRCUIT ALL EXIT SIGNS TO NEAREST UNSWITCHED LIFE SAFETY LIGHTING CIRCUIT.
6. HATCHED AREA NOT IN SCOPE OF WORK.
7. PROVIDE ADDITIONAL RELAYS FOR (3) SITE LIGHTING TIMECLOCKS TO CONNECT TO BAS SYSTEM. COORDINATE WITH CONTROLS CONTRACTOR.

True Project

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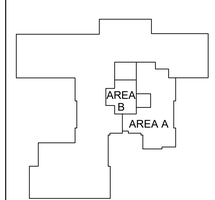
Key Plan:

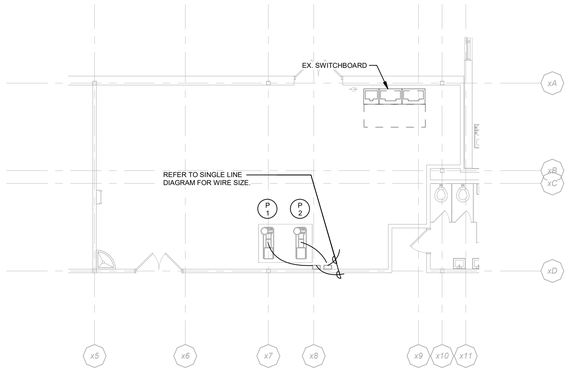


Drawing Title:
FIRST FLOOR PLAN - AREA A - LIGHTING

Drawing Number:
E301.A

1 | FIRST FLOOR PLAN - AREA A - POWER

E401.A | SCALE: 1/8" = 1'-0"



2 | BOILER ROOM PLAN - POWER

E401.A | SCALE: 1/8" = 1'-0"

CODED POWER NOTES:

A. PROVIDE (1) DUPLEX RECEPTACLE AND (2) DATA DROPS BEHIND WALL MOUNTED DISPLAY. COORDINATE LOCATION WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.

B. PROVIDE (2) DUPLEX RECEPTACLES AND (2) DATA DROPS IN WIREMOLD EVOLUTION 8-GANG EFB8 FLOOR BOX OR EQUAL. PROVIDE 1-1/4" CONDUIT FOR DATA TO ABOVE ACCESSIBLE CEILING. PROVIDE 1" CONDUIT FOR POWER CIRCUIT.

C. PROVIDE (1) DUPLEX RECEPTACLE, (2) DATA DROPS, AND (2) HDMI OUTPUTS BEHIND WALL MOUNTED TELEVISION. PROVIDE (1) DUPLEX RECEPTACLE, (2) DATA DROPS, AND (2) HDMI INPUTS AT 18" BELOW TELEVISION. PROVIDE (2) KRAMER PLENUM RATED HDMI CABLES CAT #CP-HMHMMETH OR EQUAL. COORDINATE LOCATION WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.

D. PROVIDE (8) DUPLEX RECEPTACLES AND (8) DATA DROPS IN WIREMOLD EVOLUTION 10-GANG FLOOR BOX EFB10 OR EQUAL. PROVIDE 1-1/4" CONDUIT FOR DATA TO ABOVE ACCESSIBLE CEILING. PROVIDE 1" CONDUIT FOR POWER CIRCUIT.

GENERAL POWER NOTES:

1. REFER TO E000 FOR LEGEND AND GENERAL NOTES.
2. E.C. SHALL REFER TO ARCHITECTURAL INTERIOR AND EXTERIOR ELEVATIONS TO COORDINATE THE ELECTRICAL DEVICE LOCATIONS. WHERE CONFLICTS OCCUR, CONTACT THE ARCHITECT FOR A MOUNTING HEIGHT AND LOCATION PRIOR TO ROUGHING IN.
3. MECHANICAL EQUIPMENT DISCONNECT SWITCHES FURNISHED BY H.C. INSTALLED AND WIRED BY E.C. TYPICAL FOR ALL UNLESS OTHERWISE INDICATED ON DRAWINGS.
4. PROVIDE XHHN-2/XHWN-2 CONDUCTORS FOR ALL CIRCUITS FED FROM GFCI BREAKERS.
5. HATCHED AREA NOT IN SCOPE OF WORK.

True | Project

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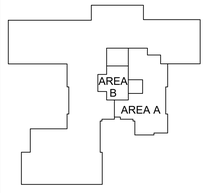
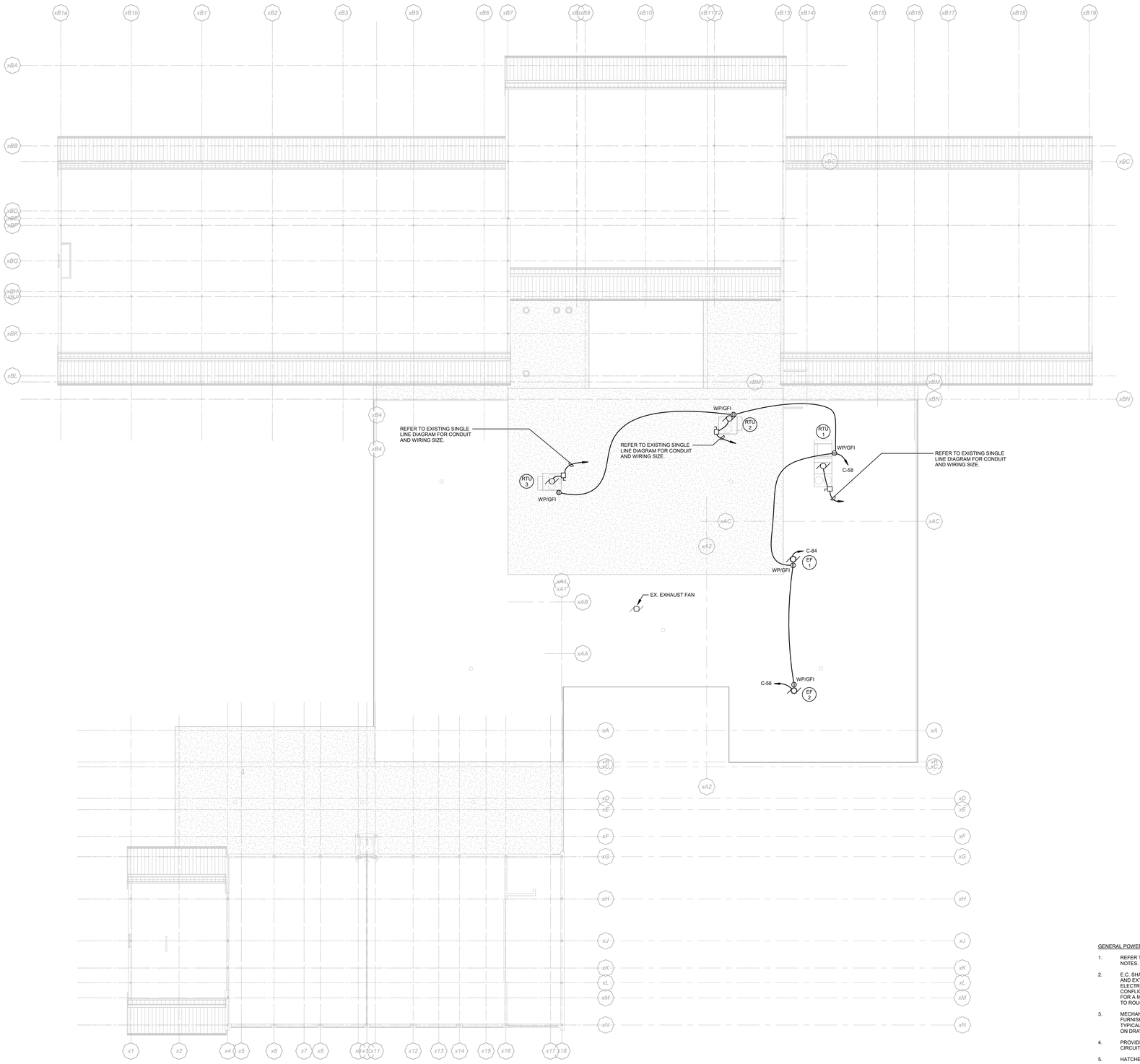
Key Plan:



Drawing Title:
FIRST FLOOR PLAN - AREA A - POWER

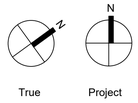
Drawing Number:
E401.A



1 ROOF PLAN - POWER
E441 SCALE: 1/16" = 1'-0"

GENERAL POWER NOTES:

1. REFER TO E000 FOR LEGEND AND GENERAL NOTES.
2. E.C. SHALL REFER TO ARCHITECTURAL INTERIOR AND EXTERIOR ELEVATIONS TO COORDINATE THE ELECTRICAL DEVICE LOCATIONS. WHERE CONFLICTS OCCUR, CONTACT THE ARCHITECT FOR A MOUNTING HEIGHT AND LOCATION PRIOR TO ROUGHING IN.
3. MECHANICAL EQUIPMENT DISCONNECT SWITCHES FURNISHED BY H.C. INSTALLED AND WIRED BY E.C. TYPICAL FOR ALL UNLESS OTHERWISE INDICATED ON DRAWINGS.
4. PROVIDE XHHN-2/XHWN-2 CONDUCTORS FOR ALL CIRCUITS FED FROM GFCI BREAKERS.
5. HATCHED AREA NOT IN SCOPE OF WORK.



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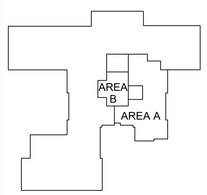
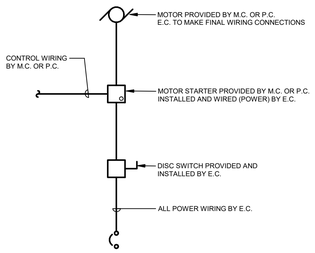
Key Plan:



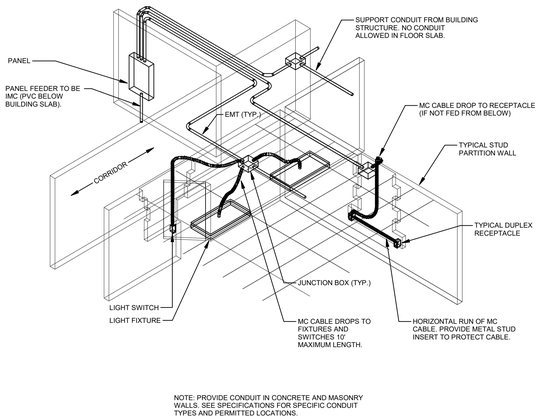
Drawing Title:
ROOF PLAN - POWER

Drawing Number:
E441



5 TYPICAL MOTOR WIRING DIAGRAM

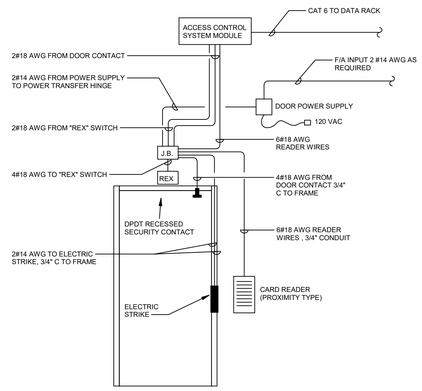
E501 SCALE: NO SCALE



NOTE: PROVIDE CONDUIT IN CONCRETE AND MASONRY WALLS. SEE SPECIFICATIONS FOR SPECIFIC CONDUIT TYPES AND PERMITTED LOCATIONS.

4 TYPICAL BUILDING WIRING METHOD

E501 SCALE: NO SCALE

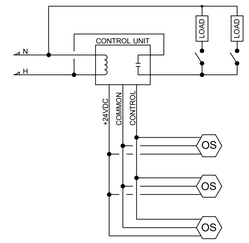


ACCESS CONTROL DOOR

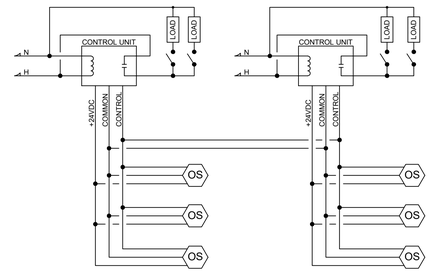
3 ACCESS CONTROL SYSTEM RISER DIAGRAM

E501 SCALE: NO SCALE

RESPONSIBILITY MATRIX FOR DOOR CONTROL SYSTEMS			
ITEM	FURNISHED BY	INSTALLED BY	WIRED BY
CARD READER: READER POWER SUPPLY & READER CONTROLLER	E.C.	E.C.	E.C.
ADA ELECTRIC DOOR CLOSERS & ACTUATERS	G.C.	G.C.	E.C.
DOOR POWER SUPPLIES	G.C.	E.C.	E.C.
ELECTRIC EXIT DEVICES (E, L, R.s), ELECTRIC POWER TRANSFER	G.C.	G.C.	E.C.
DOOR POSITION & SECURITY SWITCHES	E.C.	E.C.	E.C.
REQUEST TO EXIT (REX) SWITCHES	E.C.	E.C.	E.C.
MAGNETIC LOCKS & POWER SUPPLIES	E.C.	E.C.	E.C.
JUNCTION BOXES, CONDUIT	E.C.	E.C.	



