GREENWOOD LAKE UNION FREE SCHOOL DISTRICT
KITCHEN/CAFETERIA RENOVATIONS
ELEMENTARY SCHOOL

80 WATERSTONE ROAD,
GREENWOOD LAKE, NY, 10925

SED PROJECT NO.: 44-21-11-02-0-002-015

DISTRICT OFFICES
GREENWOOD LAKE UNION FREE SCHOOL DISTRICT
P.O. BOX 8 1247 LAKES RD.
MONROE, NY 10950
PH: (845) 477-2411 http://GWLUFSD.ORG

ENGINEERING CONSULTANT

EDPONS ASSOCIATES, P.C. | STRUCTURAL ENGINEERS
70 South Franklin Street,
Wilkes-Barre, PA 18701
570 | 824-6340 edpons.com

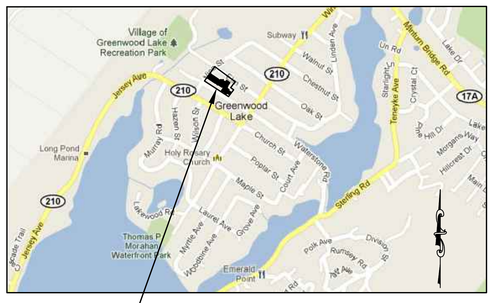
ASBESTOS ABATEMENT CONSULTANT:

Egan Environmental Consulting, Inc.
14 HIGH STREET
MAHWAH, NEW JERSEY 07430
(914) 320-7924 tom_egan2@yahoo.com

ENGINEERING CONSULTANT

FELLENZER ENGINEERING LLP
22 MULBERRY STREET
MIDDLETOWN, NY 10940
(845) 343-1481

LOCATION MAPS



ELEMENTARY SCHOOL
SITE LOCATION

SITE PLANS



GREENWOOD LAKE
ELEMENTARY SCHOOL

DRAWING LIST

TS-1	TITLE SHEET
CIP-01	CONSTRUCTION IMPLEMENTATION PLAN-GENERAL NOTES, DETAILS, & MILESTONE SCHEDULES
CIP-02	CONSTRUCTION IMPLEMENTATION PLAN-SITE PLAN & STAGING AREA
CIP-03	CONSTRUCTION IMPLEMENTATION PLAN-BASEMENT & FIRST FLOOR PLANS
CC-100	CODE COMPLIANCE PLANS
CC-200	CODE COMPLIANCE PLANS
HA-01	ASB ABATEMENT: BASEMENT ABATEMENT PLAN
A-001	ARCHITECTURAL: NOTES, SYMBOLS & ABBREVIATIONS
AD-100	ARCHITECTURAL: PARTIAL DEMO BASEMENT PLAN
AD-101	ARCHITECTURAL: PARTIAL DEMO 1ST FLOOR AND ROOF PLAN
A-100	ARCHITECTURAL: PARTIAL BASEMENT PLAN
A-101	ARCHITECTURAL: PARTIAL 1ST FLOOR AND ROOF PLAN
A-200	ARCHITECTURAL: PARTIAL BASEMENT & 1ST FLOOR RCP
A-300	ARCHITECTURAL: BUILDING SECTIONS
A-400	ARCHITECTURAL: ENLARGED PLANS, INTERIOR ELEVATIONS & SEATING ARRANGEMENTS
A-401	ARCHITECTURAL: CAFETERIA ELEVATIONS AND SCHEDULE
A-402	ARCHITECTURAL: ENLARGED KITCHEN PLAN AND EQUIPMENT SCHEDULE
A-500	ARCHITECTURAL: PARTITION, WALL TYPES AND DETAILS
A-600	ARCHITECTURAL: FINISH, DOOR & HARDWARE SCHEDULES
A-700	ARCHITECTURAL: DETAILS
S1.0	STRUCTURAL: GENERAL NOTES, LOADING CRITERIA, LEGENDS, ABBREVIATIONS & EXISTING FRAMING PLANS
S2.0	STRUCTURAL: EXISTING JOIST REINFORCEMENT, SECTIONS & DETAILS
H-001	HVAC: SYMBOLS, NOTES, & ABBREVIATIONS
HD-100	HVAC: PARTIAL BASEMENT HYDRONIC PIPING DEMO PLAN
HD-200	HVAC: PARTIAL BASEMENT DUCTWORK DEMO PLAN
H-100	HVAC: PARTIAL BASEMENT NEW HYDRONIC PIPING PLAN
H-200	HVAC: PARTIAL BASEMENT NEW DUCTWORK PLAN
H-300	HVAC: ROOF PLAN AND SECTION
H-701	HVAC: DETAILS
H-801	HVAC: SCHEDULES
H-802	HVAC: CAPTIVE AIRE DRAWINGS
H-803	HVAC: CAPTIVE AIRE DRAWINGS
P-001	PLUMBING: SYMBOLS, NOTES, AND ABBREVIATIONS
PD-100	PLUMBING: PARTIAL BASEMENT DEMO PIPING PLAN
P-100	PLUMBING: PARTIAL BASEMENT NEW PIPING PLAN
P-200	PLUMBING: PARTIAL BASEMENT NEW SANITARY & VENTING PLAN
P-300	PLUMBING: PARTIAL BASEMENT NEW STORM WATER PLAN
P-701	PLUMBING: DETAILS
E-001	ELECTRICAL: SYMBOLS, NOTES, AND ABBREVIATIONS
ED-100	ELECTRICAL: PARTIAL BASEMENT POWER DEMO PLAN
ED-200	ELECTRICAL: PARTIAL BASEMENT & FIRST FLOOR LIGHTING DEMO PLAN
E-100	ELECTRICAL: NEW PARTIAL BASEMENT & ROOF POWER PLAN
E-200	ELECTRICAL: NEW PARTIAL BASEMENT & FIRST FLOOR LIGHTING PLAN
E-701	ELECTRICAL: DETAILS
E-801	ELECTRICAL: SCHEDULES

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

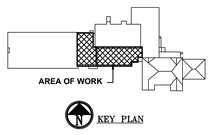
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 073084-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A,
Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100,
Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title

TITLE SHEET

Drawing No.

TS-1

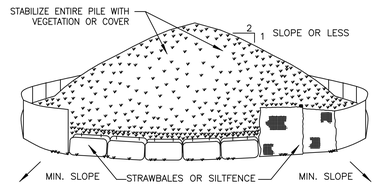
File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\TS1.dwg (Layout: TS)
Date: Tue, Dec 28, 2021 - 4:06 PM (Name: wpb)

GENERAL NOTES / SAFETY GUIDELINES / DETAILS

1. ALL WORK SHALL COMPLY WITH THE STATE EDUCATION DEPARTMENT UNIFORM SAFETY STANDARDS.
2. PER NYS LAW, SMOKING IS PROHIBITED ANYWHERE ON SCHOOL PROPERTY. VIOLATORS WILL BE SUBJECT TO ARREST AND/OR FINE OF $1,000 PER OCCURRENCE.
3. SHIRTS ARE TO BE WORN AT ALL TIMES AND NO SHORT PANTS ARE PERMITTED.
4. ANY CONTRACTOR'S PERSONNEL USING INAPPROPRIATE LANGUAGE OR WHO IS DISRUPTIVE TO THE SCHOOL ENVIRONMENT WILL BE BANNED FROM THE SITE.
5. CONTRACTOR'S PERSONNEL SHALL NOT CONVERSE WITH SCHOOL EMPLOYEES, STUDENTS AND OR THE LOCAL RESIDENTS.
6. ANY CONTRACTOR'S PERSONNEL FOUND TO BE UNDER THE INFLUENCE OF ANY CONTROLLED SUBSTANCE OR ALCOHOL WILL BE BANNED FROM THE SITE.
7. DURING SCHOOL OCCUPANCY NO DELIVERIES FROM THE CONTRACTOR WILL BE ALLOWED DURING BUS DROP OFF OR PICK UP HOURS AS DETERMINED BY THE OWNER, GREENWOOD LAKE UNION FREE SCHOOL DISTRICT BETWEEN THE HOURS OF 7:30 AM TO 8:30 AM AM AND 2:30 PM TO 3:30 PM.
8. USE OF THE EXISTING BUILDING FACILITIES DURING CONSTRUCTION IS PROHIBITED INCLUDING TOILET ROOMS, TELEPHONE AND WATER FOUNTAINS AND CLASSROOMS BY ANY CONTRACTOR'S PERSONNEL.
9. PARKING IS RESTRICTED TO AREAS DESIGNATED BY THE OWNER AND CONSTRUCTION MANAGER. ANY VEHICLES OR TRUCKS IN NON-DESIGNATED AREAS MAY BE TOWED AT CONTRACTOR'S EXPENSE.
10. SHOULD IT BECOME NECESSARY TO ACCESS THE EXISTING BUILDING DURING CONSTRUCTION HOURS FOR MEASUREMENTS OR OTHER NON-DISRUPTIVE WORK, THE CONTRACTOR SHALL BE ESCORTED BY THE CONSTRUCTION MANAGER.
11. ALL WORKERS MUST WEAR PHOTO IDENTIFICATION BADGES AT ALL TIMES WHILE WORKING AT THE SITE. IDENTIFICATION BADGES MUST BE PROVIDED BY CONTRACTOR FOR THEIR RESPECTIVE PERSONNEL, INCLUDING ALL SUBCONTRACTORS.
12. NO ASBESTOS CONTAINING PRODUCTS TO BE USED ANYWHERE ON THIS PROJECT.
13. NO LEAD CONTAINING PRODUCTS TO BE USED ANYWHERE ON THIS PROJECT.
14. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR MUST SUBMIT CONSTRUCTION PLANS FOR REVIEW AND APPROVAL, WHICH SHOW THE LOCATION OF EXHAUST, FRESH AIR FANS, HVAC EQUIPMENT, LOUVERS, WINDOWS, DOORS, AND DUST CONTROL THAT WILL BE PROVIDED FOR EACH CONDITION. NOTING THAT WINDOWS AND DOORS ARE TO BE CLEANED ON A DAILY BASIS.
15. DUST CONTROL:
    - 15.A. THE CONTRACTOR SHALL INSTALL DUST PROTECTION BARRIERS & POLY SHEETING. NO OR MINIMUM DAMAGE TO ADJACENT SURFACES. THE GENERAL CONTRACTOR IS RESPONSIBLE TO REPAIR ANY DAMAGE TO EXISTING SURFACES CAUSED BY CONSTRUCTION ACTIVITY.
      - 15.A.1. DURING SUMMER MONTHS WHEN BUILDING/SPACES ARE UNOCCUPIED: CONTRACTOR SHALL PROVIDE AND INSTALL. ALL PENETRATIONS INTO THE BUILDING SHALL BE SEALED WITH A MINIMUM OF 6 MIL. POLYETHYLENE SHEETING TO PREVENT DUST CREATED BY DEMOLITION AND CONSTRUCTION ACTIVITY FROM ENTERING THE BUILDINGS.
      - 15.A.2. DURING MONTHS WHEN SCHOOL IS OCCUPIED: ALL PENETRATIONS INTO THE BUILDING SHALL BE SEALED WITH TEMPORARY FIRE RATED PARTITIONS AND ACCESS DOORS TO PREVENT THE TRAVEL OF DUST BETWEEN WORK AREAS AND ADJACENT SPACES UNAFFECTED BY WORK.
      - 15.A.3. THE CONTRACTOR IS ADDITIONALLY RESPONSIBLE FOR ALL DEBRIS AND DUST INFILTRATING ADJACENT AND UNDISTURBED AREAS OF AND OR PREVIOUSLY FINISHED AREAS OF THE BUILDING CONTRACTOR WILL PROVIDE FINAL CLEANING OF ALL SURFACES AS REQUIRED AND TO THE SATISFACTION OF THE OWNER AND CM ON A DAILY BASIS, FOR ALL AREAS IMPACTED BY CONSTRUCTION ACTIVITY.
    - 15.B. CONTRACTOR SHALL BE RESPONSIBLE FOR MANAGING DUST AND DIRT ON THE EXTERIOR, SITE SHALL BE WATERED DOWN FREQUENTLY TO PREVENT DUST CLOUDS FROM RISING. ALL PAVED AREAS SHALL BE MAINTAINED CLEAN AT THE CONSTRUCTION MANAGERS REQUEST.
    - 15.C. CONTRACTOR IS TO USE ONLY GRINDERS WITH VACUUM ATTACHMENTS AT THE WORK SITE AND IS TO CHANGE FILTERS REGULARLY. ALL HVAC EQUIPMENT, LOUVERS, FRESH AIR FANS ETC., ADJACENT TO THE WORK SITE ARE TO BE TURNED OFF AND THEN PROTECTED AND TURNED ON AFTER WORK HAS BEEN COMPLETED. AIR INTAKES ARE TO BE PROTECTED WITH REGULARLY MAINTAINED 3M HEPA FILTERS. WINDOWS, DOORS, AND DOORWAYS ADJACENT TO THE WORK SITE MUST HAVE PLASTIC PROTECTION INSTALLED AND REMOVED AND THE WINDOWS AND DOORS AND ADJACENT AREAS ARE TO BE CLEANED ON A DAILY BASIS.
    - 15.D. ALL SMOKE HEADS AND ANY OTHER PIECES OF EQUIPMENT AND APPARATUS' THAT ARE TO REMAIN ARE TO BE COVERED & PROTECTED. IF THEY ARE ACTIVE PIECES OF EQUIPMENT THEN THEY NEED TO BE UNCOVERED AT THE CONCLUSION OF THE DAY'S WORK, RE-COVER THEM AT THE START OF THE WORK DAY.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING OWNERS PROPERTY. ALL EXISTING SHRUBS, TREES, LAWN FIXTURES, SCULPTURES AND MISCELLANEOUS EQUIPMENT SHALL BE PROTECTED AT ALL TIMES. ANY REMOVALS OR RELOCATION OF SAID OBJECTS, IF ALLOWED SHALL BE AS DIRECTED BY OWNER AND CONSTRUCTION MANAGER. CONTRACTOR WILL ALSO REPAIR TO SATISFACTION OF OWNER ALL DISTURBED EXTERIOR SITE AREAS DISTURBED BY CONSTRUCTION, INCLUDING BUT NOT LIMITED TO: LAWNS, PLANTINGS, TREES, DRAINAGE PIPING, BASINS, MANHOLES, CURBS, SIDEWALKS, PAVEMENTS, ETC.. CONTRACTOR WILL ALSO REPAIR TO THE SATISFACTION OF OWNER ALL BUILDING EXTERIORS AND ROOF AREAS DISTURBED BY CONSTRUCTION ACTIVITIES, PRIOR TO SUBSTANTIAL COMPLETION.
17. PAINTING OR OTHER CHEMICAL APPLICATIONS SHALL BE DONE IN THE EXISTING BUILDING ONLY WHEN UNOCCUPIED. STORAGE OF CHEMICALS AND PAINTING SHALL BE OUTSIDE THE EXISTING OR NEW STRUCTURES AND SHALL FOLLOW MANUFACTURER'S STORAGE GUIDELINES.
18. OXYGEN OR OTHER GAS CONTAINERS SHALL BE PROPERLY STORED AND SECURED PER OSHA REGULATIONS, TO THE SATISFACTION OF THE CONSTRUCTION MANAGER, AND OWNER. FAILURE TO DO SO WILL RESULT IN A $250 BACK CHARGE, PER OCCURRENCE. THE CONTRACTOR AND TRADE CONTRACTOR IS RESPONSIBLE TO COMPLY WITH ALL OSHA REGULATIONS. GENERAL CONSTRUCTION SHALL SCHEDULE REGULARLY, PROJECT SITES WITH OSHA.
19. THE CONTRACTOR WILL PROVIDE AND MAINTAIN DUMPSTERS AS REQUIRED FOR THE DURATION OF THE PROJECT. THE CONTRACTOR WILL PROVIDE DUMPSTERS FOR ALL OTHER PRIMES AND TRADES TO USE AND PLACE CONSTRUCTION DEBRIS AND RUBBISH WITHIN, FOR DISPOSAL FROM THE SITE FOR THE DURATION OF THE PROJECT.
20. THE CONTRACTOR WILL REPLACE AND MAINTAIN ALL DUMPSTERS AS REQUIRED FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING THEIR OWN MATERIALS, DEBRIS AND RUBBISH IN DUMPSTERS PROVIDED BY THE CONTRACTOR ON A DAILY BASIS. FAILURE TO MAINTAIN A CLEAN WORK AREA AND SITE DAILY, WILL RESULT IN OTHERS PERFORMING THE WORK AND THE CONTRACTOR(S) RESPONSIBLE WILL BE BACK CHARGED FOR ALL ASSOCIATED COSTS INCURRED TO RESTORE A CLEAN WORK AREA AND SITE. THIS MAY BE DONE WITHOUT THE TYPICAL 3-DAY NOTICE TO CONTRACTOR(S).
21. THE CONTRACTOR MUST SEND A QUALIFIED REPRESENTATIVE, KNOWLEDGEABLE IN THE PROJECT AND AUTHORIZED TO MAKE DECISIONS ON BEHALF OF THE COMPANY, TO EVERY PROJECT MEETING.
22. THE CONTRACTOR SHALL COOPERATE WITH THE SCHOOL PRINCIPAL AND CUSTODIAL STAFF IN COORDINATING WORK ACTIVITIES WITHIN THE SCHOOL. HOWEVER, IF ANY ADDITIONAL WORK IS REQUESTED THE CONTRACTOR SHALL NOT PROCEED UNLESS APPROVAL IS RECEIVED FROM THE CONSTRUCTION MANAGER. THE CONTRACTOR WILL NOT BE COMPENSATED FOR ANY ADDITIONAL WORK THAT IS PERFORMED WITHOUT THE CONSTRUCTION MANAGERS APPROVAL.
23. ANY DELIVERIES SENT TO THE SCHOOL WILL NOT BE SIGNED FOR OR UNLOADED BY THE OWNER OR CONSTRUCTION MANAGER. THEY WILL BE DIRECTED TO THE CONSTRUCTION SITE AND IF NO EMPLOYEE IS ON SITE, THE DELIVERY WILL BE REJECTED, AT THE CONTRACTORS SOLE EXPENSE.
24. ALL HOT TAR ROOFING SHALL BE INSTALLED AFTER SCHOOL HOURS OR ON WEEKENDS/HOLIDAYS ONLY. KETTLES SHALL NOT BE LIT UNTIL ALL STUDENTS HAVE LEFT THE BUILDING.
25. THE CONTRACTOR SHALL SUBMIT A TWO WEEK LOOK AHEAD WORK SCHEDULE AT ALL PROJECT MEETINGS, INDICATING WORK DAYS, WORK HOURS AND MANPOWER ALLOCATION FOR ALL AREAS OF THE CONTRACT WORK. THE CONTRACTOR WILL COORDINATE WITH ALL OTHER TRADES TO PERFORM THE WORK. CONSTRUCTION MANAGER AND OWNER TO APPROVE ACCESS TO THOSE AREAS SCHEDULED FOR WORK.
26. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN THE 8'-0" HIGH TEMP. CONSTRUCTION CHAIN LINK FENCE WITH TOP & BOTTOM RAILS, IN GOOD CONDITION AT ALL TIMES, FOR THE DURATION OF PROJECT. THIS INCLUDES ALL GATES AND LOCKS/CHAINS FOR SECURING SITE AFTER WORK HOURS. THE CONTRACTOR SHALL PROVIDE CONSTRUCTION MANAGER 3 COPIES OF ALL KEYS. THE CONTRACTOR WILL MAINTAIN THE CONSTRUCTION PERIMETER FENCE FOR THE DURATION OF THE PROJECT. AT THE COMPLETION OF PROJECT OR AT THE DIRECTION OF THE OWNER, THE CONTRACTOR WILL REMOVE THE FENCE FROM THE SITE.
27. NO STORAGE OF MATERIALS WILL BE PERMITTED WITHIN THE BUILDINGS AT ANY TIME DURING CONSTRUCTION. THE CONTRACTOR MUST PROVIDE EXTERIOR STORAGE CONTAINERS AS REQUIRED FOR MATERIAL & EQUIPMENT STORAGE. IF REQUIRED CONTRACTOR TO HEAT CONTAINERS AS REQUIRED DURING WINTER MONTHS TO MAKE SURE MATERIAL TEMPERATURES ARE PROPERLY MAINTAINED. FINAL LOCATION OF STORAGE CONTAINER SHALL BE BY OWNER AND CONSTRUCTION MANAGER.
28. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL REQUIRED SITE SAFETY SIGNAGE, IN ADDITION TO THOSE SHOWN ON CIP DWGS FOR DURATION OF PROJECT.
29. THE CONTRACTOR SHALL PROVIDE, INSTALL & MAINTAIN ALL "BLACK" GEOTEXTILE FABRIC, 8'-0" HEIGHT (SILT FENCE) TO EXISTING & TEMPORARY CHAIN LINK FENCE. FABRIC TO BE TIE-WRAPPED TO FENCE SUFFICIENT TO SUPPORT FABRIC THROUGHOUT PROJECT. THE CONTRACTOR WILL SUPPLY, INSTALL, AND MAINTAIN ALL ADDITIONAL SILT FENCING, GEOGRID AND TEMP. CONSTRUCTION FENCE AS REQUIRED BY THE OWNER FOR THE DURATION OF THE PROJECT. THE CONTRACTOR WILL REMOVE ALL TEMP. FENCING AT THE PROJECT COMPLETION.
30. CONTRACTOR TO PROVIDE AND SERVICE PORTABLE TOILETS FOR THE DURATION OF CONSTRUCTION. TOILETS TO BE SERVICED BY CONTRACTOR ON A REGULAR BASIS TO MAINTAIN SANITARY CONDITIONS.
31. CONTRACTOR SHALL PROTECT ALL EXISTING ROOFS DURING CONSTRUCTION AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ROOFS DURING CONSTRUCTION. THE CONTRACTOR SHALL MAKE ALL REPAIRS TO ANY DAMAGED AREAS, AS REQUIRED BY THE MANUFACTURER OF THE ROOF SYSTEM.
32. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING WEATHER TIGHT SEAL PROTECTION OVER ALL ROUGH OPENINGS, INCLUDING WINDOWS AND ROOF OPENINGS. CONTRACTOR TO PROVIDE FOR DURATION OF PROJECT.
33. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUCTING PRE-CONSTRUCTION WALK-THRU'S AND VIDEO TAPING EXISTING CONDITIONS. MANDATORY WALK-THRU SHALL BE PRE-SCHEDULED THROUGH THE CONSTRUCTION MANAGER AND SHALL HAVE OWNER, CONSTRUCTION MANAGER, CONTRACTOR PRESENT. FAILURE TO DO SO WILL RESULT IN OWNER ARRANGING FOR THESE SERVICES AND BACKCHARGING CONTRACTOR FOR ALL RELATED COSTS.
34. MANUFACTURERS MATERIAL SAFETY DATA SHEETS (MSDS) SHALL BE AVAILABLE AT THE SITE FOR ALL PRODUCTS USED IN THE PROJECT TO BE PROVIDED BY THE CONTRACTOR.
35. EGRESS TO BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
36. CONTRACTOR SHALL PREPARE CIP DRAWINGS WHICH WILL INDICATE ALL 1-HOUR FIRE RATED TEMPORARY WALLS INCLUDING DUST PARTITIONS AND TEMPORARY CONSTRUCTION FENCES THAT SEPARATE OCCUPIED AREAS FROM AREAS WHERE WORK IS TO BE PERFORMED. THE CIP DRAWINGS SHALL ALSO INDICATE ALL STAGING AREAS INCLUDING LOCATION OF TRAILERS, STORAGE CONTAINERS AND SERVICEABLE TOILETS. FINAL LOCATIONS OF TEMPORARY WALLS, DUST PARTITIONS, TEMPORARY FENCES, STORAGE CONTAINERS AND SERVICEABLE TOILETS SHALL BE REVIEWED WITH THE OWNER AND CONSTRUCTION MANAGER PRIOR TO INSTALLATION.
37. TEMPORARY OWNER'S TRAILER TO BE PROVIDED UNDER THE CONTRACT FOR GENERAL CONSTRUCTION. POWER FOR TRAILER TO BE PROVIDED BY ELECTRICAL CONTRACTOR.
38. BECAUSE OF THE CLOSE PROXIMITY OF THE CONSTRUCTION AREA TO THE EXISTING SCHOOL, ALL EQUIPMENT THAT PRODUCE ENGINE EXHAUST (I.E. VIA COMBUSTION ENGINES, ETC.) SHALL BE PERMANENTLY OUTFITTED WITH GAS OR DIESEL EXHAUST SCRUBBERS FOR THE DURATION OF THE WORK. IF AT ANY TIME THERE IS EQUIPMENT OPERATING WITHOUT THESE DEVICES IN PROPER FUNCTIONAL ORDER THE CONTRACTOR WILL BE FINED $500 PER INSTANCE. FOR DELIVERIES, ENGINES CAN RUN/OPERATE FOR 5 MINUTES (SAME GUIDELINES AS BUSES) THAN NEED TO BE TURNED OFF. FOR EQUIPMENT SUCH AS CONCRETE PUMPERS THAT COME TO THE SITE INTERMITTENTLY, THEY SHALL BE REQUIRED TO OPERATE AS FAR AWAY FROM THE BUILDING AS POSSIBLE. IF THIS EFFORT IS NOT UNDERTAKEN EACH AND EVERY TIME UNDER ANY CIRCUMSTANCE, THEY SHALL BE DIRECTED TO LEAVE THE SITE IMMEDIATELY.
39. BECAUSE OF THE CLOSE PROXIMITY OF THE CONSTRUCTION AREA TO THE EXISTING SCHOOL, ALL EQUIPMENT SHALL HAVE MUFFLERS AND/OR NOISE INHIBITING PARAPHERNALIA EMPLOYED SO AS TO MINIMIZE OR CANCEL OUT NOISE. NOTE THAT THE MAXIMUM ALLOWABLE NOISE LEVEL ALLOWED BY THE SED IS 60DB.

WINTER CONDITION NOTES:

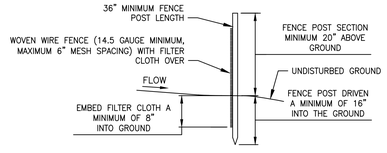
1. ALL CONTRACTORS ARE TO TAKE NECESSARY MEASURES FOR SAFETY PRECAUTIONS.
2. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SNOW REMOVAL AND APPLICATION OF ROAD SALT AS REQUIRED.
3. GENERAL CONTRACTOR TO PROVIDE WEEKLY WEATHER FORECASTS WITH THEIR TWO WEEK LOOK-AHEAD'S DURING COLD WEATHER MONTHS.
4. PROTECTION AND HEATING OF CONCRETE WORK, SEE TEMPORARY FACILITIES SPECS.
5. WRAPPING OF BUILDING FOR PROTECTION FROM AND HEATING AGAINST COLD WEATHER, SEE TEMPORARY FACILITIES SPECS.



INSTALLATION NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 1:2.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAWBALES, THEN STABILIZED WITH VEGETATION OR COVERED.

SOIL STOCKPILING
NOT TO SCALE



CROSS SECTION

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY .24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
5. POST: STEEL EITHER "T" OR "U" TYPE OR 2" HARDWOOD
6. FENCE: WOVEN WIRE, 14.5 GAUGE 6" MAXIMUM MESH OPENING FILTER
7. CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL
8. PREFABRICATED UNIT: GEOFAB. ENVIROFENCE, OR APPROVED EQUAL.

SILT FENCE DETAIL
NOT TO SCALE
REPRODUCED FROM NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL

NOTES

1. THIS DRAWING IS PROVIDED TO DEPICT THE IMPLEMENTATION SCHEDULE OF WORK IN ORDER TO MINIMIZE THE EFFECT OF CONSTRUCTION ON THE EDUCATIONAL PROGRAM AND PRIMARY USES OF THE FACILITY.
2. THIS DRAWING IS GENERAL IN NATURE AND DO NOT REFLECT THE ACTUAL EXISTING CONDITIONS. LATEST PROPOSED FLOOR PLAN, PROPOSED WORK AND WORK AREAS. REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, STRUCTURAL AND CIVIL DRAWINGS FOR SPECIFIC SCOPED WORK AND WORK AREAS.
3. THIS DRAWING IS FOR REFERENCE ONLY AND SHALL NOT TO BE USED FOR CONSTRUCTION.
4. ALL REGULATORY AGENCY REQUIREMENTS INCLUDING STATE AND LOCAL CODES AND PROPER SAFETY PRECAUTIONS SHALL APPLY AND TAKE PRECEDENCE OVER THE WORK PLANS.

MILESTONE DATES: PHASE 1

PHASE 1
COMMENCE ACM ABATEMENT..... 06/27/2022
COMPLETE ACM ABATEMENT..... 07/08/2022

COMMENCE..... 06/27/2022
DEMO, SAWCUTTING TRENCHING & CONSTRUCTION AT FACULTY LOUNGE AREA
COMPLETE..... 07/08/2022

COMMENCE..... 07/08/2022
REMOVALS AND DEMO AT KITCHEN/CAFETERIA
INTERIOR CONCRETE TRENCHING, PIPING, PATCHING AND ROOFTOP MEP INSTALLATIONS
COMPLETE..... 07/22/2022
COMMENCE..... 07/22/2022
ROUGH FRAME, MEP ROUGH-IN FINISHES, EQUIP. INSTALL & MEP ROOFTOP INSTALLATIONS
COMPLETE..... 08/26/2022

SUBSTANTIAL COMPLETION..... 08/31/2022
ANY REMAINING WORK TO 2ND SHIFT AS OF..... 08/29/2022

COMPLETION OF PUNCHLIST..... 10/12/20222
COMPLETION OF CLOSEOUT..... 10/12/2022

LEGEND OF SYMBOLS

SYMBOL	DESCRIPTION
	PROPOSED STAGING AREAS AS INDICATED ON PLANS
	PHASE 1 – PROPOSED WORK AREA. REFER TO ARCHITECTURAL DRAWINGS FOR SPECIFIC SCOPED WORK AND WORK AREAS.
	CONSTRUCTION ENTRANCE GATE
—·—·—·—·—·—	8' HIGH TEMPORARY FENCE W/BOTTOM & TOP RAILS W/30" SILT FENCE & 8' HIGH SCREEN

TEMPORARY SIGNAGE NOTES

TEMPORARY TRAFFIC SIGNAGE:

PROVIDE TRAFFIC SIGNAGE DURING CONSTRUCTION WHERE REQUIRED TO IDENTIFY TRAFFIC FLOW AND PEDESTRIAN SAFETY. SIGNAGE TO INCLUDE BUT IS NOT LIMITED TO:

- "TRUCKS ENTERING AND EXITING"
- "ALL CONSTRUCTION VEHICLES MUST STOP AT THE GC TRAILER"
- "STOP"
- "DO NOT ENTER"
- "NO ENTRY BETWEEN _____ AND _____"

TEMPORARY PAVEMENT MARKINGS:

PROVIDE PAVEMENT MARKINGS AS REQUIRED FOR TRAFFIC FLOW. AFTER AND/OR REPLACE WHEN NECESSARY.

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015
CAPITAL IMPROVEMENTS

Savin Engineers, P.C.

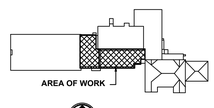
No.	Date	Revisions

UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	AA
Checked by	RF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

SEAL
ERIC D. FELLENZER, P.E.
NY PROFESSIONAL ENGINEER NO. 073084-1

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT
GREENWOOD LAKE ELEMENTARY SCHOOL

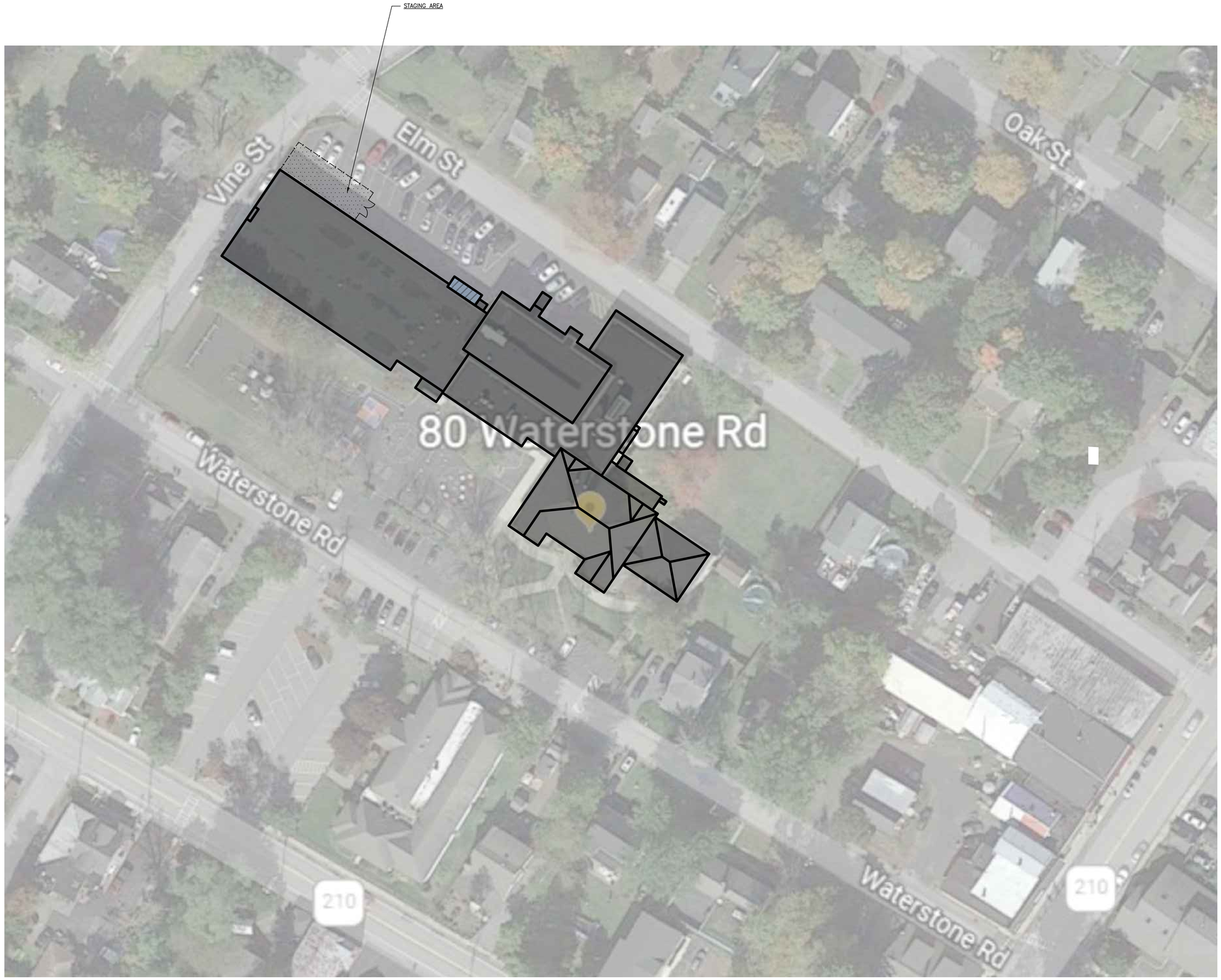


FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title
CONSTRUCTION IMPLEMENTATION PLAN – GENERAL NOTES, DETAILS, & MILESTONE SCHEDULES

Drawing No.
CIP-01



CONSTRUCTION IMPLEMENTATION PLAN - SITE PLAN

SCALE: N.T.S.

NOTES:
1. ANY ALTERATIONS AND/OR MODIFICATIONS MADE TO ANY EXISTING ELEMENTS ARE TO BE COMPLETELY RESTORED TO THEIR ORIGINAL CONDITION AND LOCATION.
2. GC TO RECORD AND DOCUMENT EXISTING CONDITIONS PRIOR TO ANY WORK STARTING.
3. CONTRACTOR IS NOT ALLOWED TO ACCESS THE AREA VIA THE INTERIOR OF THE SCHOOL WITH ANY EQUIPMENT THAT PRODUCES CO_2 EMISSIONS WHILE OPERATING INSIDE.
4. ANY MATERIAL AND/OR EQUIPMENT DELIVERIES SHALL BE DONE AFTER HOURS.
5. SEE ARCHITECTURAL DRAWINGS FOR ALTERNATES & DESIGNATED AREAS OF WORK.

LEGEND OF SYMBOLS	
SYMBOL	DESCRIPTION
	TRACK PAD
	PROPOSED STAGING AREAS AS INDICATED ON PLANS
	PHASE 1 – PROPOSED WORK AREA. REFER TO ARCHITECTURAL DRAWINGS FOR SPECIFIC SCOPED WORK AND WORK AREAS.
	CONSTRUCTION ENTRANCE GATE
	8' HIGH TEMPORARY FENCE W/BOTTOM & TOP RAILS W/30" SILT FENCE & 8' HIGH SCREEN

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

Savin Engineers, P.C.