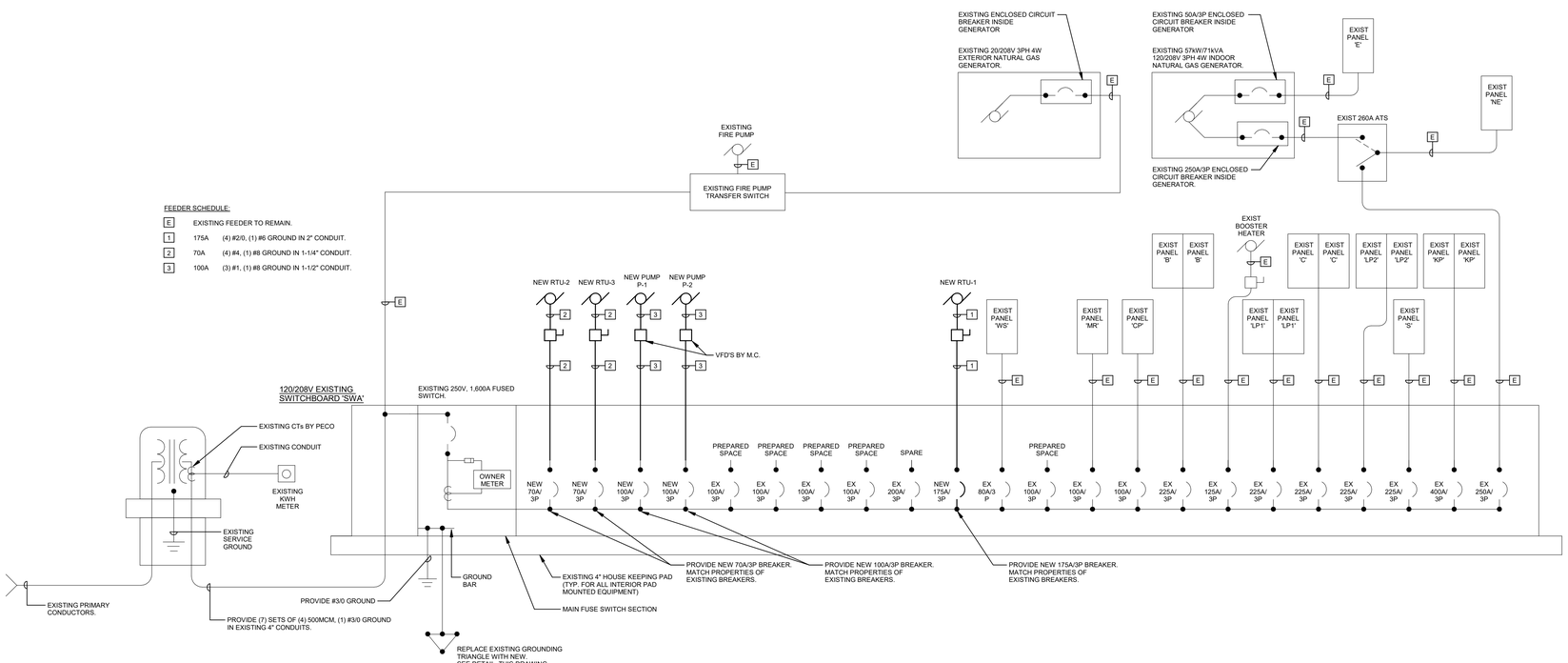
NOTE: UTILIZE THIS DIAGRAM FOR UP TO THREE OCCUPANCYSENSORS AND ONE CIRCUIT APPLICATIONS.



NOTE: UTILIZE THIS DIAGRAM FOR MORE THAN THREE OCCUPANCYSENSORS AND/OR MULTIPLE CIRCUITS.

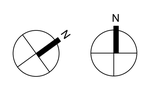
2 OCCUPANCY SENSOR WIRING DIAGRAM

E501 SCALE: NO SCALE



1 EXISTING SINGLE LINE DIAGRAM

E501 SCALE: NO SCALE



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SG PROJECT NUMBER: 225180.00

Key Plan:

Drawing Title:
DETAILS AND DIAGRAMS - ELECTRICAL

Drawing Number:
E501

Branch Panel: LP1

Location:
Supply From:
Mounting: Surface
Enclosure: Type 1
Manufacturer:

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type:
Mains Rating: 225 A
MCB Rating:

CKT	Poles	Trip	Circuit Description	A	B	C	Circuit Description	Trip	Poles	CKT
1	1	20 A	*LTG - Corridor*	0 / 0			*LTG - Rm 25*	20 A	1	2
3	1	20 A	*LTG - Rm 24*		0 / 0		*LTG - Rm 26 & S-16*	20 A	1	4
5	1	20 A	*LTG - Rm 26*			0 / 0	*LTG - Rm 16*	20 A	1	6
7	1	20 A	*LTG - Corridor*	0 / 0			*LTG - Girls/Boys Tlts &...*	20 A	1	8
9	1	20 A	*LTG - Rm 17*		0 / 0		*LTG - Rm 18*	20 A	1	10
11	1	20 A	*LTG - Rm 19*			0 / 0	*LTG - Rm 20*	20 A	1	12
13	1	20 A	*LTG - Rm 21*	0 / 0			*LTG - Rm 22*	20 A	1	14
15	1	20 A	*LTG - Rm 23*		0 / 0		*LTG - Outside*	20 A	1	16
17	1	20 A	*Rcpts - Rm 18*			0 / 150	**CH-3**	20 A	1	18
19	1	20 A	*Rcpts - Rm 24*	0 / 0			*Rcpts - Rm 20*	20 A	1	20
21	1	20 A	*Rcpts - Rm 25*		0 / 0		*Rcpts - Rm 21*	20 A	1	22
23	1	20 A	*Spare*			0 / 0	*Rcpts - Rm 22*	20 A	1	24
25	1	20 A	*Rcpts - Rm 23 & Hall Heater*	0 / 540			**Rcpts - C108**	20 A	1	26
27	2	20 A	*Existing Load*		0 / 0		*Existing Load*	20 A	1	28
29	--	--	--			0 / 0	*Rcpts - Rm 26*	20 A	1	30
31	1	20 A	*Rcpts - Rm 26*	0 / 0			*Rcpts - 19*	20 A	1	32
33	1	20 A	*Rcpts - 20*		0 / 0		*Rcpts - Seminar C*	20 A	1	34
35	1	20 A	*Rcpts - Rm 21*			0 / 0	*Rcpts - Rm 17*	20 A	1	36
37	1	20 A	*Rcpts - Rm 22*	0 / 0			*Rcpts - Rm 18*	20 A	1	38
39	1	20 A	*Rcpts - Rm 23*		0 / 900		**Rcpts - 124**	20 A	1	40
41	1	20 A	*Rcpts - Rm 24*			0 / 0	*Rcpts - Rm 25*	20 A	1	42
43	1	20 A	*CUVs - Rm 20 & 21*	0 / 0			*CUVs - Rm 18 & 19*	20 A	1	44
45	1	20 A	*CUVs - Rm 22 & 23*		0 / 0		*CUVs - Rm 16 & 26*	20 A	1	46
47	1	20 A	*CUVs - Rm 24 & 25*			0 / 0	*CUVs - Rm 17 & Seminar C*	20 A	1	48
49	1	20 A	*EF - Girls & Boys*	0 / 0			*EWC - Corridor*	20 A	1	50
51	1	20 A	*Rcpts - Comp Ceiling*		0 / 0		*Spare*	20 A	1	52
53	1	20 A	*EF - Kiln*			0 / 0	*Rcpts - Girls, Boys, & Corridor*	20 A	1	54
55	1	20 A	*Rcpts - Comp Ceiling*	0 / 0			*Rcpts - Rm 17*	20 A	1	56
57	1	20 A	*Rcpts - Comp Ceiling*		0 / 0		*Split System AC*	20 A	1	58
59	**1**	**20 A**	**Rcpts - 122**			900 / 0	*Roof Top GFI Cond Pump AC*	20 A	1	60
61	**1**	**20 A**	**Rcpts - 123**	900 / 0			*LTG - Exterior Poles*	20 A	2	62
63	**1**	**20 A**	**Rcpts - 120**		1260 / 0		--	--	--	64
65	**1**	**20 A**	**CH-1 - V107**			150 / 0	*Space*	--	1	66
67	1	--	*Space*	0 / 0			*Space*	--	1	68
69	1	--	*Space*		0 / 0		*Space*	--	1	70
71	1	--	*Space*			0 / 0	*Space*	--	1	72
73	1	--	*Space*	0 / 0			*Space*	--	1	74
75	3	35 A	*Spare*		0 / 0		*Space*	--	1	76
77	--	--	--			0 / 0	*Space*	--	1	78
79	--	--	--	0 / 0			*Space*	--	1	80
81	1	20 A	*Spare*		0 / 0		*Space*	--	1	82
83	1	20 A	*Spare*			0 / 0	*Space*	--	1	84
				1440 VA	2160 VA	1200 VA				
				12 A	18 A	10 A				

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
				Total Conn. Load:	4800 VA
				Total Est. Demand:	4800 VA
				Total Conn. Current:	13 A
				Total Est. Demand...	13 A

Notes:
Existing Loads and Breakers Designated By Italic font.
New Loads and Breakers Designated by Bold Font.
Field Verify Existing Panel AIC rating and provide equivalent AIC Rating for All New Breakers. Provide New Typed Circuit Directory

Branch Panel: C

Location: CORRIDOR C108
Supply From:
Mounting: Recessed
Enclosure: Type 1
Manufacturer:

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10, 000
Mains Type: MLO
Mains Rating: 225 A
MCB Rating:

CKT	Poles	Trip	Circuit Description	A	B	C	Circuit Description	Trip	Poles	CKT
1	1	20 A	*Ltg - Library Classroom*	0 / 0			*Ltg - Work Room*	20 A	1	2
3	1	20 A	**Ltg - Corridor**		935 / 0		*Ltg - Corridor & S-15*	20 A	1	4
5	1	20 A	**Ltg - T103-5, 118-9, 121-125**			768 / 1168	**Ltg - 117-117.A, 120**	20 A	1	6
7	1	20 A	**Microwave - 116A**	1500 / 983			**Ltg - 115-116B**	20 A	1	8
9	1	20 A	**CH-2 - V101, UH-1 - 117.3**		300 / 0		*Rcpts - S-15, S-16*	20 A	1	10
11	1	20 A	**Rcpts - 110**			720 / 0	*Rcpts - Corridor, EWC*	20 A	1	12
13	1	20 A	**Rcpts - 110.1**	900 / 0			*Rcpts - Comp Ceiling*	20 A	1	14
15	1	20 A	*Rcpts - Health Room*		0 / 720		**CT Rcpts - 113**	20 A	1	16
17	1	20 A	**Rcpts - C101, 113**			1260 / 1440	**Rcpts - 113.1, 114, 115.3**	20 A	1	18
19	1	20 A	**Coffee Maker - 114**	1500 / 1500			**Coffee Maker - 114**	20 A	1	20
21	1	20 A	**Microwave - 114**		1500 / 1500		**Refrigerator - 114**	20 A	1	22
23	1	20 A	**Refrigerator - 114**			1500 / 0	*Rcpts - Comp Cilrcuits*	20 A	1	24
25	1	20 A	*Rcpts - Corridor*	0 / 0			*HVAC Control*	20 A	1	26
27	1	20 A	**Rcpts - 115.2**		900 / 900		**Rcpts - 115.1**	20 A	1	28
29	1	20 A	**Rcpts - 115**			1440 / 900	**Rcpts - 115**	20 A	1	30
31	1	20 A	**Microwave - 114**	1500 / 1500			**Dishwasher - 114**	20 A	1	32
33	1	20 A	**Rcpts - 116A**		900 / 900		**Rcpts - 116B**	20 A	1	34
35	1	20 A	**Rcpts - 117.2**			900 / 0	*Rcpts - Comp Ceiling*	20 A	1	36
37	1	20 A	*Library Class CUVs*	0 / 0			*Rcpts - Library & Corridor*	20 A	1	38
39	1	20 A	*Outside Wall Light*		0 / 772		**Ltg - 110-114**	20 A	1	40
41	1	20 A	*Ltg - Guidance and Office*			0 / 0	*Ltg - Library Classroom*	20 A	1	42
43	1	20 A	**Rcpts - 112**	900 / 1500			**Microwave - 116B**	20 A	1	44
45	1	20 A	*Rcpts - Rm 14*		0 / 0		*Guidance Office CUV*	20 A	1	46
47	1	20 A	*Rcpts - AV Storage*			0 / 1440	**Floor Box - 117**	20 A	1	48
49	1	20 A	*Rcpts - AV Storage*	0 / 1080			**Rcpts - 117**	20 A	1	50
51	1	20 A	*Rcpts - Conference Rm*		0 / 0		*Rcpts - Library Classroom,...*	20 A	1	52
53	1	20 A	*Rcpts - Conference Rm*			0 / 1000	**ATC Panels - NE102**	20 A	1	54
55	1	20 A	*Rcpts - Conference Rm*	0 / 0			**EF-2 - Roof**	20 A	1	56
57	1	20 A	*Rcpts - Library*		0 / 900		**Rcpts - Roof**	20 A	1	58
59	1	20 A	*Conference Rm*			0 / 0	**Front Door Power - V101**	20 A	1	60
61	1	20 A	*Rcpts - Conference Rm*	0 / 0			*Ex. Load*	20 A	1	62
63	1	20 A	*Rcpts - Library Classroom*		0 / 0		*A/C Condensing Unit (roof)*	20 A	2	64
65	2	20 A	*A/C Condensing Unit (roof)*			0 / 0	--	--	--	66
67	--	--	--	0 / 0			*A/C Condensing Unit (roof)*	20 A	2	68
69	3	20 A	*Air Handler - S-13*		0 / 0		--	--	--	70
71	--	--	--			0 / 1000	**Copier - 113**	**20 A**	**2**	72
73	--	--	--	0 / 1000			--	--	--	74
75	**1**	**15 A**	**EF-3 - E108**		19 / 540		**Rcpts - 38,38,40**	**20 A**	**1**	76
77	**1**	**20 A**	**Rcpts - 30.1**			540 / 360	**Rcpts - 30.1**	**20 A**	**1**	78
79	**1**	**20 A**	**Rcpts - 30.1**	540 / 900			**Rcpts - 117.1**	**20 A**	**1**	80
81	**1**	**20 A**	**ATC Panels - E108**		1000 / 720		**Rcpts - 25,33,34**	**20 A**	**1**	82
83	**1**	**20 A**	**Rcpts - 111**			900 / 506	**EF-1 - Roof**	**15 A**	**1**	84
				15303 VA	12506 VA	15842 VA				
				131 A	104 A	136 A				

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
				Total Conn. Load:	43650 VA
				Total Est. Demand:	30550 VA
				Total Conn. Current:	121 A
				Total Est. Demand...	85 A

Notes:
Existing Loads and Breakers Designated By Italic font.
New Loads and Breakers Designated by Bold Font.
Field Verify Existing Panel AIC rating and provide equivalent AIC Rating for All New Breakers. Provide New Typed Circuit Directory

ELEC - Lighting Fixture Schedule

Type	Apparent Load	Manufacturer	Catalog Number	Mounting	Total Depth	No. of Lamps	Lamp Type	Voltage	Additional Remarks	Approved Equals
A1	25 VA	LITHONIA	CPX-2X4-3000LM-80-35K-SWL-MIN1-ZT-MVOLT	RECESSED	2.3"	LED	3287LU 3500K	UNV	2X4 LED FLAT PANEL WITH 0-10V 1% DIMMING.	ELITE - FPL; CURRENT - NBT; METALUX - CGT; DAY-BRITE CFI - FLUXPANEL LED;
A1E	25 VA	LITHONIA	CPX-2X4-3000LM-80-35K-SWL-MIN1-ZT-MVOLT-E10W	RECESSED	2-3/8"	LED	3287LU 3500K	UNV	2X4 LED FLAT PANEL WITH 0-10V 1% DIMMING AND INTEGRAL BATTERY.	ELITE - FPL; CURRENT - NBT; METALUX - CGT; DAY-BRITE CFI - FLUXPANEL LED;
A2	37 VA	LITHONIA	CPX-2X4-4000LM-80-35K-SWL-MIN1-ZT-MVOLT	RECESSED	2.3"	LED	4818LU 3500K	UNV	2X4 LED FLAT PANEL WITH 0-10V 1% DIMMING.	ELITE - FPL; CURRENT - NBT; METALUX - CGT; DAY-BRITE CFI - FLUXPANEL LED;
A2E	37 VA	LITHONIA	CPX-2X4-4000LM-80-35K-SWL-MIN1-ZT-MVOLT-E10W	RECESSED	2.3"	LED	4818LU 3500K	UNV	2X4 LED FLAT PANEL WITH 0-10V 1% DIMMING AND INTEGRAL BATTERY.	ELITE - FPL; CURRENT - NBT; METALUX - CGT; DAY-BRITE CFI - FLUXPANEL LED;
A4	42 VA	LITHONIA	CPX-2X4-6000LM-80-35K-SWL-MIN1-ZT-MVOLT	RECESSED	2.3"	LED	5983LU 3500K	UNV	2X4 LED FLAT PANEL WITH 0-10V 1% DIMMING.	ELITE - FPL; CURRENT - NBT; METALUX - CGT; DAY-BRITE CFI - FLUXPANEL LED;
B1	16 VA	LITHONIA	CPX-2X2-2000LM-80-35K-SWL-MIN1-ZT-MVOLT	RECESSED	2.3"	LED	2167LU 3500K	UNV	2X2 LED FLAT PANEL WITH 0-10V 1% DIMMING.	ELITE - FPL; CURRENT - NBT; METALUX - CGT; DAY-BRITE CFI - FLUXPANEL LED;
B2	30 VA	LITHONIA	CPX-2X2-3200LM-80-35K-SWL-MIN1-ZT-MVOLT	RECESSED	2.3"	LED	3542LU 3500K	UNV	2X2 LED FLAT PANEL WITH 0-10V 1% DIMMING.	ELITE - FPL; CURRENT - NBT; METALUX - CGT; DAY-BRITE CFI - FLUXPANEL LED;
E	0 VA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	EXISTING FIXTURE TO REMAIN.	
L1	19 VA	LITHONIA	CLX-L48-3000L-SEF-WDL-WD-MVOLT-GZ10-35K-80-W H-HC36M12-WGCLX48	SUSPENDED	N/A	LED	3000LU 3500K	UNV	4' LONG LED INDUSTRIAL STRIP. PROVIDE CHAIN HANGERS AND WIREGUARD. MOUNT BOTTOM OF FIXTURE AT 8' AFF.	ELITE - OC4; DAYBRITE - FLUXSTREAM; METALUX - SNX; CURRENT- LCL
L2	26 VA	LITHONIA	CLX-L48-4000L-SEF-WDL-WD-MVOLT-GZ10-35K-80-W H-HC36M12-WGCLX48	SUSPENDED	N/A	LED	4000LU 3500K	UNV	4' LONG LED INDUSTRIAL STRIP. PROVIDE CHAIN HANGERS AND WIREGUARD. MOUNT BOTTOM OF FIXTURE AT 8' AFF.	ELITE - OC4; DAYBRITE - FLUXSTREAM; METALUX - SNX; CURRENT- LCL
X	2 VA	LITHONA	TLE-1-R-ELN	UNIVERSAL	N/A	LED	LED	UNV	SINGLE FACE LED EXIT SIGN W/ BATTERY BACKUP. PROVIDE CHEVRONS AS INDICATED ON DRAWINGS.	ELITE - ELX-627; CHLORIDE - 46L; SURE-LITE - TPX; COMPASS - CCE
X2	2 VA	LITHONIA	TLE-1-R-ELN	UNIVERSAL	N/A	LED	LED	UNV	DOUBLE FACE LED EXIT SIGN WITH EMERGENCY BATTERY PACK. PROVIDE CHEVRONS AS INDICATED ON DRAWINGS.	ELITE - ELX-627; CHLORIDE - 46L; SURE-LITE - TPX; COMPASS - CCE

LIGHTING FIXTURE SCHEDULE NOTES:

1. FINISH AS SELECTED BY ARCHITECT AT TIME OF SHOP DRAWINGS. ASSUME PREMIUM FINISH.
2. PROVIDE ALL REQUIRED ACCESSORIES INCLUDING MOUNTING HARDWARE TO COORDINATE WITH VARIOUS CEILING TYPES.
3. FIXTURES NOTED AS 'APPROVED EQUALS' SHALL MEET ALL CHARACTERISTICS OF SPECIFIED PRODUCT INCLUDING BUT NOT LIMITED TO DELIVERED LUMENS, EFFICACY, WATTAGE, AND CONSTRUCTION. FIXTURES ARE SUBJECT TO REVIEW AND REJECTION AT TIME OF SHOP DRAWINGS.

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Professional Seal:

Owner:
OWEN J. ROBERTS SCHOOL DISTRICT
Owner Address

Additions and Renovations to:
OJR DISTRICT SERVICES CENTER

ISSUED FOR:

NO.	DESCRIPTION	DATE
	ISSUED FOR BIDDING	07/27/2026

DATE: 07/24/2026

SG PROJECT NUMBER: 225180.00

Key Plan:

Drawing Title:
SCHEDULES - ELECTRICAL

Drawing Number:
E601

FIRE PROTECTION - GENERAL NOTES

1.	The Contractor shall provide a "Design Build" fire suppression sprinkler system in accordance with IBC and NFPA 13, and inclusive of all additional requirements as indicated on the drawings and in the specifications. The building shall be "fully sprinklered" and the system shall be hydraulically calculated to provide the prescribed density uniformly over the most remote area. Contractor shall prepare shop drawings and calculations and submit to the Architect/Engineer, and all reviewing agencies having jurisdiction including the owner's insurance carrier. The final approved submittal drawings prepared by the contractor shall bear a fire protection engineer's seal, whom is registered in the Commonwealth of Pennsylvania and designer certified to NICET Level IV. No work shall begin until all approvals are granted. Note: Schematic layout of the sprinkler system and drawings for space allocation and design coordination. Not all piping is shown and the contractor shall be responsible for a complete "Design Build" system and to provide all required piping and appurtenances as noted above.
2.	The contractor whom installs the system shall have a minimum of five (5) years successful installation experience on projects with fire protection systems similar to that required by this project.
3.	All sprinkler heads shall be "Quick Response" rated.
4.	Contractor shall verify appropriate temperature ratings of all sprinkler heads in accordance with NFPA-13 Section 8.3.2. NOTE: Sprinkler heads located within an area 2ft. 6in. horizontally of supply air diffusers shall be "Intermediate" temperature rating in accordance with NFPA-13 Table 8.3.2.5(a).
5.	No extended coverage heads shall be permitted on this project unless specifically noted as extended coverage on drawings.
6.	Exposed piping to be limited to areas noted on drawings and as approved by architect/tenant representative in field. Exposed piping shall be installed in a neat arrangement in inconspicuous locations. Where possible piping shall be installed within chases, soffits, and walls and coordinated with all trades prior to installation.
7.	Coordinate all piping, heads, equipment, etc. with all other trades in field prior to installation. All exposed piping shall be field coordinated with architect prior to installation. Field coordination shall take precedence over routing and details shown on FP submittal drawings. Any change in piping from that shown on the submittal drawings, resulting from field coordination, shall be completed at no additional cost to the owner. Prefabrication of FP piping off site or third party design of FP system does not relieve this contractor of any field coordination requirements.
8.	All sprinkler heads shall be located as shown on "Typical ACT Panel Approved Sprinkler Penetration Points" detail, unless noted otherwise. All sprinkler heads must be installed symmetrically with all other devices, equipment, etc. The contractor shall use the approved architectural reflected ceiling plans as the basis for his sprinkler head layout, any deviation from the drawing layout must be approved in advance by the Architect/Engineer.
9.	Contractor shall prep all exposed piping for painting. Preparation shall include cleaning, and removal of dust, rust, oil, or other contaminants on exposed piping. General contractor shall provide protective covering for all sprinklers installed in areas to be painted, and remove protective coverings upon completion of painting. All painted or damaged sprinklers shall be replaced at no additional cost to the Owner.
10.	The contractor shall verify all ceiling construction types prior to ordering or installing any sprinkler heads as shown. Refer to details/specifications for sprinkler head manufacturers, models, and type to be used in each ceiling type.
11.	Sprinkler system design density for Offices, Toilet Rooms, Break Rooms, typical Classrooms, Auditoriums, Libraries (except Large Stack Rooms) etc. shall be based on "Light Hazard Occupancy" classification. Maximum sprinkler coverage shall be 225 square feet per head, unless noted otherwise.
12.	Sprinkler system design density for Mechanical Rooms, Janitor Closets, Storage Rooms, Standard Science Rooms, Kitchens, Vehicle storage garage areas , etc. shall be based on "Ordinary Hazard I Occupancy" classification. Maximum sprinkler coverage shall be 130 square feet per head, unless noted otherwise.
13.	Sprinkler system design density for Stages, Libraries (Large stack room areas). Loading docks, and Repair garage areas shall be based on "Ordinary Hazard II Occupancy" classification. Maximum sprinkler coverage shall be 130 square feet per head, unless noted otherwise.
14.	Sprinkler head locations, installations, etc. for the entire project shall be installed in strict accordance with NFPA 13 (latest edition) Chapter 8 "Installation Requirements", International Building Code, International Fire Code (latest editions), and the Local Fire Marshal.
15.	Contractor shall provide additional heads and supply pipe required for proper sprinkler coverage both above and below HVAC duct work, suspended units, obstructions, etc. over 48" in width. Coordinate in field (NFPA 8-5.5.3.1).
16.	Contractor shall be responsible for providing sprinklers in all concealed spaces, as required by NFPA13 (latest edition) Chapter 8.
17.	This contractor shall provide vibration isolation and seismic restraint on fire piping as required by contract drawings, specifications, the requirements of NFPA13 (latest edition) Chapter 9 "Hanging, Bracing, and Restraint of System Piping", all local code requirements, the International Building Code and International Fire Code (latest editions).
18.	Provide Inspectors Test Connections and drains as required by NFPA 13 (latest edition) Chapter 8 "Installation Requirements". Fire Protection Contractor shall pipe Inspectors Test Connections piped to exterior of building or to an approved drain location (verify with local AHJ).
19.	Where sprinkler heads are installed in spaces with no ceilings or below ceilings exposed, provide sprinkler guards on these heads. Sprinkler guards shall have chrome finish unless directed otherwise by the Architect in field.
20.	Provide sleeves at all wall/floor penetrations. Coordinate sleeves with GC for installation in wall/floor construction. In exposed areas provide chrome plated escutcheons at pipe penetrations. Seal all fire rated floor and wall penetrations with fire stopping materials as specified in the Div. 7 specifications. Where firestopping materials are not specified in Div. 7, provide firestopping materials U.L. listed for use and as manufactured by 3m or equal.
21.	This Contractor is responsible for performing a Fire Flow Test on the Public Water Distribution System serving the building prior to beginning his design. The contractor shall coordinate all requirements for the flow test with the Water Authority. The Contractor shall use these test results as a basis of design for his hydraulic calculations for the building system.
22.	Contractor shall install all sprinkler piping in exposed area as high as possible within the ceiling space. Sprinkler branches shall be installed within bar joists, tight to bottom of joists or tight to bottom of beams.
23.	This Contractor shall install all sprinkler piping in exposed area as high as possible within the ceiling space. Sprinkler branches shall be installed within bar joists, tight to bottom of joists or tight to bottom of beams. This Contractor shall coordinate piping locations and elevations with all other trades and note elevations on the sprinkler submittal drawings. All piping shall be installed to freely drain back to mains. Where trapped piping is unavoidable, this contractor shall provide auxiliary drains in accordance with NFPA13 at lowpoints of all trapped piping. All auxiliary drains shall be clearly labeled and all locations shall be noted on the record drawings.
24.	Contractor shall verify and coordinate all sprinkler requirements for elevator shafts and elevator machine rooms with PA L&I, elevator installer, and local AHJ prior to installation. Field coordinate installation work between all trades. Branch piping serving sprinklers within elevator shafts and elevator machine rooms shall be provided with isolation valve, check valve, and testable "zero-delay" flow switch. coordinate wiring of zero-delay flow switch to initiate elevator recall or shunt trip power disconnect as required by NFPA-13, NFPA-72, PA L&I, elevator installer, and local AHJ.
25.	Contractor shall provide all signage in accordance with NFPA-13 including but not limited to riser tags with Hydraulic Calculation information, control valve tags, and piping identification refer to specifications for additional information.
25.	Contractor shall minimize all required shutdowns of existing building fire protection system. All required shutdowns of the existing building fire protection system shall be coordinated with the Owner. Contractor shall provide all necessary after hours labor required to coordinate required shutdowns with Owner and provide any required fire watch for the existing building during shutdown periods.
26.	Contractor shall verify manufacturer and models of sprinklers currently installed in the existing building sprinkler system. Where sprinklers of the type specified are currently installed in the existing building, the contractor shall provide sprinklers of the same make and manufacturer to reduce the required types of stock of sprinkler spares.
27.	Contractor shall provide all required operational and pressure testing of sprinkler system in accordance with NFPA-13 and coordinate witnessing of test with local AHJ. Where existing systems are modified or connected to new work, the entire system shall be tested in accordance with NFPA-13 and all requirements of the local AHJ.

FIRE PROTECTION DEMOLITION - GENERAL NOTES

1.	Existing sprinkler heads and associated branch/supply piping to be removed in is entirety, as indicated by plans or required by scope of work. Contractor shall verify location of all branch piping and heads in field. Removals shall not be limited to only the piping on the demolition plans. Contractor shall field verify all conditions. Contractor shall notify architect / engineer of any piping not shown on removals prior to any demolition. None of the work shown on this plan shall be performed until new piping, equipment, etc. Is installed and tested or necessary temporary connections are installed, tested and operational.
2.	Equipment and piping locations, quantity and conditions are approximate. Contractor shall field verify all conditions, locations and quantities prior to bid. These demolition drawings are intended to convey the basics of the existing system components. Not all conditions and components have been identified on these drawings.
3.	All existing Fire Protection sprinkler and standpipe systems (within the project scope of work and ancillary systems outside the project scope of work) shall remain functional for as long as required, until replaced with new, or reworked as required (see new work plans). Contractor may provide temporary connections and/or isolation valves in order to keep systems functioning properly and to eliminate the need for complete system drainage everytime work is performed on the existing system. All temporary isolation valves shall be removed at project completion or have handles removed and turned over to owner for safe keeping. Contractor shall provide fire watch or other fire prevention measures as required by the local AHJ and the Owner's insurance carrier during any periods where the existing system is deactivated to perform demolition or new connections at no additional cost to the owner. Contractor shall be aware that some work may be required to be performed after hours, weekends, or during vacation breaks. All demolition work shall be coordinated with the Owner/Architect to limit inconvenience or interruption of the normal workday schedule for this facility. Any demolition work done, by the Contractor, which affects the operation of this facility shall be replaced with new, repaired to original conditions or replaced by temporary means for however long as required, at no additional cost to the owner.
4.	The demolition plans are a general guide only. They are included to assist the contractor and do not include all work to be removed.
5.	The Contractor is responsible for removal of all existing materials etc. In the way of any new work, even if not indicated on the demolition plans to be removed.
6.	Contractor is responsible for protecting existing materials, equipment and finishes that are to remain.
7.	Contractor shall remove all items, fixtures, equipment that are to remain but conflict with the installation of any new work. The Contractor shall re-install the same items (or new if damaged during this task) once new work is completed.
8.	Contractor shall remove all of his demolition debris on a daily basis from all interior renovated areas as directed by the architect / owner.
9.	Where existing piping branches, laterals, etc. Are called to be removed, the existing piping must be capped/plugged permanently where take-off from main occurs.
10.	The owner reserves the rights to all removed equipment, fixtures, materials, etc. Should the owner decide not to keep said items the Contractor shall remove these items from the site in an appropriate manner. Coordinate with Owners representative in field.

FIRE PROTECTION ABBREVIATION LEGEND

AAC	Above Accessible Ceiling	FH	Fire Hydrant
AFF	Above Finished Floor	FHC	Fire Hose Cabinet
AFG	Above Finished Grade	Fin. Flr.	Finished Floor
AB	Above	Flr.	Floor
Arch	Architectural	FP	Fire Protection
BF	Below Floor	FPZ	Fire Protection Zone
BFG	Below Finished Grade	FVC	Fire Valve Cabinet
BFP	Backflow Preventer	G	Gas
CLG.	Ceiling	G.C.	General Contractor
Coord.	Coordinate	H.C.	HVAC Contractor
CTE	Connect To Existing	MAX	Maximum
DBF	Down Below Floor	MIN	Minimum
DN	Down	MTD	Mounted
DWG	Drawing	P.C.	Plumbing Contractor
E.C.	Electrical Contractor	PIV	Post Indicating Valve
E.T.R.	Existing To Remain	S.F.	Square Foot
Ea.	Each	T.B.R.	To Be Removed
Ext.	Exterior	TYP.	Typical
F.F.	Finished Floor	V.I.F.	Verify In Field
F.P.C.	Fire Protection Contractor		

SPRINKLER HEAD LEGEND

C ? ?	Concealed Pendant Type. See drawings for following options: Designations: DRY - Dry type with barrel length determined in field E.T.R. - Existing To Remain T.B.R - To Be Removed Cover colors: W - White CH - Chrome CC - Custom Color (Color as determined by Architect)
P ? ? U ? ?	Standard Pendant (P) or Upright (U) Type. See drawings for following options: Designations: DRY - Dry type with barrel length determined in field. DSR - Dry type, Semi-recessed INST - Institutional, flush mount pendant type EC - Extended Coverage G - Guard E.T.R. - Existing To Remain T.B.R - To Be Removed Colors: CH - Chrome Brass
? ?	Horizontal Sidewall Type. See drawings for following options: Designations: C - Concealed DRY - Dry type with barrel length determined in field. DSR - Dry type, Semi-recessed with barrel length determined in field. EC - Extended Coverage G - Guard E.T.R. - Existing To Remain T.B.R - To Be Removed Colors: CH - Chrome Brass

*Coordinate sprinkler head types with drawings, approved architectural reflected ceiling plans and field conditions. Resolve any conflicts with Architect/Engineer prior to installation.
*Heads designated as exposed standard upright and pendant type can be either pendant or upright as to best fit in final piping layout.
*Refer to Division 21 - "Fire Suppression" Specifications for detailed sprinkler specifications.

DESIGN CODE REFERENCES

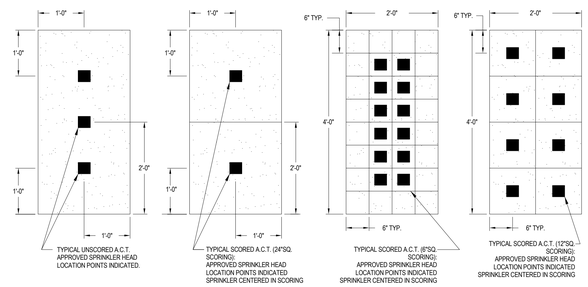
PA - UCC	PENNSYLVANIA UNIFORM CONSTRUCTION CODE
IBC	ICC - INTERNATIONAL BUILDING CODE; 2018
IFC	ICC - INTERNATIONAL FIRE CODE; 2018 (AS REFERENCED IN INTERNATIONAL BUILDING CODE)

REFERENCED DESIGN STANDARDS

NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA 13	NATIONAL FIRE PROTECTION ASSOCIATION - STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS; 2016 EDITION OR MOST RECENT EDITION ADOPTED BY AUTHORITY HAVING JURISDICTION, INCLUDING ALL APPLICABLE AMENDMENTS AND SUPPLEMENTS.
NFPA 14	NATIONAL FIRE PROTECTION ASSOCIATION - STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEMS; 2016 EDITION OR MOST RECENT EDITION ADOPTED BY AUTHORITY HAVING JURISDICTION, INCLUDING ALL APPLICABLE AMENDMENTS AND SUPPLEMENTS
NFPA 20	NATIONAL FIRE PROTECTION ASSOCIATION - STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION; 2016 EDITION OR MOST RECENT EDITION ADOPTED BY AUTHORITY HAVING JURISDICTION, INCLUDING ALL APPLICABLE AMENDMENTS AND SUPPLEMENTS
NFPA 24	NATIONAL FIRE PROTECTION ASSOCIATION - STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES; 2016 EDITION OR MOST RECENT EDITION ADOPTED BY AUTHORITY HAVING JURISDICTION, INCLUDING ALL APPLICABLE AMENDMENTS AND SUPPLEMENTS
NFPA 101	NATIONAL FIRE PROTECTION ASSOCIATION - 2018 EDITION OR CODE FOR SAFETY TO LIFE FROM FIRE IN BUILDINGS AND STRUCTURES; MOST RECENT EDITION ADOPTED BY AUTHORITY HAVING JURISDICTION, INCLUDING ALL APPLICABLE AMENDMENTS AND SUPPLEMENTS.