No.	Date	Revisions

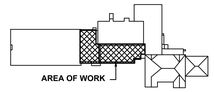
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	AA
Checked by	RF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

SEAL
ERIC D. FELLENZER, P.E.
NY PROFESSIONAL ENGINEER NO. 073084-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL

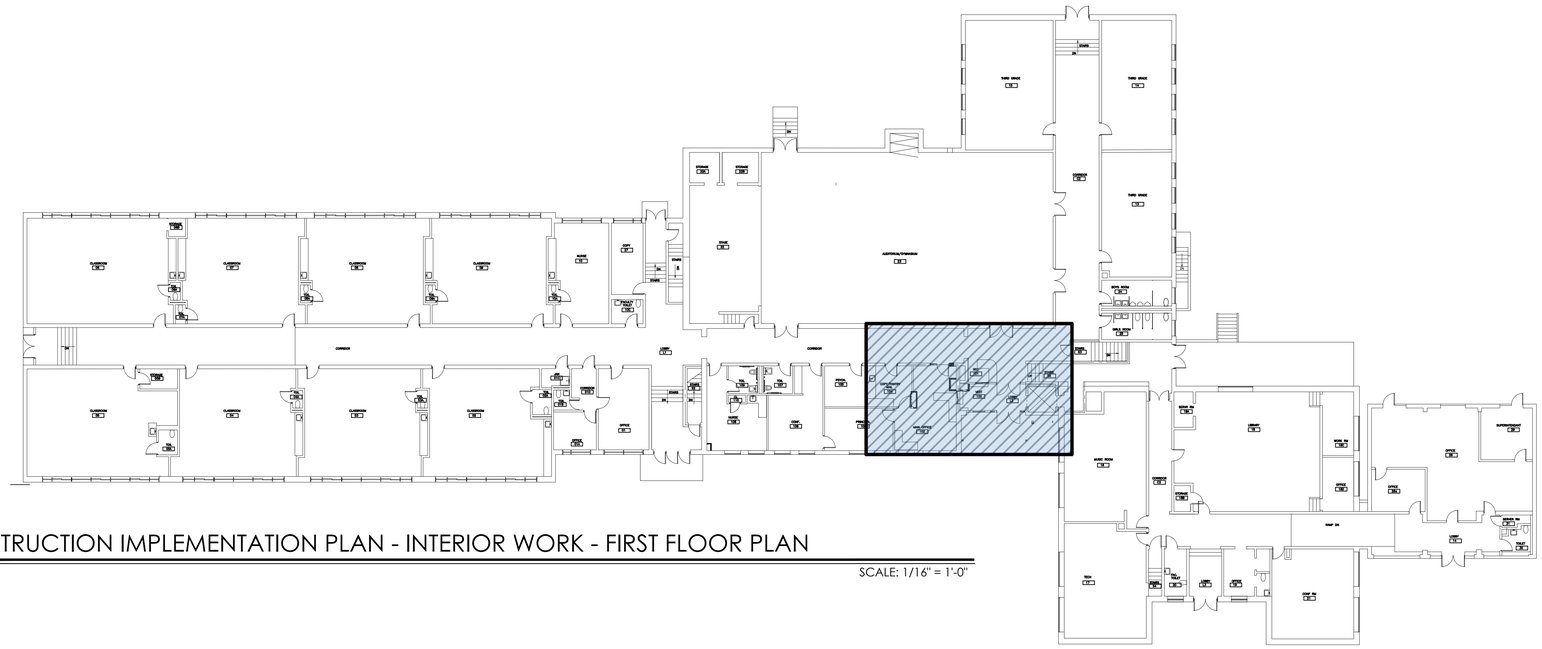


FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t.845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t.845-454-9704 fx 855-320-8735

REFERENCE SCALE
⅛" ¼" ½" 0 1" 2"

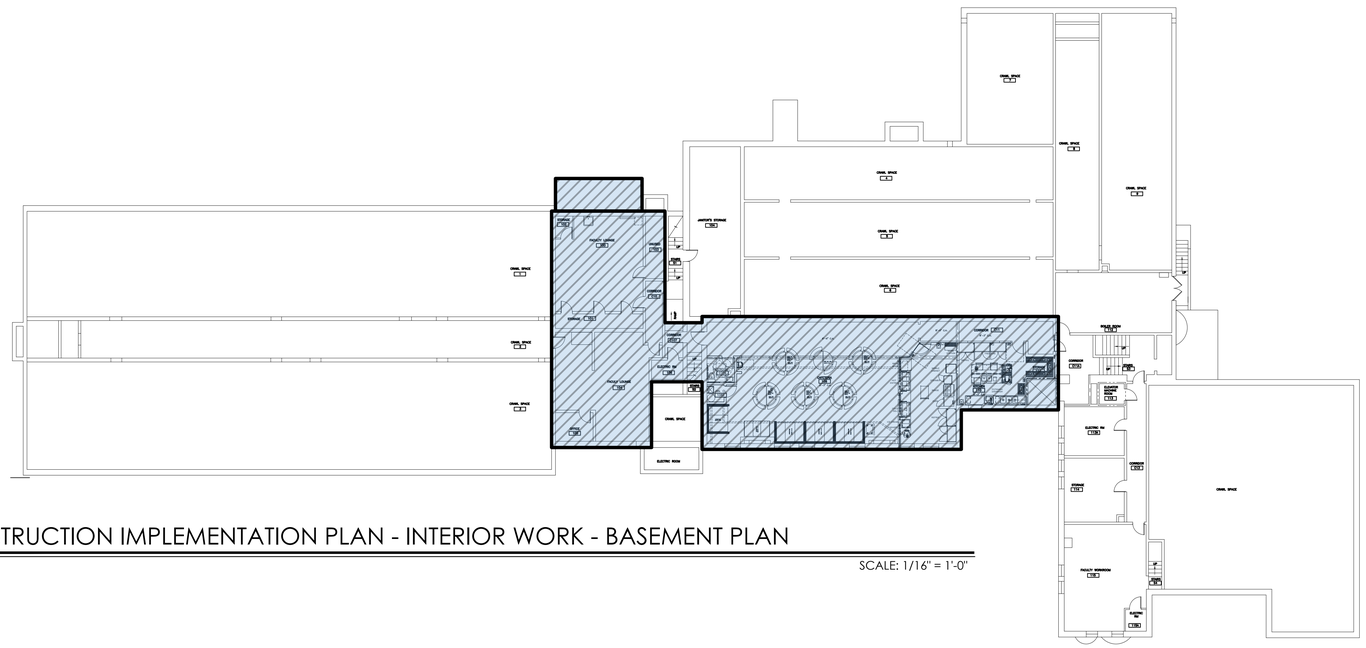
Drawing Title
CONSTRUCTION IMPLEMENTATION PLAN – SITE PLAN & STAGING AREA

Drawing No.
CIP–02



CONSTRUCTION IMPLEMENTATION PLAN - INTERIOR WORK - FIRST FLOOR PLAN

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



CONSTRUCTION IMPLEMENTATION PLAN - INTERIOR WORK - BASEMENT PLAN

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

LEGEND OF SYMBOLS	
SYMBOL	DESCRIPTION
	TRACK PAD
	PROPOSED STAGING AREAS AS INDICATED ON PLANS
	PHASE 1 – PROPOSED WORK AREA. REFER TO ARCHITECTURAL DRAWINGS FOR SPECIFIC SCOPED WORK AND WORK AREAS.
	CONSTRUCTION ENTRANCE GATE
	8' HIGH TEMPORARY FENCE W/BOTTOM & TOP RAILS W/30" SILT FENCE & 8' HIGH SCREEN

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

SED PROJECT NUMBER

44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

Savin Engineers, P.C.

No.	Date	Revisions

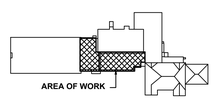
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	AA
Checked by	RF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

SEAL
ERIC D. FELLENZER, P.E.
NY PROFESSIONAL ENGINEER NO. 073084-1

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



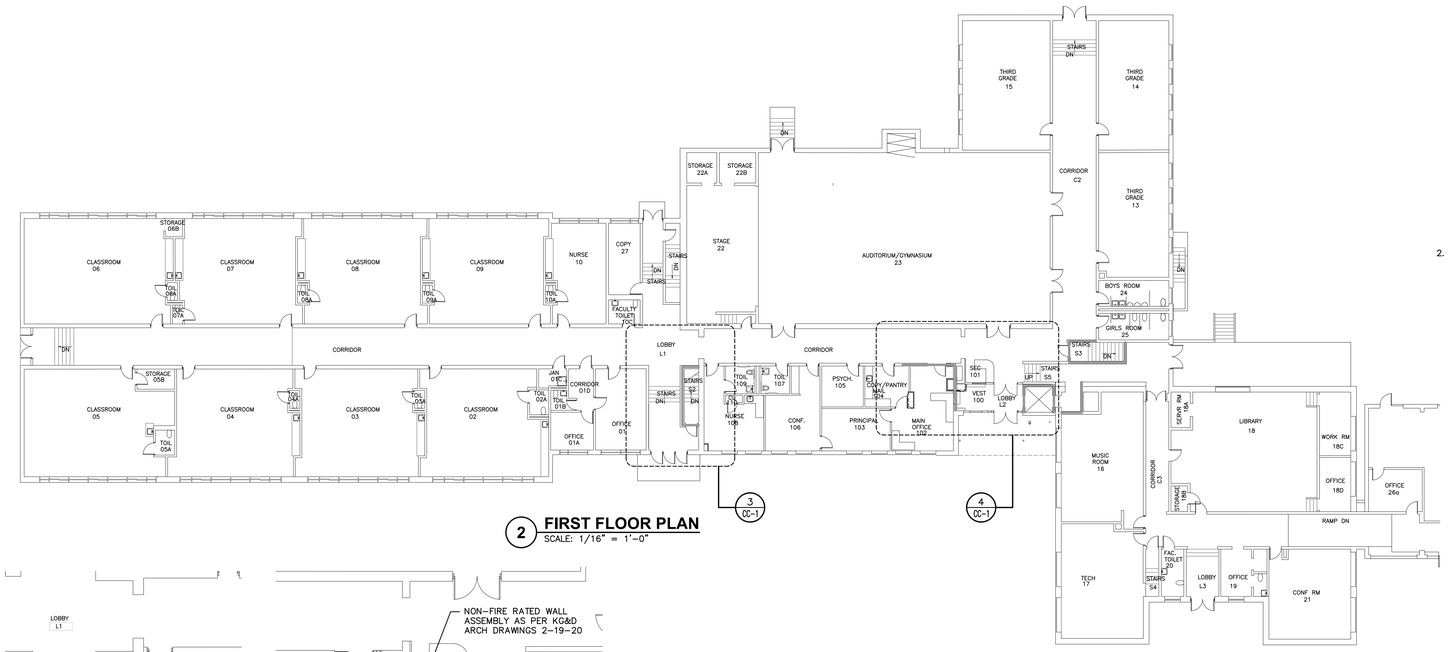
KEY PLAN

FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

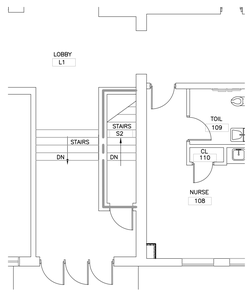
⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title
CONSTRUCTION IMPLEMENTATION PLAN – BASEMENT & FIRST FLOOR PLANS

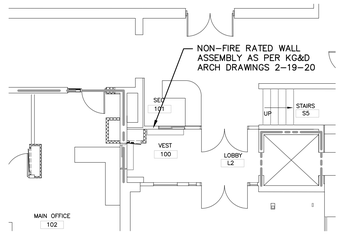
Drawing No.
CIP–03



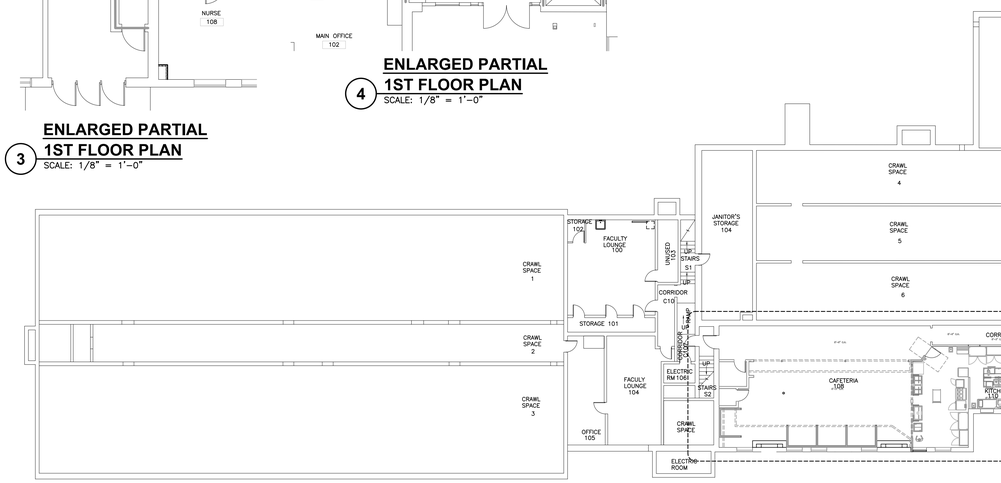
2 FIRST FLOOR PLAN
SCALE: 1/16" = 1'-0"



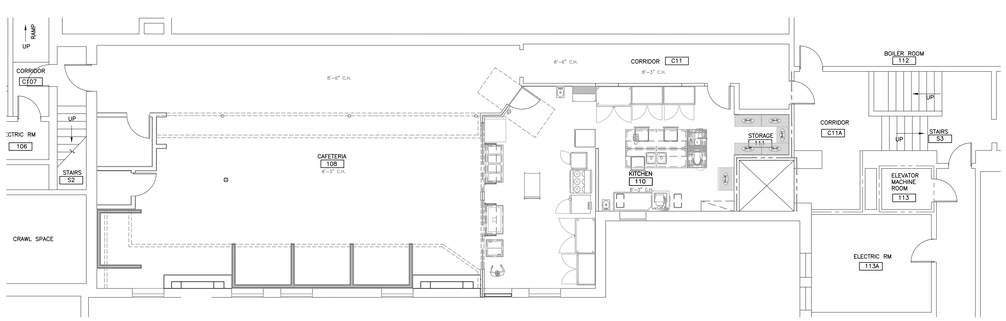
3 ENLARGED PARTIAL 1ST FLOOR PLAN
SCALE: 1/8" = 1'-0"



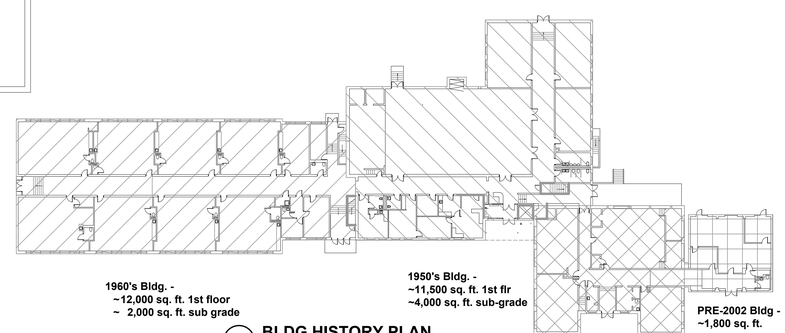
4 ENLARGED PARTIAL 1ST FLOOR PLAN
SCALE: 1/8" = 1'-0"



1 BASEMENT PLAN
SCALE: 1/16" = 1'-0"



5 ENLARGED PARTIAL BASEMENT PLAN
SCALE: 1/8" = 1'-0"



6 BLDG HISTORY PLAN
SCALE: 1/32" = 1'-0"

DESIGN DATA:

1. FIRE RESISTANCE RATINGS: (TABLE 601, II B)

PRIMARY STRUCTURAL FRAME	0
EXTERIOR:	
BEARING WALLS	0, NC
NON BEARING WALLS	0, NC

INTERIOR NON-BEARING WALL & PARTITIONS (NOT LESS THAN THE FIRE RESISTANT RATING REQUIRED BY OTHER SECTIONS OF THIS CODE)

INTERIOR:	
BEARING WALLS OR PARTITIONS	0, NC
NONBEARING WALLS OR PARTITIONS	0, NC
FIRE WALLS	3 HR
FIRE BARRIERS	2 HR
PARTITIONS ENCLOSING STAIRWAYS	1 HR
SHAFTWAYS	1 HR
CORRIDORS	1 HR
KITCHEN WALLS	1 HR
FLOOR CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS:	0,NC
ROOF CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS:	0,NC

2. STRUCTURAL LOADS:
(FOR EXISTING BUILDING, DESIGN DATA AS PER EXISTING DWG'S FROM THOMAS ASSOCIATES DATED 2002. FOR DESIGN DATA FOR ALTERED AREAS SEE STRUCTURAL DRAWINGS)

A. LIVE LOADS: (NYSUFPBS 0803.2)

CLASSROOMS/OFFICES	60 PSF
CORRIDORS	100 PSF
TOILET ROOMS	60 PSF
STAIRS	100 PSF

B. ROOF LOADS:

MINIMUM ROOF LIVE LOAD	30 PSF

RAIN LOAD:
RAIN SURCHARGE LOAD HAS BEEN APPLIED TO AREAS WHERE PONDING OCCURS IN ACCORDANCE WITH ACE 7, SECTION 8.

C. SNOW LOADS: (NYSUFPBC 803.3)

FLAT ROOF SNOW LOAD, Pf	30 PSF

SNOW DRIFT LOADS:
DRIFT SURCHARGE HAS BEEN APPLIED TO AREAS ADJACENT TO A HIGHER STRUCTURE TO ACCOUNT FOR DRIFTING SNOW.

D. WND LOADS: (BOCA 1609.3)

FOR WALLS:	
0-25 FT.	15 PSF
26-40 FT.	18 PSF
41-60 FT.	21 PSF

E. EARTHQUAKE DESIGN DATA: (BOCA 1610.0)

PEAK VELOCITY RELATED ACCELERATION, Av	0.12
EFFECTIVE PEAK ACCELERATION, As	0.12
SEISMIC HAZARD EXPOSURE GROUP	II
SEISMIC PERFORMANCE CATEGORY	C
SOIL PROFILE TYPE	S1
BASIC STRUCTURAL SYSTEM:	BUILDING FRAME SYSTEM
SEISMIC RESISTING SYSTEM:	BRACED FRAME SYSTEM
RESPONSE MODIFICATION FACTOR, R	5
DEFLECTION AMPLIFICATION FACTOR, C	4 ½
ANALYSIS PROCEDURE:	EQUIVALENT STATIC FORCE

CODE COMPLIANCE :

CODE REFERENCES:
2020 NYS BC, EBC, PC, MC, FC, ECC.
NFPA 80
SED MPS 1998

1. OCCUPANCY CLASSIFICATION: E-EDUCATION - SINGLE OCCUPANCY
2. CONSTRUCTION CLASSIFICATION - EXISTING: (TABLE NYS BC 601)
EXISTING BUILDING CONSTRUCTION: TYPE IIB
3. ALLOWABLE HEIGHT & STORIES ABOVE GRADE: (TABLE 504.3 & 504.4)
55' ALLOWED - 18' ACTUAL
2 STORIED ALLOWED - 1 STORY ACTUAL
4. SPRINKLER SYSTEM: NONE (NOT REQUIRED)
5. FIRE AREA CALCULATIONS (506.2):
TYPE IIB, 1 STORY, AREA ALLOWED: 14,500 SQ. FT.

BASED ON INCREASES ALLOWED PER SECTION 506.2.1. THE EXISTING FIRE AREA(S) CAN BE INCREASED AS FOLLOWS:

THE BUILDING HAS LEGAL OPEN SPACE (AS DEFINED BY THE NYS BC) OF AT LEAST 20 FT. (+30FT. ACTUAL) ON ALL SIDES (F=BLDG PERIMETER WITH OPEN SPACE DISTANCE OF >20' = P=PERIMETER OF ENTIRE BLDG). THUS ALLOWING THE INCREASE IN FIRE AREA. THEREFORE:

TYPE IIB, 1 STORY: 14,500 SF + (14,500 X .75) = 25,375 MAX. ALLOWABLE SF.

EXISTING BASEMENT: 8,580 SF (<21,000)
EXISTING 1ST FLOOR: 31,043 SF (EXISTING NON-CONFORMING)
NO NEW ADDITIONS PLANNED

6. CORRIDOR ENCLOSURES:
TO BE CONSTRUCTED TO PREVENT THE PASSAGE OF SMOKE, INCLUDING SMOKE DAMPERS IN ANY DUCTWORK, ALL OTHER RATED LOCATIONS TO BE FIRE RATED ONLY.

2 HR. FIRE BARRIER
1 HR. FIRE BARRIER
1 HR. FIRE PARTITION

INFILL ALL PENETRATIONS AS REQUIRED TO MAINTAIN RATINGS SHOWN. INFILL AND FIRESTOP ALL FLOOR PENETRATIONS TO 2 HR. RATING.

FOR LOCATION OF CORRIDOR ENCLOSURE SEE DRAWINGS CC100 & CC200.

7. CORRIDOR AND ROOM TRAVEL DISTANCES:
NYSBC TABLE 1017.2
200' MAX. UNSPRINKLERED
250' SPRINKLERED
SED MPS
150' TO EXTERIOR DOOR FROM CORRIDOR (ANY POINT)
120' TO STAIR ENCLOSURE FROM CORRIDOR
50' TO EXIT FROM SPACES <1,500

EXISTING RESCUE WINDOWS: TO REMAIN

FOR CORRIDOR AND ROOM TRAVEL DISTANCES SEE DRAWINGS CC-200.

8. CORRIDOR AND ROOM EXIT UNIT CALCULATIONS:
FOR CORRIDOR AND ROOM EXIT UNIT CALCULATIONS SEE DRAWING CC-200.
9. DOOR & STAIR EXIT UNIT CALCULATIONS:
FOR DOOR AND STAIR EXIT UNIT CALCULATIONS SEE CC-200.
10. ALTERATION 1: 1,100 SQ. FT.
3% OF BLDG AREA

ALTERATION LEVEL 2: 2,562 SF BASEMENT AREA, 30 SF 1FT FL
7% OF BLDG AREA.

11. FINISHES:
CLASS A FINISHES TO BE PROVIDED IN ALL CORRIDOR, ASSEMBLY AND KITCHEN AREAS.
12. FIRE EXTINGUISHES:
EXISTING FIRE EXTINGUISHER TO REMAIN.
NEW FIRE EXTINGUISHER SHALL NOT EXCEED A DISTANCE OF 150'.
13. SIGNAGE:
PROVIDE MAX. OCCUPANCY SIGNAGE IN ALTERED ASSEMBLY SPACES.
14. OCCUPANCY LOADS:
CLASSROOMS: 20 NET
ASSEMBLY (CAFETERIA): 15 NET
ASSEMBLY OFFICE AREAS: 100 GROSS
15. ENERGY CODE:
CLIMATE ZONE: 5 (ORANGE COUNTY NY)

ONE EXTERIOR FENESTRATION IS PART OF THIS PROJECT.

PLUMBING FIXTURE COUNT :

STUDENT CAPACITY FOR FIXTURE COUNT IS AS FOLLOWS:
SF OF CLASSROOMS: 9,522
PER NYS BC TABLE 1004.5 20 SF/OCC = 9,522/ 20 = 476 STUDENTS 476 (238 M/F)
TOTAL FACULTY AND STAFF = 45

ALL EXISTING PLUMBING FIXTURES TO REMAIN,

NEW TO BASEMENT AREA:
ADA UNISEX BATHROOM
WATER FOUNTAIN
JANITOR CLOSET WITH SERVICE SINK

PER TABLE NYSBC 2902.1/NYSPC 403.1

WATERCLOSETS	REQ.	PROVIDED
REQ. STAFF	1 EA.	6
REQ. STUDENTS 1 FOR 50	5 EA.	
BOYS		1
URINALS:		4
GIRLS		3
UNISEX		11

URINALS CAN NOT REPLACE FOR MORE THAN ⅓ COUNT (EXISTING NON-CONFORMING)

LAVATORIES:		
STAFF	2	8
STUDENTS 1/50	10	14
DRINKING FOUNTAINS:		
STAFF	1	1
STUDENTS: 1/100	5	---
SERVICE SINK:	1	2

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

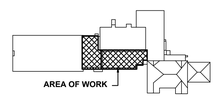
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
NY PROFESSIONAL ENGINEER
NO. 073084-1

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



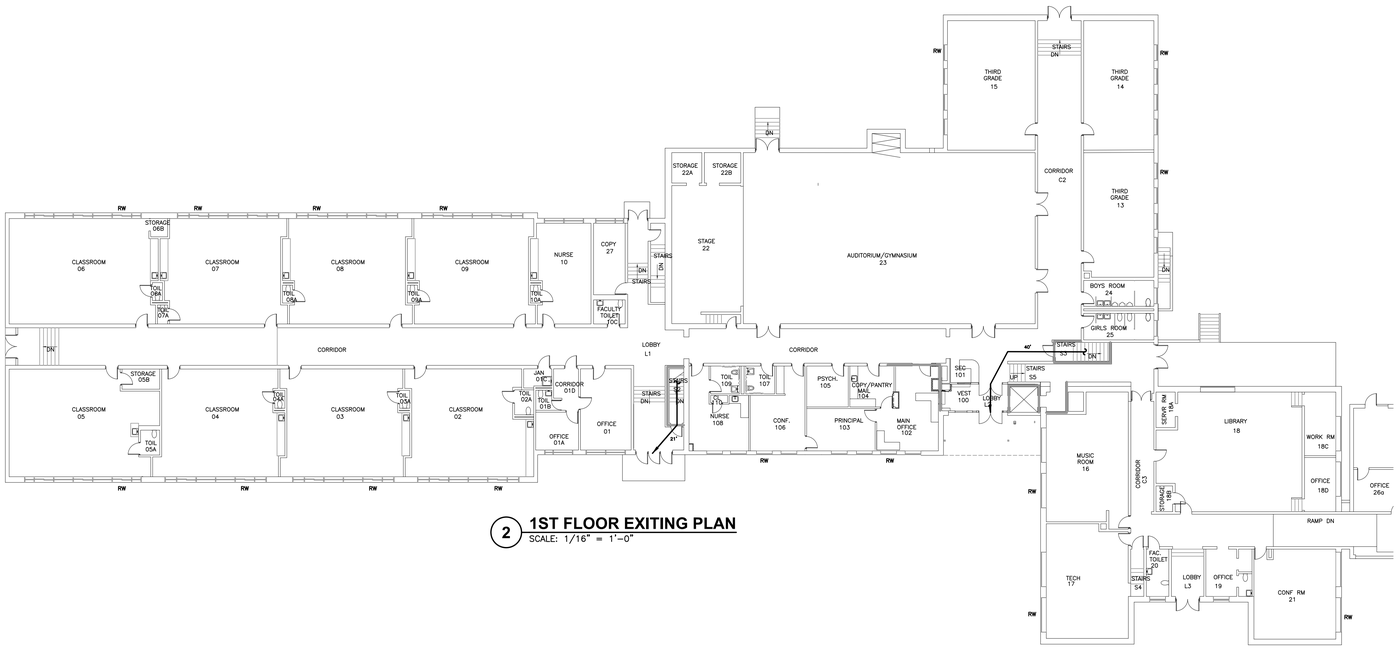
FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A,
Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100,
Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title
CODE COMPLIANCE PLANS

Drawing No.
CC-100

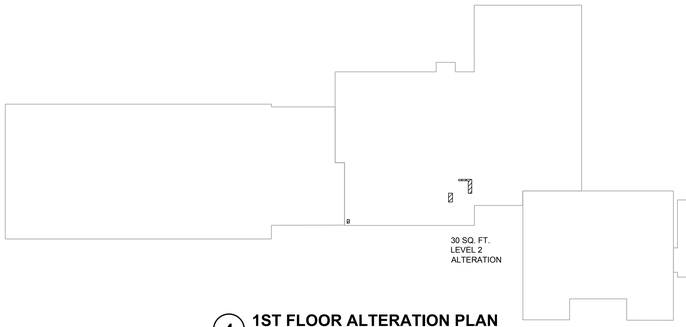
File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\CC-100.dwg (Layout: CC-100)
Date: Tue, Dec 28, 2021 - 4:06 PM (Name: wpb)



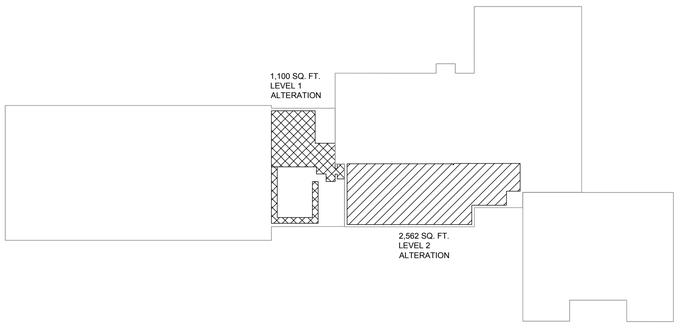
2 1ST FLOOR EXITING PLAN
SCALE: 1/16" = 1'-0"

LEGEND:

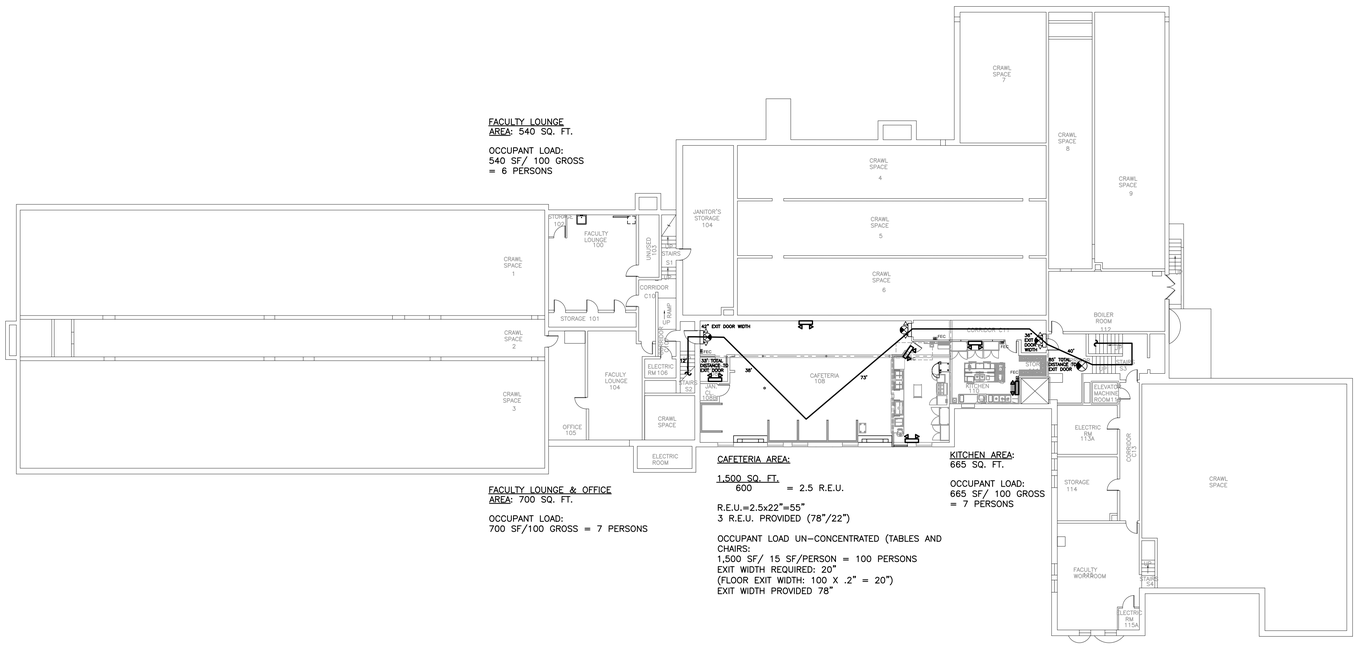
- 2-HR RATED FIRE WALL
- 1-HR RATED FIRE WALL (NEW WHERE NOTED)
- 75' — COMMON PATH OF EGRESS TRAVEL – 75 FT. MAXIMUM (NON-SPRINKLERED) SECTION 1014.3
- 75' — EXIT ACCESS TRAVEL DISTANCE – 200 FT. PERMITTED TABLE 1016.1 (NON-SPRINKLERED BLDG.)
- FEC ■ — LOCATION OF NEW FIRE EXTINGUISHER CABINET WITH 10LB ABC EXTINGUISHER 2 ½ GALLON PER MINUTE (4A-80BC) FULLY RECESSED, (U.N.O.)
- FEC □ — EXISTING FIRE EXTINGUISHER
- EXIT — EXIT LOCATION
- NEW EXIT SIGN LOCATION
- NEW EMERGENCY WALL PACK FIXTURE WITH EXIT SIGN
- NEW EMERGENCY WALL PACK FIXTURE



4 1ST FLOOR ALTERATION PLAN
SCALE: 1/32" = 1'-0"



1 BASEMENT ALTERATION PLAN
SCALE: 1/32" = 1'-0"



1 BASEMENT EXITING PLAN
SCALE: 1/16" = 1'-0"

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\CC-200.dwg (Layout: CC-200)
Date: Tue, Dec 28, 2021 - 4:06 PM (Name: wpb)

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

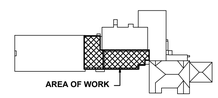
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
ERIC D. FELLENZER
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 077004-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



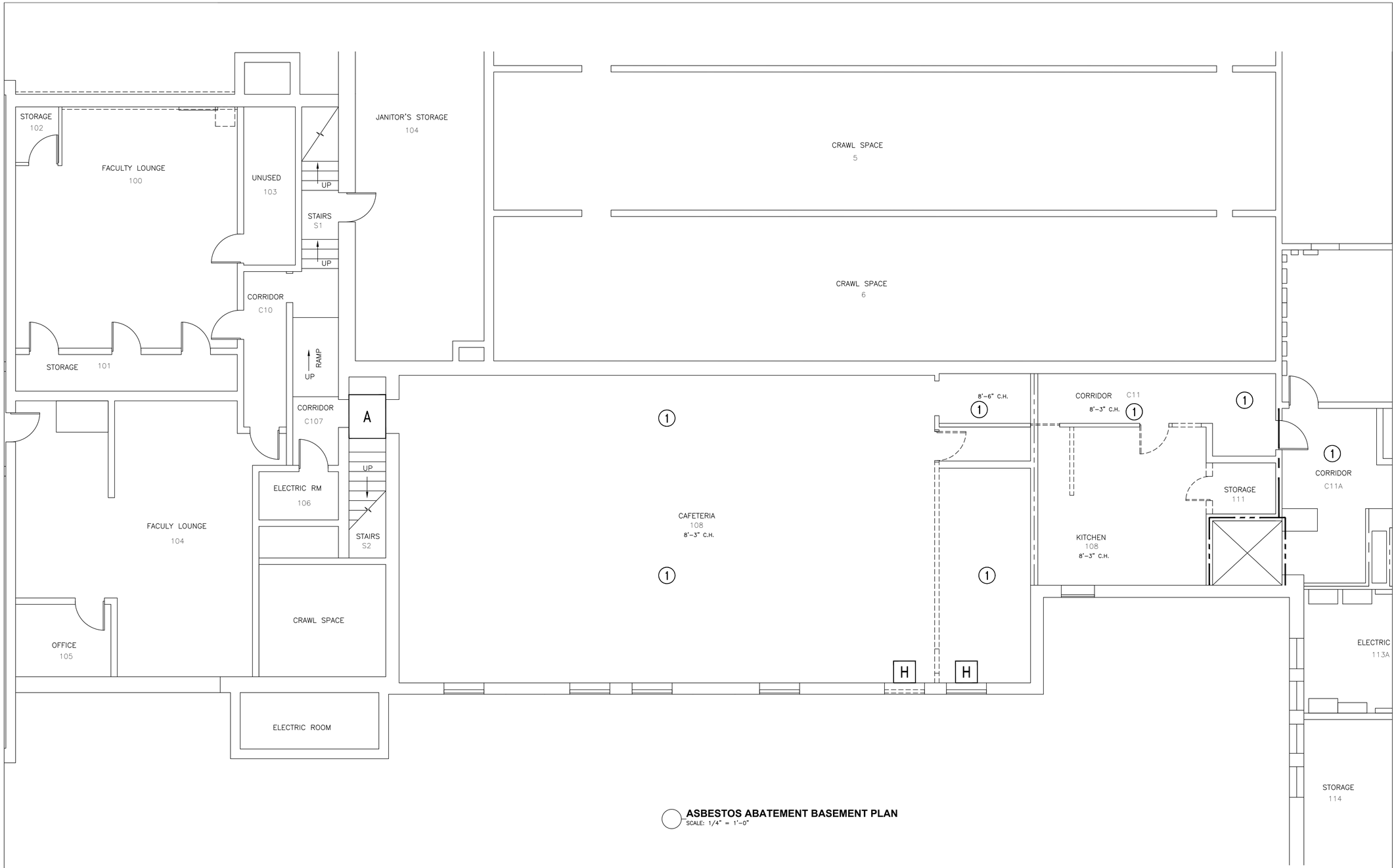
KEY PLAN

FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title
CODE COMPLIANCE PLANS

Drawing No.
CC-200



ASBESTOS ABATEMENT BASEMENT PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. Asbestos abatement shall be performed in accordance with the specification and applicable regulations. Personnel holding current New York State Department of Labor (NYSDOL) asbestos handler's certificates shall perform the work. Additionally, the Contractor must employ NYSDOL certified supervisors to be on the work site for all abatement activities. The contractor must be currently licensed by the NYSDOL. All certificates and licenses are to be readily available for verification by the Greenwood Lakes School District representative.
2. Contractor is responsible for removal and disposal of all asbestos-containing materials and asbestos-contaminated materials within the specified areas.
3. Contractor is responsible for verification of all quantities of asbestos-containing materials and asbestos-contaminated materials.
4. Contractor is responsible for precleaning any existing asbestos contamination, dust and debris within the removal areas.
5. Contractor is responsible for maintaining the integrity of building finishes. The contractor shall repair any and all damages caused by abatement activities or his personnel.
6. Contractor is solely responsible for all means, methods, techniques, sequences and procedures and for coordinating all portions of the scope of work under this contract.
7. The project shall be filed as a large project with the NYSDOL and USEPA.