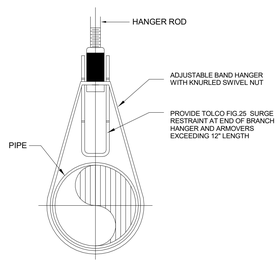
FIRE PROTECTION DESIGN LEGEND

1	Sprinkler system Design Density for rooms indicated shall be based on "Light Hazard" classification. Maximum sprinkler coverage shall be 225 square feet per head , unless noted otherwise.
2	Sprinkler system Design Density for rooms indicated shall be based on "Ordinary Hazard 1" classification. Maximum sprinkler coverage shall be 130 square feet per head , unless noted otherwise.
3	Sprinkler system Design Density for rooms indicated shall be based on "Ordinary Hazard 2" classification. Maximum sprinkler coverage shall be 130 square feet per head , unless noted otherwise.
4	This Contractor shall coordinate sprinkler head and piping with all other trades prior to installation. Contractor shall also provide additional heads and supply pipe required for proper sprinkler coverage both above and below HVAC duct work, suspended units, etc. over 48" in width. Coordinate in field (NFPA 5-5.5.3.1).



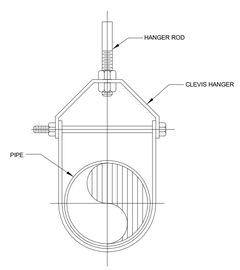
Typical A.C.T. Panel Approved Sprinkler Penetration Points

NO SCALE



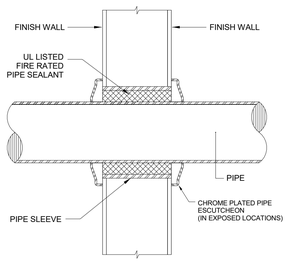
Typical Adjustable Band Hanger Detail - Fire Protection Piping

Scale: None



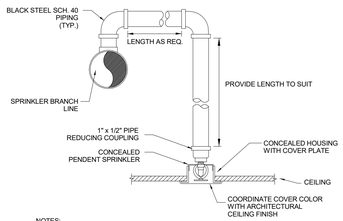
Typical Clevis Hanger Detail

Scale: None



Pipe Sleeve Through Wall Detail

Scale: None

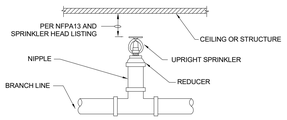


NOTES:

1. ADJUST SPRINKLER DROPS AS NECESSARY TO CLEAR OBSTRUCTIONS SUCH AS CEILING "T" BAR SUSPENSION SYSTEM, LIGHT FIXTURES, ETC. PROVIDE A PIPE HANGER IF THE HORIZONTAL OFFSET LENGTH EXCEEDS 24 INCHES.

Typical Sprinkler Pipe Drop Detail w/ Concealed Pendent Sprinkler Head

Scale: None

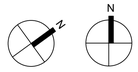


NOTE:

POSITION OF SPRINKLER HEADS WITH RESPECT TO COMBUSTIBLE AND NON-COMBUSTIBLE CONSTRUCTION, STRUCTURAL MEMBERS, ETC. SHALL BE IN ACCORDANCE WITH NFPA 13.

Typical Upright Sprinkler Head Detail

Scale: None



True Project

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Structural Engineer
Schradergroup
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Lancaster, PA 17602
610.694.8020

Professional Seal:

Owner:
OWEN J. ROBERTS SCHOOL DISTRICT
Owner Address

Additions and Renovations to:
OJR DISTRICT SERVICES CENTER

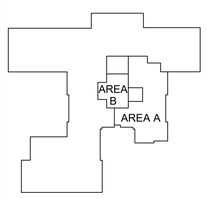
ISSUED FOR:

NO.	DESCRIPTION	DATE
	ISSUED FOR BIDDING	07/27/2026

DATE: 07/24/2026

SG PROJECT NUMBER: 225180.00

Key Plan:

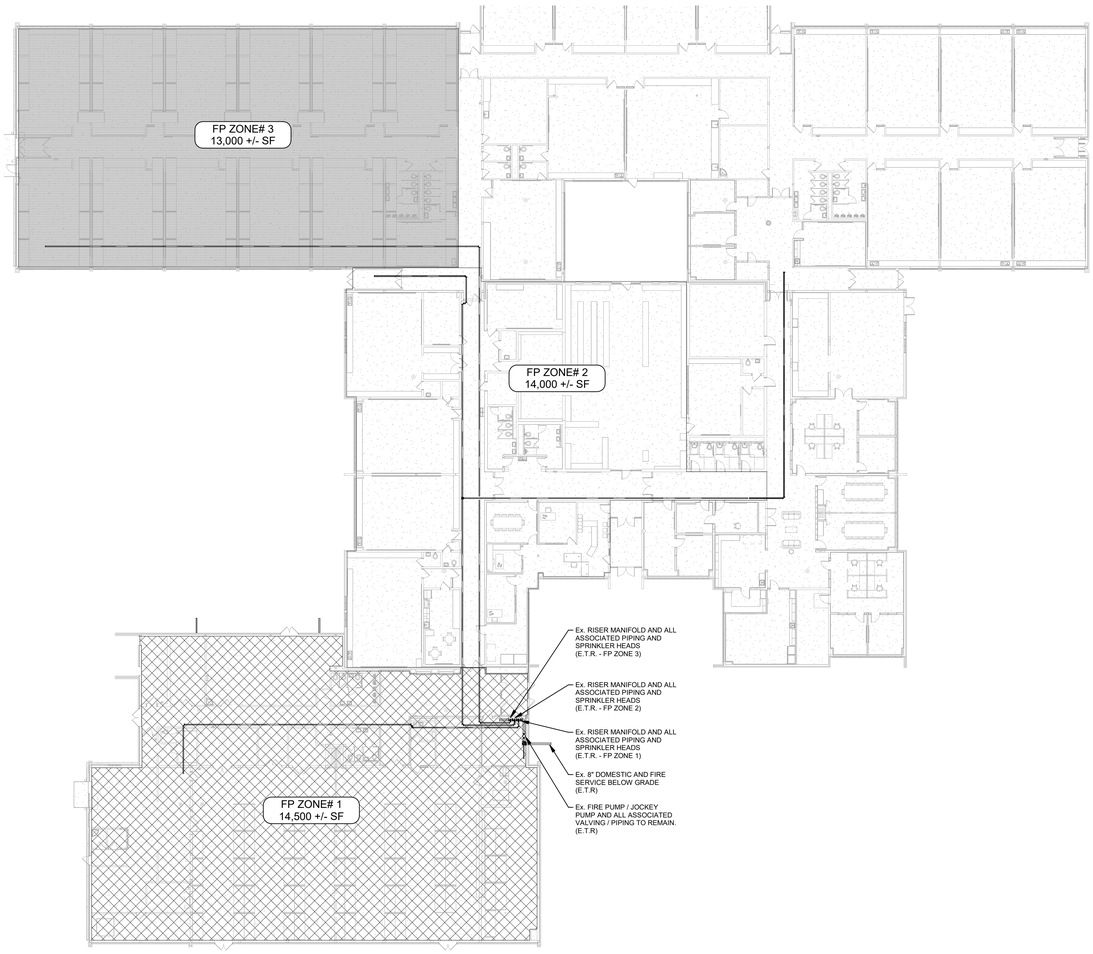


Drawing Title:

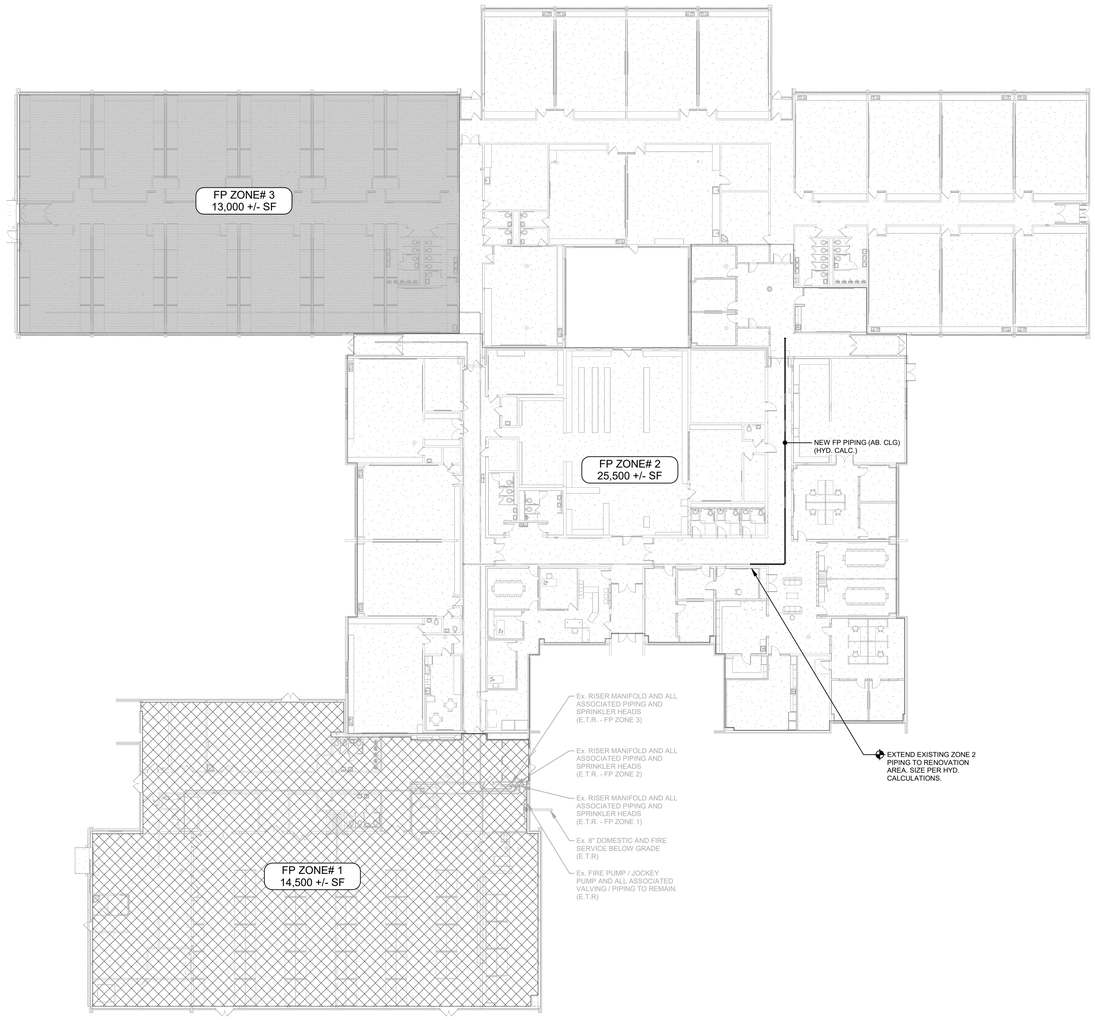
COVER SHEET - FIRE PROTECTION

Drawing Number:

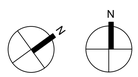
FP0.00



1 EXISTING FIRST FLOOR ZONE PLAN - FIRE PROTECTION
FP0.1 SCALE: 3/64" = 1'-0"



2 FIRST FLOOR - ZONE PLAN - NEW WORK - FIRE PROTECTION
FP0.1 SCALE: 3/64" = 1'-0"



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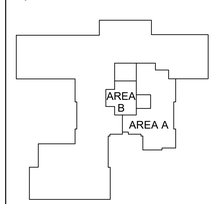
Key Plan:

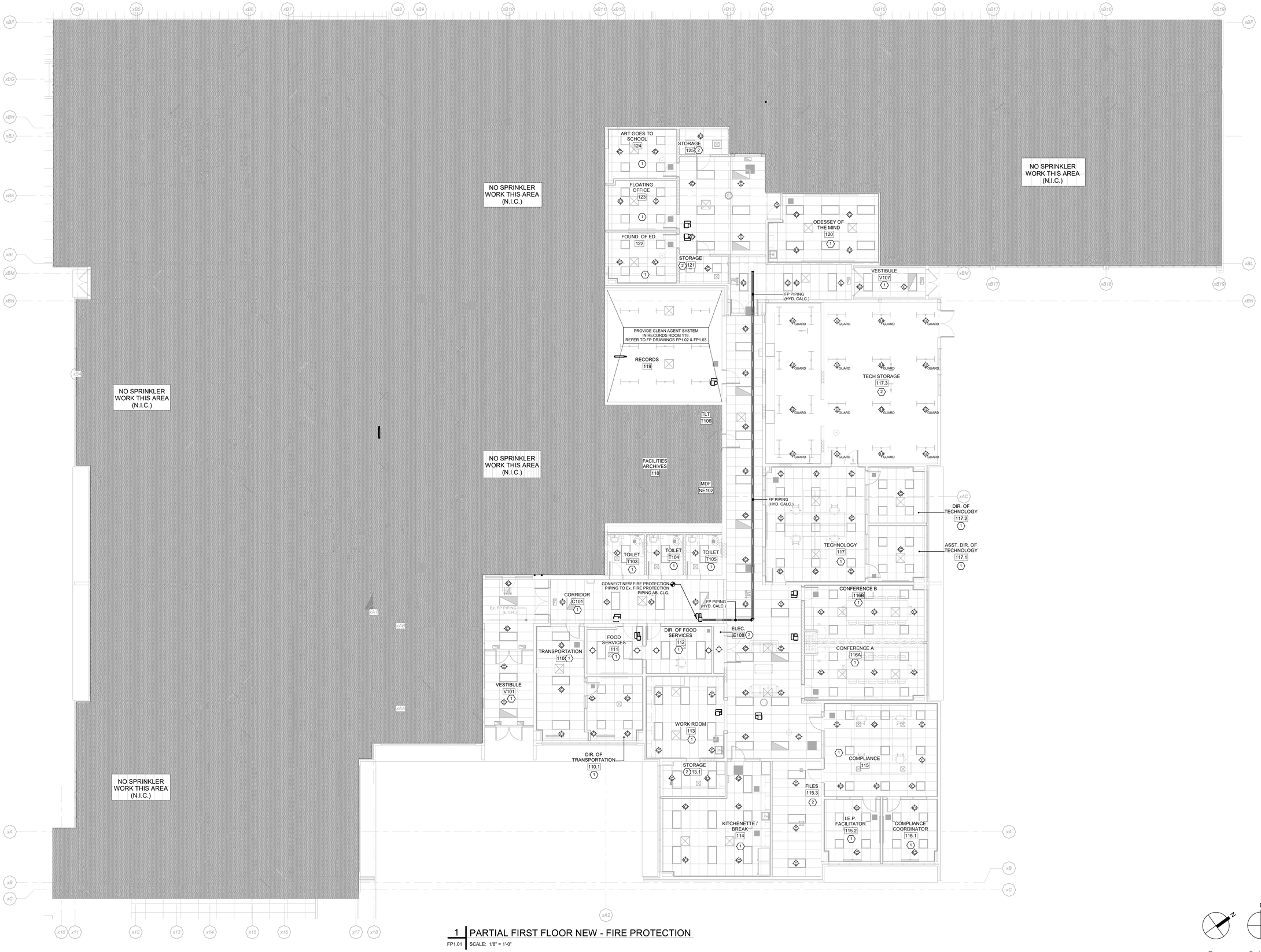


Drawing Title:

ZONE PLANS - FIRE PROTECTION

Drawing Number:

FP0.1



1 PARTIAL FIRST FLOOR NEW - FIRE PROTECTION

FP1.01 SCALE: 1/8" = 1'-0"

True Project

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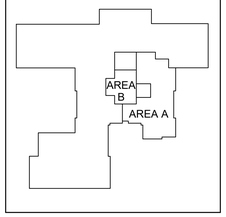
DATE: 07/24/2026

SG PROJECT NUMBER: 225180.00

Key Plan:



Drawing Title:

FIRST FLOOR PLAN - FIRE PROTECTIONS

Drawing Number:

FP1.01

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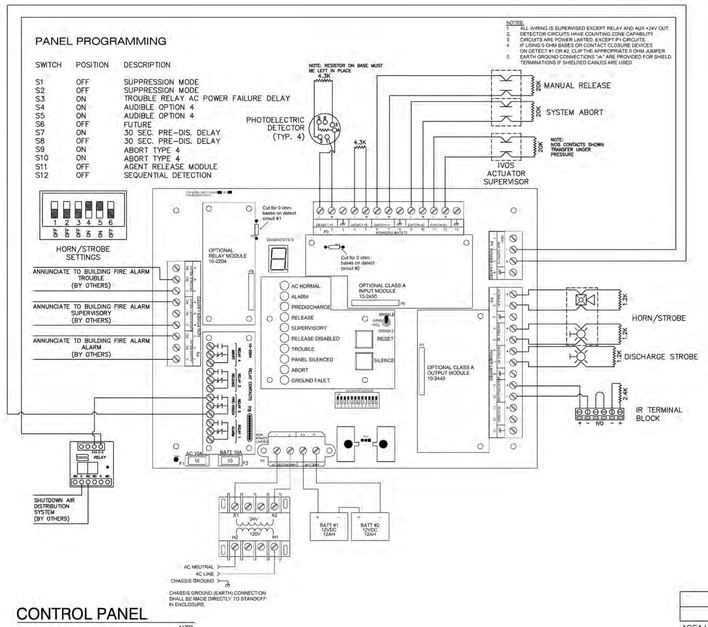
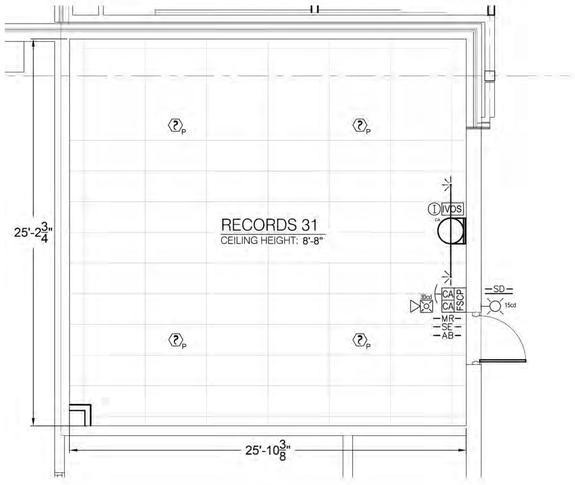


CONTROL PANEL
NTS

SF1230 PIPING NOTE:

ALL SF1230 NOZZLES MUST BE DIRECTED DOWNWARD.



SYSTEM LAYOUT
SCALE: 1/4"=1'-0'

SEQUENCE OF OPERATIONS

ALARM: ACTIVATION OF ANY ONE SMOKE DETECTOR SHALL CAUSE:
- THE PIEZO ON THE PANEL TO "CHIRP".
- AN ALARM CONDITION DISPLAYED AT THE FIRE SUPPRESSION PANEL.
- ACTIVATION OF HORN/STROBE UNIT(S) (SLOW).
- ANNUNCIATION TO THE BUILDING FIRE ALARM.

PRE-DISCHARGE: ACTIVATION OF ANY TWO SMOKE DETECTORS SHALL CAUSE:
- THE PIEZO ON THE PANEL TO "CHIRP".
- A PRE-DISCHARGE CONDITION DISPLAYED AT THE FIRE SUPPRESSION PANEL.
- ACTIVATION OF HORN/STROBE UNIT(S) (FAST).
- INITIATION OF 30 SECOND TIME DELAY.
- THE SHUTDOWN OF THE AIR DISTRIBUTION SYSTEM.

RELEASE: 30 SECOND TIME DELAY EXPIRATION SHALL CAUSE:
- THE PIEZO ON THE PANEL TO "CHIRP".
- A RELEASE CONDITION DISPLAYED AT THE FIRE SUPPRESSION PANEL.
- ACTIVATION OF HORN/STROBE UNIT(S) (STEADY) AND DISCHARGE STROBE(S).
- FIRE SUPPRESSION AGENT TO BE DISCHARGED.

ACTIVATION OF A MANUAL RELEASE STATION SHALL CAUSE:
- A RELEASE CONDITION DISPLAYED AT THE FIRE SUPPRESSION PANEL.
- ACTIVATION OF ALL HORN/STROBE UNIT(S) (STEADY) AND DISCHARGE STROBE(S).
- FIRE SUPPRESSION AGENT TO BE DISCHARGED IMMEDIATELY.
- ALL SYSTEM FUNCTIONS TO INITIATE.
- AN OVERRIDE OF THE SYSTEM ABORT SWITCH.

ACTIVATION OF A SYSTEM ABORT SWITCH SHALL CAUSE (ABORT TYPE 4):*
- AN ABORT CONDITION DISPLAYED AT THE FIRE SUPPRESSION PANEL.
- A TROUBLE SIGNAL SENT TO THE BUILDING FIRE ALARM.
- A RESET OF ANY TIME DELAY WITHIN THE SYSTEM. UPON RELEASE THE SYSTEM WILL COUNTDOWN THE PRE-SET TIME DELAY AND AGENT RELEASE WILL OCCUR.

*THIS IS A MOMENTARY SWITCH WHICH WHEN ACTIVATED MUST BE HELD IN FOR APPROXIMATELY ONE SECOND TO ENGAGE.

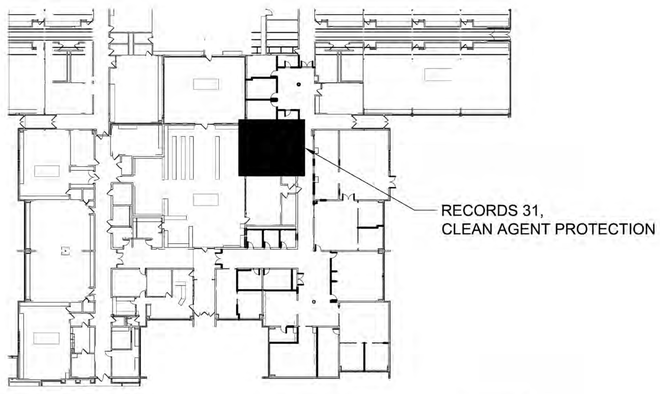
TROUBLE CONDITION SHALL CAUSE:
- A TROUBLE CONDITION DISPLAYED AT THE FIRE SUPPRESSION PANEL.
- ANNUNCIATION TO THE BUILDING FIRE ALARM.

SUPERVISORY CONDITION SHALL CAUSE:
- A SUPERVISORY CONDITION DISPLAYED AT THE FIRE SUPPRESSION PANEL.
- ANNUNCIATION TO THE BUILDING FIRE ALARM.

FK-5-1-12 DESIGN DATA CHART

ROOM NAME	ZONE	STORAGE CYLINDER	PROTECTED HEIGHT	AREA (SQ. FT.)	VOLUME (CU. FT.)	TEMP	CONCENTRATION (AMDC)	AGENT REQUIRED	ELEVATION CORRECTION	AGENT SUPPLIED
RECORDS 31	1	1	15.75'	650.7	10,249	70°	4.5%	420.21	N/A	424 lbs.

AREA VOLUME X 4.5% (.0410 PER NFPA 2001) = AGENT REQUIRED
AMDC = ADJUSTED MINIMUM DESIGN CONCENTRATION
FDC = FINAL DESIGN CONCENTRATION



KEY MAP
NTS

ENCLOSURE HEIGHT	SF1230	
1'-4" - 16'-0"	180°	44'-11"
1'-4" - 16'-0"	360°	28'-5'
< 1'-4"	180°	22'-5'
< 1'-4"	360°	14'-2'

NOZZLE THROW CHART
NTS

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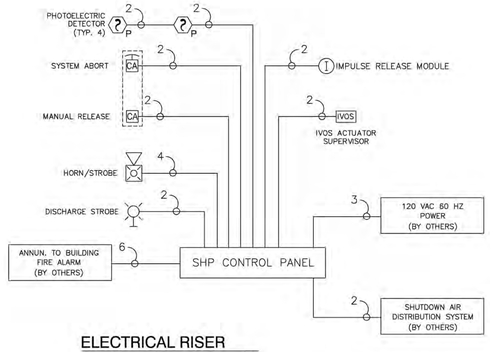


ELECTRICAL RISER
NTS

NOTE: ALL WIRING SHALL BE THHN #14 AWG STRANDED UNLESS OTHERWISE NOTED. SEE ELECTRICAL NOTES ON SHEET 2 FOR POWER INPUT WIRING.

MINUTES PER AIR CHANGE	AIR CHANGES PER HOUR	SPACING PER DETECTOR			
		FT²	DETECTOR TO DETECTOR	DETECTOR TO WALL	DETECTOR TO CORNER
1	60	125	11'-2'	5'-7"	7'-10"
2	30	250	15'-10'	7'-11"	11'-1"
3	20	375	19'-4'	9'-8"	13'-6"
4	15	500	22'-4'	11'-2"	15'-7"
5	12	625	25'-0'	12'-6"	17'-6"
6	10	750	27'-4'	13'-8"	19'-2"
7	8.6	875	29'-7"	14'-9"	20'-8"
8	7.5	900	30'-0'	15'-0"	21'-0"
9	6.7	900	30'-0'	15'-0"	21'-0"
10	6	900	30'-0'	15'-0"	21'-0"

NOTES:
1. ALL POINTS ON THE CEILING SHALL HAVE A SMOKE DETECTOR WITHIN A DISTANCE EQUAL TO OR LESS THAN 0.7 TIMES THE NOMINAL SPACING.
2. ALL SMOKE DETECTORS TO BE A MINIMUM OF 3-0" FROM DIFFUSERS AND REGISTERS.