ASBESTOS ABATEMENT NOTES:

A. The Contractor is to remove the ACM's in accordance with New York State Department of Labor (NYSDOL) Industrial Code Rule 56 (12 NYCRR Part 56), applicable federal regulations (USEPA and OSHA) and this specification. Where there is an overlap the most stringent regulation shall be followed.

B. All project filings and variances will be the sole responsibility of the asbestos abatement contractor. The location of ACM indicated and the extent of work needed are best estimates. Variations in locations within the construction limits are considered as having no impact on contract price or schedule. The asbestos abatement contractor is responsible for verifying locations of ACM listed and removing all ACM's.

C. The exact location of the decontamination units and waste dumpster shall be mutually agreed upon during the preconstruction meeting by the Greenwood Lake School District and asbestos abatement contractor.

D. The asbestos abatement shall be coordinated to avoid interruptions to the normal activities of the Greenwood Lake School District.

E. The contractor shall be responsible for any and all damages resulting from asbestos abatement activities.

F. Asbestos-containing floor tile (9"x9" red and white and mastic) must be removed to facilitate the renovation of the cafeteria/kitchen project. The floor tile and mastic are located in the basement cafeteria and adjacent corridors of the Greenwood Lake Elementary School.

G. All work area decontamination units (personal and waste) shall be fully framed, waterproofed and sheathed because they will be located in areas of public access. The contractor shall prepare the work area in accordance with this specification and applicable codes, rules and regulations. Isolation barriers shall be erected so that the work area is physically separated from other areas of the school.

H. The asbestos abatement contractor shall protect the existing fiberglass insulation within the work area with two (2) layers of 6-mil plastic sheeting before asbestos abatement activities begin.

I. All utilities, mechanical systems and piping shall be locked out and tagged before the contractor is to begin abatement activities.

J. All ACM's within the contract limits must be removed and disposed of as asbestos-contaminated waste unless specifically excluded in these specifications.

K. Asbestos abatement shall be performed in accordance with the specification and applicable regulations. Personnel holding current New York State Department of Labor (NYSDOL) asbestos handler's certificates shall perform the work. Additionally, the Contractor must employ English-speaking NYSDOL certified supervisors to be on the work site for all abatement activities. The contractor must be currently licensed by the NYSDOL. All certificates and licenses are to be readily available for verification by the Greenwood Lake School District.

L. Quantities indicated for removal in contract documents are estimates based on visual surveys. Any discrepancies in quantities or locations noted by the Contractor must be noted in writing and given to the Greenwood Lake School District before materials are removed so quantities can be independently verified.

ASBESTOS ABATEMENT LEGEND:

1	FLOOR TILE & MASTIC TO BE REMOVED.
H	HEPA - FILTERED NEGATIVE AIR MACHINE.
A	AIR LOCK

Asbestos-Containing Materials Quantity Table

Location	Material	Quantity
BASEMENT CAFETERIA	FLOOR TILE & MASTIC	2,590 S.F.
BASEMENT CORRIDOR	FLOOR TILE & MASTIC	390 S.F.

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015
CAPITAL IMPROVEMENTS

ASBESTOS ABATEMENT CONSULTANT:
Egan Environmental Consulting, Inc.
14 HIGH STREET
MAHWAH, NEW JERSEY 07430
Tel: (914) 320-7924 Email: tom_egan2@yahoo.com

LEGEND

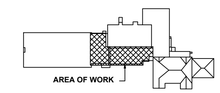
No.	Date	Revisions
1		

UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	EDS
Checked by	TGE
Project No.	FE# 19-194
Scale	AS NOTED
Date	11-01-2020

SEAL: THOMAS G. EGAN
STATE BOARD OF ENGINEERS & LAND SURVEYORS
12-1-2020

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT
GREENWOOD LAKE ELEMENTARY SCHOOL



FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

⅜" ¼" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title
ASBESTOS ABATEMENT BASEMENT PLAN

Drawing No.
HA-01



GENERAL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING ALL DIMENSIONS ON THESE PLANS AGAINST FIELD CONDITIONS PRIOR TO ANY CONSTRUCTION WORK. REPORT ANY DISCREPANCIES TO THE ENGINEER FOR REVIEW. ALL DIMENSIONS AND LOCATIONS AS-INDICATED ON THE DRAWINGS SHALL BE CONSIDERED AS REASONABLY CORRECT BUT IT SHALL BE UNDERSTOOD THAT THEY ARE SUBJECT TO MODIFICATION AS MAY BE NECESSARY OR DESIRABLE AT THE TIME OF INSTALLATION TO MEET ANY UNFORESEEN OR OTHER CONDITION.
2. ALL WORK PERFORMED SHALL COMPLY WITH BUILDING AND ZONING ORDINANCE OF THE LOCAL AUTHORITY HAVING JURISDICTION, AND THE NYS BUILDING AND ENERGY CODES.
3. CONTRACTOR OR ANY SUBCONTRACTOR DOING ANY WORK UNDER THIS CONTRACT SHALL CARRY LIABILITY AND PROPERTY DAMAGE INSURANCE AGAINST ACCIDENTS OF ALL KINDS AND SHALL FURNISH OWNER WITH CERTIFICATES OF INSURANCE.
4. NEW WALL AND CEILING FINISHES SHALL HAVE A FLAME-SPREAD INDEX OF 0-25 (CLASS A) IN INTERIOR STAIRS, EXIT PASSAGEWAYS AND KITCHEN, 26-75 (CLASS B) IN CORRIDORS, 76-200 (CLASS C) IN ROOMS AND ENCLOSED SPACES.
5. NEW FLOOR FINISHES SHALL NOT BE LESS THAN CLASS II, GREATER THAN OR EQUAL TO .22 WATTS/CM^2 (MIN. CRITICAL RADIANT FLUX) IN EXIT ENCLOSURES, PASSAGEWAYS, CORRIDORS AND ROOMS NOT SEPARATED FROM CORRIDORS.
6. CONTRACTOR SHALL PROVIDE AND INSTALL ALL COMPONENTS INDICATED ON DETAIL SHEETS, PLANS, SPECIFICATIONS AND ALL PERTINENT EQUIPMENT REQUIRED FOR A COMPLETE AND WORKABLE SYSTEM.
7. CONTRACTOR SHALL PROTECT THE PUBLIC AND STRUCTURE DURING CONSTRUCTION WITH TEMPORARY FENCING AND BRACING.
8. ALL SPECIAL INSPECTIONS SHALL BE DONE BY A QUALIFIED INDIVIDUAL IN ACCORDANCE WITH DRAWING S1.0. SPECIAL INSPECTORS TO BE RETAINED BY OWNER OR OWNER REPRESENTATIVE OF THE OWNER.
9. CONTRACT CLOSE OUT: IN THE PRESENCE OF THE OWNER, ENGINEER OR ARCHITECT; DEMONSTRATING OPERATION OF SYSTEMS AND THAT ALL SPECIFICATIONS HAVE BEEN MET TO THE SATISFACTION OF ALL PARTIES.
10. IT IS THE INTENTION THAT THESE SPECIFICATIONS, AND DRAWINGS ACCOMPANYING SAME, SHALL PROVIDE FOR THE FURNISHING AND INSTALLING OF THE BUILDING CONSTRUCTION COMPLETE AS SPECIFIED AND SHOWN. ANY WORK SHOWN ON THE DRAWINGS AND NOT PARTICULARLY DESCRIBED IN THE SPECIFICATIONS OR VICE VERSA, OR ANY WORK CHANGES WHICH MAY BE EVIDENTLY NECESSARY TO COMPLETE THE INSTALLATION SHALL BE FURNISHED BY THIS CONTRACTOR.
11. IT IS THE INTENT AND PURPOSE OF THESE SPECIFICATIONS AND DRAWINGS TO INCLUDE AND PROVIDE FOR ALL MATERIALS, APPLIANCES AND LABOR TO PROPERLY COMPLETE AND LEAVE IN PERFECT WORKING CONDITION THE ENTIRE SYSTEM HEREINAFTER SPECIFIED. ANY MATERIAL, LABOR OR APPLIANCE NOT SPECIFICALLY MENTIONED IN THESE SPECIFICATIONS OR SHOWN ON THE DRAWINGS, BUT NECESSARY FOR A COMPLETE INSTALLATION MUST BE FURNISHED BY THIS CONTRACTOR.
12. IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS TO PROVIDE ALTERATIONS AND/OR NEW CONSTRUCTION AS INDICATED ON THE DRAWNGS AND IN THE SPECIFICATIONS TO PROVIDE COMPLETE NEW SYSTEMS IN EVERY RESPECT, CAPABLE OF OPERATING AS DESIGNED. IT IS NOT INTENDED THAT EVERY FITTING, MINOR DETAIL OR FEATURE BE SHOWN ON DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DETAIL NECESSARY FOR COMPLETION OF THESE SYSTEMS IN ACCORDANCE WITH GOOD PRACTICE.

GENERAL SYMBOLS

- POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK
- POINT OF DISCONNECT
- INDICATES SECTION LETTER
- INDICATES DRAWING NUMBER WHERE LOCATED
- WINDOW TAG
- DOOR TAG
- 1 HOUR FIRE SEPARATION
- 2 HOUR FIRE SEPARATION

ABBREVIATIONS

AC	AIR CONDITIONING UNIT
ACT	ACOUSTIC CEILING TILE
ACCU	AIR COOLED CONDENSING UNIT
AD	ACCESS DOOR
A.F.F.	ABOVE FINISHED FLOOR
AL	ALUMINUM
CAT.	CATALOG
CFM	CUBIC FEET PER MINUTE
CG	CEILING GRILLE
C.J.	CEILING JOIST
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
DF	DRINKING FOUNTAIN
DIV	DIVISION
DN.	DOWN
DWG	DRAWING
EA	EACH
E.C.	ELECTRICAL CONTRACTOR
ELEC.	ELECTRICAL
ELEV	ELEVATOR
EQUIP.	EQUIPMENT
EXIST	EXISTING
FE	FIRE EXTINGUISHER
F.J.	FLOOR JOIST
FLR	FLOOR
FT	FEET OR FOOT
FTG	FOOTING
G.C.	GENERAL CONTRACTOR
GYB	GYPSUM BOARD
H.C.	HVAC CONTRACTOR
HDR	HEADER
LF	LINEAR FEET
LVL	LAMINATED VENEER LUMBER
MAX.	MAXIMUM
M.E.R.	MECHANICAL EQUIPMENT ROOM
MIN.	MINIMUM
MTD	MOUNTED
MTG	MOUNTING
N.I.C.	NOT IN CONTRACT
NOM.	NOMINAL
NTS	NOT TO SCALE
O.C.	ON CENTER
P.C.	PLUMBING CONTRACTOR
PSF	POUNDS PER SQUARE FT.
PSI	POUNDS PER SQUARE IN.
P.T.	PRESSURE TREATED
REQ.	REQUIRED
RM.	ROOM
R.O.	ROUGH OPENING
R.R.	ROOF RAFTER
SCHED.	SCHEDULE
SECT.	SECTION
SPEC.	SPECIFICATION
SPF	SPRUCE PINE FIR
S.S.	SOLID STUDS
SYS.	SYSTEM
TEL.	TELEPHONE
TYP.	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
VIF	VERIFY IN FIELD

ARCHITECTURAL LINE TYPES

- EXISTING TO BE REMOVED
- EXISTING TO REMAIN
- EXISTING BEAM
- NEW WALL
- NEW FOOTING
- NEW BEAM
- NEW CONCRETE
- NEW MILLWORK

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

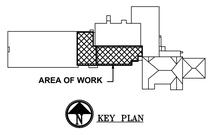
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER
NO. 073084-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A,
Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100,
Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

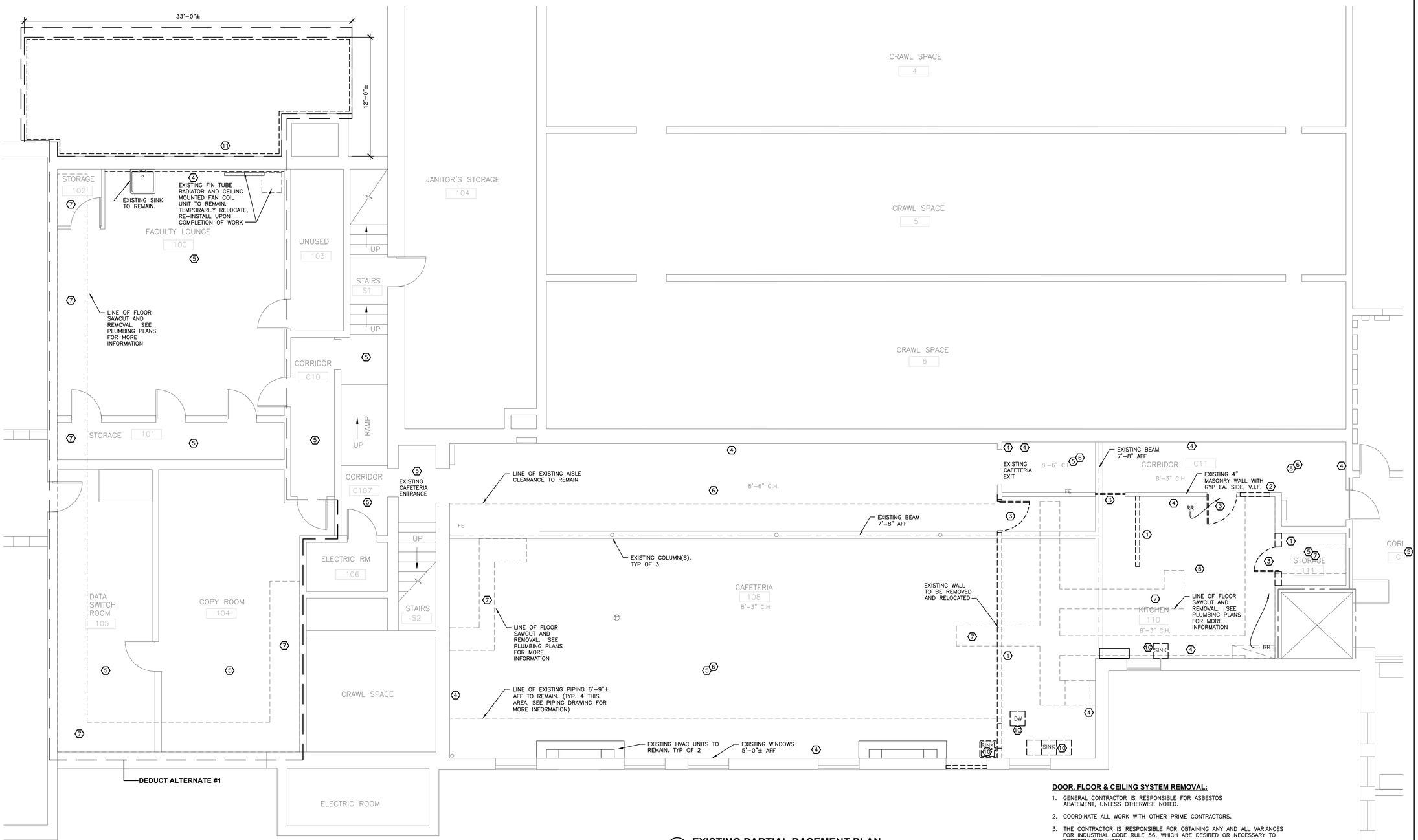
Drawing Title

**ARCHITECTURAL:
NOTES, SYMBOLS
& ABBREVIATIONS**

Drawing No.

A-001

File Name: F:\2019\19-194.GWLUFSD.Kitchen and Cafeteria Renovations\ARCH\(6) A-001.dwg (Layout: A-001)
Date: Tue, Dec 28, 2021 - 4:06 PM (Name: wpb)



1 EXISTING PARTIAL BASEMENT PLAN

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

KEY NOTES:

1. REMOVE EXISTING MASONRY WALL AND ALL ASSOCIATED MATERIALS COMPLETELY. PATCH AND PREPARE SURFACE FOR SCHEDULED WORK.
2. CUT OPENING IN MASONRY WALL TO ACCOMMODATE NEW DOOR OPENING. PROVIDE LINTEL PER LINTEL SCHEDULE. PATCH EXPOSED SURFACES TO MATCH EXISTING ADJACENT SURFACES. REFER TO DETAILS.
3. REMOVE DOOR AND FRAME.
4. REMOVE WALL FINISHES IN ITS ENTIRETY. PATCH ALL EXPOSED SURFACES TO MATCH EXISTING ADJACENT SURFACES/FINISHES IN PREPARATION OF NEW WALL FINISH.
5. REMOVE FLOOR FINISHES IN ITS ENTIRETY. PATCH ALL EXPOSED SURFACES TO MATCH EXISTING ADJACENT SURFACES/FINISHES IN PREPARATION OF MOISTURE REMEDIATION/NEW FLOOR FINISH. SEE DETAIL 10/A-500 FOR MORE INFORMATION
6. REMOVE ALL CEILING FINISHES. PATCH ALL EXPOSED SURFACES TO MATCH EXISTING ADJACENT SURFACES.
7. P.C. TO SAW-CUT AND REMOVE EXISTING CONCRETE FLOOR FOR INSTALLATION OF NEW PIPING. G.C. TO COORDINATE WITH PLUMBING CONTRACTOR.
8. REMOVE EXISTING KITCHEN EQUIPMENT. STORE EQUIPMENT SCHEDULED TO BE RE-USED IN NEW KITCHEN. EQUIPMENT TO BE CLEANED PRIOR TO RE-INSTALLATION. ANY EQUIPMENT SCHEDULED FOR RE-USE DAMAGED UPON REMOVAL SHALL BE REPLACED AT NO ADDITIONAL COST TO THE SCHOOL DISTRICT.
9. REMOVE UPPER AND LOWER CASEWORK IN ITS ENTIRETY. PATCH ALL EXPOSED SURFACES TO MATCH EXISTING ADJACENT SURFACES/FINISHES IN PREPARATION OF NEW WALL/FLOOR FINISHES.
10. REMOVE EXISTING PLUMBING FIXTURES.
11. REMOVE EXISTING PLANTER ON SIDE OF BUILDING, REMOVE EARTH ALONG CONCRETE FOUNDATION WALL AND APPLY WATERPROOF AND 2" RIGID INSULATION ALONG ENTIRE WALL TO FOOTING, (APPROXIMATELY 7'-0"± BELOW FINISHED GRADE). BACKFILL WITH DRAINAGE STONE AND BLACKTOP FINISHED GRADE OF DISTURBED AREA. BLACKTOP TO BE SLOPED AWAY FROM BUILDING.
12. REMOVE EXISTING WINDOW AND PREPARE SURFACE FOR INSTALLATION OF NEW WINDOW. VERIFY SIZE IN FIELD AND COORDINATE WITH NEW WINDOW.

GENERAL DEMOLITION NOTES:

1. REMOVE PARTITIONS, DOORS AND ASSOCIATED CONSTRUCTION INCLUDING CASEWORK, WALL FINISHES, FLOOR FINISHES, CEILING FINISHES AND KITCHEN EQUIPMENT, AS WELL AS FLOOR, CEILING OR WALL MOUNTED ITEMS AS INDICATED AND/OR REQUIRED TO PERFORM NEW WORK. TURN OVER OR STORE ITEMS REQUESTED BY OWNER. PROPERLY DISPOSE OF ALL OTHER MATERIALS.
2. PATCH TO MATCH ADJOINING FINISHES AT ALL SURFACES DISTURBED DURING DEMOLITION AND/OR CONSTRUCTION AND PREPARE TO RECEIVE NEW FINISHES. SCRAPE, PATCH AND PRIME SURFACES TO RECEIVE NEW WORK. COAT EXISTING METAL SURFACES AS REQUIRED TO PREVENT CONTACT OF DISSIMILAR MATERIALS.
3. IN ALL AREAS OF DEMOLITION, WORK INCLUDES ENTIRE PREPARATION AS REQUIRED, INCLUDING LEVELING OF SUBSTRATE FOR INSTALLATION OF NEW WORK.
4. COORDINATE ALL WORK WITH OTHER PRIME CONTRACTORS.
5. PROVIDE TEMPORARY PHASING PARTITIONS AS REQUIRED.

DOOR, FLOOR & CEILING SYSTEM REMOVAL:

1. GENERAL CONTRACTOR IS RESPONSIBLE FOR ASBESTOS ABATEMENT, UNLESS OTHERWISE NOTED.
2. COORDINATE ALL WORK WITH OTHER PRIME CONTRACTORS.
3. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY AND ALL VARIANCES FOR INDUSTRIAL CODE RULE 56, WHICH ARE DESIRED OR NECESSARY TO PERFORM THE WORK.
4. PERFORM ALL WORK IN ACCORDANCE WITH SPECIFICATION 028200 ASBESTOS ABATEMENT SAFE WORK PRACTICES.
5. REMOVE AND DISPOSE OF FLOOR SYSTEMS AS ASBESTOS CONTAINING OR CONTAMINATED MATERIAL. SEE DRAWING HA-01 ASBESTOS ABATEMENT BASEMENT PLAN FOR ADDITIONAL REQUIREMENTS.
6. DOOR, FLOOR AND CEILING SYSTEMS INCLUDE, WITHOUT LIMITATION, ANY AND ALL OF THE FOLLOWING (INCLUDING COMBINATIONS OF TWO OR MORE):
   a. DOORS
   b. FRAMES
   c. HARDWARE
   d. INSULATION
   e. WALL FINISHES
   f. FLOOR FINISHES
   g. CEILING FINISHES
   h. CAULKING
   i. FLASHING
   j. SEALANTS.
7. REMOVE THE ENTIRE DOOR SYSTEM BETWEEN THE MASONRY/ CONCRETE/ STRUCTURAL STEEL THAT SURROUNDING THEM, EXCEPT AS FOLLOWS:
   a. LINTELS
   b. STRUCTURAL SUPPORTS
8. REGARDLESS OF ANY VARIANCE, SEAL ALL OPENINGS TO THE BUILDING WITHIN 25 FEET OF THE ACTIVE WORK AREA WITH A MINIMUM OF 2 LAYERS OF PLASTIC SHEETING.
9. REMOVE ALL ABATED MATERIALS FROM THE WORK AREA AND/OR BUILDING IN SEALED BAGS, DRUMS OR PLASTIC SHEETING.
10. MAINTAIN MOISTURE PROTECTION AND SITE SECURITY AT ALL TIMES.
11. AFTER THE FLOOR SYSTEM HAS BEEN REMOVED AND AFTER CLEARANCE AIR SAMPLES HAVE BEEN COLLECTED, PROVIDE HARD WALL BARRIERS TO THE INTERIOR OF THE BUILDING, SPECIFIED IN SECTION 001500.
12. WHERE INTERIOR ABATEMENT OCCURS, ISOLATE THE SECTION OF THE BUILDING FROM OCCUPIED PORTIONS OF THE BUILDING WITH SEALED ISOLATION BARRIERS CONSTRUCTED OF NON-COMBUSTIBLE MATERIALS.THE ISOLATED PORTION OF THE BUILDING AND VENTILATION SYSTEMS SHALL BE PHYSICALLY SEPARATED AND SEALED AT THE ISOLATION BARRIER.

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

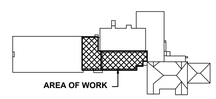
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
073084
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 073084-1

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

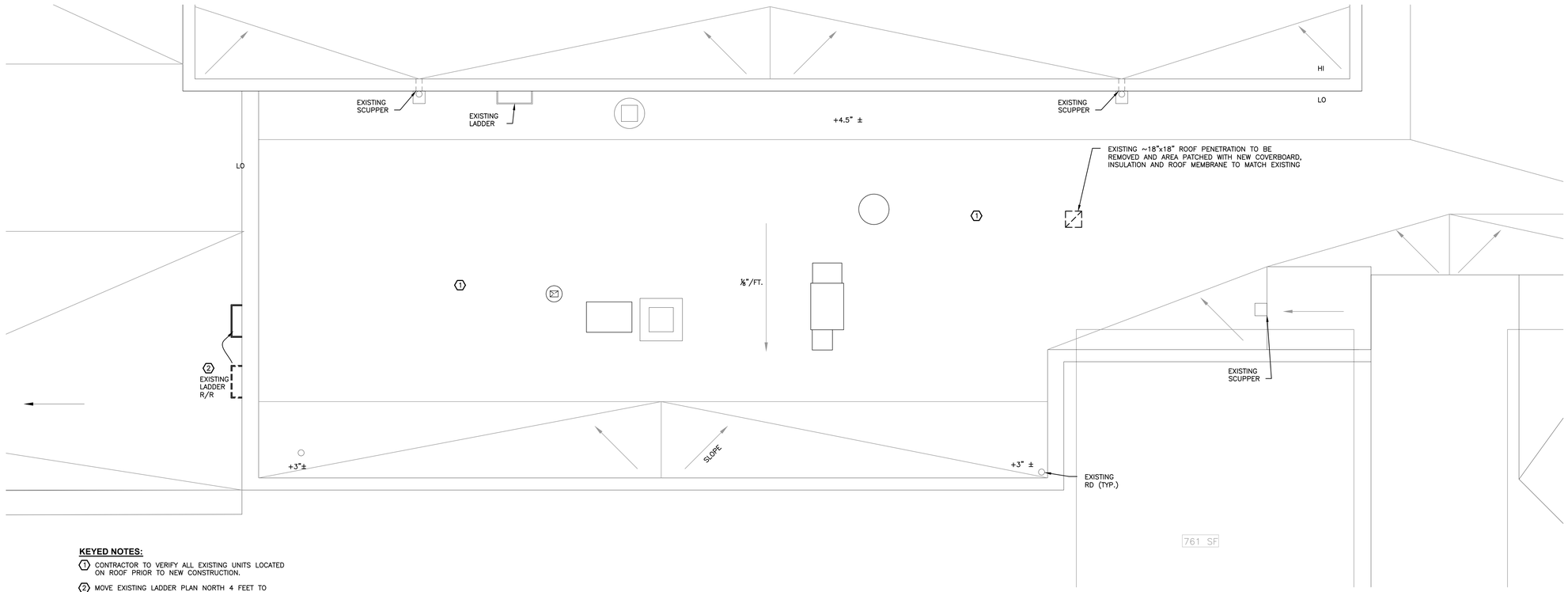
Drawing Title

ARCHITECTURAL: PARTIAL DEMO BASEMENT PLAN

Drawing No.

AD-100

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\ARCH(9) AD-100, (11) A-100 BASEMENT.dwg (Layout: AD-100 DEMO FLOOR PLAN)
Date: Tue, Dec 28, 2021 - 4:06 PM (Name: wpb)

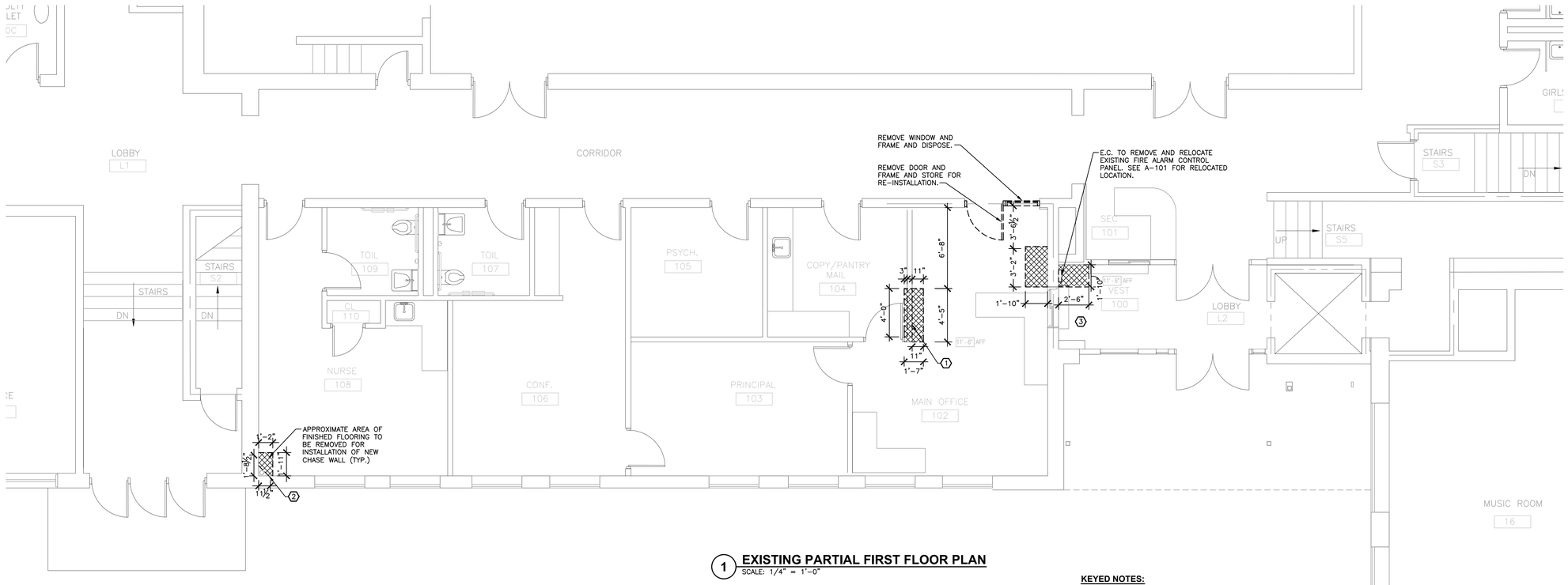


KEYED NOTES:

1. CONTRACTOR TO VERIFY ALL EXISTING UNITS LOCATED ON ROOF PRIOR TO NEW CONSTRUCTION.
2. MOVE EXISTING LADDER PLAN NORTH 4 FEET TO PROVIDE CLEARANCE FOR THE NEW EXHAUST FAN.

2 EXISTING PARTIAL ROOF PLAN

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



1 EXISTING PARTIAL FIRST FLOOR PLAN

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

KEYED NOTES:

1. CONTRACTOR TO VERIFY EXISTING FLOOR JOIST LOCATION PRIOR TO REMOVAL OF WALL. COORDINATE WITH M.C. CONTACT EOR IF FLOOR JOIST LOCATION INTERFERES WITH DUCT INSTALLATION.
2. REMOVE EXISTING CORNER SHAFT WALL TO EXPOSE STORM DRAIN.
3. SHIFT EXISTING COUNTER TO ALLOW FOR NEW SHAFT WALL

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER

44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

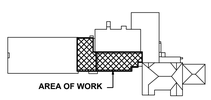
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
035847
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 072084-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



KEY PLAN

FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

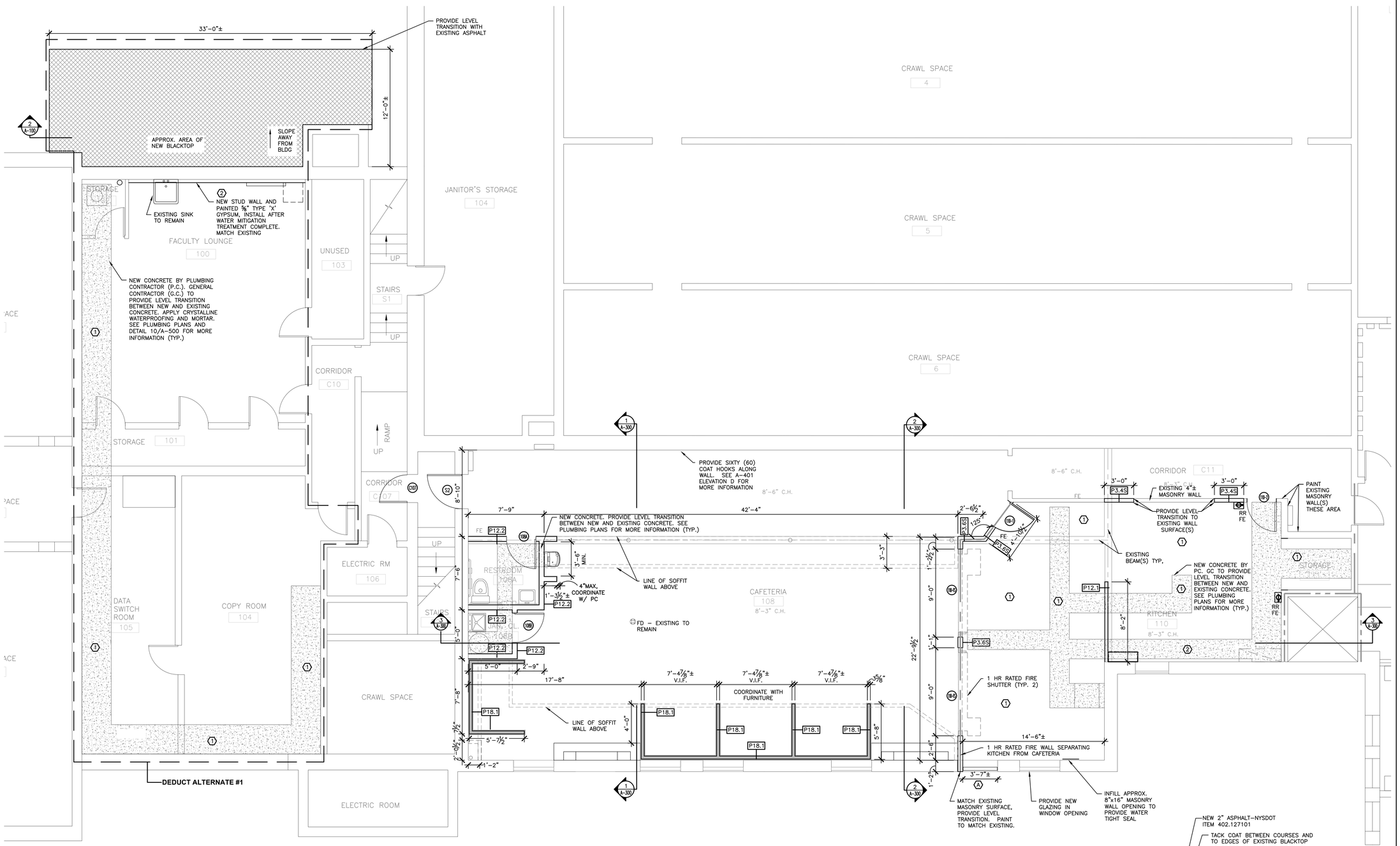
Drawing Title

ARCHITECTURAL: DEMO PARTIAL 1ST FLOOR AND ROOF PLAN

Drawing No.

AD-101

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\ARCH\(10) AD-101, (12) A-101 1ST FLR & ROOF.dwg (Layout: AD-101 DEMO FLOOR PLAN)
Date: Tue, Dec 28, 2021 - 4:06 PM (Name: wpb)



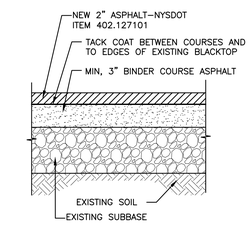
KEY NOTES:

1. PATCH AND GRIND EXISTING & NEW (WORK BY P.C.) CONCRETE FLOOR. PERFORM WATER MITIGATION TREATMENTS. SEE NOTE 1 THROUGH 3 ON DETAIL 10/A-500 "TILE INSTALLATION DETAIL".
2. PERFORM WATER MITIGATION TREATMENTS. SEE NOTE 1 THROUGH 3 ON DETAIL 10/A-500 "TILE INSTALLATION DETAIL".

NOTE:

1. REFER TO ROOM FINISH SCHEDULE ON A-600 FOR ROOM FINISH WORK.

1 NEW PARTIAL BASEMENT PLAN
SCALE: 1/4" = 1'-0"



2 TYP. PAVEMENT DETAIL
N.T.S.

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
NY PROFESSIONAL ENGINEER NO. 073084-1

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL

AREA OF WORK

KEY PLAN

FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

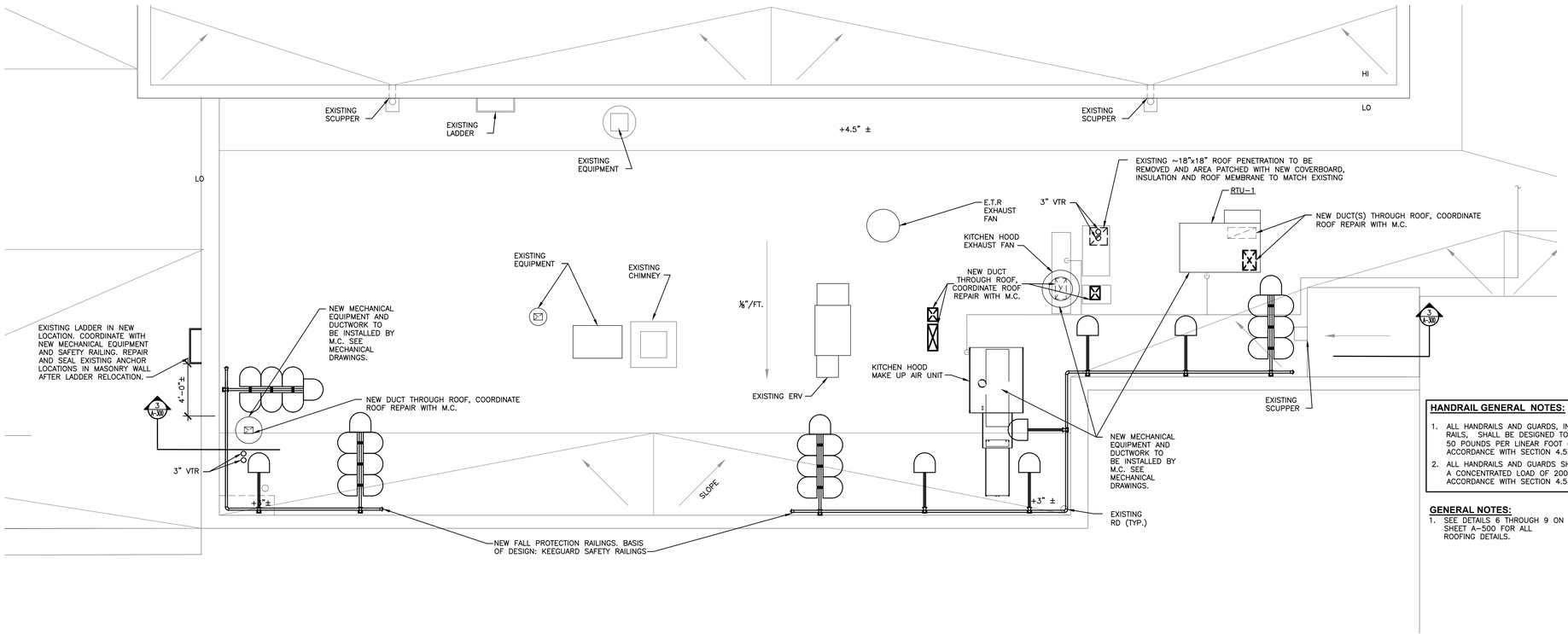
Drawing Title

ARCHITECTURAL: PARTIAL BASEMENT PLAN

Drawing No.

A-100

File Name: F:\2019\19-194.GWLUFSD.Kitchen and Cafeteria Renovations\ARCH\(8) A\D-100, (11) A-100 BASEMENT.dwg (Layout: A-100 NEW FLOOR PLAN)
Date: Tue, Dec 28, 2021 - 4:06 PM (Name: wpb)



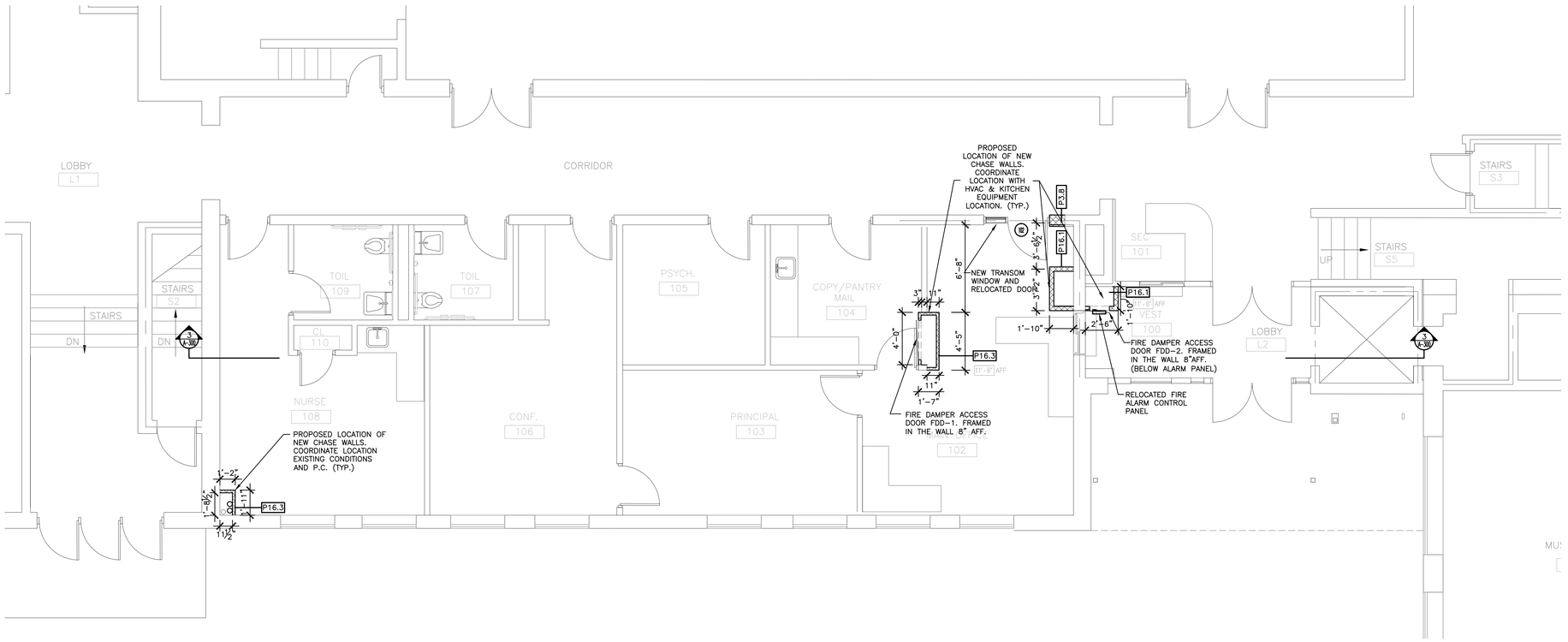
2 NEW PARTIAL ROOF PLAN
SCALE: 1/4" = 1'-0"

HANDRAIL GENERAL NOTES:

1. ALL HANDRAILS AND GUARDS, INCLUDING INTERMEDIATE RAILS, SHALL BE DESIGNED TO RESIST A LINEAR LOAD OF 50 POUNDS PER LINEAR FOOT (PLF) (0.73 KN/M) IN ACCORDANCE WITH SECTION 4.5.1.1 OF ASCE 7
2. ALL HANDRAILS AND GUARDS SHALL BE DESIGNED TO RESIST A CONCENTRATED LOAD OF 200 POUNDS (0.89 KN) IN ACCORDANCE WITH SECTION 4.5.1.1 OF ASCE 7.

GENERAL NOTES:

1. SEE DETAILS 6 THROUGH 9 ON SHEET A-500 FOR ALL ROOFING DETAILS.



1 NEW PARTIAL FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
ERIC D. FELLENZER
095844
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER
NO. 075084-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL

AREA OF WORK

KEY PLAN

FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

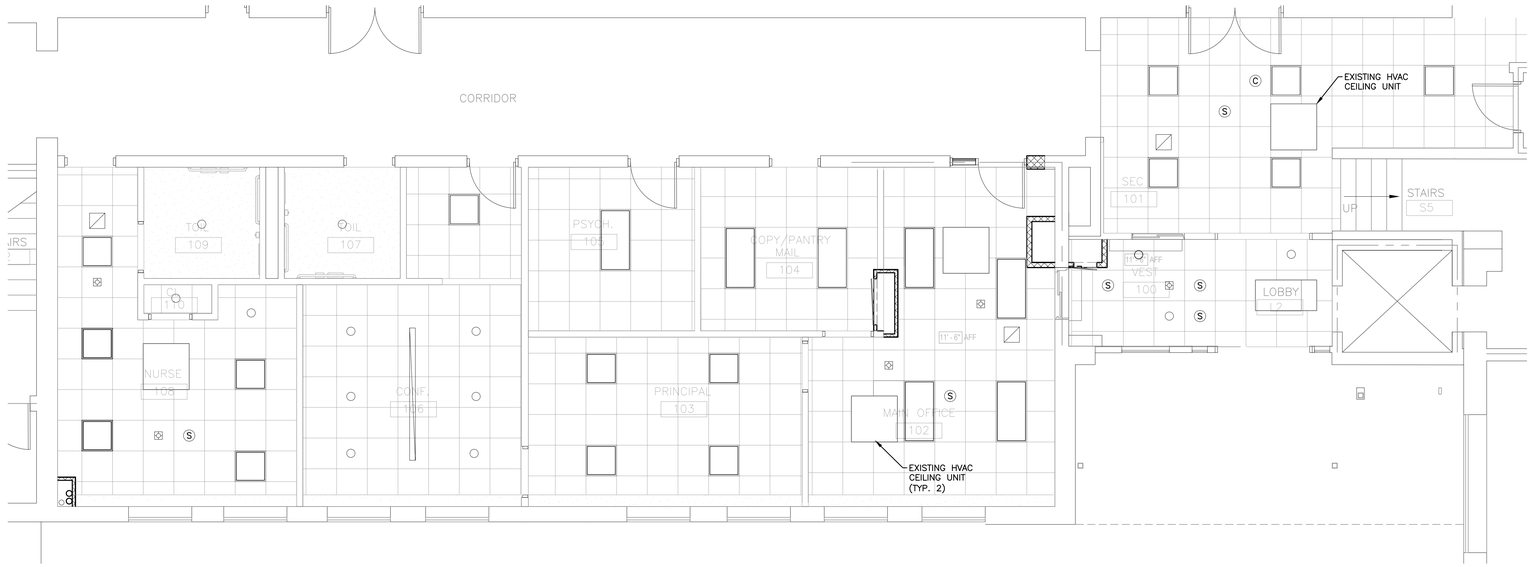
Drawing Title

ARCHITECTURAL: PARTIAL 1ST FLOOR AND ROOF PLAN

Drawing No.

A-101

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\ARCH\(10) AD-101, (12) A-101 1ST FLR & ROOF.dwg (Layout: A-101 NEW FLOOR PLAN)
Date: Tue, Dec 28, 2021 - 4:06 PM (Name: wpb)



2 NEW PARTIAL 1ST FLOOR - RCP
SCALE: 1/4" = 1'-0"



1 NEW PARTIAL BASEMENT PLAN - RCP
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. DROP CEILING GRID AS SHOWN OVER BOOTHS IN CAFETERIA AREA. NEW SHEETROCK IN BATHROOM AND JANITOR ROOM CEILING. NEW SHEETROCK CAFTERIA AREA (1) ⅝" LAYER TYPE X SHEETROCK. TAPED, SPACKLED AND PAINTED. PATCH, REPAIR AND PAINT EXISTING SHEETROCK IN KITCHEN AREA TO SMOOTH SURFACE.
2. DOMESTIC WATER AND SANITARY PIPE CHASE/SOFFIT MUST BE LARGE ENOUGH TO COMPLETELY ENCLOSE ALL PIPES AND UNISTRUT SHOWN ON P-100 AND P-200. SOFFIT/CHASE SIZE IS TO BE V.I.F.
3. DROP CEILING SOFFIT AREA MUST BE LARGE ENOUGH TO ENCLOSE ALL PIPES SHOWN ON P-100 AND P-200. UNISTRUT UNDERSIDE TO BE EVEN WITH CEILING GRID. WRAP UNISTRUT WITH METAL ENCLOSER TO ENCLOSE UNISTRUT, ROD ENDS AND FASTENER, HEIGHTO BE LOWEVER THAN CEILING BUT AS HIGH AS POSSIBLE ABOVE FINISHED FLOOR. PIPE CHASE/SOFFIT SIZE IS TO BE V.I.F.

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
NY PROFESSIONAL ENGINEER NO. 073084-1

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL

AREA OF WORK

KEY PLAN

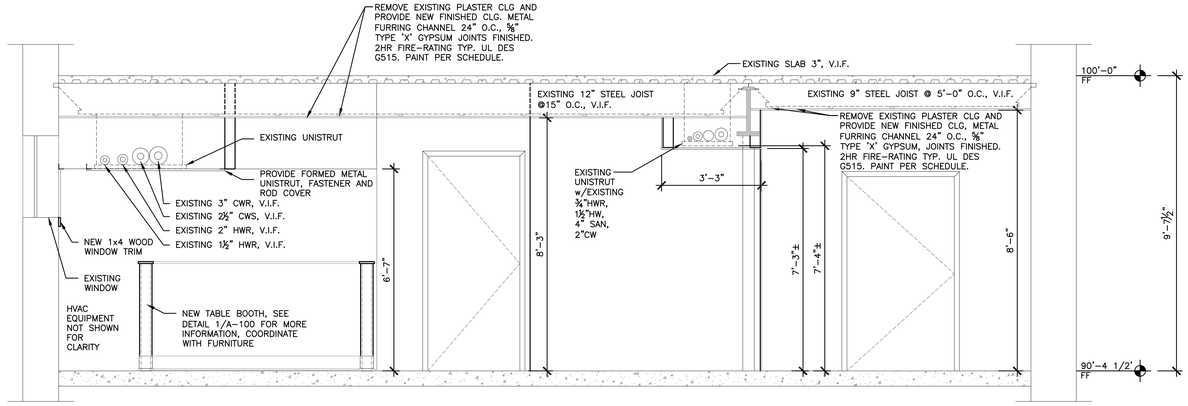
FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

⅜" ¼" ½" 0 1" 2"
REFERENCE SCALE

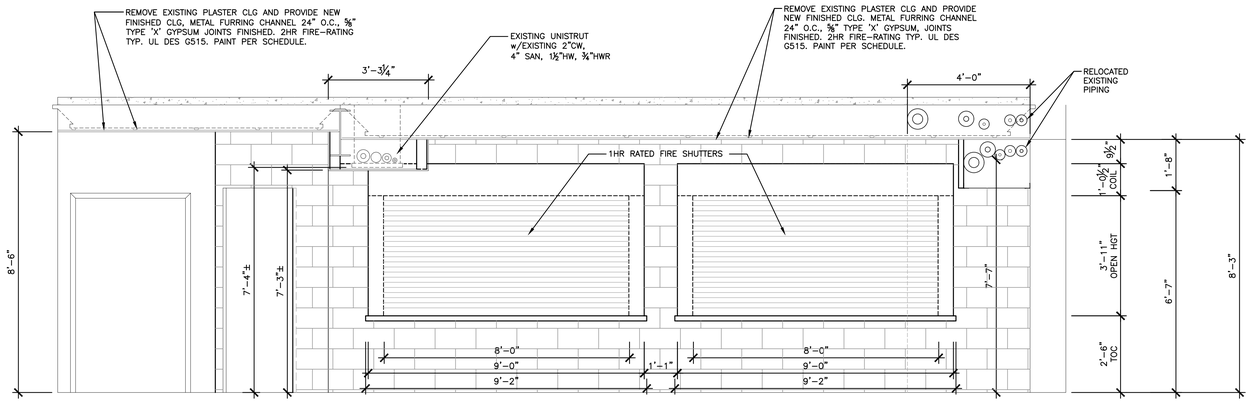
Drawing Title
ARCHITECTURAL: PARTIAL BASEMENT & 1ST FLOOR RCP

Drawing No.
A-200

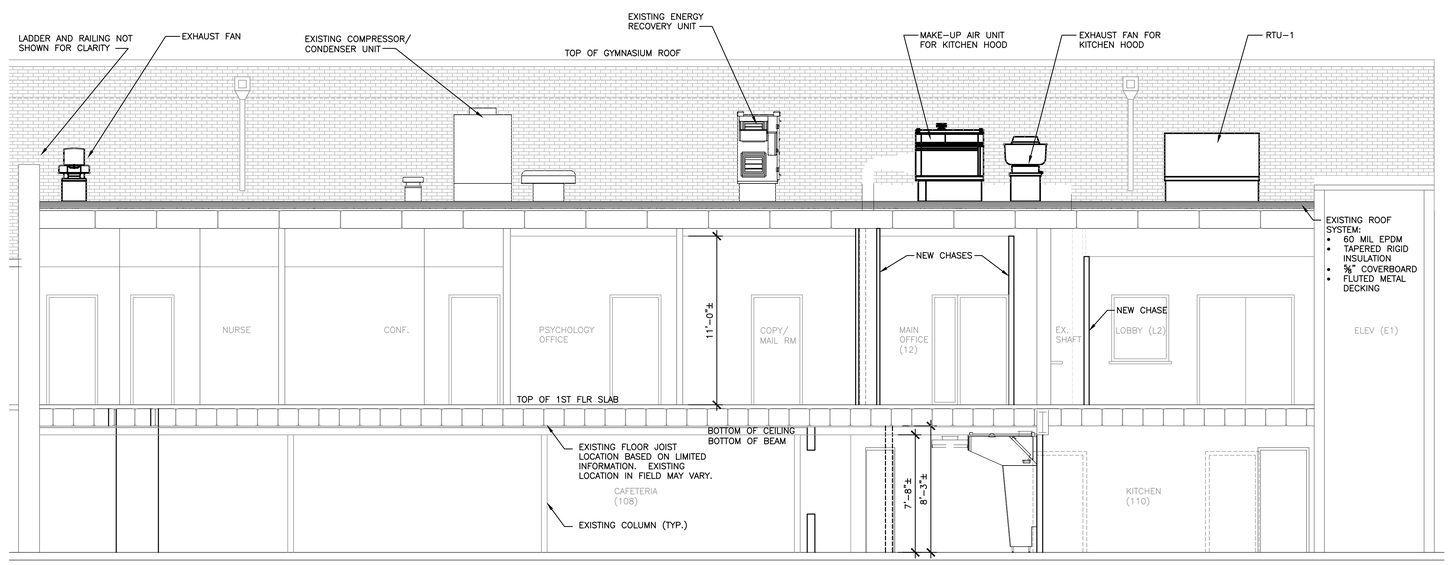
File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\ARCH\(13) A-200 RCP.dwg (Layout: A-200 BASEMENT RCP)
Date: Tue, Dec 28, 2021 - 4:07 PM (Name: wpb)



1 PARTIAL SECTION
SCALE: 1/2" = 1'-0"



2 PARTIAL SECTION
SCALE: 1/2" = 1'-0"



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

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

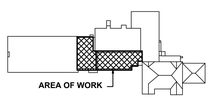
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
ERIC D. FELLENZER
075084
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 075084-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

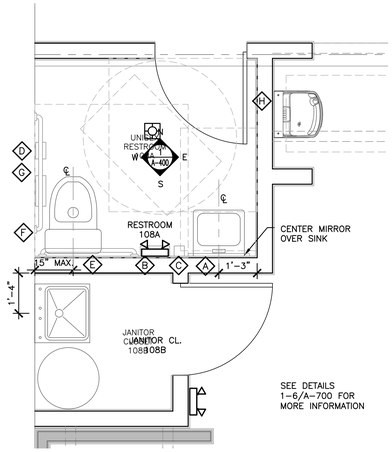
Drawing Title

ARCHITECTURAL: BUILDING SECTIONS

Drawing No.

A-300

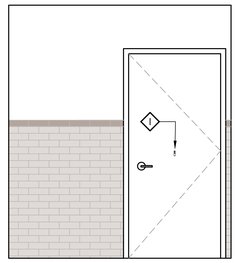
File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\ARCH\(14) A-300 SECTIONS.dwg (Layout: A-300)
Date: Tue, Dec 28, 2021 - 4:07 PM (Name: wpb)

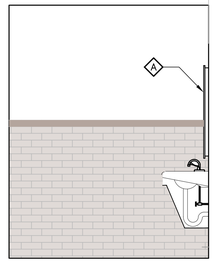


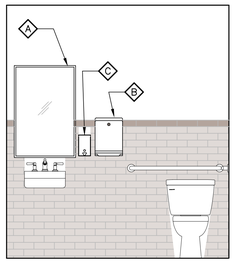
1 ENLARGED RESTROOM PLAN
SCALE: 1/2" = 1'-0"

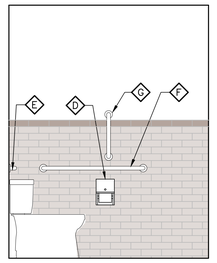
TOILET ACCESSORY SCHEDULE	
ITEM	MANUFACTURER/MODEL NO.
24" X 36" MIRROR	BOBRICK – B-293 FIXED POSITION TILT MIRROR W/STAINLESS STEEL FRAME
SURFACE MOUNTED PAPER TOWEL DISPENSER	BAYWEST – OPTISERV HYBRID HANDS-FREE ROLL TOWEL DISPENSER, #87511, BLACK TRANSLUCENT
WALL MOUNTED SOAP DISPENSER	BRADLEY – HORIZONTAL TANK ADA COMPLIANT MODEL 6543
SURFACE MOUNTED TOILET PAPER DISPENSER	BAYWEST – DUBL-SERV TOILET PAPER DISPENSER, #80200
36" GRAB BAR	BRADLEY CORP. – 1-1/2" DIA. HEAVY DUTY GRAB BAR W/PEENED FINISH
42" GRAB BAR	BRADLEY CORP. – 1-1/2" DIA. HEAVY DUTY GRAB BAR W/PEENED FINISH
18" VERTICAL GRAB BAR	BRADLEY CORP. – 1-1/2" DIA. HEAVY DUTY GRAB BAR W/PEENED FINISH
COAT HOOK	BOBRICK – B-682 MOUNTED AT 40" MAX. AFF
–	---

GENERAL RESTROOM CONSTRUCTION NOTES:
1. PROVIDE BLOCKING WHERE REQUIRED FOR MOUNTING HARDWARE.
2. PROVIDE AND INSTALL REST ROOM DOOR SIGN.

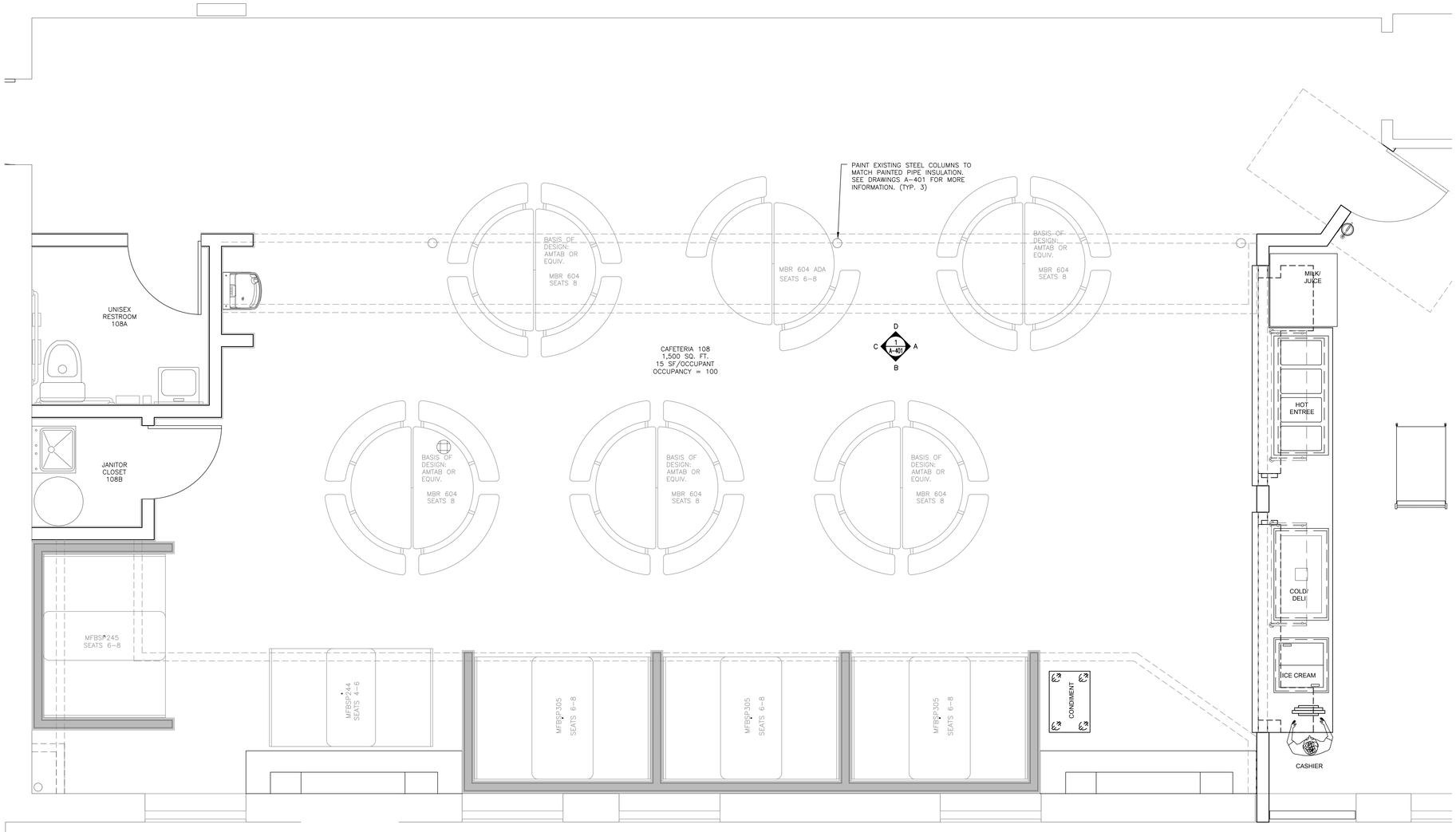

N


E


S


W

2 RESTROOM INTERIOR ELEVATIONS
SCALE: 1/2"=1'-0"



3 ENLARGED CAFETERIA PLAN
SCALE: 1/2" = 1'-0"

NOTE:

1. PER 2010 ACCESSIBLE CODES

902.4 DINING SURFACES AND WORK SURFACES FOR CHILDREN'S USE. ACCESSIBLE DINING SURFACES AND WORK SURFACES FOR CHILDREN'S USE SHALL COMPLY WITH 902.4.

EXCEPTION: DINING SURFACES AND WORK SURFACES THAT ARE USED PRIMARILY BY CHILDREN 5 YEARS AND YOUNGER SHALL NOT BE REQUIRED TO COMPLY WITH 902.4 WHERE A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 POSITIONED FOR A PARALLEL APPROACH IS PROVIDED.

902.4.1 CLEAR FLOOR OR GROUND SPACE. A CLEAR FLOOR SPACE COMPLYING WITH 305 POSITIONED FOR FORWARD APPROACH SHALL BE PROVIDED. KNEE AND TOE CLEARANCE COMPLYING WITH 306 SHALL BE PROVIDED, EXCEPT THAT KNEE CLEARANCE 24 INCHES (610 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND SHALL BE PERMITTED.

902.4.2 HEIGHT. THE TOPS OF TABLES AND COUNTERS SHALL BE 28 INCHES (660 MM) MINIMUM AND 30 INCHES (760 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

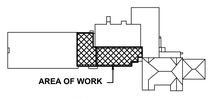
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
NY PROFESSIONAL ENGINEER NO. 077084-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



KEY PLAN

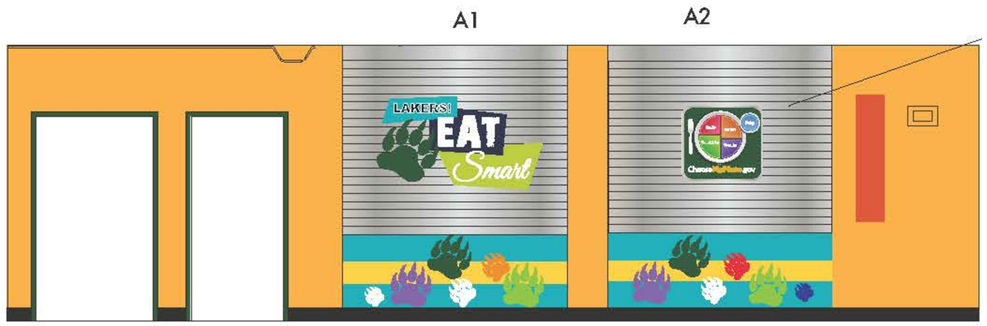
FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title
ARCHITECTURAL: ENLARGED PLANS, INTERIOR ELEVATIONS & SEATING ARRANGEMENTS

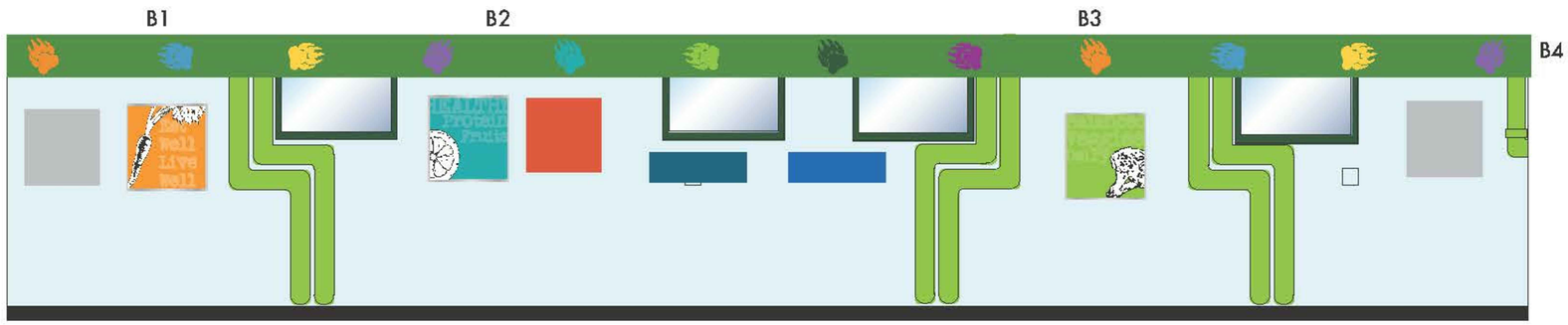
Drawing No.
A-400

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\ARCH\(15-16-17) A-400 ENLARGED PLANS.dwg (Layout: A-400 ENLARGED PLAN)
Date: Tue, Dec 28, 2021 - 4:07 PM (Name: wpb)

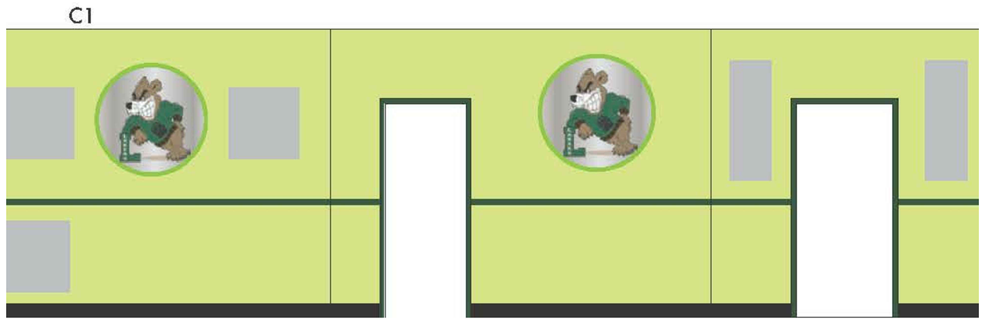


ELEVATION A

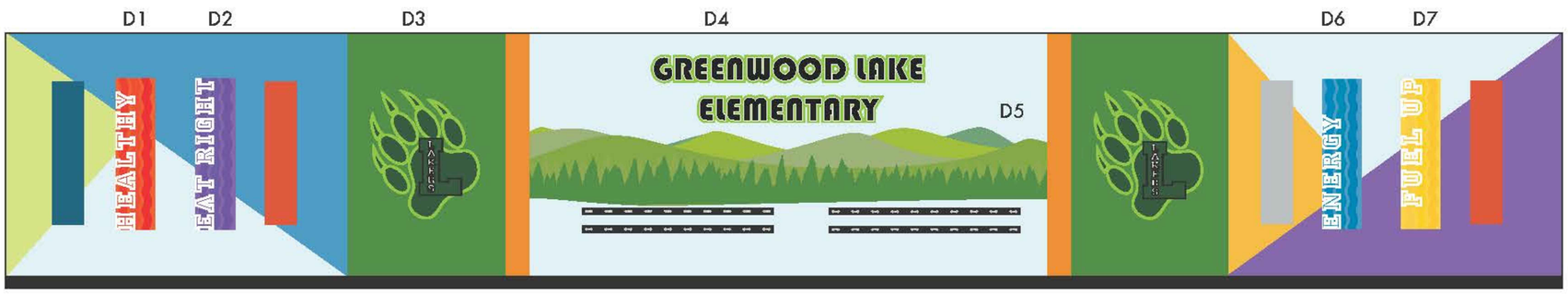
2 **SIGN DESCRIPTION A1-B4**
SCALE: N.T.S.



ELEVATION B



ELEVATION C



ELEVATION D

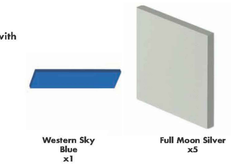
1 **CAFETERIA INTERIOR ELEVATIONS**
SCALE: N.T.S.

FURNITURE SCHEDULE

SYMBOL	ITEM	QTY	MANUF. & MODEL NO.	DESCRIPTION	SEAT CAP	REMARKS
	60" DIA. ROUND MOBILE BENCH TABLE	5	AM TAB MBR604	TABLE TOP: WILSONART STD LAMINATE 4937-38 PINBALL, FINE VELVET FINISH EDGES: GRAY BENCH: LAMINATE COLOR GRAY. METAL FINISH: METALLIC TITANIUM WHEEL: GRAY	8	TABLE 27" HIGH SEAT 15" HIGH
	60" DIA. ROUND MOBILE BENCH TABLE ADA	1	AM TAB MBR604 ADA	TABLE TOP: WILSONART STD LAMINATE 4937-38 PINBALL, FINE VELVET FINISH EDGES: GRAY BENCH: LAMINATE COLOR GRAY. METAL FINISH: METALLIC TITANIUM WHEEL: GRAY	6-8	TABLE 27" HIGH SEAT 15" HIGH
	80"x60" MOBILE FOLDING BOOTH SEATING WITH TABLE	1	AM TAB MFBSP245	MOBILE FOLDING BOOTH SEATING AND TABLE, FOLDED STORAGE POSITION 60"W x 60"L x 40"H. TABLE TOP LAMINATED WITH FORMICA WHITE TWILL MATTE FINISH 9285-58, GRAY EDGE & WHEELS, METALLIC TITANIUM METAL FINISH. FIBERGLASS SEATS COLOR BLUE PEPPER.	6-8	TABLE 27" HIGH SEAT 18" HIGH
	80"x48" MOBILE FOLDING BOOTH SEATING WITH TABLE	1	AM TAB MFBSP244	MOBILE FOLDING BOOTH SEATING AND TABLE, FOLDED STORAGE POSITION 60"W x 48"L x 40"H. TABLE TOP LAMINATED WITH FORMICA WHITE TWILL MATTE FINISH 9285-58, GRAY EDGE & WHEELS, METALLIC TITANIUM METAL FINISH. FIBERGLASS SEATS COLOR BLUE PEPPER.	4-6	TABLE 27" HIGH SEAT 18" HIGH
	86"x60" MOBILE FOLDING BOOTH SEATING WITH TABLE	3	AM TAB MFBSP305	MOBILE FOLDING BOOTH SEATING AND TABLE, FOLDED STORAGE POSITION 60"W x 60"L x 40"H. TABLE TOP LAMINATED WITH FORMICA WHITE TWILL MATTE FINISH 9285-58, GRAY EDGE & WHEELS, METALLIC TITANIUM METAL FINISH. FIBERGLASS SEATS COLOR BLUE PEPPER.	6-8	TABLE 27" HIGH SEAT 18" HIGH

Coat and Backpack Hook Rail with Aluminum Construction
SKU:HL99
10 hooks @ 92in length
Black Anodized Aluminum

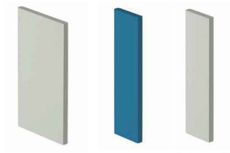




Acoustic Wall Panel 2"

Sizes:

- 24" x 24" **x 6**
- 12" x 47.5 **x 7**
- 24" x 47.5 **x 2**





16x64 - 3MM PVC with digital print graphics

16x64 - 3MM PVC with digital print graphics



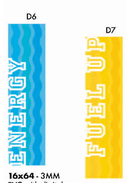
46.5x55 - 3MM PVC with digital print graphics - QTY 2



116x29.5 - 3MM PVC with digital print graphics



D5 **240x34** - 6MM PVC with digital print graphics



16x64 - 3MM PVC with digital print graphics

16x64 - 3MM PVC with digital print graphics

NOTES:

1. SIGNS TO BE MANUFACTURED AND INSTALLED BY LTI, MECHANICS.
2. GC TO PREP WALLS FOR PAINTING.
3. WALLS TO BE PAINTED BY LTI, MECHANICS.
4. ALL PAINT WILL BE SHERWIN WILLIAMS PRO INDUSTRIAL LATEX EPOXY IN SEMI-GLOSS. COLORS AND PATTERN INDICATED

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

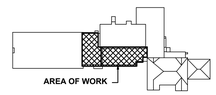
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 073084-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



KEY PLAN

FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

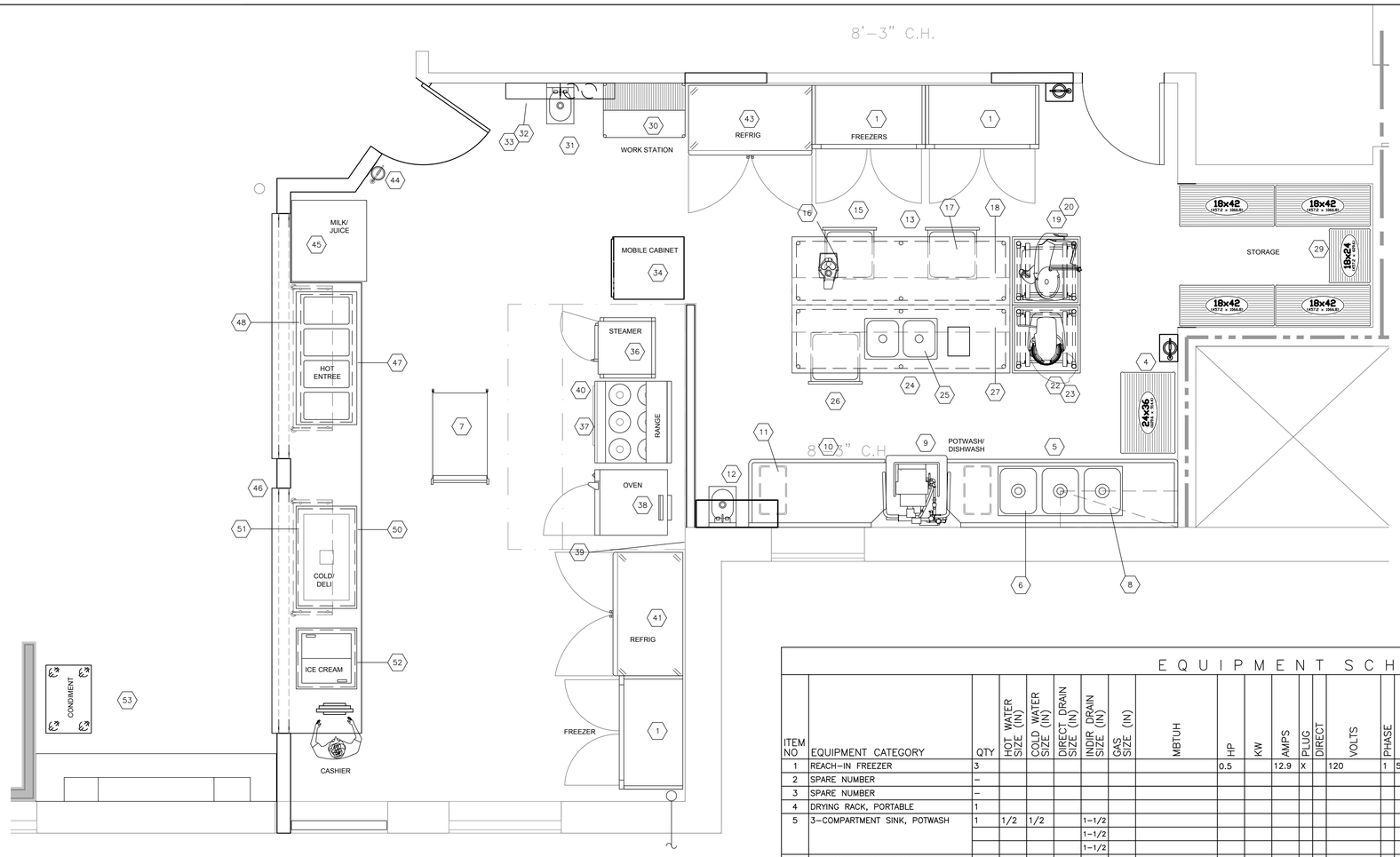
Drawing Title

ARCHITECTURAL. CAFETERIA ELEVATIONS AND SCHEDULE

Drawing No.