SMOKE DETECTOR SPACING CHART
NTS

SHEET INDEX

SHEET	DESCRIPTION
1	EQUIPMENT LEGEND, SYSTEM LAYOUT, CONTROL PANEL & RISER
2	NOTES & DETAILS

EQUIPMENT LEGEND

SYM	PART NUMBER	QTY	DESCRIPTION
SCP	10-063-1-R-1	1	SHP PRO CONTROL SYSTEM, ALL MODES, RED, 110V
	B12120	2	BATTERIES 12V 12AH
	20-1175	1	SINGLE(DPDT) RELAY
	10-2204	1	CRM4 RELAY MODULE
CA CA	10-2975	1	MANUAL RELEASE / SYSTEM ABORT
	20-123-01	1	STROBE WALL MOUNT RED/WHT
	20-123-48	1	HORN/STROBE WALL MOUNT RED/WHT
	20-123-TRIM-R	2	"AGENT" BEZEL RED (GE SERIES)
P	63-1320	4	PHOTOELECTRIC DETECTOR
	67-1034	4	6" BASE 430 OHM
	70-364	1	215# AGENT STORAGE CONTAINER
	F0295590	215#	SF1230 AGENT FACTORY FILLED & PRESSURIZED
I	70-279	1	IMPULSE VALVE OPERATOR (IVO) KIT (IVOS INCLUDED)
	80-122-100	2	1" - 180° DISCHARGE NOZZLE
SE	02-I04	1	PULSE SEQUENCE SIGN
SD	02-E02	1	"IF ALARM ACTIVE, DO NOT ENTER" SIGN
AB	02-AB1	1	"SYSTEM ABORT" SIGN
MR	02-MR1	1	"MANUAL RELEASE" SIGN
	02-E01	1	"DO NOT ENTER DURING OR AFTER DISCHARGE" SIGN

SSI
Fire & Explosion Protection
155 NESTLE WAY, SUITE 104
BREINIGSVILLE, PA 18031
(610) 709-5000

THE INFORMATION ON THESE DRAWINGS REFLECTS THE DESIGN OF THE FIRE SUPPRESSION SYSTEM PROPOSED BY SUPPRESSION SYSTEMS INC. FINAL COMMISSIONING OF THIS SYSTEM WILL NOT OCCUR WITHOUT THESE DRAWINGS BEING APPROVED BY THE CUSTOMER/CUSTOMER REPRESENTATIVE.

DATE APPROVAL

PE SEAL

REV	DATE	DESCRIPTION
A	1/27/26	TANK RELOCATED

OJR DISTRICT SERVICES CENTER

SHP PRO / SF1230 CLEAN AGENT FIRE PROTECTION SYSTEM

ISSUE DATE:	12/8/25
SCALE:	AS NOTED
DESIGNED TO:	NFPA 2001(2018 EDITION) NFPA 72(2019 EDITION)
DRAWN BY:	ZAK DOLAK
PROJECT NO:	B2025-5
PAGE NO:	1

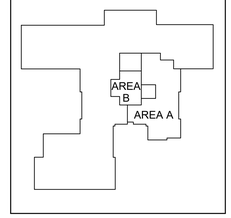
ISSUED FOR:

NO.	DESCRIPTION	DATE
	ISSUED FOR BIDDING	07/27/2026

DATE: 07/24/2026

SG PROJECT NUMBER: 225180.00

Key Plan:



True Project

Drawing Title:

CLEAN AGENT SYSTEM - RECORDS ROOM - FIRE PROTECTION

Drawing Number:

FP1.02

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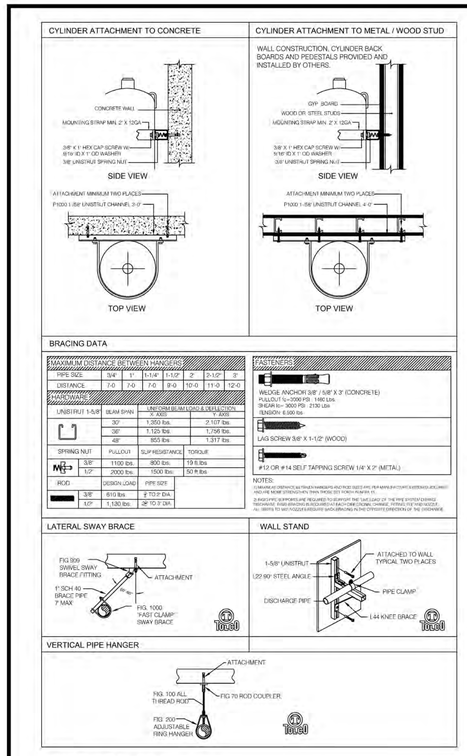
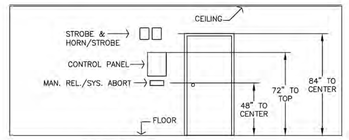


BRACING DATA

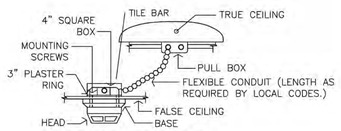
MAXIMUM DISTANCE BETWEEN HANGERS						
PIPE SIZE	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
DISTANCE	10'	10'	10'	10'	10'	11'-0"	12'-0"

MAXIMUM LOAD				
UNISTRUT 1-5/8"	BEAM SPAN	UNIFORM LOAD X-AXIS	UNIFORM LOAD Y-AXIS	
	30"	1,350 lbs.	2,107 lbs.	
	36"	1,125 lbs.	1,756 lbs.	
	48"	955 lbs.	1,317 lbs.	
SPRING NUT	PULLOUT	SLIP RESISTANCE	TORQUE	
3/8"	1100 lbs.	800 lbs.	19 ft.lbs	
1/2"	2000 lbs.	1500 lbs.	50 ft.lbs	
ROD	DESIGN LOAD	PIPE SIZE		
3/8"	610 lbs.	2" TO 3" DIA.		
1/2"	1,130 lbs.	3" TO 5" DIA.		

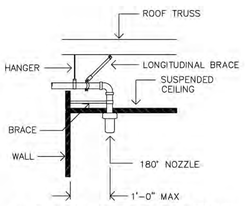
PIPE BRACING
NTS



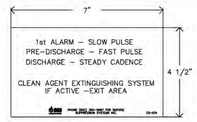
ELEVATION
COMPONENT LOCATIONS NTS



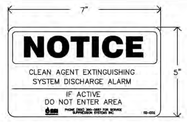
ACOUSTICAL TILE CEILING
DETECTOR MOUNTING NTS



ACOUSTICAL TILE CEILING NOZZLE
INSTALLATION NTS



02-I04 PULSE SEQUENCE SIGN
SIGN NTS

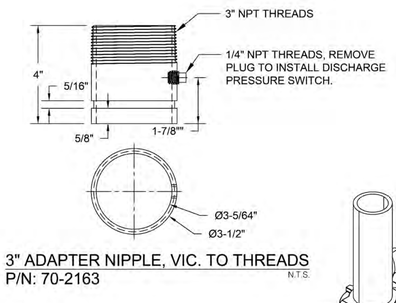


02-E02 SYSTEM DISCHARGE SIGN
SIGN NTS

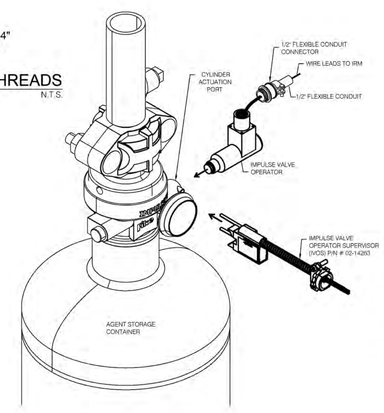
02-MR1 MANUAL RELEASE SIGN
SIGN NTS

02-AB1 SYSTEM ABORT SIGN
SIGN NTS

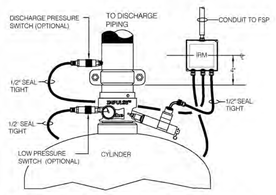
02-E01 CAUTION SIGN
SIGN NTS



3" ADAPTER NIPPLE, VIC. TO THREADS
P/N: 70-2163
N.T.S.

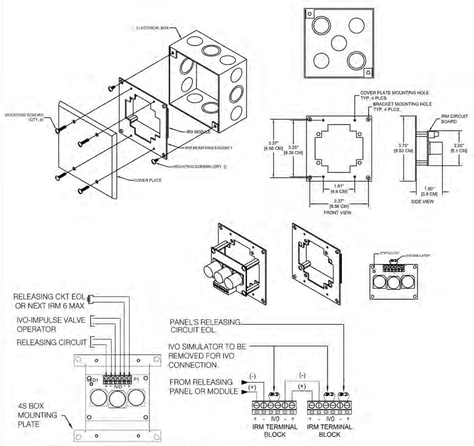


IMPULSE VALVE OPERATOR SUPERVISOR
NTS



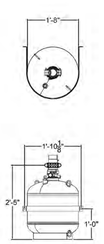
1. LOW PRESSURE AND DISCHARGE PRESSURE SWITCHES AND MODULES ARE OPTIONAL AND MAY NOT BE PART OF SCOPE.
2. ACTUAL LAYOUT SHALL BE FIELD DETERMINED.

CYLINDER ASSEMBLY
NTS

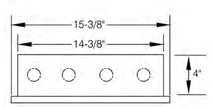


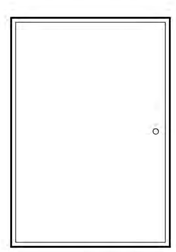
1. MAXIMUM WIRE SIZE FOR TERMINALS IS #14 AWG.
2. 24VDC @ 2.0 AMPS MAX. SUPERVISED, POWER LIMITED.
3. MAXIMUM OF SIX (6) IRM'S WIRED IN PARALLEL, CAN BE CONNECTED CONNECTED TO A SINGLE RELEASE CIRCUIT.

IRM INTERFACE
NTS

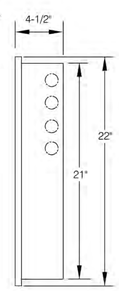


215 LB. AGENT STORAGE CONTAINER NTS





SHP PANEL ENCLOSURE
N.T.S.



SHP SERIES
BATTERY REQUIREMENT CALCULATION

NORMAL OPERATION					
Control Current	0.135	A			
Aux Output Current	0.000	A			
Total Normal Current	0.135	A x	24	Hours =	3.24 AH
ALARM OPERATION					
Controller Current	0.135	A			
CRM4 Current	0.010	A	(.01 A per output used)		
Output Device Current	0.167	A			
Aux Output Current	0.040	A			
Total Alarm Current	0.352	A x	0.083	Hours =	0.03 AH
				Total AH used =	3.27 AH
				x	1.20 factor
				Total Power Required =	3.92 AH
				Total Battery Pack AH Provided =	12.00 AH

Note:
The SHP Pro 0.135 Amp current includes power to activate the normally energized trouble relay and power for a maximum number of two wire detectors.