A-401

File Name: F:\2019\19-194.GWLUFSD.Kitchen and Cafeteria Renovations\ARCH\(15-16-17) A-400 ENLARGED PLANS.dwg (Layout: A-401 CAFETERIA ELEVATIONS)
Date: Tue, Dec 28, 2021 - 4:07 PM (Name: wpb)



1 ENLARGED KITCHEN PLAN

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

EQUIPMENT SCHEDULE

ITEM NO	EQUIPMENT CATEGORY	QTY	HOT WATER SIZE (IN)	COLD WATER SIZE (IN)	DIRECT DRAIN SIZE (IN)	INDIR DRAIN SIZE (IN)	GAS SIZE (IN)	MBTUH	HP	KW	AMPS	PLUG	DIRECT	VOLTS	PHASE	NEMA	MANUFACTURER	MODEL NUMBER	EQUIPMENT REMARKS
1	REACH-IN FREEZER	3				1-1/2			0.5		12.9	X		120	1	5-20P	UTILITY	F-50-SS-2S-N	
2	SPARE NUMBER	–																	
3	SPARE NUMBER	–																	
4	DRYING RACK, PORTABLE	1															EAGLE GROUP/ METAL MASTERS	QDR-2436E-GL	
5	3-COMPARTMENT SINK, POTWASH	1	1/2	1/2		1-1/2											EAGLE GROUP/METAL MASTERS	SDTPL-96-14/3	
						1-1/2													
						1-1/2													
6	S.S. RACK GUIDE, REMOV.	1															EAGLE GROUP/METAL MASTERS	CUSTOM	
7	UTILITY CART	1															LAKESIDE	949 (24x48)	
8	STORAGE SYSTEM, WALL MNTD.	1															EAGLE GROUP/ METAL MASTERS	WAL-STOR	
9	WAREWASHER, DOOR TYPE, VENTLESS	1	1/2	1/2		1-1/2					45.4		X	208	3		HOBART US FOODSERVICE	AM15VLT-2	
10	CLEAN DISH TABLE	1															EAGLE GROUP/METAL MASTERS	CDTR-60-14/3	
11	TRASH RECEPTACLE, SLIM JIM	3															RUBBERMAID	1971258	
12	HAND SINK, WALL MOUNT	1	1/2	1/2	1-1/2												EAGLE GROUP/METAL MASTERS	HSAN-10-F-LRS	
13	WORK TABLE	1															EAGLE GROUP/METAL MASTERS	T3096SEB-BS	
14	SPARE NUMBER	–																	
15	WORK DRAWER(S), BUILT-IN	2															EAGLE GROUP/METAL MASTERS	502943	
16	FOOD CUTTER/ CHOPPER	1							0.5		7.0	X		120	1	5-15P	ROBOT COUPE	R2N	
17	CAN OPENER, ELECTRIC	1									1.5	X		120	1	5-15P	EDLUND	270C	
18	OVERSHELF, TABLE MNTD.	1															EAGLE GROUP/METAL MASTERS	OS1296-16/3	
19	STAND, EQUIPMENT	1															EAGLE GROUP/METAL MASTERS	MMT3030S	
20	SLICER, FOOD	1							0.5		8.0	X		120	1	5-15P	BERKEL	X13AE-PLUS	
21	SPARE NUMBER	–																	
22	STAND, EQUIPMENT	1															EXISTING TO BE REUSED		
23	MIXER, COUNTER	1							0.5		8.0	X		120	1	5-15P	EXISTING TO BE REUSED	HOBART HL200	
24	WORK TABLE	1															EAGLE GROUP/METAL MASTERS	T3096SEB-BS	
25	WORK SINK, WELDED-IN	1	1/2	1/2		1-1/2											EAGLE GROUP/METAL MASTERS	FDI-14-16-9.5-2	
						1-1/2													
26	WORK DRAWER(S), BUILT-IN	1															EAGLE GROUP/METAL MASTERS	502943	
27	OVERSHELF, TABLE MNTD.	1															EAGLE GROUP/METAL MASTERS	OS1296-16/3	
28	SPARE NUMBER	–																	
29	STORAGE SHELVING	5															EAGLE GROUP/ METAL MASTERS	QPF-1842E-GL	
30	WORK STATION, MODULAR	1															EAGLE GROUP/METAL MASTERS	MD2436	
31	HAND SINK, WALL MOUNT	1	1/2	1/2	1-1/2												EAGLE GROUP/METAL MASTERS	HSAN-10-F-LRS	
32	EXHAUST HOOD, CONTROL PANEL	1									15.0		X	120	1		CAPTIVE AIRE	CUSTOM	
33	FIRE PROTECTION SYSTEM	1									15.0		X	120	1		CAPTIVE AIRE	UL-300 (R-102)	
34	CABINET, MOBILE, WARM/HOLD	1								1.5	12.5	X		120	1	5-15P	EXISTING TO BE REUSED	VULCAN VBP15	
35	SPARE NUMBER	–																	
36	STEAMER, ATMOSPHERIC, CONNECTED	1		3/4	3/4		1/2	60			1.0	X		120	1	5-15P	ACCUTEMP PRODUCTS	N61201E060 SGL	
37	RANGE, RESTAURANT, ELECTRIC	1								1.7	81.7		X	208	1		EXISTING TO BE REUSED		
38	OVEN, CONVECTION, GAS	1					1/2	66			1.0	X		120	1	5-15P	MOFFAT	G32D5-2C	
											1.0	X		120	1	5-15P			
39	S.S. WALL PANEL(S)	LOT															CAPTIVE AIRE	CUSTOM	
40	EXHAUST HOOD, TYPE I	1	ALL DATA ON FANS, DUCTS, POWER, SWITCHES, ETC... BY M.E.P. 2,000 C.F.M.														CAPTIVE AIRE	CUSTOM	
41	REFRIGERATOR, REACH-IN	1									10.0	X		120	1	5-15P	EXISTING TO BE REUSED	TURBO AIR MSR-49NM	
42	SPARE NUMBER	–																	
43	REFRIGERATOR, REACH-IN	1									10.0	X		120	1	5-15P	EXISTING TO BE REUSED	TURBO AIR MSR-49NM	
44	FIRE EXTINGUISHER, WALL MNTD.	1															CAPTIVE AIRE	K-CLASS	
45	REFRIGERATED SELF-SERVICE CASE	1								1.2	16.0	X		120	1	5-20P	STRUCTURAL CONCEPTS	NR3647RSSV	
46	SERVING COUNTER	LOT															LTI	CUSTOM	
47	DROP-IN, HOT WELLS	1				3/4				2.0	9.6		X	208	1		LTI	TW-DW-4	
48	FOOD PROTECTOR(S), ADJUSTABLE	1									1.0		X	120	1		HUDSON	PCA-P	
49	SPARE NUMBER	–																	
50	DROP-IN, COLD WELL	1				3/4			0.3		7.6	X		120	1	5-15P	LTI	DI-2037TA-H	
51	FOOD PROTECTOR(S), ADJUSTABLE	1									1.0		X	120	1		HUDSON	PCA-P	
52	DROP-IN, ICE CREAM DISPENSER	1							0.3		6.4	X		120	1	5-15P	LTI	DI-2222-IC	
53	CONDIMENT COUNTER, PORTABLE	1															LTI	CUSTOM	

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER

44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

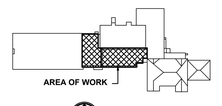
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 073084-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A,
Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100,
Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

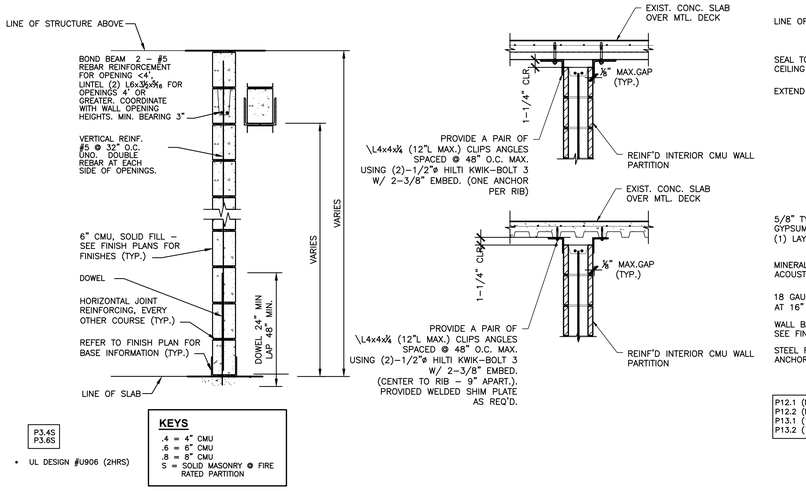
Drawing Title

**ARCHITECTURAL:
ENLARGED KITCHEN PLAN
AND EQUIPMENT SCHEDULE**

Drawing No.

A-402

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\ARCH\(15-16-17) A-400 ENLARGED PLANS.dwg (Layout: A-402 KITCHEN PLAN)
Date: Tue, Dec 28, 2021 - 4:07 PM (Name: wpb)

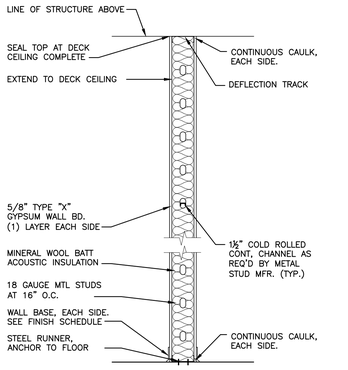


P3.4S
P3.6S

- UL DESIGN #U906 (2HRS)

KEYS
.4 = 4" CMU
.6 = 6" CMU
.8 = 8" CMU
S = SOLID MASONRY @ FIRE RATED PARTITION

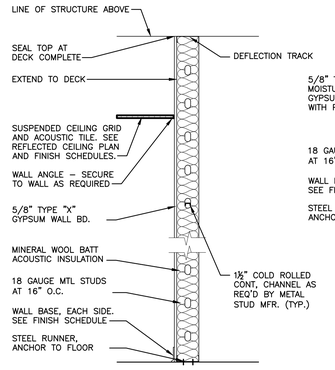
1 CMU PARTITION AND BRACING TYPE
N.T.S.



P12.1 (NO RATING)
P12.2 (NO RATING)
P13.1 (1 HR RATING)
P13.2 (1 HR RATING)

NON-RATED INTERIOR PARTITION
* MOISTURE RESISTANT GYPSUM WALL BOARD ON WET SIDES

1-HR FIRE RATED INTERIOR PARTITION
SIMILAR TO UL DESIGN U412/ UL419 & U465

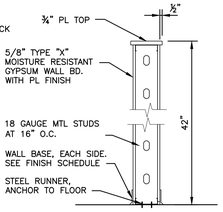


P16.1
P16.2
P16.3

SHAFT WALL PARTITION
* MOISTURE RESISTANT GYPSUM WALL BOARD AT TOILET ROOMS

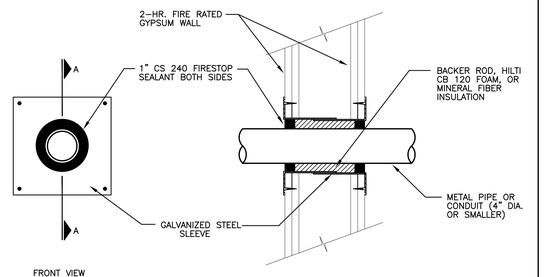
KEYS
.1 = 3 ⅝" MTL STD
.2 = 6" MTL STUD
.3 = 2" MTL STUD

2 METAL STUD PARTITION TYPE
N.T.S.



P18.1
P18.2

KNEEWALL PARTITION



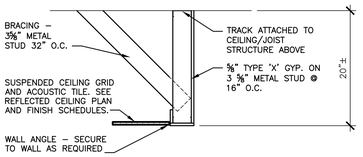
NOTE: IF MINERAL FIBER INSULATION IS USED AS THE BACKING MATERIAL, SEALANT DEPTH MAY BE REDUCED TO 1/2".

ALL SURFACES SHOULD BE CLEANED, SOUND AND DRY PRIOR TO APPLICATION OF FIRESTOPPING MATERIALS. IF THE OPENING IS NOT SLEEVED, INSTALL A GALVANIZED STEEL SLEEVE AROUND THE PIPE AND ANCHOR IT IN PLACE.

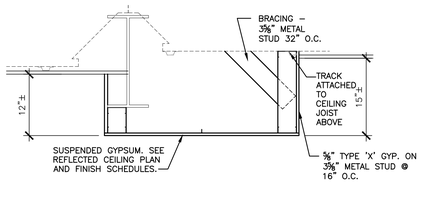
INSTALL BACKER ROD, CB 120 FOAM, OR PACK MINERAL WOOL BETWEEN THE PIPE SLEEVE, LEAVING APPROPRIATE SPACE ON EACH SIDE OF THE WALL FOR THE FIRESTOP SEALANT.

APPLY THE REQUIRED DEPTH OF CS 240 FIRESTOP SEALANT TO BOTH SIDES OF THE WALL AND TOOL IT WITH A PUTTY KNIFE UNTIL FLUSH WITH THE SURFACE. LEAVE COMPLETE SEAL UNDISTURBED FOR 48 HOURS.

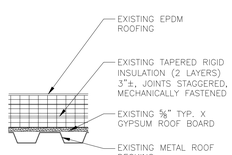
3 FIREWALL PENETRATION DETAIL
N.T.S.



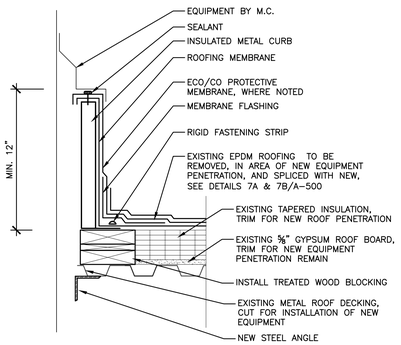
4 WALL SOFFIT DETAIL
N.T.S.



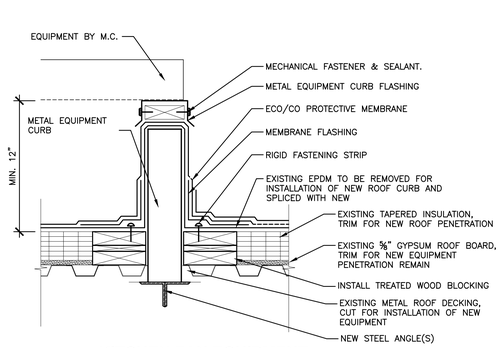
5 BEAM SOFFIT DETAIL
N.T.S.



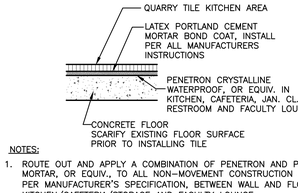
EXISTING ROOFING SYSTEM DETAIL
6 SCALE: 1 1/2"=1'–0"



7 ROOF CURB DETAIL
SCALE: 1 1/2"=1'–0"

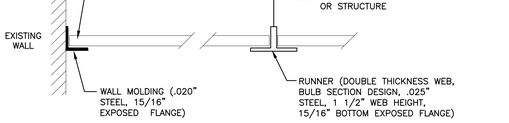


KITCHEN FAN EQUIPMENT CURB DETAIL
8 SCALE: 1 1/2"=1'–0"

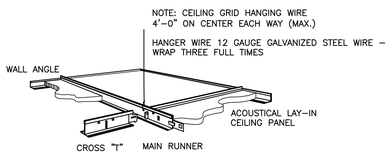


NOTES:
1. ROUTE OUT AND APPLY A COMBINATION OF PENETRON AND PENECRETE MORTAR, OR EQUIV., TO ALL NON–MOVEMENT CONSTRUCTION JOINTS, AS PER MANUFACTURER'S SPECIFICATION, BETWEEN WALL AND FLOORS IN KITCHEN/CAFETERIA/STORAGE AND FACULTY LOUNGE.
2. APPLY PENETRON, OR EQUIV. CRYSTALLINE WATERPROOF COATING, AS PER MANUFACTURE'S RECOMMENDATIONS, TO LOWER 12" OF WALLS IN KITCHEN/CAFETERIA/STORAGE AREAS AND ENTIRE HEIGHT OF EXTERIOR WALL IN FACULTY LOUNGE. ALLOW THE PENETRON COATING TO WET CURE FOR 14 DAYS, FOLLOWED BY THE COMPLETE MECHANICAL REMOVAL OF THE PENETRON COATING BEFORE THE FINISHES CAN BE APPLIED.
3. LATEX PORTLAND CEMENT GROUT SHALL BE USED FOR ALL FLOOR AND WALL APPLICATIONS. ALL PRODUCTS SHALL BE INSTALLED IN COMPLIANCE WITH ALL MANUFACTURERS RECOMMENDATIONS.

10 TILE INSTALLATION DETAIL
N.T.S.

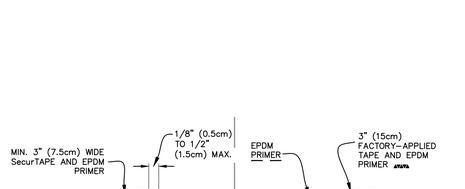


11 EXPOSED GRID ACOUSTICAL TILE CEILING DETAIL
N.T.S.



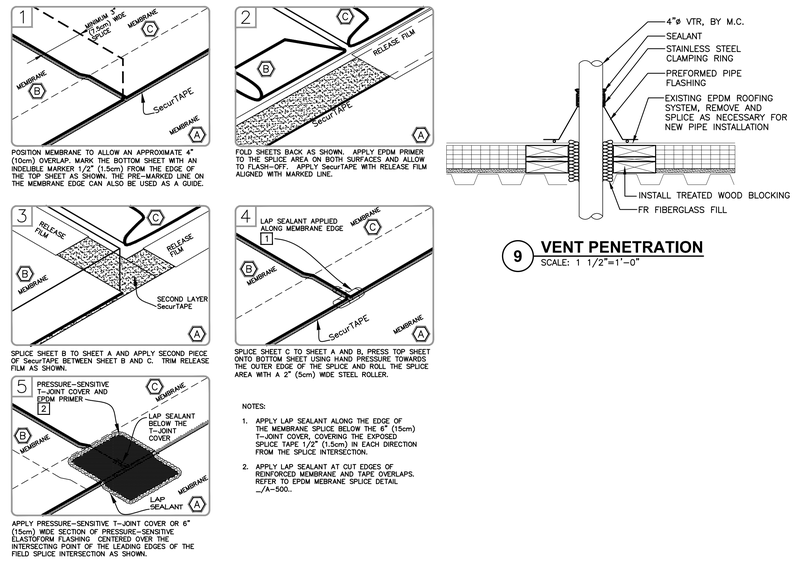
ACOUSTICAL TILE CEILING INSTALLED ELEVATION 6'–8" AND 7'–4"
2' x 2' TEGULAR (DROPPED EDGE) ACOUSTICAL CEILING TILES
ALL INTERIOR CEILING FINISHES SHALL BE CLASS "A" MIN.

12 SUSPENDED CEILING DETAIL
N.T.S.



NOTES:
1. OVERLAP THE ENDS OF THE FIELD APPLIED SecurTAPE A MINIMUM OF 1" (2.5cm). APPLY LAP SEALANT AT TAPE OVERLAPS 2" (5cm) IN EACH DIRECTION AS SHOWN.
2. APPLY LAP SEALANT ALONG THE EXPOSED EDGE OF THE MEMBRANE SPLICE COVERING THE EXPOSED SPLICE TAPE 1/2" (1.5cm) IN EACH DIRECTION FROM THE SPLICE INTERSECTION AND OVERLAY WITH A 6" (15cm) T–JOINT COVER.
3. LAP SEALANT IS REQUIRED ON CUT EDGES OF REINFORCED EPDM MEMBRANE.

7A EPDM MEMBRANE SPLICE
SCALE: N.T.S.

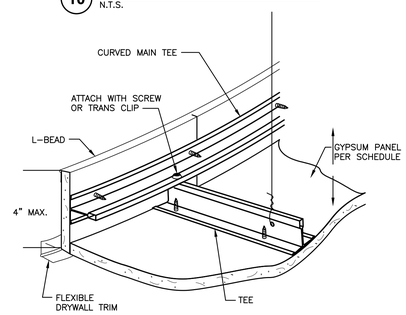


1. POSITION MEMBRANE TO ALLOW AN APPROXIMATE 4" (10cm) OVERLAP. MARK THE BOTTOM SHEET WITH AN INDELIBLE MARKER 1/2" (1.5cm) FROM THE EDGE OF THE TOP SHEET AS SHOWN. THE PRE–MARKED LINE ON THE MEMBRANE EDGE CAN ALSO BE USED AS A GUIDE.
2. FOLD SHEETS BACK AS SHOWN. APPLY EPDM PRIMER TO THE SPLICE AREA ON BOTH SURFACES AND ALLOW TO FLASH–OFF. APPLY SecurTAPE WITH RELEASE FILM ALIGNED WITH MARKED LINE.
3. SPLICE SHEET B TO SHEET A AND APPLY SECOND PIECE OF SecurTAPE BETWEEN SHEET B AND C. TRIM RELEASE FILM AS SHOWN.
4. SPLICE SHEET C TO SHEET A AND B, PRESS TOP SHEET ONTO BOTTOM SHEET USING HAND PRESSURE TOWARDS THE OUTER EDGE OF THE SPLICE AND ROLL THE SPLICE AREA WITH A 2" (5cm) WIDE STEEL ROLLER.
5. APPLY PRESSURE–SENSITIVE T–JOINT COVER OR 6" (15cm) WIDE SECTION OF PRESSURE–SENSITIVE ELASTOFORM FLASHING CENTERED OVER THE INTERSECTING POINT OF THE LEADING EDGES OF THE FIELD SPLICE INTERSECTION AS SHOWN.

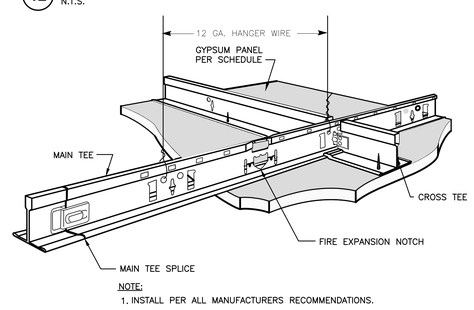
NOTES:
1. APPLY LAP SEALANT ALONG THE EDGE OF THE MEMBRANE SPLICE BELOW THE 6" (15cm) T–JOINT COVER, COVERING THE EXPOSED SPLICE TAPE 1/2" (1.5cm) IN EACH DIRECTION FROM THE SPLICE INTERSECTION.
2. APPLY LAP SEALANT AT CUT EDGES OF REINFORCED MEMBRANE AND TAPE OVERLAPS. REFER TO EPDM MEBRANE SPLICE DETAIL .../A–500..

7B EPDM MEMBRANE SPLICE INTERSECTION
SCALE: N.T.S.

9 VENT PENETRATION
SCALE: 1 1/2"=1'–0"



13 GYPSUM CEILING SUSPENSION SYSTEM
N.T.S.



NOTE:
1. INSTALL PER ALL MANUFACTURERS RECOMMENDATIONS.

14 GYPSUM CEILING SUSPENSION SYSTEM
N.T.S.

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

SED PROJECT NUMBER
44–21–11–02–0–002–015

CAPITAL IMPROVEMENTS

LEGEND

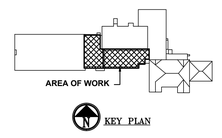
No.	Date	Revisions
	12/29/21	FOR BID

UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB–DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19–194
Scale	AS NOTED
Date	1–8–21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
NY PROFESSIONAL ENGINEER NO. 073084–1

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT
GREENWOOD LAKE ELEMENTARY SCHOOL



FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title
ARCHITECTURAL. PARTITIONS, WALL TYPES & DETAILS

Drawing No.
A-500

File Name: F:\2019\19-194.GWLUFSD.Kitchen and Cafeteria Renovations\ARCH\(19) A-500 PART & WALL TYPES (1).dwg (Layout: A-500)
Date: Tue, Dec 28, 2021 - 4:07 PM (Name: wpb)

ROOM FINISH SCHEDULE

ROOM NAME	FLOOR FINISH	WALL BASE FINISH	NORTH WALL FINISH	EAST WALL FINISH	SOUTH WALL FINISH	WEST WALL FINISH	CLG MATERIAL	CLG FINISH	CLG HEIGHT	COMMENTS
FACULTY LOUNGE – 100	EPY–1	VB–1	GWB/ P–1	EXIST GWB/ P–1	EXIST GWB/ P–1	EXIST GWB/ P–1	ACT	–	8'–0"±	PATCH & SPACKLE EXIST. GWB, PFD
STORAGE CLOSET – 101	EPY–1	–	–	–	–	GWB/ P–1	–	–	8'–0"±	
CORRIDOR – C10	EPY–1	VB–1	–	–	–	–	–	–	8'–0"±	
COPY ROOM – 104 & C107	EPY–1	VB–1	–	–	–	–	–	–	8'–0"±	
DATA SWITCH ROOM – 105	EPY–1	VB–1	–	–	–	–	–	–	8'–0"±	
CAFETERIA – 108	EPY–1	VB–1	CMU/P–1, 1A, 1B	CMU/P–1, 1A, 1B	CMU/P–1, 1A, 1B	CMU & GYP/P–1, 1A, 1B	GWB/ACT–1	P–3	8'–3"±/8'–6"±/6'–8"±	PATCH EXIST. CMU, SMOOTH FINISH
REST ROOM – 108A	EPY–1	CT–1	WAB/CT–1,2 4'–6" / P–1	WAB/CT–1,2,3 4'–6" / P–1	WAB/CT–1,2,3 4'–6" / P–1	CMU/CT–1,2,3 4'–6" / P–1	GWB	P–3	8'–3"±	
JANITORS CLOSET – 108B	EPY–1	EPY–1	GWB/ P–1	GWB/ P–1	GWB/ P–1	CMU/ P–1	GWB	P–3	8'–3"±	
KITCHEN – 110	T–1	T–2	GWB/ P–2	CMU/ P–2	CMU/ P–2	CMU/ P–2	GWB	P–3	8'–3"±	PATCH EXIST. CMU, SMOOTH FINISH
CORRIDOR – C11	EPY–1	EPY–1	CMU/ P–2	CMU/ P–2	GWB/ P–2	GWB/ P–2	GWB	P–3	8'–9"±	PATCH EXIST. CMU, SMOOTH FINISH
CORRIDOR – C11A	EPY–1	EPY–1	–	–	–	–	–	–	8'–9"±	SEE DEMO PLAN AD–100 FOR APPROXIMATE AREA.
FIRST FLR OFFICE – 102	–––	–––	GWB/ P–X	GWB/ P–X	GWB/ P–X	GWB/ P–X	ACT	–	–	
FIRST FLR VESTIBULE – 100	–––	–––	GWB/ P–Y	–	–	GWB/ P–Y	ACT	–	–	

FINISH MATERIAL SCHEDULE

SYMBOL	ITEM	MAUFACTURER	NO.	NAME	REMARKS
AT-1	ACOUSTICAL CEILING TILE	ARMSTRONG	3214PB	OPTIMA HEALTH ZONE	2'-0"x2'-0"x1" SQUARE EDGE
CT-1	CERAMIC WALL TILE	DALTILE	(41) CLASSIC	MATTE BISCUIT - K775	3"x6" WALL TILE-MATTE FINISH, RUNNING BOND
CT-2	CERAMIC WALL TILE	DALTILE	S-4639	MATTE ARCH GRAY - 0709	3"x6" WALL TILE-MATTE FINISH, BULLNOSE TOP COURSE 6" SIDE
GROUT	GROUT	TEC	991	PARCHMENT	TOILET ROOM
GROUT	GROUT	TEC	941	RAVEN	KITCHEN
EPY-1	EPOXY FLOOR	SHERWIN WILLIAMS	T.B.D.	AQUARMOR 'C' COATING	STANDARD SLIP RESISTANT FINISH W/ WATER BASED EPOXY
P-1	INTERIOR PAINT	SHERWIN WILLIAMS	SW7661	REFLECTION	GENERAL WALLS - SEMI- GLOSS FINISH
P-1A	INTERIOR PAINT	SHERWIN WILLIAMS	SW7057	SILVER STRAND	GENERAL WALLS - SEMI- GLOSS FINISH
P-1B	INTERIOR PAINT	SHERWIN WILLIAMS	SW6247	KRYPTON	GENERAL WALLS - SEMI- GLOSS FINISH
P-2	BIO-FLAKE WB CATALYSTIC EPOXY PAINT	SHERWIN WILLIAMS	SW7661	REFLECTION	CAFE & KITCHEN WALLS
P-2A	PRO-INDUSTRIAL WB CATALYSTIC EPOXY PAINT	SHERWIN WILLIAMS	SW7661	REFLECTION	H.M. DOORS AND FRAMES AND MISC. TRIM
P-3	INTERIOR PAINT	SHERWIN WILLIAMS		CEILING WHITE	CEILING & UNDERSIDE OF SOFFITS
P-X,Y	INTERIOR PAINT	SHERWIN WILLIAMS	TBD	MATCH EXISTING	NEW SHAFT WALLS - SEMI- GLOSS FINISH
PL-1	PLASTIC LAMINATE	WILSONART HD	1854K-35	LUNA NIGHT	35 MIRAGE FINISH WITH AEON
SS-1	SOLID SURFACE	CARLISLE/DINEX	--	STAINLESS STEEL	BULLNOSE EDGE
VB-1	VINYL WALL BASE	JOHNSONITE	32	PEBBLE	4" VINYL COVE WALL BASE
T-1	QUARRY TILE	DALTILE	0T03(2)	QUARRY TEXTURES - ASHEN GRAY	6"x6" ABRASIVE SURFACE
T-2	QUARRY TILE	DALTILE	Q-3565	QUARRY TEXTURES - ASHEN GRAY	5"x6" COVE BASE, INCLUDING INSIDE CORNER AND OUTSIDE CORNER

FINISH SCHEDULE NOTES:

1. SUSPENSION SYSTEM FOR ACT CEILING TO BE 15/16" PRELUDE PLUS XL EXPOSED TEE IN WHITE.
2. REFER TO CRYSTALLINE WATERPROOFING INSTALLATION INSTRUCTIONS PRIOR TO INSTALLING FINISHES.

DOOR SCHEDULE

BASIS OF DESIGN: CURRIES

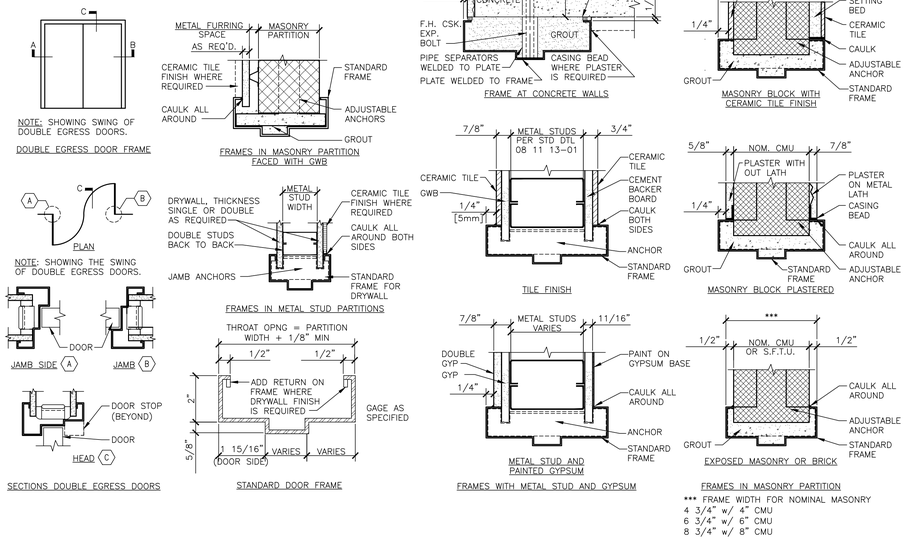
	DOOR NO.	LOCATION	DOOR SIZE	DOOR TYPE	MATERIAL	FIRE RATING	SMOKE CONTROL	GLAZING	DOOR FRAME MAT	DOOR FRAME ELEV	DOOR FRAME HEAD	DOOR FRAME JAMB	HARD. SET	REMARKS
1	C107	CORRIDOR – C10	2'–10" x 7'–0"	V	MTL	1 HR	S	D–H–60	HM	F1	CMU	CMU	1	ELECTRONIC HOLD OPEN (HO)
1	S2	CAFETERIA – 108	3'–6" x 6'–4"	V	MTL	1 HR	S	D–H–60	HM	F1	CMU	CMU	2	EXISTING NON–CONFORMING HEIGHT, HO
	108A	TOILET ROOM – 108A	3'–0" x 7'–0"	F	MTL	–	–	–	HM	F1	MTL	MTL	3	
	108B	JANITORS CLOSET – 108B	3'–0" x 7'–0"	F	MTL	–	–	–	HM	F1	MTL	MTL	4	
1	110–1	KITCHEN – 110	3'–0" x 7'–0"	V	MTL	⅜ HR	–	D–H	HM	F1	MTL	MTL	5	
1	110–2	KITCHEN – 110	3'–0" x 6'–4"	V	MTL	⅜ HR	–	D–H	HM	F1	CMU	CMU	5	EXISTING NON–CONFORMING HEIGHT
	110–FS	KITCHEN – 110	9'–0" x 4'–9"	FS	MTL	1 HR	–	–	–	–	–	–	–	
	102	MAIN OFFICE	3'–0" x 7'–0"	EXIST	EXIST	EXIST	EXIST	EXIST	HM	F4	CMU	CMU	EXIST	NEW FRAME AND TRANSOM
	FDD–1	COPY/PANTRY MAIL – 104	3'–0" x 3'–0"		CRS	–	–	–	CRS	–	–	–	–	SKU#: BA–AHD–36–36
	FDD–2	LOBBY/VEST – 100	1'–6" x 1'–6"		CRS	–	–	–	CRS	–	–	–	–	SKU#: BA–AHD–18–18

DOOR SCHEDULE NOTES:

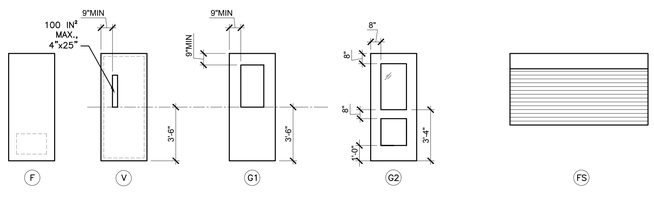
1. DOORS WITH LOCKS TO HAVE WIRING FOR CORBIN–RUSSWIN IN120 WIFI MORTISE LOCKSET.
2. CRS = 16 GAUGE COLD ROLLED STEEL.
3. FDD–1 AND FDD–2 SHALL BE WHITE POWDER COATED WITH SCREWDRIVER CAM LATCHES.