BATTERY CALCULATION
NTS

SF1230 MECHANICAL NOTES:

1) PIPING MATERIALS MUST CONFORM TO THE REQUIREMENT AS OUTLINED IN NFPA 2001, SECTION 4.2.1, CURRENT EDITION. BLACK PIPE, SCHEDULE 40 MUST BE USED.
2) PIPE FITTINGS MUST CONFORM TO THE REQUIREMENTS AS OUTLINED IN NFPA 2001, SECTION 4.2.3, CURRENT EDITION. MALLEABLE IRON FITTINGS MUST BE 300 LB. CLASS CONFORMING TO ASTM SPECIFICATION A-197 150 LB. CLASS AND ORDINARY CAST IRON FITTINGS ARE NOT PERMITTED. VICTAULIC OR GROOVED PIPE FITTINGS MAY BE USED AS WELL AS THREADED, WELDED OR FLANGED, AS LONG AS THEY CONFORM TO THE ABOVE REQUIREMENTS. HOWEVER, HOLE-CUT FITTINGS OR SIMILAR, MAY NOT BE USED.
3) ALL REDUCTIONS SHALL BE MADE USING REDUCERS OR REDUCING FITTINGS - BUSHINGS ARE NOT PERMITTED.
4) ALL PIPE AND NOZZLE DROPS MUST BE BRACED TO WALLS, COLUMNS, OR CEILINGS USING STEEL HANGERS WITH A MINIMUM OF ⅜" ALL-THREAD ROD PLACED PER NFPA CODE, (CONSULT SSI MECHANICAL SPECS). ALL DROPS TO 180° NOZZLES REQUIRE BACK BRACING IN THE OPPOSITE DIRECTION OF THE DISCHARGE. RIGID PIPE SUPPORTS ARE REQUIRED TO SUPPORT "LIVE LOAD" OF THE PIPE SYSTEM DURING DISCHARGE, RIGID BRACING IS REQUIRED AT EACH DIRECTIONAL CHANGE, FITTING, TEE AND NOZZLE. EARTHQUAKE BRACING SHALL BE USED WHERE REQUIRED.
5) PIPING IS DESIGNED "CENTER TO CENTER", AND FITTINGS ALLOWANCE IS INCLUDED IN PIPE LENGTH "CALL-OFF". LENGTHS OF PIPE ARE APPROXIMATE ONLY. INSTALLING CONTRACTOR MUST DETERMINE EXACT LENGTH REQUIREMENTS PRIOR TO FABRICATION, TO INSURE UNOBSTRUCTED DISCHARGE.
6) EACH PIPE SECTION SHALL BE CLEANED INTERNALLY BEFORE INSTALLATION WITH A NONFLAMMABLE CLEANER SUCH AS PERCHLORETHYLENE IN ACCORDANCE WITH NFPA 2001, LATEST EDITION.
7) ALL PENETRATIONS MUST BE SEALED BY INSTALLING CONTRACTOR.
8) LUBRICATE GASKETS ON ALL VICTAULIC COUPLINGS USING VICTAULIC OR NON-PETROLEUM BASED LUBRICANTS.
9) FLOW CALCULATIONS ARE BASED ON PIPING BEING INSTALLED EXACTLY AS DIAGRAMMED ON SSI DRAWINGS. ALL FIELD PIPING CHANGES SHALL BE APPROVED BY SSI PRIOR TO FABRICATION AND INSTALLATION.
10) TEFLON TAPE OR JOINT COMPOUND SHALL BE USED ON ALL THREADED JOINTS.
11) ALL "THRU TEES" MUST BE RUN IN A HORIZONTAL PLANE.
12) THE PIPING SYSTEM SHOULD BE SECURELY SUPPORTED WITH DUE ALLOWANCE FOR AGENT THRUST FORCES, THERMAL EXPANSION, AND CONTRACTION, AND SHOULD NOT BE SUBJECTED TO MECHANICAL, CHEMICAL, VIBRATION, OR OTHER DAMAGE.
13) ALL NOZZLES TO BE WITHIN 1'0" OF CEILING, 180° NOZZLES TO BE WITHIN 1'0" OF WALL.
14) ALL NOZZLES SHALL BE DIRECTED DOWNWARD.
15) ALL CONTAINERS SHALL NOT BE MOUNTED HORIZONTALLY. MOUNTING IN THE HORIZONTAL POSITION WILL RESULT IN AN INCOMPLETE DISCHARGE.

ELECTRICAL NOTES:

1) CONTROL PANEL SHALL BE WIRED THROUGH SEPARATE CONDUIT TO A 15 AMP, 120 VAC DEDICATED CIRCUIT BREAKER, MINIMUM #12 AWG SHALL BE USED. THREE CONDUCTORS MUST BE RUN: HOT, GROUND, AND NEUTRAL.
2) ALL ELECTRICAL WIRING MUST MEET REQUIREMENTS SET FORTH BY ARTICLE 760 OF THE NEC, AND LOCAL CODES.
3) HIGH VOLTAGE/LOW VOLTAGE LINES MUST BE RUN IN SEPARATE CONDUIT.
4) ALL WIRES MUST BE LABELED, NUMBERED, OR COLOR CODED.
5) ALL AUDIBLE DEVICE CIRCUITS ARE SUPERVISED - PARALLEL BRANCHING OF WIRES IS NOT PERMISSIBLE.
6) ALL SF WIRING MUST BE IN EMT CONDUIT. ALL CEILING WIRING MUST BE IN EMT OR FIRE ALARM METAL CLAD (MC) CONTROL CABLE.
7) DETECTORS MAY NOT BE LOCATED IN DIRECT AIR STREAMS FROM SUPPLY DUCTS.
8) CONTROL PANEL SHALL BE CONNECTED TO EARTH GROUND TO DEFEND AGAINST REDUCED LIGHTNING PROTECTION AND LOSS OF GROUND FAULT SUPERVISION (ARTICLE 760 OF THE NEC)
9) ALL PENETRATIONS MADE BY INSTALLING CONTRACTOR SHALL BE SEALED TO INSURE ROOM INTEGRITY.
10) INSTALLING CONTRACTOR SHALL CONFORM TO SSI ELECTRICAL SPECIFICATIONS.
11) DETECTORS MUST BE MINIMUM 3'0" FROM DIFFUSERS AND REGISTERS.
12) BATTERY CALCULATIONS WERE PERFORMED USING CANDELA AS SHOWN ON SYSTEM LAYOUT. MAKE SURE THE CANDELA SELECTION SLIDER SWITCH ON THE DEVICE IS SET AT CORRECT CANDELA TO ENSURE CORRECT BATTERY CALCULATIONS.
13) NO CONDUIT TO THE BOTTOM OF THE CONTROL PANEL.
14) ALL CONDUIT INSTALLED AT THE DECK LEVEL TO BE A MINIMUM OF 1-1/2" LOWER THAN THE LOWEST POINT OF THE DECKING.

SYSTEM NOTES:

1) COMPONENT LOCATIONS ARE SHOWN FOR DESIGN PURPOSES, AND MUST BE APPROVED PRIOR TO INSTALLATION
2) CONTROL PANEL AND ALL ASSOCIATED DEVICES ARE TO BE SURFACE MOUNTED.
3) ALL DOORS TO PROTECTED AREAS ARE CONSIDERED "NORMALLY CLOSED".
4) ANY DEVIATIONS FROM BASIC DESIGN MUST MEET APPROVAL BY THE SSI ENGINEERING DEPARTMENT PRIOR TO CONTINUING WITH THE INSTALLATION.
5) VERIFY DIMENSIONS IN THE FIELD, REPORT ANY DISCREPANCIES TO SSI ENGINEERING DEPARTMENT.
6) OPERATING TEMPERATURE OF SF1230 IS BETWEEN 32° F AND 130° F.

SF1230 STRUCTURAL GUIDELINES:

BECAUSE OF THE CONCEPT BY WHICH SF1230 SUPPRESSES A FIRE AND THE CHARACTERISTICS THE AGENT POSSESSES, IT IS ESSENTIAL TO RETAIN THE DESIGN CONCENTRATION OF AGENT WITHIN THE HAZARD FOR A SPECIFIED DURATION. THE DURATION TIME MAY VARY WITH THE SPECIFIC APPLICATION AND AUTHORITY HAVING JURISDICTION. THE AGENT "HOLD TIME" IS A DIRECT REFLECTION OF THE INTEGRITY OR STRUCTURAL TIGHTNESS OF THE HAZARD AREA. SINCE SF1230 IS HEAVIER THAN AIR, SF1230 HAS A TENDENCY TO ESCAPE FROM LOWER OPENINGS, SUCH AS BENEATH DOORS AND AT THE JUNCTION OF FLOORS AND PARTITION WALLS. HOWEVER, THE FAN PRESSURIZATION TESTS THE ENTIRE HAZARD AREA SLAB TO DECK. ALL PENETRATIONS SHALL BE SEALED. THE FOLLOWING LIST IS SUGGESTIONS SSI PROVIDES TO HELP MAINTAIN A STRUCTURALLY TIGHT AND ACCEPTABLE HAZARD AREA FOR A SF1230 DISCHARGE. THESE SUGGESTIONS ARE BASED ON SSI'S EXPERIENCE WITH THE AGENT, AND ARE PROVIDED AS GENERAL GUIDELINES THAT MAY BE BENEFICIAL TO FOLLOW. SSI WILL NOTIFY THE APPROPRIATE PARTIES OF ANY POSSIBLE PROBLEM AREAS DURING SYSTEM INSTALLATION AND/OR TESTING.

1) ALL DOORS SHALL HAVE PNEUMATIC OR ELECTRICAL DOOR CLOSING DEVICES.
2) SWEEPS AND WEATHER-STRIPPING SHALL BE PROVIDED ON ALL DOORS.
3) ANY DOUBLE DOORS HAVING GAPS SHALL HAVE EXTENSIONS INSTALLED.
4) ALL PENETRATIONS IN PERIMETER WALLS SHALL BE SEALED.
5) SEAL ALL CONDUIT AND CABLE TRAY RUNS.
6) FLOOR DRAINS SHALL HAVE TRAPS INSTALLED AND PRIMED.
7) THE AIR DISTRIBUTION SYSTEM SHALL BE SHUTDOWN AND/OR ISOLATED BY DAMPERS.
8) WALLS MUST EXTEND SLAB TO DECK.
9) ROOF FLUTES MUST BE SEALED WITH APPROPRIATE FIRE CAULK, OR DRYWALL CUT TO FIT FLUTES AND CAULKED. (STUFFING ROCK WOOL OR FIBERGLASS IN FLUTES IS NOT ACCEPTABLE.)

MINIMUM PIPING DISTANCE (ENGINEERED SYSTEMS):

A MINIMUM OF TEN (10) PIPE DIAMETERS MUST BE MAINTAINED BETWEEN FITTINGS TO STABILIZE THE FLOW AND MAINTAIN THE ACCURACY OF THE SPLITS OCCURRING AT THE TEES. THE (10) PIPE DIAMETER RULE APPLIES TO THE FOLLOWING CONFIGURATIONS.

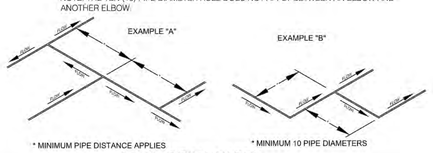
DISTANCE BETWEEN TWO TEES:

A) A MINIMUM OF 2.41 FEET (28.92 INCHES) MUST BE MAINTAINED BETWEEN TEES FOR PIPE SIZES 2-1/2 INCH AND SMALLER. FOR PIPE SIZES 3 INCH AND LARGER, A MINIMUM OF TEN PIPE DIAMETERS MUST BE MAINTAINED BETWEEN TEES.

DISTANCE FROM AN ELBOW TO A TEE:

B) WHEN AN ELBOW IS LOCATED DIRECTLY BEFORE OR DIRECTLY AFTER A TEE, THE MINIMUM DISTANCE BETWEEN THE ELBOW AND THE TEE MUST BE TEN (10) PIPE DIAMETERS.

NOTE: THE TEN (10) PIPE DIAMETER RULE DOES NOT APPLY BETWEEN AN ELBOW AND ANOTHER ELBOW.



SF1230 PIPING NOTES
NTS

SSI
Fire & Explosion Protection
155 NESTLE WAY, SUITE 104
BREINIGSVILLE, PA 18031
(610) 709-5000

THE INFORMATION ON THESE DRAWINGS REFLECTS THE DESIGN OF THE FIRE SUPPRESSION SYSTEM PROPOSED BY SUPPRESSION SYSTEMS INC. FINAL COMMISSIONING OF THIS SYSTEM WILL NOT OCCUR WITHOUT THESE DRAWINGS BEING APPROVED BY THE CUSTOMER/CUSTOMER REPRESENTATIVE.

DATE	APPROVAL
	PE SEAL

REV	DATE	DESCRIPTION
A	1/27/26	TANK RELOCATED

OJR DISTRICT SERVICES CENTER

SHP PRO / SF1230 CLEAN AGENT FIRE PROTECTION SYSTEM

ISSUE DATE:	12/8/25
SCALE:	AS NOTED
DESIGNED TO:	NFPA 2001(2018 EDITION) NFPA 72(2019 EDITION)
DRAWN BY:	ZAK DOLAK
PROJECT NO:	B2025-5
PAGE NO:	2

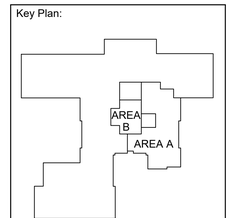
ISSUED FOR:

NO.	DESCRIPTION	DATE
	ISSUED FOR BIDDING	07/27/2026

DATE: 07/24/2026

SG PROJECT NUMBER: 225180.00

Key Plan:



Drawing Title:

CLEAN AGENT SYSTEM - RECORDS ROOM - FIRE PROTECTION

Drawing Number:

FP1.03

True Project