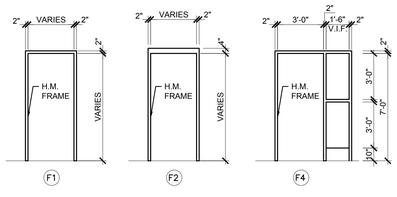
KEYED NOTES:

1. COORDINATE DOOR HARDWARE REPLACEMENT, IF NECESSARY, WITH ONGOING DOOR HARDWARE REPLACEMENT PROJECT.



1 FINISHES AND STANDARD DETAILS
N.T.S.





2 DOOR ELEVATIONS
N.T.S.

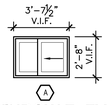
LOCKSET SCHEDULE

BASIS OF DESIGN: SARGENT

HARDWARE SET	ITEM NUMBER	REMARKS
1	70–IN120–82276–BIPS–B–LNL–26D	
2	70–IN120–8877–BIPS–ETL–32D	
3	70–4875–26D	THUMB TURN DEADBOLT
4	8204–OBL–26D	STOREROOM/CLOSET
5	8255–OBL–26D	OFFICE/ENTRY

EXTERIOR WINDOW SCHEDULE

TYPE MARK	DESCRIPTION	WIDTH	HEIGHT	HEAD HEIGHT	FRAME MATERIAL	FRAME FINISH INT/EXT	GLAZING	MANUFACTURER AND MODEL	REMARKS
A	SLIDER	3'–7 1/2"	2'–8"	8'–3"	ALUM.	GREEN TO MATCH EXTG	LOW E–4 U–FACTOR .30 SHGC .31	KAWNEER, OR EQUIV	CONTRACTOR TO V.I.F. ALL DIMENSIONS.



3 WINDOW ELEVATIONS
N.T.S.

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44–21–11–02–0–002–015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

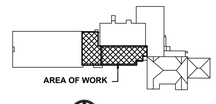
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB–DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19–194
Scale	AS NOTED
Date	1–8–21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
073084
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 073084–1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

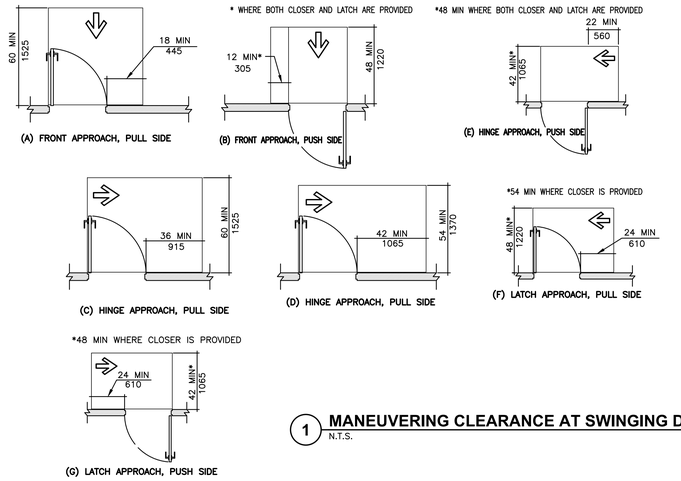
Drawing Title

ARCHITECTURAL:
FINISH, DOOR & HARDWARE SCHEDULES

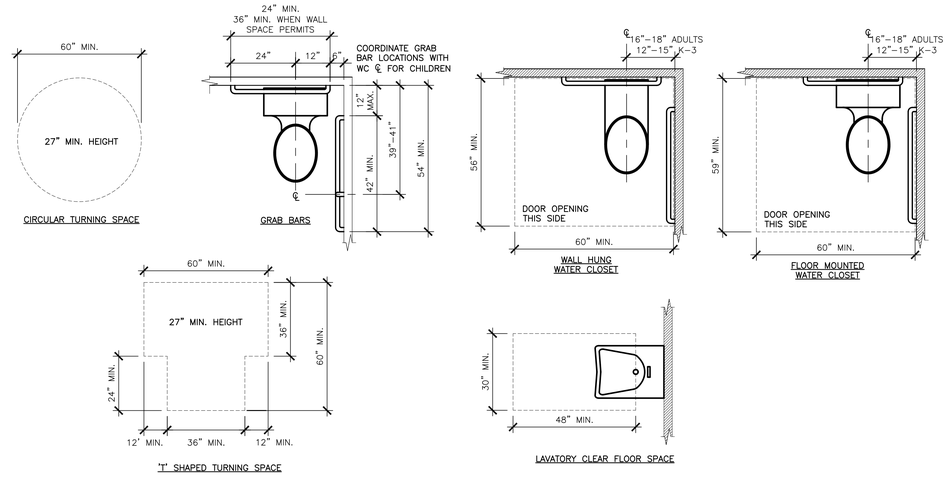
Drawing No.

A-600

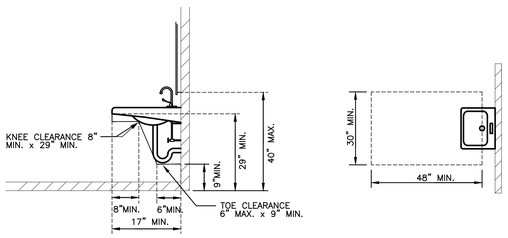
File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\ARCH\(19) A-600 DOOR & HARDWARE SCH.dwg (Layout: A-600)
Date: Tue, Dec 28, 2021 - 4:07 PM (Name: wpb)



1 MANEUVERING CLEARANCE AT SWINGING DOORS
N.T.S.



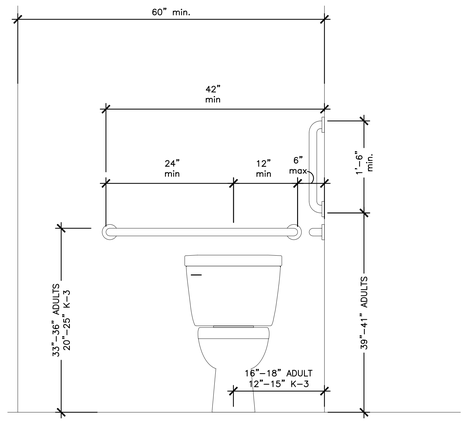
2 TYPICAL ADA BATHROOM CLEARANCES
N.T.S.



3 HANDICAPPED LAVATORY INSTALLATION DETAILS
N.T.S.

2010 ADA STANDARDS FOR ACCESSIBLE DESIGN ADVISORY 604.9 WATER CLOSETS AND TOILET COMPARTMENTS FOR CHILDREN'S USE. ADVISORY SPECIFICATIONS FOR WATER CLOSETS SERVING CHILDREN AGES 3 THROUGH 12			
	AGES 3 AND 4	AGES 5 THROUGH 8	AGES 9 THROUGH 12
WATER CLOSET CENTERLINE	12 INCHES	12 TO 15 INCHES	15 TO 18 INCHES
TOILET SEAT HEIGHT	11 TO 12 INCHES	12 TO 15 INCHES	15 TO 17 INCHES
GRAB BAR HEIGHT	18 TO 20 INCHES	20 TO 25 INCHES	25 TO 27 INCHES
DISPENSER HEIGHT	14 INCHES	14 TO 17 INCHES	17 TO 19 INCHES

2010 ADA STANDARDS FOR ACCESSIBLE DESIGN 308 CHILDREN'S REACH RANGES			
FORWARD OR SIDE REACH	AGES 3 AND 4	AGES 5 THROUGH 8	AGES 9 THROUGH 12
HIGH (MAXIMUM)	36 IN (915 MM)	40 IN (1015 MM)	44 IN (1120 MM)
LOW (MINIMUM)	20 IN (510 MM)	18 IN (455 MM)	16 IN (405 MM)



4 GRAB BAR LOCATIONS
N.T.S.

2017 ICC A117.1 ACCESSIBLE AND USABE BLDGS AND FACILITIES

606.2 CLEAR FLOOR SPACE.

A CLEAR FLOOR SPACE COMPLYING WITH 305, POSITIONED FOR A FORWARD APPROACH, AND KNEE AND TOE CLEARANCE COMPLYING WITH 306 SHALL BE PROVIDED.

EXCEPTIONS:

1. A PARALLEL APPROACH COMPLYING WITH 305 SHALL BE PERMITTED TO A KITCHEN SINK IN A SPACE WHERE A COOK TOP OR CONVENTIONAL RANGE IS NOT PROVIDED AND TO WET BARS.
2. A LAVATORY IN A TOILET ROOM OR BATHING FACILITY FOR A SINGLE OCCUPANT ACCESSED ONLY THROUGH A PRIVATE OFFICE AND NOT FOR COMMON USE OR PUBLIC USE SHALL NOT BE REQUIRED TO PROVIDE KNEE AND TOE CLEARANCE COMPLYING WITH 306.
4. A KNEE CLEARANCE OF 24 INCHES (610 MM)MINIMUM ABOVE THE FINISH FLOOR OR GROUND SHALL BE PERMITTED AT LAVATORIES AND SINKS USED PRIMARILY BY CHILDREN 6 THROUGH 12 YEARS WHERE THE RIM OR COUNTER SURFACE IS 31 INCHES (785 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.

604.3 CLEARANCE OVERLAP.

THE REQUIRED CLEARANCE AROUND THE WATER CLOSET SHALL BE PERMITTED TO OVERLAP THE WATER CLOSET, ASSOCIATED GRAB BARS, PAPER DISPENSERS, SANITARY NAPKIN RECEPTACLES, COAT HOOKS, SHELVES, ACCESSIBLE ROUTES, CLEAR FLOOR SPACE AT OTHER FIXTURES AND THE TURNING SPACE. NO OTHER FIXTURES OR OBSTRUCTIONS SHALL BE WITHIN THE REQUIRED WATER CLOSET CLEARANCE.

604.7 DISPENSERS

DISPENSERS SHALL BE OF CONTINUOUS PAPER FLOW TYPE.

SINGLE TOILET PAPER DISPENSERS:

WHERE LOCATED ABOVE GRAB BAR, OUTLET SHALL BE BETWEEN 24" AND 36" FROM THE REAR WALL.

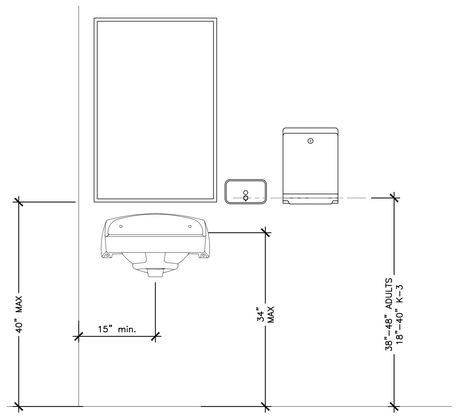
WHERE LOCATED BELOW THE GRAB BAR, OUTLET SHALL BE LOCATED 18" TO 48" ABOVE THE FLOOR.

DOUBLE ROLL DISPENSERS:

5" DIAMETER MAX., MAY BE LOCATED 7"–9" IN FRONT OF THE WATER CLOSET MEASURED TO CENTERLINE OF DISPENSER. OUTLET TO BE BETWEEN 15" AND 48" ABOVE THE FLOOR.

604.8 COAT HOOKS AND SHELVES

COAT HOOKS PROVIDED WITHIN TOILET COMPARTMENTS SHALL BE 48" MAX. ABOVE THE FLOOR. SHELVES SHALL BE 40" MIN. AND 48 INCHES MAXIMUM ABOVE THE FLOOR.



5 ACCESSORY LOCATIONS
N.T.S.

2017 ICC A117.1 ACCESSIBLE AND USABE BLDGS AND FACILITIES

603.6 OPERABLE PARTS

OPERABLE PARTS ON TOWEL DISPENSERS AND HAND DRYERS SERVING LAVATORIES SHALL COMPLY WITH TABLE 603.6

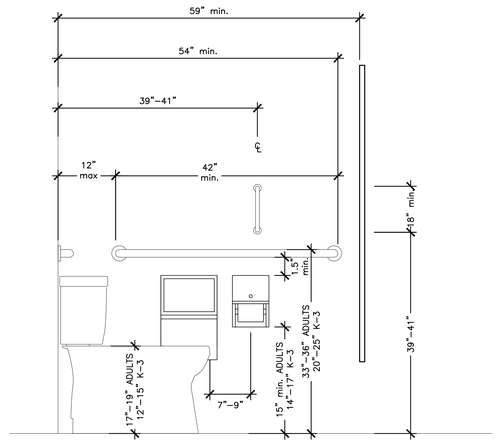
TABLE 603.6
MAXIMUM REACH DEPTH AND HEIGHT

MAX. REACH DEPTH	.5"	2"	5"	6"	9"	11"
MAX. REACH HEIGHT	48"	46"	42"	40"	36"	34"

603.3 MIRRORS.

MIRRORS LOCATED ABOVE LAVATORIES OR COUNTERTOPS SHALL BE INSTALLED WITH THE BOTTOM EDGE OF THE REFLECTING SURFACE 40 INCHES (1015 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND. MIRRORS NOT LOCATED ABOVE LAVATORIES OR COUNTERTOPS SHALL BE INSTALLED WITH THE BOTTOM EDGE OF THE REFLECTING SURFACE 35 INCHES (890MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.

ADVISORY 603.3 MIRRORS. A SINGLE FULL–LENGTH MIRROR CAN ACCOMMODATE A GREATER NUMBER OF PEOPLE, INCLUDING CHILDREN. IN ORDER FOR MIRRORS TO BE USABLE BY PEOPLE WHO ARE AMBULATORY AND PEOPLE WHO USE WHEELCHAIRS, THE TOP EDGE OF MIRRORS SHOULD BE 74 INCHES (1880 MM) MINIMUM FROM THE FLOOR OR GROUND.



6 DISPENSOR & GRAB BAR LOCATIONS
N.T.S.

2017 ICC A117.1 ACCESSIBLE AND USABE BLDGS AND FACILITIES

609.4 POSITION OF GRABBARS. GRAB BARS SHALL BE INSTALLED IN A HORIZONTAL POSITION, 33 INCHES(840 MM) MINIMUM AND 36 INCHES (915 MM) MAXIMUM ABOVE THE FINISH FLOORMEASURED TO THE TOP OF THE GRIPPING SURFACE, EXCEPT THAT AT WATER CLOSETS FOR CHILDREN'SUSE COMPLYING WITH 604.9, GRAB BARS SHALL BE INSTALLED IN A HORIZONTALPOSITION 18 INCHES (455 MM) MINIMUM AND 27 INCHES (685 MM) MAXIMUMABOVE THE FINISH FLOOR MEASURED TO THE TOP OF THE GRIPPING SURFACE. THEHEIGHT OF THE LOWER GRAB BAR ON THE BACK WALL OF A BATHTUB SHALL COMPLY WITH 607.4.1.1 OR 607.4.2.1.

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\ARCH\(20) A-700 DETAILS.dwg (Layout: A-700)
Date: Tue, Dec 28, 2021 - 4:07 PM (Name: wpb)

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions

GRAVITY LOADS OF THE EXISTING BUILDING (REF TO: CC100 DWG. DATED ON 06/19/2002)			
LEVEL/OCCUPANCY	OVERALL DL (PSF)	LL (PSF)	TOTAL (PSF)
FLAT ROOF	20	20	40
CLASSROOMS/OFFICES	50 (V.I.F.)	60	110
CORRIDOR	50 (V.I.F.)	100	150
TOILET ROOMS	50 (V.I.F.)	60	110

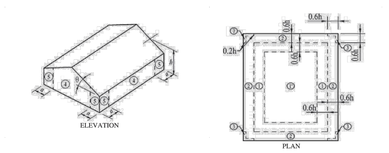
SNOW LOAD (AS PER ASCE7-16 CHAPTER 7 & CC-100 CODE COMPLIANCE PLANS)		
ITEM	VALUE	REFERENCE
RISK CATEGORY	III	Table. 1.5-1
IMPORTANCE FACTOR	Is = 1.10	Table 1.5-2
GROUND SNOW LOAD, Pg	35 PSF	
SNOW DENSITY, Pg	18.55 PCF	ASCE 7-16 EQ. 7.7-1
EXPOSURE FACTOR, Ce	1.0 (PARTIALLY EXPOSED)	Table 7.3-1
THERMAL FACTOR, Ct	1.0	Table 7.3-2
FLAT ROOF SNOW LOAD, Pf	27 PSF	Sect. 7.3
BALANCED SNOW HEIGHT, hb	1.45 ft.	
DRIFT ON LOWER ROOF (WHERE APPLY)		(SEE PLAN)
SLIDING SNOW		N/A

SEISMIC LOAD (ASCE 7 -16 CHAPTER 13 & CC-100 CODE COMPLIANCE PLANS))	
ITEM	VALUE
RISK CATEGORY	III
SEISMIC IMPORTANCE FACTOR	Ie = 1.25
THE MAPPED SPECTRAL RESPONSE ACCELERATION AT SHORT PERIODS	S_s = 0.258 g S_{DS} = 0.224 g
THE MAPPED SPECTRAL RESPONSE ACCELERATION FOR A 1-sec PERIOD	S_1 = 0.058 g S_{D1} = 0.058 g
SITE COEFFICIENT	Fa = 1.3
SITE COEFFICIENT	Fv = 1.5
SITE CLASS:	C (REF TO: CC100 DWG DATED ON 09/16/02 SOIL TYPE S1 - BOCA 1610.0)
SEISMIC DESIGN CATEGORY	B

RAIN LOAD (2020 NYS BUILDING CODE SECTION 1611)	
ITEM	VALUE
100 YEARS - 1HR RAINFALL	3 IN./HR.
ds + dh (ASSUMED)	3 IN. (MAX.)
R (ASSUMED)	16 PSF (MAX.)

WIND LOAD MWFRS (ASCE 7-16 SECTION 29.4 - DIRECTIONAL PROCEDURE FOR ROOF TOP EQUIPMENT)	
ITEM	VALUE
BASIC WIND SPEED:	120 mph (ULTIMATE) 93 mph (ASD)
EXPOSURE	B
Kzt	1.0
Kz	1.0
Kd	0.85
Ke at 630 ft ground elev. above sea level	0.98
qh	33.9 PSF (ULTIMATE)
GCr HOR.	1.0
GCr VERT.	1.0
Fh (ULT.)	33.9 PSF (ULTIMATE)
Fv (ULT.)	+/- 33.9 PSF (ULTIMATE)

WIND LOAD COMPONENTS & CLADDING FOR EXISTING BUILDING (ASCE 7-16 SECTION 30 PART 2 - LOW RISE BUILDING SIMPLIFIED)				
ITEM	VALUE			
BASIC WIND SPEED:	120 mph (ULTIMATE) 93 mph (ASD)			
EXPOSURE	B			
Kzt	1.0			
Kz	1.0			
Kd	0.85			
Ke	0.98			
λ	1.03			
a	13.2 FT.			
h	33 FT.			
GCpi (ENCLOSED BUILDING)	+/- 0.18			
	ULTIMATE WIND LOAD COMPONENTS & CLADDING			
Aeff	10 SQ. FT	20 SQ. FT	50 SQ. FT	100 SQ. FT
ROOF - ZONE 1	16 PSF / -42.6 PSF	16 PSF / -39.7 PSF	16 PSF / -36 PSF	16 PSF / -33.2 PSF
ROOF - ZONE 1'	16 PSF / -24.5 PSF	16 PSF / -24.5 PSF	16 PSF / -24.5 PSF	16 PSF / -24.5 PSF
ROOF - ZONE 2	16 PSF / -56.1 PSF	16 PSF / -52.5 PSF	16 PSF / -47.7 PSF	16 PSF / -44.1 PSF
ROOF - ZONE 3	16 PSF / -76.5 PSF	16 PSF / -69.3 PSF	16 PSF / -59.7 PSF	16 PSF / -52.5 PSF
WALL - ZONE 4	26.7 PSF / -29 PSF	25.5 PSF / -27.8 PSF	23.9 PSF / -26.2 PSF	22.7 PSF / -25 PSF
WALL - ZONE 5	26.7 PSF / -35.8 PSF	25.5 PSF / -33.4 PSF	23.9 PSF / -26.2 PSF	22.7 PSF / -27.8 PSF



STEEL SPECIAL INSPECTIONS

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD	REFERENCE
1. MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS:				
a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	-	X	APPLICABLE ASTM MATERIAL SPECIFICATIONS; AISC 360, SECTION A3.3	-
b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	-	X	-	-
2. INSPECTION OF HIGH-STRENGTH BOLTING:				
a. BEARING-TYPE CONNECTIONS.	-	X	AISC 360, SECTION M2.5	1704.3.3
b. SLIP-CRITICAL CONNECTIONS.	N/A	N/A		
3. MATERIAL VERIFICATION OF STRUCTURAL STEEL:				
a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	-	-	ASTM A 6 OR ASTM A 568	1708.4
b. MANUFACTURERS' CERTIFIED MILL TEST REPORTS.	-	-	ASTM A 6 OR ASTM A 568	
4. MATERIAL VERIFICATION OF WELD FILLER MATERIALS:				
a. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS.	-	-	AAISC 360, SECTION A3.5	-
b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	-	-	-	-
5. INSPECTION OF WELDING:				
a. STRUCTURAL STEEL:	-	-		
1) COMPLETE AND PARTIAL PENETRATION GROOVE WELDS.	N/A	N/A	AWS D1.1	1704.3.1
2) MULTIPASS FILLET WELDS.	N/A	N/A		
3) SINGLE-PASS FILLET WELDS > 5/16 "	N/A	N/A		
4) SINGLE-PASS FILLET WELDS ≤ 5/16 "	-	X		
5) FLOOR AND ROOF DECK WELDS.	N/A	N/A	AWS D1.3	-
b. REINFORCING STEEL:			AWS D1.4 ACI 318: 3.5.2	-
1) VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706.	N/A	N/A		
2) REINFORCING STEEL-RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL REINFORCED CONCRETE SHEAR WALLS AND SHEAR REINFORCEMENT.	N/A	N/A		
3) SHEAR REINFORCEMENT.	N/A	N/A		
4) OTHER REINFORCING STEEL.	-	X		
6. INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS:			-	1704.3.2
a. DETAILS SUCH AS BRACING AND STIFFENING.	N/A	N/A		
b. MEMBER LOCATIONS.	N/A	N/A		
C. APPLICATION OF JOINT DETAILS AT EACH CONNECTION.	N/A	N/A		

MINIMUM QUALIFICATIONS FOR SPECIAL INSPECTORS

WELDING	1704.3; TABLE 1704.3, ITEM 5; TABLE 1704.4, ITEM 2; 1707.2; 2208	1. CURRENT AWS CERTIFIED WELDING INSPECTOR. 2. CURRENT ICC STRUCTURAL STEEL AND WELDING CERTIFICATE PLUS ONE YEAR OF RELEVANT EXPERIENCE. 3. CURRENT LEVEL II CERTIFICATION FROM THE AMERICAN SOCIETY FOR NONDESTRUCTIVE TESTING (NDT). 4. CURRENT NDT LEVEL III PROVIDED PREVIOUSLY CERTIFIED AS NDT LEVEL II.
HIGH-STRENGTH BOLTING & STEEL FRAME INSPECTION	1704.3.3; TABLE 1704.3	1. CURRENT ICC STRUCTURAL STEEL AND WELDING CERTIFICATION AND ONE YEAR OF RELEVANT EXPERIENCE. 2. EIT WITH RELEVANT EXPERIENCE. 3. P.E. WITH RELEVANT EXPERIENCE.
INSPECTION OF FABRICATORS	1704.2	1. PRECAST: CURRENT ICC REINFORCED CONCRETE CERTIFICATION PLUS ONE YEAR RELEVANT EXPERIENCE. 2. BAR JOIST: SEE WELDING REQUIREMENTS. 3. METAL BUILDING: SEE WELDING REQUIREMENTS. 4. STRUCTURAL STEEL: SEE WELDING REQUIREMENTS
SMOKE CONTROL	1704.14	1. SEE THE REQUIREMENTS IN BCNYS SECTION 1704.14.2 2. 2. THE RDP RESPONSIBLE FOR DESIGN.
SEISMIC RESISTANCE	1707; 1708	1. SEE THE APPLICABLE CATEGORIES IN THIS TABLE.

A. SPECIAL INSPECTION

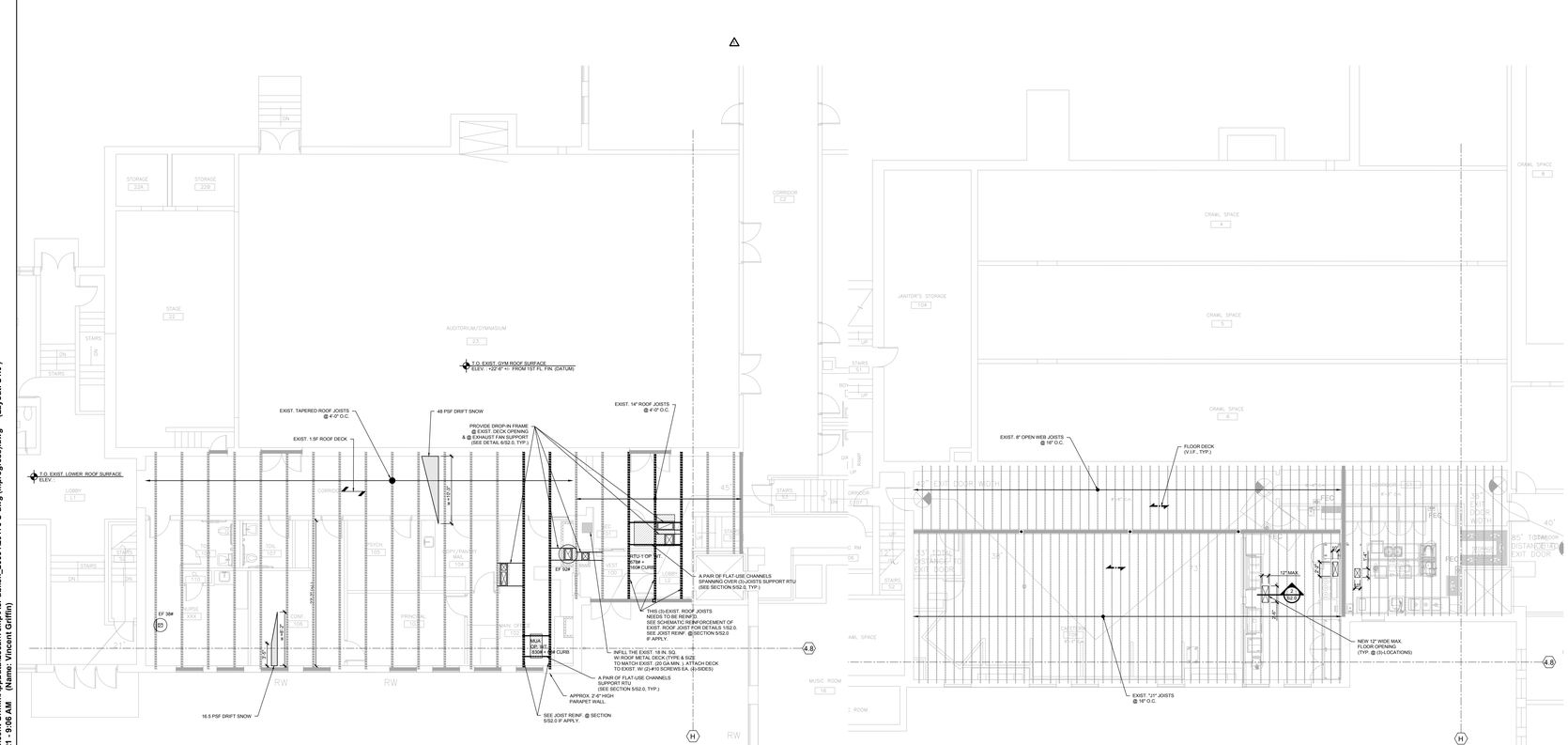
1. SPECIAL INSPECTION WILL BE IN ACCORDANCE WITH NYSBC 1704. REFER TO THE TABLES CONTAINED ON THESE SHEETS FOR PROJECT SPECIFIC INSPECTION TYPES AND FREQUENCIES.
2. SPECIAL INSPECTION IS REQUIRED OF MATERIALS, INSTALLATION, FABRICATION, ERECTION OR PLACEMENT OF COMPONENTS AND CONNECTIONS REQUIRING SPECIAL EXPERTISE TO ENSURE COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS.
3. COORDINATE SCHEDULES WITH THE AGENCY PERFORMING SPECIAL INSPECTIONS TO ENSURE AMPLE TIME IS AVAILABLE TO PERFORM THE REQUIRED TASKS.
4. THE SPECIAL INSPECTOR SHALL PROVIDE REPORTS TO THE LOCAL BUILDING OFFICIAL, REGISTERED DESIGN PROFESSIONAL IN CHARGE, AND THE OWNER'S DESIGNATED REPRESENTATIVE. THESE REPORTS MUST BE IN COMPLIANCE WITH IBC 2015. THE SPECIAL INSPECTOR SHALL IMMEDIATELY NOTIFY THE CONTRACTOR IN WRITING OF NON-CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS, IBC 2015, OR OTHER VIOLATIONS OF THE APPLICABLE REFERENCED MATERIAL STANDARDS IN THE IBC 2015 WITHIN THE SCOPE OF THE SPECIAL INSPECTION REQUIREMENTS.
5. THE SPECIAL INSPECTION AGENCY SHALL SUBMIT A FINAL REPORT TO THE BUILDING OFFICIAL, REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE, AND OWNER'S REPRESENTATIVE STATING WHETHER WORK REQUIRING SPECIAL INSPECTION WAS INSPECTED, REPORTED, AND FOUND TO BE IN COMPLIANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS, IBC 2015, AND THE APPLICABLE REFERENCED MATERIAL STANDARDS IN THE IBC 2015 CODE. FINAL REPORTS SHALL CATALOG ALL INSPECTION, TESTING, AND RELATED ENGINEER SIGNED REPORTS.

B. STRUCTURAL OBSERVATION

1. STRUCTURAL OBSERVATION IS THE VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM BY A REGISTERED DESIGN PROFESSIONAL FOR GENERAL CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS AT SIGNIFICANT CONSTRUCTION STAGES AND AT COMPLETION OF THE STRUCTURAL SYSTEM. THESE OBSERVATIONS DO NOT WAIVE THE RESPONSIBILITY FOR THE INSPECTION AS DEFINED BY SPECIAL INSPECTION.
2. THE STRUCTURAL OBSERVER IS NOT INSPECTING FOR OSHA COMPLIANCE AND TEMPORARY CONSTRUCTION, SUCH AS BRACING, SHORING, MEANS AND METHODS, ETC.

COMMENTS:

1. PERIODIC SPECIAL INSPECTION: THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN OR IS BEING PERFORMED AND AT THE COMPLETION OF WORK.
2. CONTINUOUS SPECIAL INSPECTION: THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE ARE WHERE WORK IS BEING PERFORMED.
3. ITEMS NOT SHOWN MAY REQUIRE CONTINUOUS OR PERIODIC SPECIAL STRUCTURAL INSPECTION AT THE DISCRETION OF THE ENGINEER. ITEMS LISTED MAY REQUIRE ALTERNATE FREQUENCIES OF INSPECTION OTHER THAN SHOWN.
4. WELDING OF REINFORCING STEEL IS NOT ACCEPTABLE UNLESS DIRECTED BY THE ENGINEER OF RECORD.



PLAN - EXISTING ROOF FRAMING
SCALE: 3/16"=1'-0"
NOTES
1. U.O.N., SEE M-DRAWINGS FOR ROOF OPENING LOCATIONS.
2. FIELD VERIFY JOIST LOCATIONS TO DETERMINE THE LOCATON OF RTU PLACEMENTS.

PLAN - EXISTING1ST FLOOR FRAMING
SCALE: 3/16"=1'-0"
NOTES
1. U.O.N., SEE M-DRAWINGS FOR FLOOR OPENING LOCATIONS.

GENERAL NOTES

1. SEE MECHANICAL PLAN FOR ALL DIMENSIONS AND OPENING NOT SHOWN ON STRUCTURAL PLANS.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO ORDERING OR FABRICATING MATERIALS.
3. GENERAL CONTRACTOR IS RESPONSIBLE TO PROVIDE TEMPORARY SHORING AS NECESSARY DURING STEEL JOIST REINFORCEMENT.

STEEL NOTES

1. ALL CHANNELS AND ANGLES TO BE A.S.T.M. A-36 Fy=36KSI.
2. ALL WELDING SHALL BE DONE BY CERTIFIED WELDERS USING TYPE E70XX ELECTRODES AND SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN WELDING SOCIETY.
3. GENERAL CONTRACTOR TO PROVIDE MISCELLANEOUS STEEL SHOWN ON MECHANICAL DRAWINGS THAT IS NOT SHOWN ON STRUCTURAL DRAWINGS.

GRAPHICS LEGEND

EARTH, CRUSHED STONE, CONCRETE, CONCRETE MASONRY UNIT, STEEL, BRICK, GROUT

SECTION NUMBER; SHEET WHERE SECTION APPEARS; ELEVATION NUMBER; SHEET WHERE ELEVATION APPEARS; COLUMN CENTERLINE; EXISTING COLUMN CENTERLINE

DETAIL NUMBER; SHEET WHERE DETAIL APPEARS; ELEVATION MARK; CENTERLINE; JOIST; JOIST BRIDGING; EXISTING CONSTRUCTION; WALL TYPE

ABBREVIATIONS

DIA.	DIAMETER
#	NUMBER (REBAR)/POUND (QUANTITY)
ALT.	ALTERNATE
BOT.	BOTTOM
C.A.	COURSE AGGREGATE
C.I.P.	CAST IN PLACE
CONC.	CONCRETE
℄	CENTER LINE
D.B.B.	DIAGONAL BOLTED BRIDGING
DWL.	DOWEL
EA.	EACH
EJM	EXPANSION JOINT MATERIAL
EL.	ELEVATION
EXIST.	EXISTING
E.W.	EACH WAY
F.S.	FAR SIDE
GA.	GAUGE
H.B.	HORIZONTAL BRIDGING
HOR.	HORIZONTAL
LBS.	POUNDS
MANUF.	MANUFACTURER
M.O.	MASONRY OPENING
N.S.	NEAR SIDE
O.C.	ON CENTER
P.A.F.	POWER ACTUATED FASTENER
PSI	POUNDS PER SQUARE INCH
PSF	POUNDS PER SQUARE FOOT
PROP.	PROPOSED
REINF.	REINFORCEMENT
REQ'D	REQUIRED
S.J.	SLAB JOINT
SL.	SLOPED
SPEC.	SPECIFICATION
STD.	STANDARD
T.O.B.	TOP OF BEAM
T.O.F.	TOP OF FOOTING
T.O.S.	TOP OF STEEL
TYP.	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
VERT.	VERTICAL
V.I.F.	VERIFY IN THE FIELD
WP	WORK POINT

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

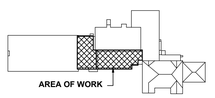
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	H.W.
Checked by	V.A.G.
Project No.	FE# 19-194
Scale	AS NOTED
Date	01-08-2021

SEAL: VINCENT A. GRIFFIN P.E. STATE OF NEW YORK 096942 LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 096942

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



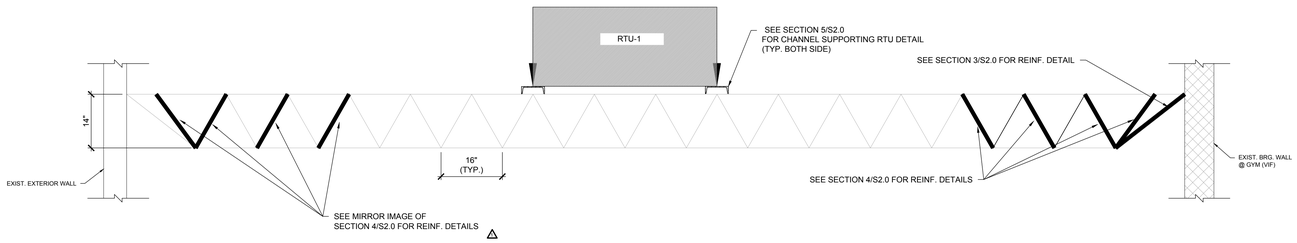
FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

REFERENCE SCALE

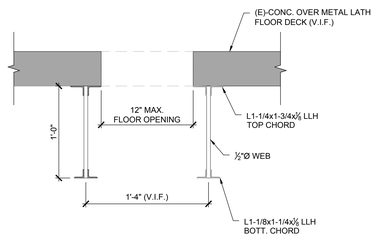
Drawing Title
GENERAL NOTES, LOADING CRITERIA, LEGENDS,ABBREVIATIONS & EXISTING FRAMING PLANS

Drawing No.
S1.0

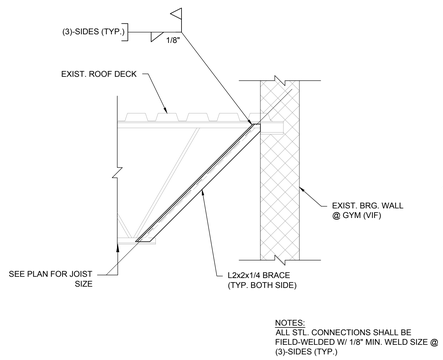
File Name: C:\Users\Vincent Griffin\AppData\Local\Temp\AcPublish_26684\20173 S-dwg (inprogress).dwg (Layout: S1.0)
Date: Mon, Dec 27, 2021 - 9:06 AM (Name: Vincent Griffin)



1 S2.0 SCHEMATIC REINFORCEMENT OF EXIST. 14" DEEP OPEN WEB ROOF JOIST
SCALE: 3/4"=1'-0"

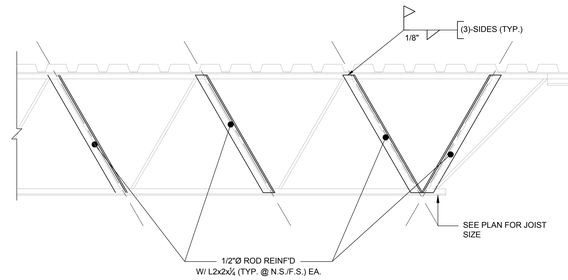


2 S2.0 SECTION - EXIST. "J1" JOIST
SCALE: 1 1/2"=1'-0"

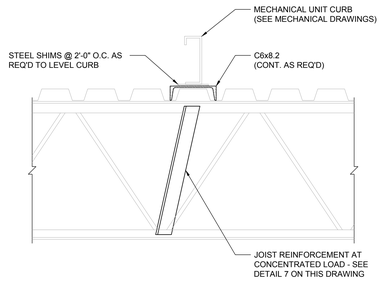


NOTES:
ALL STL. CONNECTIONS SHALL BE FIELD-WELDED W/ 1/8" MIN. WELD SIZE @ (3)-SIDES (TYP.)

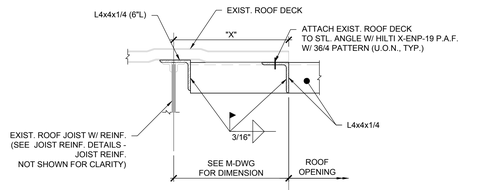
3 S2.0 DETAIL - JOIST BEARING REINFORCEMENT
SCALE: 1"=1'-0"



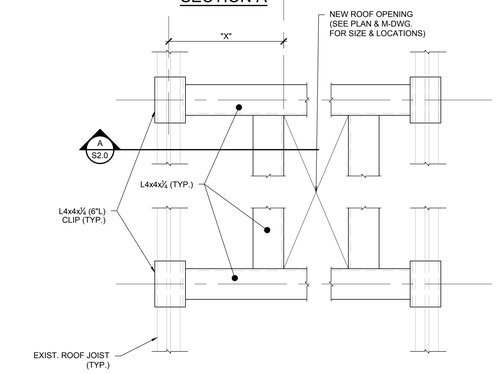
4 S2.0 DETAIL - 1/2"Ø ROD REINFORCEMENT
SCALE: 1"=1'-0"



5 S2.0 DETAIL - RTU SUPPORT
SCALE: 1 1/2"=1'-0"

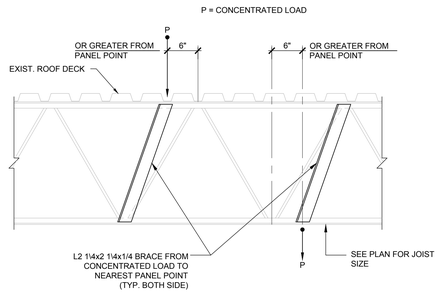


SECTION A



6 S2.0 PLAN VIEW - DROP-IN FRAME
SCALE: 1 1/2"=1'-0"

NOTES:
1. IF "X" IS 4" OR LESS, ELIMINATE ANGLE PARALLEL TO JOIST OR BEAM.
2. PROVIDE ANGLE FRAME FOR ALL OPENINGS GREATER THEN 10" DIA. OR 10" SQUARE.
3. CONTRACTOR TO VERIFY SIZE AND LOCATION OF ALL OPENINGS. SEE ARCHITECTURAL, MECHANICAL, ETC. DRAWINGS FOR OPENINGS NOT SHOWN ON STRUCTURAL DRAWINGS.



NOTES:
ALL STL. CONNECTIONS SHALL BE FIELD-WELDED W/ ⅛" MIN. WELD SIZE @ (3)-SIDES (TYP.)

7 S2.0 DETAIL - JOIST REINFORCEMENT @ CONCENTR. LOADS
SCALE: 1"=1'-0"

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

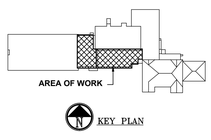
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	H.W.
Checked by	V.A.G.
Project No.	FE# 19-194
Scale	AS NOTED
Date	01-08-2021

SEAL: VINCENT A. GRIFFIN — STATE OF NEW YORK — 096942 — LICENSED PROFESSIONAL ENGINEER — NY PROFESSIONAL ENGINEER NO. 096942

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A,
Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100,
Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title
EXIST. JOIST SCHEMATIC REINF. SECTIONS & DETAILS

Drawing No.
S2.0

File Name: C:\Users\Vincent Griffin\AppData\Local\Temp\AcPublish_26884\20173 S-dwg (inprogress).dwg (Layout: S2.0)
Date: Mon, Dec 27, 2021 - 9:06 AM (Name: Vincent Griffin)

HVAC DEMOLITION NOTES:

1. COORDINATE WITH ARCHITECTURAL PLANS FOR EXACT AREAS TO BE DEMOLISHED.
2. REMOVE ALL EQUIPMENT, DUCTWORK AND PIPING AS INDICATED ON PLAN. REMOVALS SHALL INCLUDE ALL SUPPORTS AND HANGERS, HOUSEKEEPING PADS, DAMPERS, VALVES, FITTINGS, CONTROLS AND ASSOCIATED LOW VOLTAGE WIRING, AND ANY OTHER ASSOCIATED ACCESSORIES WHICH PERTAIN TO THE EQUIPMENT TO BE REMOVED.
3. REMOVAL OF ALL POWER CONNECTIONS TO DEMOLITION ITEMS SHALL BE BY THE E.C.
4. ANY DISCREPANCIES BETWEEN THE DEMOLITION PLANS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER. ANY DEMOLITION WORK WHICH MAY BE QUESTIONABLE DUE TO UNFORESEEN FIELD CONDITIONS SHALL NOT BE REMOVED UNTIL REVIEWED BY THE ARCHITECT, ENGINEER OR BUILDING FACILITIES MANAGER.
5. DEMOLITION WORK SHALL INCLUDE THE PREPARATION OF EXISTING EQUIPMENT FOR CONNECTION TO NEW EQUIPMENT. COORDINATE DEMOLITION WORK WITH THE CONSTRUCTION PLANS.
6. ALL EQUIPMENT REMOVALS SHALL BECOME THE PROPERTY OF THIS CONTRACTOR. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER REMOVAL AND DISPOSAL OF DEMOLITION ITEMS OFF-SITE, UNLESS OTHERWISE NOTED.
7. ALL CUTTING AND PATCHING NECESSARY FOR THE DEMOLITION WORK SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR.
8. IT SHALL BE THE OWNER'S RESPONSIBILITY TO REMOVE ANY LOOSE EQUIPMENT, FURNITURE, SUPPLIES, ETC. THAT MAY BE LOCATED IN THE AREA OF WORK.
9. THE PLANS ARE INTENDED TO CONVEY THE EXTENT AND SCOPE OF THE DEMOLITION WORK. EVERY ITEM INTENDED FOR REMOVAL MAY NOT BE SHOWN. THE CONTRACTOR IS ADVISED TO SURVEY THE PROJECT SITE BEFORE SUBMITTING A BID FOR DEMOLITION WORK.

GENERAL NOTES:

1. THE DRAWINGS ON THESE PLANS ARE DIAGRAMMATIC. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL HVAC WORK WITH OTHER TRADES AND THE BUILDING STRUCTURE. NO EXTRA PAYMENTS WILL BE AUTHORIZED FOR REROUTING OR REMOVAL OF INSTALLED WORK DUE TO LACK OF COORDINATION WITH OTHER SYSTEMS.
2. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING OF WALLS, FLOORS AND CEILINGS AS REQUIRED FOR INSTALLATION OF HIS WORK.
3. ACCESS PANELS SHALL BE PROVIDED IN CEILINGS, WALLS, FLOORS, ETC., AS REQUIRED TO MAINTAIN ACCESSIBILITY TO DAMPERS, ETC.
4. PROVIDE DUCT ACCESS DOORS AT ALL MOTORIZED DAMPERS, FIRE DAMPERS, AND SMOKE DAMPERS.
5. ALL PENETRATIONS THROUGH FIRE RATED PARTITIONS SHALL BE SEALED FIRE AND SMOKE TIGHT WITH AN APPROPRIATE U.L. LISTED FIRESTOPPING MATERIAL AND OR SYSTEM.
6. ALL DUCTWORK PASSING THROUGH A FIRE RATED PARTITION SHALL BE PROVIDED WITH A FIRE DAMPER TO MAINTAIN THE FIRE RATING OF THE PARTITION.
7. LOCATIONS OF DIFFUSERS AND GRILLES ARE APPROXIMATE. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS.
8. ALL BRANCHES AND TAKE-OFFS SHALL BE EQUIPPED WITH VOLUME CONTROL DAMPERS. DAMPERS TO BE OPPOSED BLADE TYPE, 4" MAX. BLADE HEIGHT. VOLUME DAMPERS TO BE LOCATED AS NEAR TO THE POINT OF TAKE-OFF AS PRACTICAL.
9. FLEXIBLE DUCT CONNECTIONS SHALL BE LIMITED TO A MAXIMUM LENGTH OF FIVE (5) FEET AND SUPPORTED AT MID-POINT.
10. ALL SUPPLY & RETURN AIR DUCTWORK SHALL BE INSULATED.
11. PROVIDE SHUT-OFF VALVES AT ALL PIPING BRANCH TAKE-OFFS AND AT ALL CONNECTIONS TO EQUIPMENT.
12. PROVIDE DRAINS WITH HOSE ADAPTERS AND CAPS ON PIPING AT ALL LOW POINTS. PROVIDE MANUAL VENTS ON PIPING AT ALL HIGH POINTS.
13. COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH ELECTRICAL CONTRACTOR.
14. ALL MOTOR STARTERS SHALL BE FURNISHED BY THE HVAC CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
15. ALL REQUIRED CONTROL EQUIPMENT AND WIRING SHALL BE FURNISHED & INSTALLED BY THE HVAC CONTRACTOR.
16. THE TERMS "PROVIDE" OR "FURNISH", AS USED ON THESE PLANS, INDICATE THAT THE CONTRACTOR IS TO FURNISH AND INSTALL THE REFERENCED EQUIPMENT OR SYSTEMS IN THEIR ENTIRETY AS REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM.
17. CONTRACTOR SHALL PROVIDE AND INSTALL ALL COMPONENTS INDICATED ON DETAIL SHEETS, PLANS, SPECIFICATIONS AND ALL PERTINENT EQUIPMENT REQUIRED FOR A COMPLETE AND WORKABLE SYSTEM.
18. CONTRACT CLOSE OUT: IN THE PRESENCE OF THE OWNER, ENGINEER OR ARCHITECT; DEMONSTRATING OPERATION OF SYSTEMS AND THAT ALL SPECIFICATIONS HAVE BEEN MET TO THE SATISFACTION OF ALL PARTIES.
19. IT IS THE INTENTION THAT THESE SPECIFICATIONS, AND DRAWINGS ACCOMPANYING SAME, SHALL PROVIDE FOR THE FURNISHING AND INSTALLING OF THE () SYSTEMS COMPLETE AS SPECIFIED AND SHOWN. ANY WORK SHOWN ON THE DRAWINGS AND NOT PARTICULARLY DESCRIBED IN THE SPECIFICATIONS OR VICE VERSA, OR ANY WORK CHANGES WHICH MAY BE EVIDENTLY NECESSARY TO COMPLETE THE INSTALLATION SHALL BE FURNISHED BY THIS CONTRACTOR.
20. IT IS THE INTENT AND PURPOSE OF THESE SPECIFICATIONS AND DRAWINGS TO INCLUDE AND PROVIDE FOR ALL MATERIALS, APPLIANCES AND LABOR TO PROPERLY COMPLETE AND LEAVE IN PERFECT WORKING CONDITION THE ENTIRE SYSTEM HEREINAFTER SPECIFIED. ANY MATERIAL, LABOR OR APPLIANCE NOT SPECIFICALLY MENTIONED IN THESE SPECIFICATIONS OR SHOWN ON THE DRAWINGS, BUT NECESSARY FOR A COMPLETE INSTALLATION MUST BE FURNISHED BY THIS CONTRACTOR.
21. IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS TO PROVIDE ALTERATIONS AND/OR NEW CONSTRUCTION AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS TO PROVIDE COMPLETE NEW SYSTEMS IN EVERY RESPECT, CAPABLE OF OPERATING AS DESIGNED. IT IS NOT INTENDED THAT EVERY FITTING, MINOR DETAIL OR FEATURE BE SHOWN ON DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DETAIL NECESSARY FOR COMPLETION OF THESE SYSTEMS IN ACCORDANCE WITH GOOD PRACTICE.

HVAC LINE TYPES

- —/—/—/— or - - - - - - - - EXISTING EQUIPMENT/DUCT TO BE REMOVED
- ——————— EXISTING EQUIPMENT/DUCT TO REMAIN
- ——————— NEW EQUIPMENT / DUCT
- ———CHR——— CHILLED WATER RETURN
- ———CHS——— CHILLED WATER SUPPLY
- ———HWR——— HOT WATER RETURN
- ———HWS——— HOT WATER SUPPLY

DUCTWORK SYMBOLS

- AxB — DUCTWORK DOUBLE LINE REPRESENTATION: "A" INDICATES DUCT WIDTH; "B" INDICATES DUCT DEPTH.
- AxB — DUCTWORK SINGLE LINE REPRESENTATION: "A" INDICATES DUCT WIDTH; "B" INDICATES DUCT DEPTH.
- SUPPLY AIR DUCT UP
- SUPPLY AIR DUCT DOWN
- RETURN AIR DUCT UP
- RETURN AIR DUCT DOWN
- EXHAUST AIR DUCT UP
- EXHAUST AIR DUCT DOWN
- SUPPLY AIR FLOW
- RETURN/EXHAUST AIR FLOW
- VOLUME DAMPER
- VOLUME DAMPER
- MOTORIZED DAMPER w/ ACCESS DOOR
- FIRE DAMPER W/ ACCESS DOOR
- SUPPLY AIR TERMINAL
- RETURN/EXHAUST AIR TERMINAL
- EXHAUST AIR TERMINAL
- D — DROP DUCT
- R — RISE DUCT

PIPING SYMBOLS

- DIRECTION OF FLOW
- TOP CONNECTION, 45° OR 90°
- BOTTOM CONNECTION, 45° OR 90°
- SIDE CONNECTION
- CAPPED OUTLET
- PIPE DOWN TURN
- PIPE RISE

VALVE SYMBOLS

- GATE VALVE – THREADED/FLANGED
- GATE VALVE WITH 3/4" HOSE ADAPTER
- GLOBE VALVE – THREADED/FLANGED
- CHECK VALVE
- STRAINER
- WYE STRAINER (WITH BALL VALVE & HOSE CONNECTION)
- STRAINER WITH VALVED DRAIN AND QUICK-COUPLE HOSE CONNECTOR
- FLEXIBLE CONNECTION
- ANGLE GLOBE VALVE
- BUTTERFLY VALVE
- BALL VALVE
- CONTROL VALVE (CV) – FLOAT-OPERATED
- MODULATING CONTROL VALVE
- MODULATING CONTROL BUTTERFLY VALVE
- TWO POSITION CONTROL VALVE
- THREE-WAY MODULATING CONTROL VALVE
- THREE-WAY TWO POSITION CONTROL VALVE
- PRESSURE REGULATING VALVE
- PRESSURE REDUCING VALVE (PRV)
- TEMPERATURE & PRESSURE RELIEF VALVE
- SAFETY OR PRESSURE RELIEF VALVE
- AUTOMATIC BALANCING CONTROL VALVE
- WATER BALANCE DEVICE
- WATER FLOW MEASURING DEVICE
- CIRCUIT SETTER VALVE
- GATE VALVE WITH GLOBE-VALVED BYPASS
- TRIPLE DUTY VALVE
- LC — WATER LEVEL CONTROLLER
- M — FLOW METER
- COMBINATION BALANCING AND SHUT-OFF VALVE
- MANUAL AIR VENT
- TEST PLUG (PRESSURE/TEMPERATURE)
- PLUG VALVE
- LUBRICATED PLUG VALVE

GENERAL SYMBOLS

- POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK
- POINT OF DISCONNECT
- X / XX — INDICATES SECTION LETTER / INDICATES DRAWING NUMBER WHERE LOCATED
- XXX / XXX — INDICATES TYPE OF AIR OUTLET / INDICATES AIR FLOW REQUIREMENTS
- T — WALL MOUNT THERMOSTAT 'A' DESIGNATES COMPONENT SERVED

ABBREVIATIONS

AC	AIR CONDITIONING UNIT
ACT	ACOUSTIC CEILING TILE
ACCU	AIR COOLED CONDENSING UNIT
AD	ACCESS DOOR
AF	AFTER FILTER
AFF	ABOVE FINISHED FLOOR
AFM	AIR FLOW MEASURING DEVICE
AHU	AIR HANDLING UNIT
A.L.D.	AUTOMATIC LOUVER DAMPER (PNEUMATIC)
AP	ACCESS PANEL
BDD	BACK DRAFT DAMPER
BG	BOTTOM GRILLE (WALL TYPE)
BR	BOTTOM REGISTER (WALL TYPE)
BTUH	BRITISH THERMAL UNITS/HOUR
CC	COOLING COIL
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CG	CEILING GRILLE
CLG	CEILING
CO	CLEAN OUT
CP	CONDENSATE PUMP
CR	CEILING REGISTER
CUH	CABINET UNIT HEATER
CW	COLD WATER
D	DRAIN
Db	DRY BULB TEMPERATURE, °F
dB	DECIBELS
DN	DOWN
DP	DIFFERENTIAL PRESSURE
Dp	DEW POINT TEMPERATURE, °F
DS	DUCT SMOKE DETECTOR
DX	DIRECT EXPANSION
EA	EXHAUST AIR
EAT	ENTERING AIR TEMP
E.C.	ELECTRICAL CONTRACTOR
ECC	ENGINEERING CONTROL CENTER
EER	ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN
EGW	ETHYLENE GLYCOL-WATER SOLUTION
EMD	END OF MAIN DRIP (STEAM)
ERC	ENERGY RECOVERY COIL
ERP	ELECTRIC RADIANT CEILING PANEL
ET	EXPANSION TANK
EUH	ELECTRIC UNIT HEATER
EXIST	EXISTING
F.A.I.	FRESH AIR INTAKE
FC	FLEXIBLE CONNECTION
FCU	FAN COIL UNIT
FD	FIRE DAMPER
FLR	FLOOR
F.O.R.	FUEL OIL RETURN
F.O.S.	FUEL OIL SUPPLY
FPC	FIRE PROTECTION CONTRACTOR
F/SD	COMBINATION FIRE/SMOKE DAMPER
FTR	FIN TUBE RADIATION
G	NATURAL GAS PIPE
G.C.	GENERAL CONTRACTOR
GH	GRAVITY HOOD
GPM	GALLONS PER MINUTE
H.C.	HVAC CONTRACTOR
HF	HEPA FILTER
HP	HORSEPOWER
HRP	HYDRONIC RADIANT CEILING PANEL
HV	HEATING AND VENTILATING UNIT
IV	INLET VANES
LCD	LINEAR CEILING DIFFUSER
LFD	LAMINAR FLOW DIFFUSER
LF	LINEAR FEET
LPG	LP GAS PIPING
LPR	LOW PRESSURE STEAM CONDENSATE
LPS	LOW PRESSURE STEAM
LBS/HR	POUNDS PER HOUR
MB	MIXING BOX
MD	MOTORIZED DAMPER
MER	MECHANICAL EQUIPMENT ROOM
MAX.	MAXIMUM
MBH	ONE THOUSAND BTUH
MIN.	MINIMUM
NOM.	NOMINAL
OA	OUTSIDE AIR
P	PUMP
P.C.	PLUMBING CONTRACTOR
PD	PRESSURE DROP (FEET OF WATER)
PF	PRE-FILTER
PGW	PROPYLENE GLYCOL-WATER SOLUTION
PH	PREHEAT
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE IN.
RA	RETURN AIR
RF	RETURN FAN
RHC	REHEAT COIL
Rh	RELATIVE HUMIDITY
RPZ	REDUCED PRESSURE ZONE
SA	SUPPLY AIR
SD	SMOKE DAMPER
Sp. Gr.	SPECIFIC GRAVITY
SH	STEAM HUMIDIFIER
SP	STATIC PRESSURE
SPD	SPLITTER DAMPER
SPS	STATIC PRESSURE SENSOR
S.S.	STAINLESS STEEL
TG	TOP GRILLE (WALL TYPE)
TR	TOP REGISTER (WALL TYPE)
TWU	THRU WALL UNIT
UH	UNIT HEATER
U.N.O.	UNLESS NOTED OTHERWISE
UV	UNIT VENTILATOR
V	VALVE
VD	VOLUME DAMPER
VE	VOLUME EXTRACTOR
VI	VIBRATION ISOLATOR
VIF	VERIFY IN FIELD
Wb	WET BULB TEMPERATURE, °F
WFM	WATER FLOW MEASURING DEVICE
WMS	WIRE MESH SCREEN

Greenwood Lake Elementary School Ventilation Table

Unit No.	Occupancy Classification	Area (SF)	Occupancy Density	# of Occupants	Corrected # of Occupants	OA (CFM/person)	OA (CFM/ft²)	Uncorrected OA (CFM)	Air Distribution Effectiveness	Final Outdoor Airflow (CFM)	System Airflow (CFM)	Outdoor Air Fraction	EA (CFM/ft²)	Final Exhaust Airflow (CFM)
Restroom (108A)	Toilet Rooms - Public	47.1208	---	---	---	---	---	---	---	---	---	---	50 CFM (CNT)/ 70 CFM (INT)	50 CFM (Continuous)
Janitors Closet (108B)	Toilet Rooms - Public	20.2488	---	---	---	---	---	---	---	---	---	---	50 CFM (CNT)/ 70 CFM (INT)	50 CFM (Continuous)
Kitchen (110)	Kitchens (Cooking)	665	20	13.30	14	7.5	0.12	184.80	0.8	231	1050	0.22	0.7	466

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

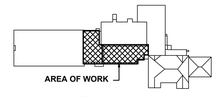
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
NY PROFESSIONAL ENGINEER NO. 073064-1

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

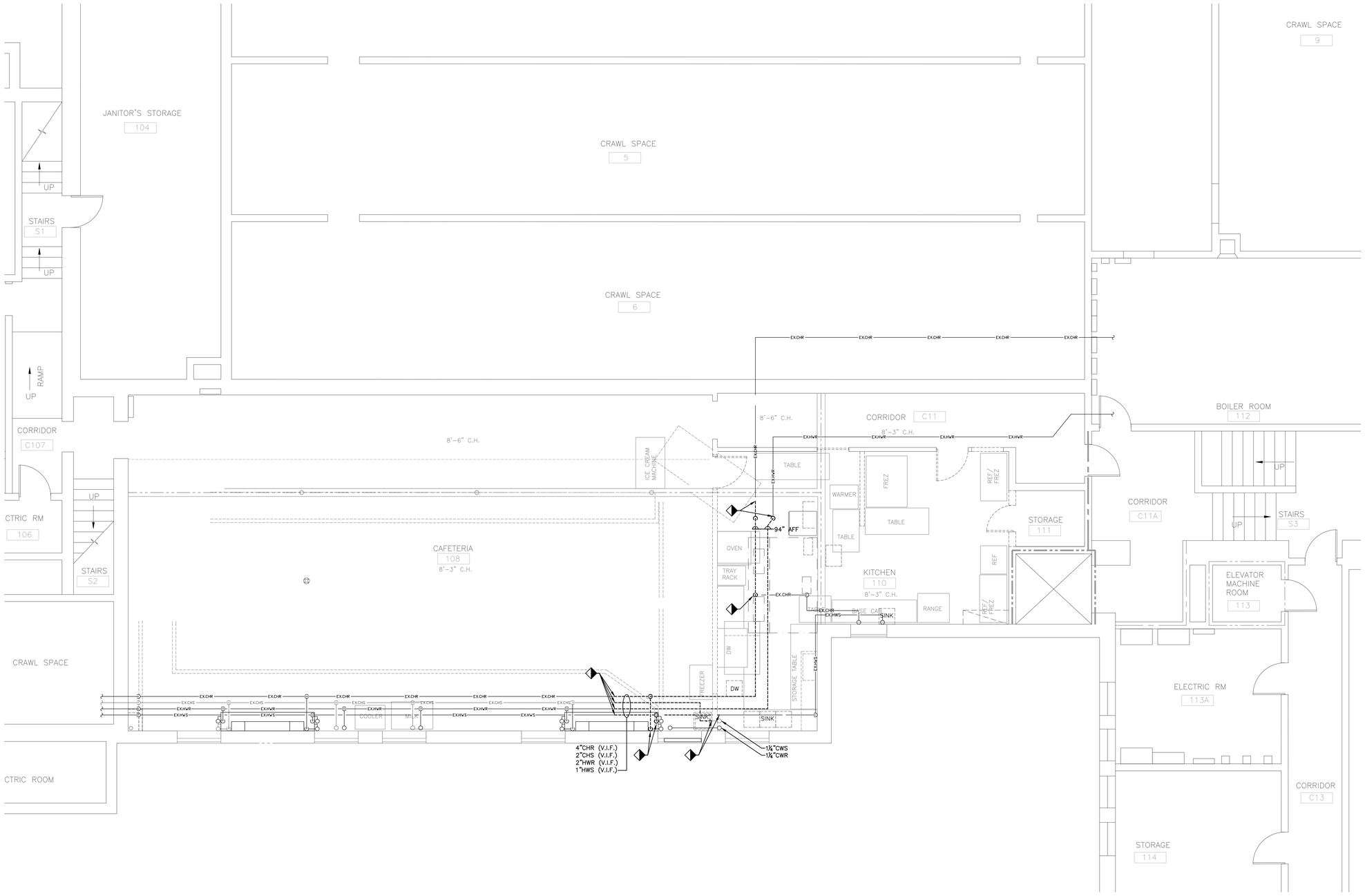
Drawing Title

HVAC: SYMBOLS, NOTES, & ABBREVIATIONS

Drawing No.

H-001

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\HVAC\H-001.dwg (Layout: H-001)
Date: Tue, Dec 28, 2021 - 4:07 PM (Name: wpb)



1 HVAC: PARTIAL BASEMENT HYDRONIC PIPING DEMO PLAN

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

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\HVAC\H-100 & HD-101.dwg (Layout: HD-100 DEMO PIPING)
Date: Tue, Dec 28, 2021 - 4:07 PM (Name: wpb)

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

SED PROJECT NUMBER

44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
NY PROFESSIONAL ENGINEER NO. 073084-1

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL

AREA OF WORK

KEY PLAN

FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

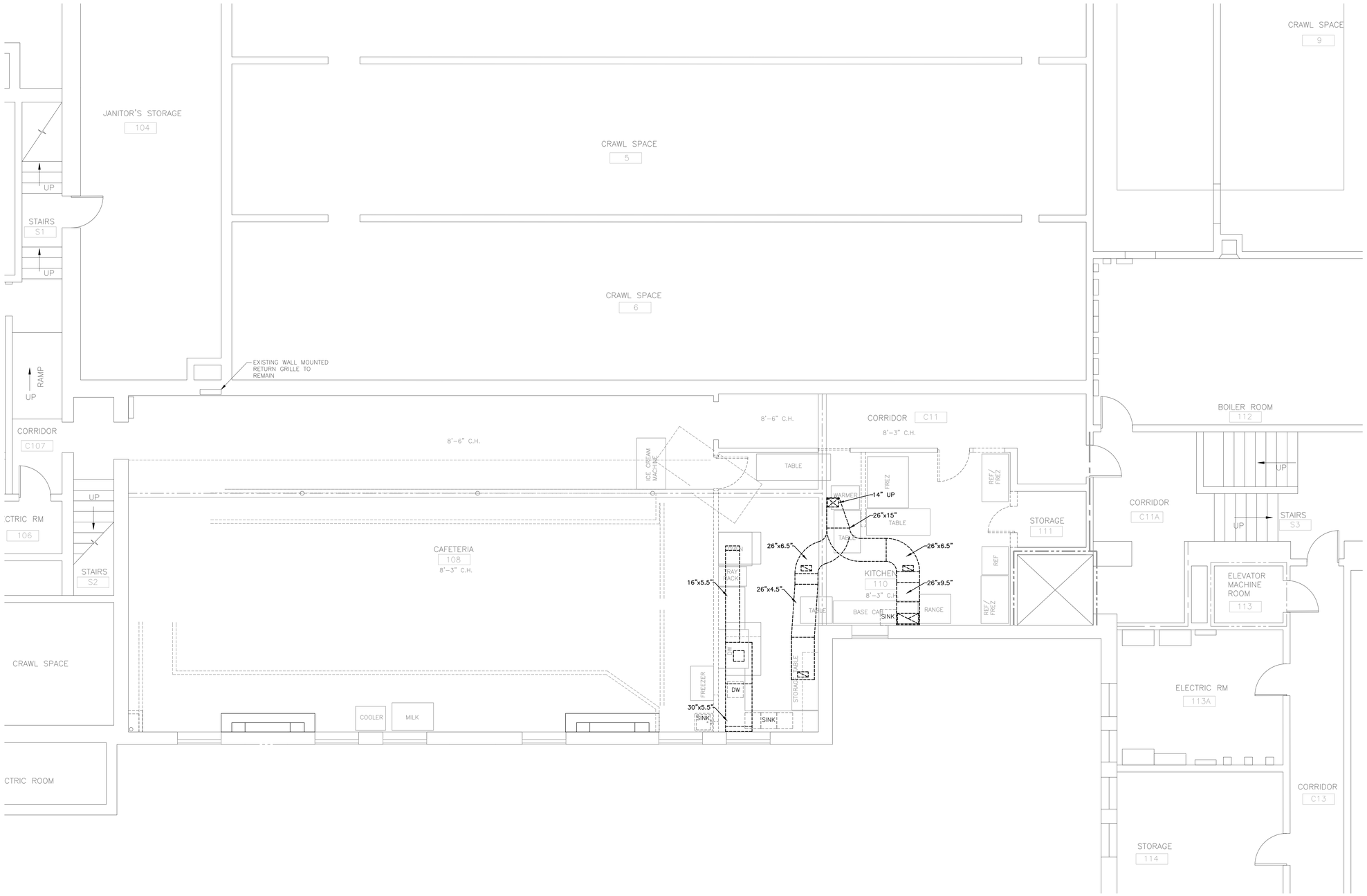
⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title

HVAC: PARTIAL BASEMENT HYDRONIC PIPING DEMO PLAN

Drawing No.

HD-100



1 HVAC: PARTIAL BASEMENT DUCTWORK DEMO PLAN

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

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

SED PROJECT NUMBER

44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

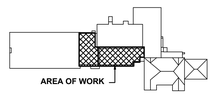
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
ERIC D. FELLENZER
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 073084-1

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

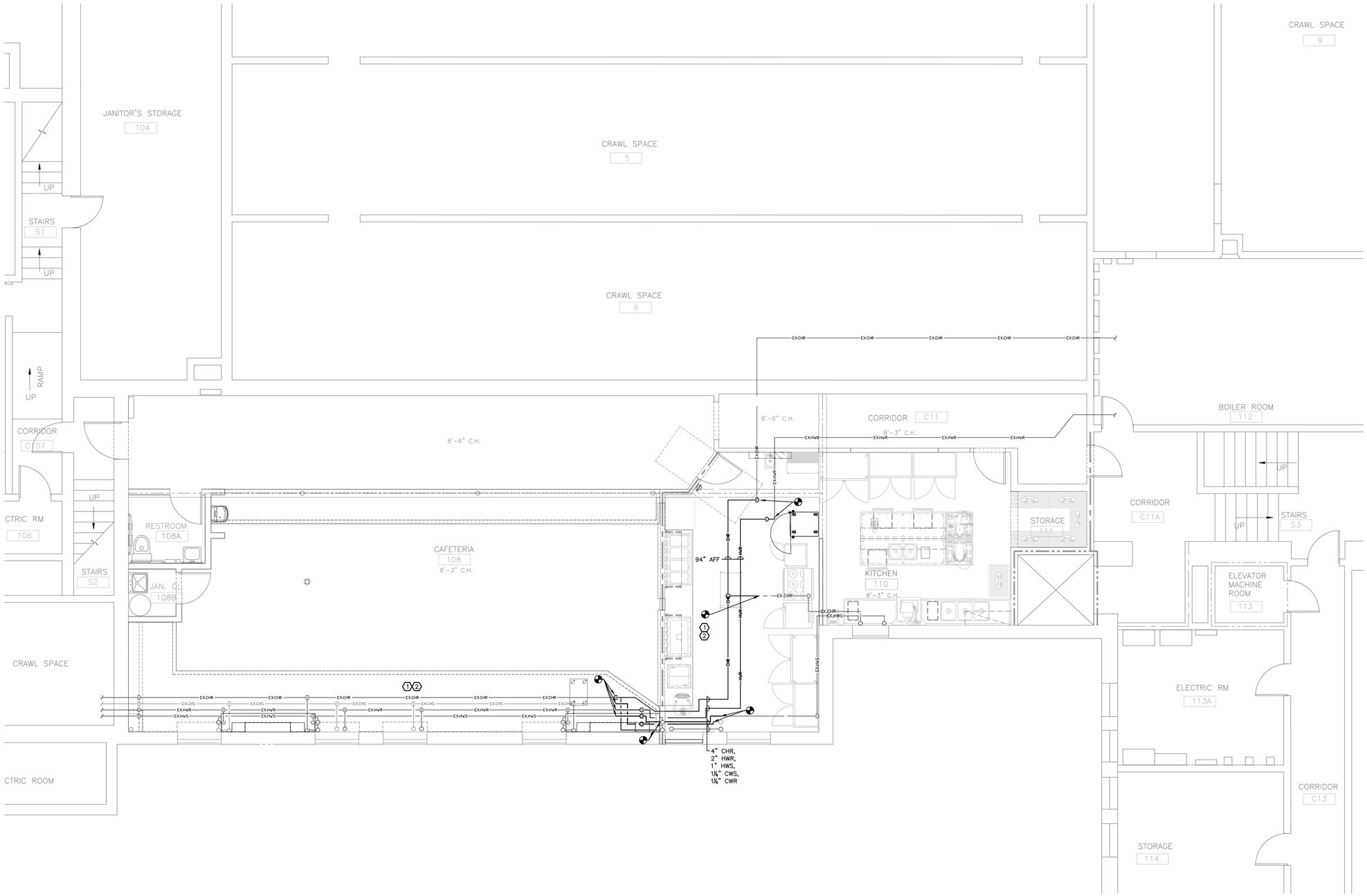
Drawing Title

HVAC: PARTIAL BASEMENT DUCTWORK DEMO PLAN

Drawing No.

HD-200

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\HVAC\H-200 & HD-200.dwg (Layout: HD-200)
Date: Tue, Dec 28, 2021 - 4:07 PM (Name: wpb)



1 HVAC: PARTIAL BASEMENT NEW HYDRONIC PIPING PLAN

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

NOTE:

1. REFER TO PLUMBING DRAWINGS FOR ALL NEW GAS PIPING PLANS.

KEYED NOTES:

(1) PROVIDE ALL NEW PIPING WITH LABELS TO MATCH THE EXISTING CONDITIONS. SEE DETAIL 1/P-701 FOR MORE INFORMATION.

(2) CONTRACTOR TO FIELD VERIFY ALL EXISTING PIPE CONDITIONS PRIOR TO ANY NEW CONSTRUCTION.

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

SED PROJECT NUMBER

44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
ERIC D. FELLENZER
073084
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 073084-1

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL

AREA OF WORK

KEY PLAN

FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

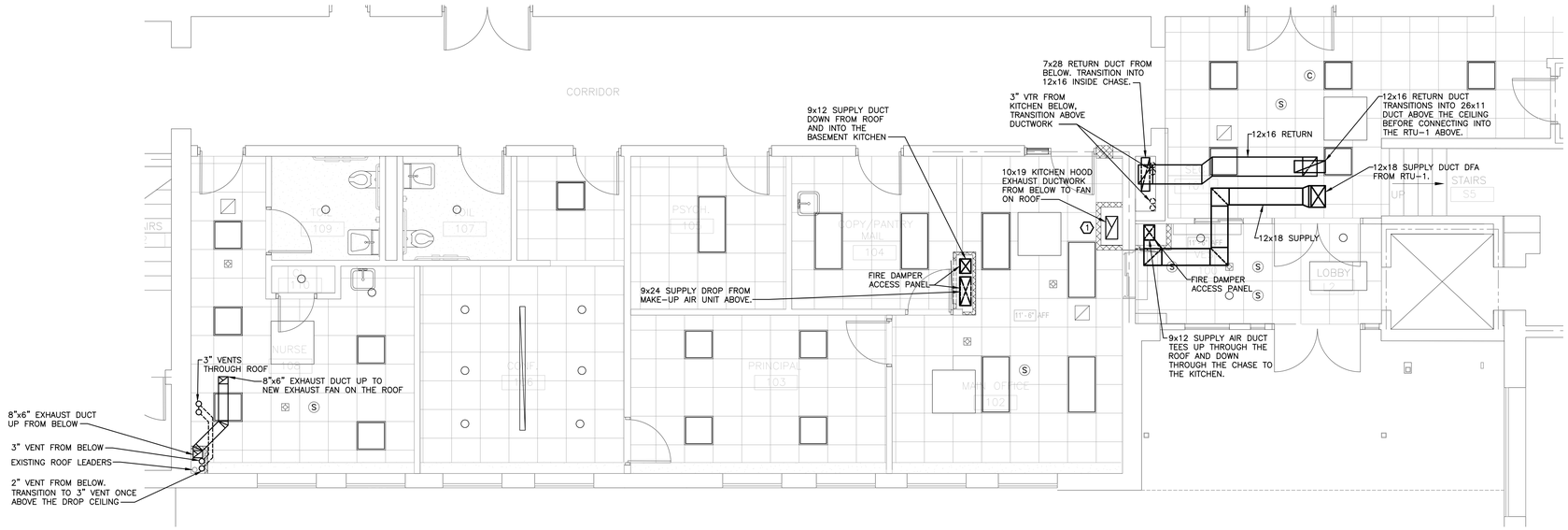
Drawing Title

HVAC: PARTIAL BASEMENT NEW HYDRONIC PIPING PLAN

Drawing No.

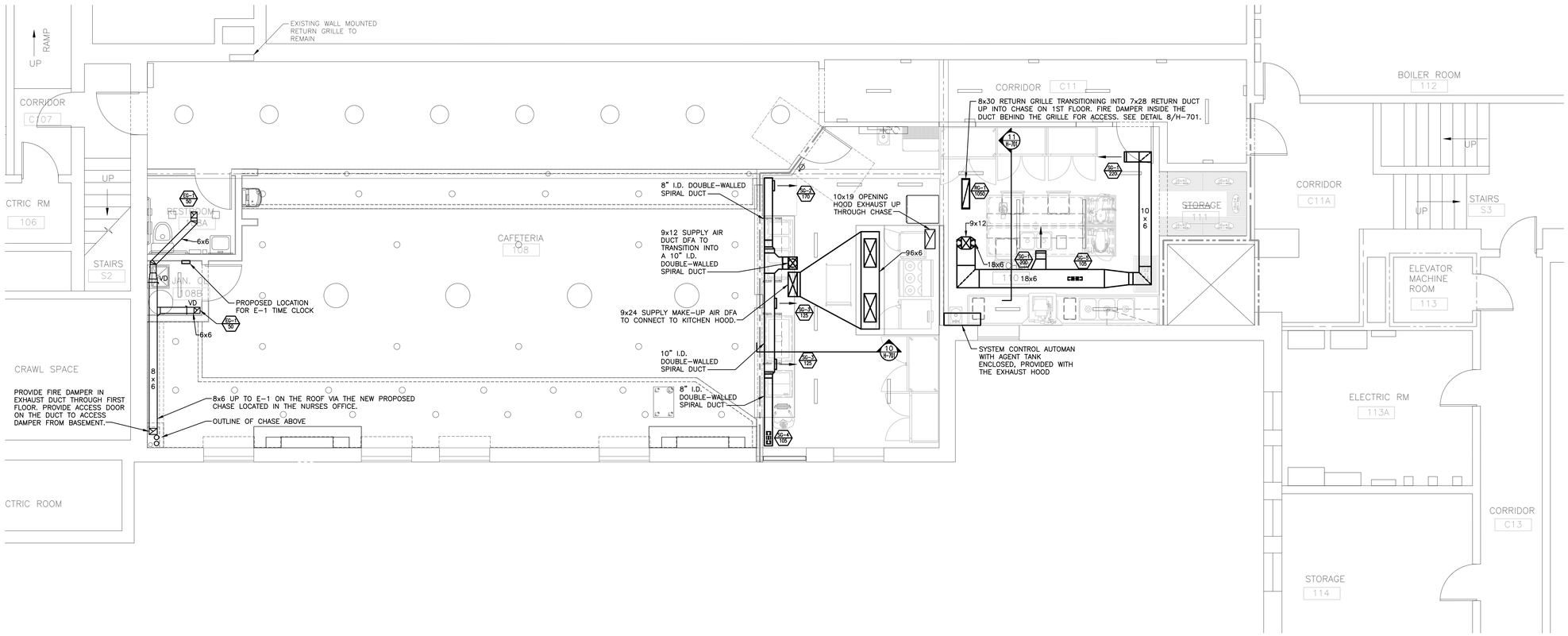
H-100

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\HVAC\H-100 & HD-100.dwg (Layout: H-100 NEW PIPING)
Date: Tue, Dec 28, 2021 - 4:07 PM (Name: wpb)



2 HVAC: PARTIAL 1ST FLOOR NEW DUCTWORK PLAN

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



1 HVAC: PARTIAL BASEMENT NEW DUCTWORK PLAN

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

KEYED NOTES:

1. RELOCATE DUCTWORK, PIPING, CONDUITS/WIRES ABOVE THE CEILING IN THE PATH OF THE KITCHEN EXHAUST HOOD 19x10 DUCT, TRAVELING FROM THE BASEMENT TO ITS CORRESPONDING EXHAUST FAN ON THE ROOF.

GENERAL NOTE:

1. REFER TO ARCHITECTURAL DRAWINGS FOR ALL FINAL CHASE LOCATIONS.

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

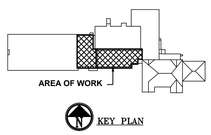
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
ERIC D. FELLENZER
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 073084-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

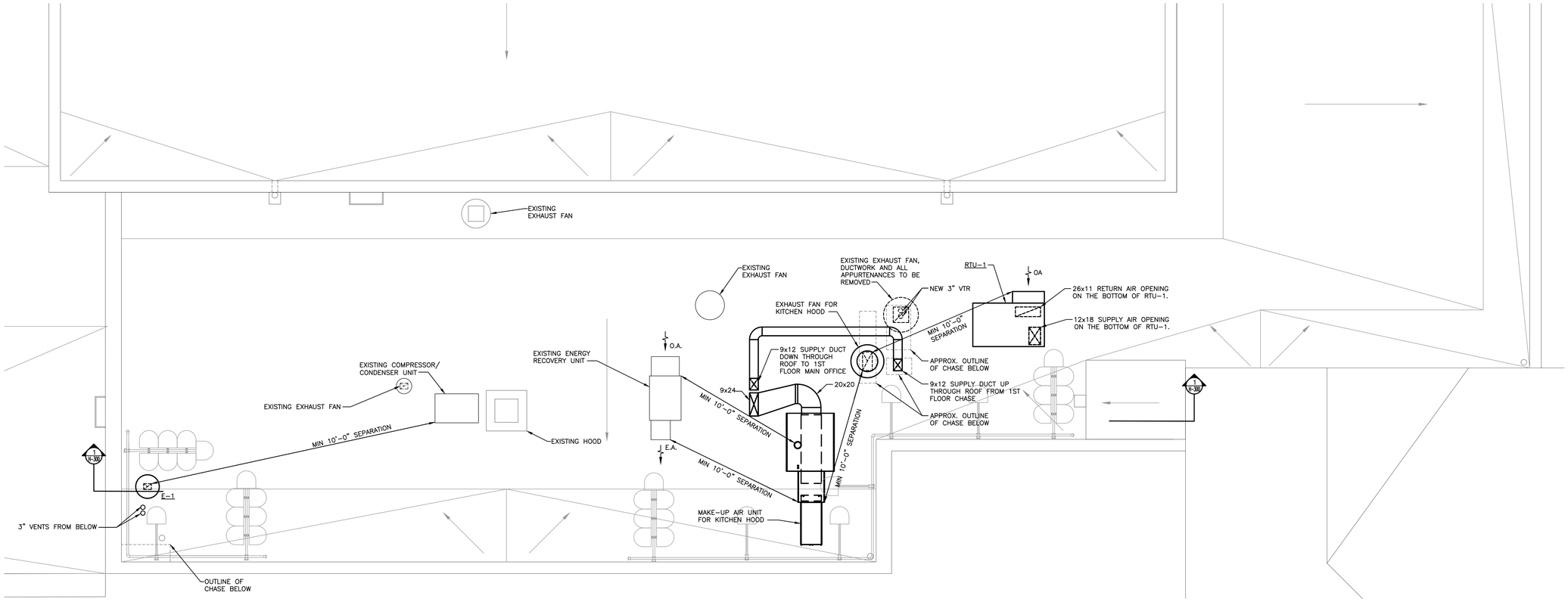
Drawing Title

HVAC:
PARTIAL BASEMENT
NEW DUCTWORK PLAN

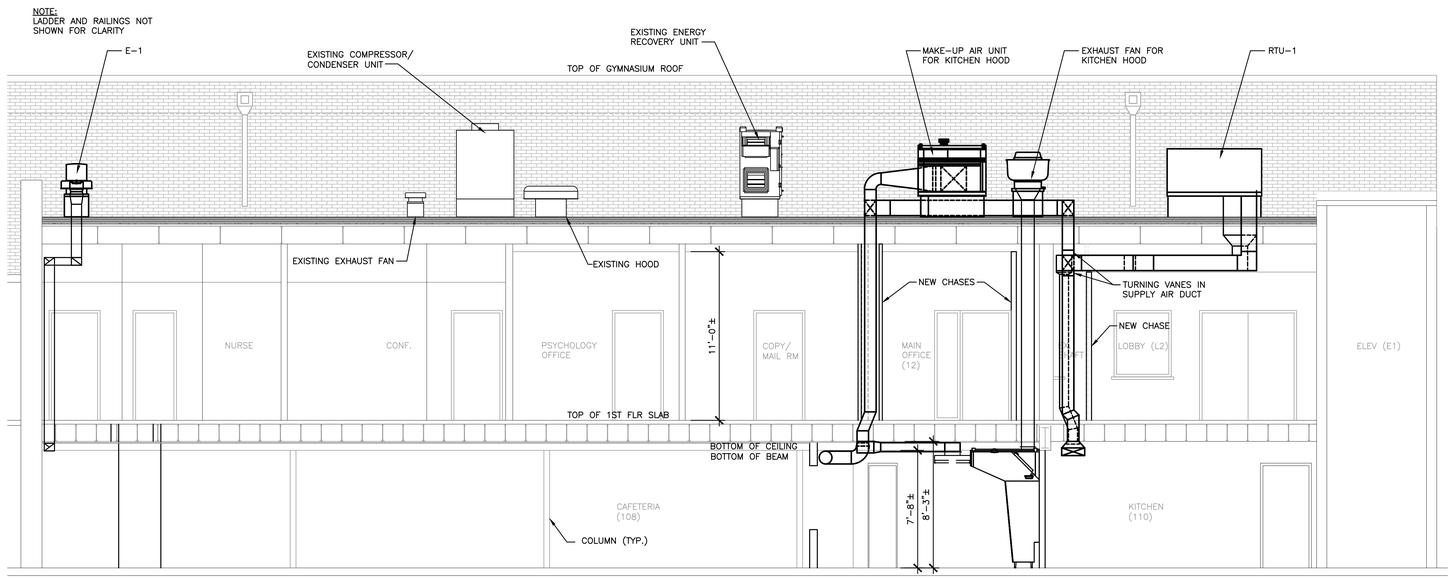
Drawing No.

H-200

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\HVAC\H-200 & HD-200.dwg (Layout: H-200)
Date: Tue, Dec 28, 2021 - 4:07 PM (Name: wpb)



2 PARTIAL ROOF PLAN
SCALE: 1/4" = 1'-0"



1 PARTIAL SECTION
SCALE: 1/4" = 1'-0"

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\HVAC\H-300.dwg (Layout: H-300)
Date: Tue, Dec 28, 2021 - 4:07 PM (Name: wpb)

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

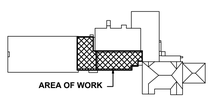
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
035841
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 075084-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

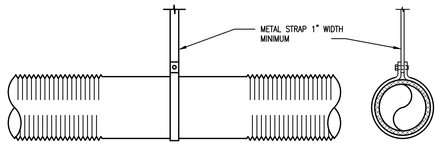
⅛" ¼" ⅜" 0 1" 2"
REFERENCE SCALE

Drawing Title

HVAC:
ROOF PLAN
AND SECTION

Drawing No.

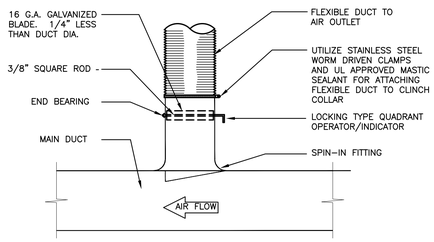
H-300



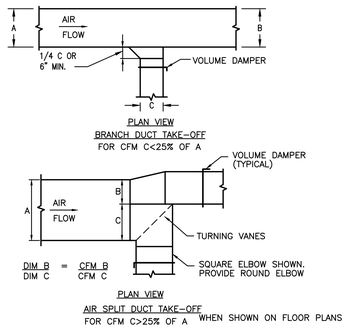
NOTES:

1. DUCT SHOULD EXTEND STRAIGHT FOR A MINIMUM OF 3 DUCT DIAMETERS BEFORE BENDING.
2. SUPPORT SYSTEM MUST NOT BEND DUCT OR CAUSE OUT OF ROUND SHAPE.
3. MAXIMUM SAG 1/2" PER FOOT OR SUPPORT SPACING.
4. 5'-0" MAXIMUM FLEX DUCT LENGTH.

1 FLEX DUCT SUPPORT
N.T.S.

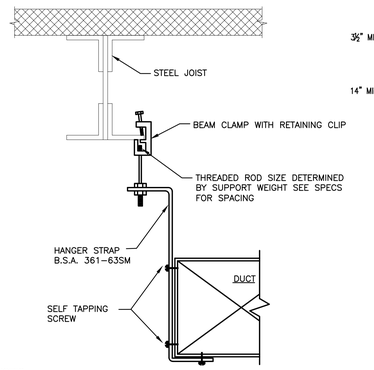


SPIN-IN BRANCH CONNECTION TO SINGLE AIR OUTLET
2 N.T.S.



WHEN SHOWN ON FLOOR PLANS

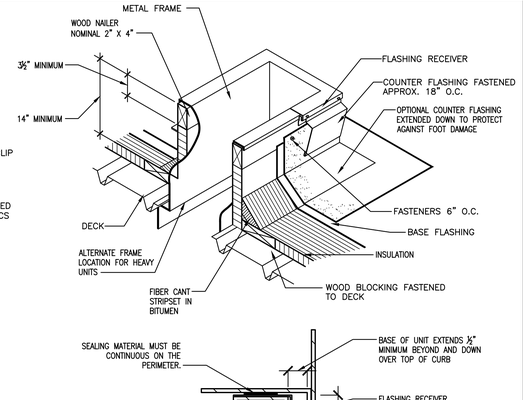
3 SUPPLY DUCTWORK TAKE-OFFS
N.T.S.

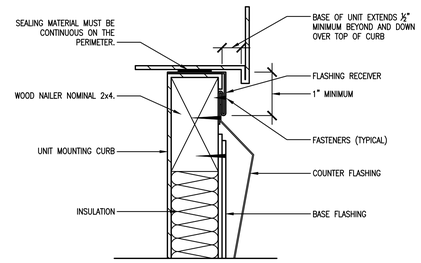


NOTES:

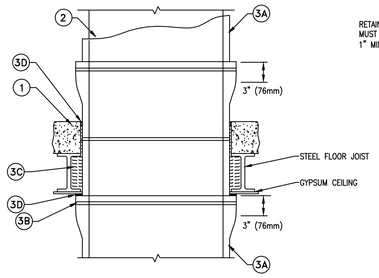
1. DUCTS SHALL NOT BE HUNG FROM OR SUPPORTED BY HUNG CEILING.
2. FOR DUCTS NOT EXCEEDING 2 SQ. FT. IN CROSS-SECTIONAL AREA, HANGERS SHALL BE OF METAL NOT LESS THAN 1/16".
3. FOR DUCTS LARGER THAN 2 SQ. FT. IN CROSS-SECTIONAL AREA, HANGERS SHALL BE OF METAL NOT LESS THAN 1" BY 1/8".
4. FOR ALL DUCTS. HANGERS SHALL BE TURNED UNDER AND FASTENED TO THE BOTTOM OF DUCT AS SHOWN ABOVE.
5. WHERE CROSS-SECTIONAL AREA OF DUCT EXCEEDS 8 SQ. FT., HANGERS SHALL BE NOT MORE THAN 4 FT. ON CENTER.

4 METHOD OF HANGING DUCTWORK
N.T.S.





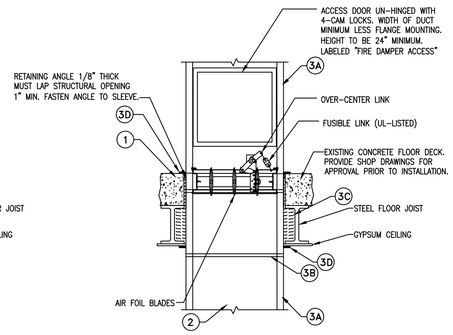
5 ROOFTOP CURB DETAIL
N.T.S.



1.	Concrete Floor
2.	Kitchen Hood Exhaust Duct
3A.	One Layer 3M Fire Barrier Duct Wrap 15A, Or Approved Equal
3B	Banding or Pinning
3C.	Packing Material
3D.	3M Fire Barrier 1000 N/S, 1003 S/Lor 2000+ Silicone Sealant Or Approved Equal.

System integrity is limited by quality of installation.
Page 10

FIRE BARRIER DUCT WRAP FOR KITCHEN HOOD EXHAUST DUCT
6 N.T.S.



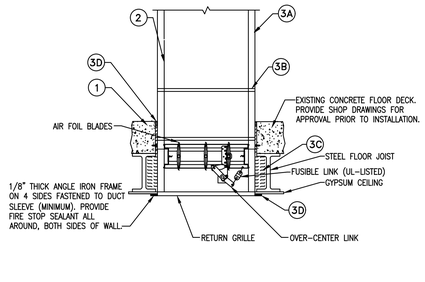
1.	Concrete Floor
2.	Duct
3A.	Duct Insulation (Thickness Per ASHRAE 90.1)
3B	Insulation Joint
3C.	Packing Material
3D.	3M Fire Barrier 1000 N/S, 1003 S/Lor 2000+ Silicone Sealant Or Approved Equal.

System integrity is limited by quality of installation.
Page 10

NOTES:

1. FIRE DAMPER SHALL BE UL APPROVED FOR DUAL DIRECTION AIR FLOW.
2. FIRE DAMPER SHALL BE RATED FOR A MINIMUM OF 4000 FPM AIR VELOCITY AT 8" STATIC PRESSURE.
3. FIRE DAMPER SHALL BE GALVANIZED STEEL CONSTRUCTION.
4. FIRE DAMPER SHALL BE INSTALLED PER MANUFACTURERS INSTRUCTIONS. PROVIDE SHOP DRAWINGS FOR APPROVAL PRIOR TO INSTALLATION.

SUPPLY DUCT PENETRATION THROUGH CONCRETE FLOOR
7 N.T.S.



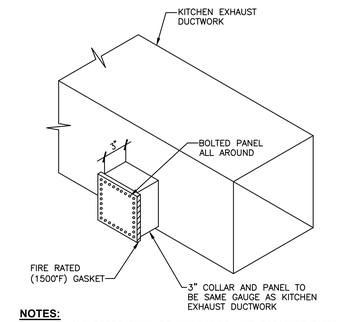
1.	Concrete Floor
2.	Duct
3A.	Duct Insulation (Thickness Per ASHRAE 90.1)
3B	Insulation Joint
3C.	Packing Material
3D.	3M Fire Barrier 1000 N/S, 1003 S/Lor 2000+ Silicone Sealant Or Approved Equal.

System integrity is limited by quality of installation.
Page 10

NOTES:

1. FIRE DAMPER SHALL BE UL APPROVED FOR DUAL DIRECTION AIR FLOW.
2. FIRE DAMPER SHALL BE RATED FOR A MINIMUM OF 4000 FPM AIR VELOCITY AT 8" STATIC PRESSURE.
3. FIRE DAMPER SHALL BE GALVANIZED STEEL CONSTRUCTION.
4. FIRE DAMPER SHALL BE INSTALLED PER MANUFACTURERS INSTRUCTIONS. PROVIDE SHOP DRAWINGS FOR APPROVAL PRIOR TO INSTALLATION.

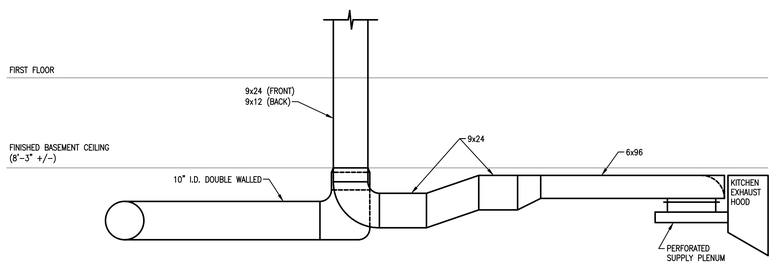
RETURN DUCT PENETRATION THROUGH CONCRETE FLOOR
8 N.T.S.



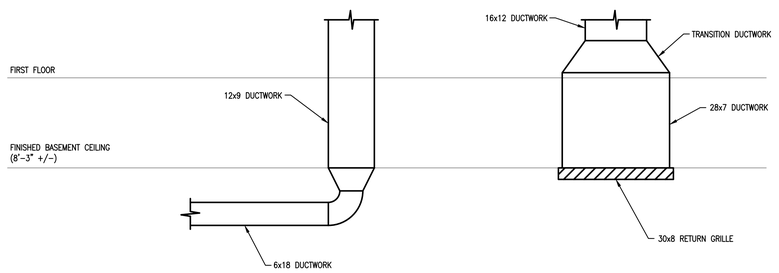
NOTES:

1. CLEAN-OUT DOORS SHALL BE MINIMUM 12" AND PRESSURE RATED, WITH RATED GASKET AND INSTALLED AT EVERY DUCT TURN AND EVERY 20'-0" OF HORIZONTAL RUN.
2. KITCHEN EXHAUST DUCTWORK CONSTRUCTION TO BE 16 GA BLACK IRON STEEL, 18 GA STAINLESS STEEL OR 10 GA. BLACK STEEL IN N.Y.C. WITH ALL WELDED POINTS AND SEAMS.

CLEANOUT ACCESS PANEL FOR EXHAUST DUCTWORK SYSTEMS
9 N.T.S.



KITCHEN DUCTWORK SECTION #1
10 SCALE: 3/4" = 1'-0"



KITCHEN DUCTWORK SECTION #2
11 SCALE: 3/4" = 1'-0"

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

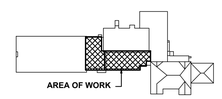
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
NY PROFESSIONAL ENGINEER NO. 073084-1

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title
HVAC: DETAILS

Drawing No.
H-701

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\HVAC\H-701.dwg (Layout: H-701)
Date: Tue, Dec 28, 2021 - 4:07 PM (Name: wpb)

PACKAGED GAS/ELECTRIC ROOFTOP SCHEDULE

ID	LOCATION	AREA AND/OR BLDG SERVED	TYPE	MANU.	MODEL NO.	GENERAL DATA: TOTAL SUPPLY AIR FLOW	GENERAL DATA: MIN. OUTSIDE AIR FLOW	GENERAL DATA: EXT. STATIC PRESSURE	GENERAL DATA: BLOWER STATIC PRESSURE	GENERAL DATA: COOLING DATA: TOTAL CAPACITY	GENERAL DATA: COOLING DATA: EER	GENERAL DATA: COOLING DATA: SEER	GENERAL DATA: HEATING DATA: NUMBER OF STAGES	GENERAL DATA: HEATING DATA: STAGE 1 INPUT/OUTPUT	GENERAL DATA: HEATING DATA: STAGE 2 INPUT/OUTPUT	GENERAL DATA: HEATING DATA: TEMPERATURE RISE	GENERAL DATA: HEATING DATA: AFUE	GENERAL DATA: HEATING DATA: FUEL TYPE	GENERAL DATA: OPERATIONAL WEIGHT W/ ACCESSORIES	GENERAL DATA: OPERATIONAL SOUND LEVEL	UNIT POWER CONNECTION: VOLTAGE	UNIT POWER CONNECTION: PHASE	UNIT POWER CONNECTION: MCA	UNIT POWER CONNECTION: MOCP	REMARKS
RTU-1	MAIN OFFICE ROOF	KITCHEN	PACKAGED ROOFTOP	CARRIER	48GCDM04A3A5-2WSC0	1050 CFM	231	0.29" WC	1.4" WC	35.14 MBH	12	16	2	50 MBH / 40 MBH	67 MBH / 54 MBH	25 F - 55 F	81%	NATURAL GAS	678 LBS.	79 dBA	208	3	24	30	SEE NOTES

NOTES

1. AFUE COLUMN REPRESENTS ANNUAL FUEL UTILIZATION EFFICIENCY.
2. RTU-1 SHALL BE INTEGRATED INTO THE EXISTING BUILDING MANAGEMENT SYSTEM. PROVIDE ALL APPURTENANCES REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. COORDINATE WITH GREENWOOD LAKE CONTROLS CONTRACTOR FOR ALL REQUIREMENTS.
3. PROVIDE UNIT WITH A HIGH STATIC BLOWER.
4. PROVIDE UNIT WITH A ECONOMIZER.
5. PROVIDE UNIT WITH HINGED PANELS.
6. PROVIDE UNIT WITH A 2" THICK MERV 13 THROWAWAY FILTER.
7. PROVIDE UNIT WITH A MANUFACTURER APPROVED ROOF CURB. ROOF CURB MUST BE A MIN. OF 14" OVERALL HEIGHT.

EXHAUST FAN SCHEDULE

I.D.	MANUFACTURER	MODEL NO.	AIRFLOW	GENERAL DATA: TOTAL EXTERNAL S.P.	GENERAL DATA: FAN RPM	GENERAL DATA: POWER USAGE: START UP	GENERAL DATA: POWER USAGE: OPERATING	GENERAL DATA: MOTOR SIZE	GENERAL DATA: SONES	GENERAL DATA: SOUND LEVEL	GENERAL DATA: WEIGHT	ELECTRICAL DATA: VOLTAGE/PHASE	ELECTRICAL DATA: FLA	REMARKS
E-1	GREENHECK	G-097-VG	100 CFM	0.50 " WG	1,135	0.03 BHP	0.03 BHP	1/4 HP	4.6	47 dBA	38 LBS.	115/1	2.85	SEE NOTES

NOTES:

1. PROVIDE UNIT WITH A BACKDRAFT DAMPER, MOTOR STARTER, AND BIRDSCREEN.
2. PROVIDE UNIT WITH A 24 HOUR / 7 DAY TIME CLOCK.

REGISTER & GRILLE SCHEDULE

I.D.	MANUFACTURER	MODEL NO.	AIRFLOW (CFM)	FRAME TYPE	NOMINAL FACE SIZE	BLADE DEFLECTION	BLADE SPACING	FINISH	REMARKS
SG-1	TITUS	271FS	200-220	DUCT MOUNTED	10" x 6"	DOUBLE	3/4"	WHITE	SEE NOTES
SG-2	HART/COOLEY	SVH-3-12X4-W-8	170	DUCT MOUNTED	12" X 4"	DOUBLE	3/4"	WHITE ENAMEL	SEE NOTES
SG-3	HART/COOLEY	SVH-3-10X4-W-10	125	DUCT MOUNTED	10" X 4"	DOUBLE	3/4"	WHITE ENAMEL	SEE NOTES
SG-4	HART/COOLEY	SVH-3-10X4-W-8	125	DUCT MOUNTED	10" X 4"	DOUBLE	3/4"	WHITE ENAMEL	SEE NOTES
SG-5	HART/COOLEY	USVH-3-14X3-W	105	DUCT MOUNTED	14" X 3"	DOUBLE	3/4"	WHITE	SEE NOTES
RG-1	TITUS	56FL	1050	SURFACE MOUNTED	30" x 8"	SINGLE	3/4"	WHITE	SEE NOTES
EG-1	TITUS	56FL	50	SURFACE MOUNTED	6" x 6"	SINGLE	3/4"	WHITE	SEE NOTES

NOTE:

1. ALL FINAL MOUNTING LOCATIONS FOR ALL GRILLES, REGISTERS & DIFFUSERS CAN BE SEEN ON THE ARCHITECTURAL PLANS. ALL LOCATIONS SHOWN ON THE MECHANICAL PLAN ARE TENTATIVE.

INSULATION SCHEDULE

"KNAUF" AS STANDARD OR APPROVED EQUAL

INSIDE BUILDING THERMAL ENVELOPE	FIBERGLASS FLEXIBLE BLANKET, 1.0 LB/CF R=8.0 (INSTALLED @ 25% COMPRESSION)	
SERVICE	FACING	MINIMUM THICKNESS TO MEET ASHRAE 90.1 REQUIREMENTS
SUPPLY/RETURN AIR	FSK	2"
OUTDOOR AIR	FSK	2"
EXHAUST AIR	–	NONE
OUTSIDE BUILDING THERMAL ENVELOPE	FIBERGLASS FLEXIBLE BLANKET, 1.0 LB/CF R=12.0	
SERVICE	FACING	THICKNESS TO EXCEED ASHRAE 90.1 REQUIREMENTS
SUPPLY/RETURN AIR	ASJ	4"

* FLEXIBLE ELASTOMERIC FOAM INSULATION (ARMACELL OR EQUIVALENT)

NOTES:

1. ALL EDGES SHALL BE CLEAN CUT.
2. ALL SEAMS AND BUTT JOINTS SHALL BE ADHERED AND SEALED USING ARMAFLEX 520 ADHESIVE. HORIZONTAL JOINTS SHALL BE AT BOTTOM OF DUCTS & PIPES.
3. ALL EXPOSED END CUTS SHALL BE COATED WITH ARMAFLEX 520 ADHESIVE.
4. INSULATION AT HIGH END OF PIPING RUNS SHALL BE ADHERED DIRECTLY TO THE PIPING USING A 1" STRIP OF 520 ADHESIVE ON THE I.D. OF THE INSULATION AND ON THE PIPE.
5. FOR ALL OUTDOOR EXPOSED DUCTWORK, THE HORIZONTAL SURFACE SHALL BE SLOPED TP PREVENT POUNDING ON SURFACE OF COATED INSULATION (2" MIN.).
6. THE "ARMA TUFF" PLUS SYSTEM MAY BE USED IN LIEU OF EXTERIOR DUCT INSULATION/WEATHER RESISTANT SYSTEM DESCRIBED IN SCHEDULE ABOVE.

MINIMUM DUCT INSULATION

COMMERCIAL

ALL SUPPLY AND RETURN AIR DUCTS AND PLENUMS SHALL BE INSULATED WITH A MINIMUM OF R-6 INSULATION WHEN LOCATED IN UNCONDITIONED SPACES AND WITH A MINIMUM OF R-8 INSULATION WHEN LOCATED OUTSIDE THE BUILDING ENVELOPE. WHEN LOCATED WITHIN A BUILDING ENVELOPE ASSEMBLY, THE DUCT OR PLENUM SHALL BE SEPARATED FROM THE BUILDING EXTERIOR OR UNCONDITIONED OR EXEMPT SPACES BY A MINIMUM OF R-8 INSULATION.

EXCEPTIONS:

1. WHEN LOCATED WITHIN EQUIPMENT.
2. WHEN THE DESIGN TEMPERATURE DIFFERENCE BETWEEN THE INTERIOR AND EXTERIOR OF THE DUCT OR PLENUM DOES NOT EXCEED 15°F (8°C).

ALL JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS, AND CONNECTIONS IN DUCTWORK, SHALL BE SECURELY FASTENED AND SEALED WITH WELDS, GASKETS, MASTICS (ADHESIVES), MASTIC-PLUS- EMBEDDED FABRIC SYSTEMS OR TAPES. TAPES AND MASTICS USED TO SEAL DUCTWORK SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 181A OR UL 181B. DUCT CONNECTIONS TO FLANGES OF AIR DISTRIBUTION SYSTEM EQUIPMENT SHALL BE SEALED AND MECHANICALLY FASTENED. UNLISTED DUCT TAPE IS NOT PERMITTED AS A SEALANT ON ANY METAL DUCTS.

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

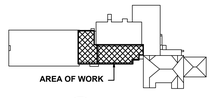
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 072004-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



KEY PLAN

FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title

HVAC: SCHEDULES

Drawing No.

H-801

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\HVAC\H-801.dwg (Layout: H-801)
Date: Tue, Dec 28, 2021 - 4:07 PM (Name: wpb)

HOOD INFORMATION – JOB#4027733

HOOD NO	TAG	MODEL	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S) WIDTH	LENG	HEIGHT	DIA	CFM	VEL	SP	TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD CONFIG END TO END	HOOD CONFIG ROW
1		5412 SND-2	9' 0"	450 DEG	I	MEDIUM	222	2000	10"	19"	4"		2000	1516	-0.665"	0	430 SS WHERE EXPOSED	ALONE	ALONE
2		286 MISC-PSP	9' 0"	300 DEG	I	N/A	0	0								1400	430 SS WHERE EXPOSED	ALONE	ALONE

HOOD INFORMATION

HOOD NO	TAG	FILTER(S) TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	LIGHT(S) QTY	TYPE	WIRE GUARD	FIRE SYSTEM PIPING	HOOD HANGING WEIGHT
1		CAPTRATE SOLO FILTER	6	20"	16"	85% SEE FILTER SPEC	4	RECESSED	NO	YES	470 LBS
2							0			NO	124 LBS

HOOD OPTIONS

HOOD NO	TAG	OPTION
1		FIELD WRAPPER 12.00" HIGH FRONT, LEFT, RIGHT.
		BACKSPLASH 68.00" HIGH X 108.00" LONG 430 SS VERTICAL.
		LEFT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 68" HIGH INSULATED 430 SS.
		RIGHT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 68" HIGH INSULATED 430 SS.

PERFORATED SUPPLY PLENUM(S)

HOOD NO	TAG	PDS	LENGTH	WIDTH	HEIGHT	RISER(S) TYPE	WIDTH	LENG	DIA	CFM	SP
2		Front	108"	28"	6"	MUA	12"	28"		700	0.160"
						MUA	12"	28"		700	0.160"

FIRE SYSTEM INFORMATION – JOB#4027733

FIRE SYSTEM NO	TAG	TYPE	SIZE	FLOW POINTS	INSTALLATION SYSTEM	INSTALLATION LOCATION ON HOOD
1		ANSUL R102	3.0	3	WALL MOUNT LEFT	N/A

ELECTRICAL PACKAGE – JOB#4027733

NO	TAG	PACKAGE #	LOCATION	SWITCHES LOCATION	SWITCHES QUANTITY	OPTION	FANS CONTROLLED FAN TAG	TYPE	÷	HP	VOLT	FLA
1		DCV-1111	WALL MOUNT IN SS BOX	08 - SHIP LOOSE W/ PREWIRE	1 LIGHT 1 FAN	SMART CONTROLS DCV	KEF-1	EXHAUST	1	1.000	208	6.9
							MAU-1	SUPPLY	1	1.000	208	6.9

VERIFY CEILING HEIGHT

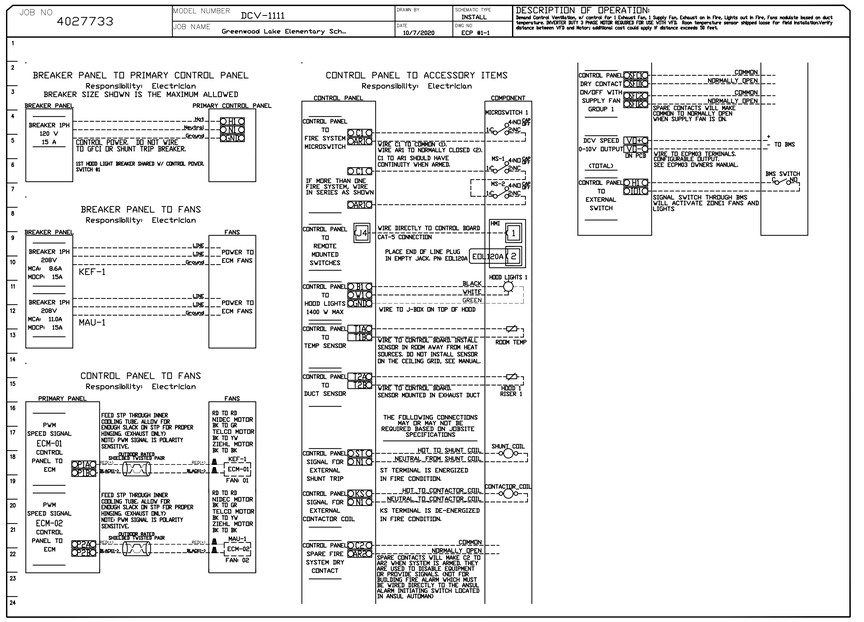
_____'_____"

Height required to verify hood fit and to size the enclosure panels (wrappers)

CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH

NFPA #96
NSF
UL 710 & ULC710 STANDARDS
E.T.L. LISTED 3054804-001

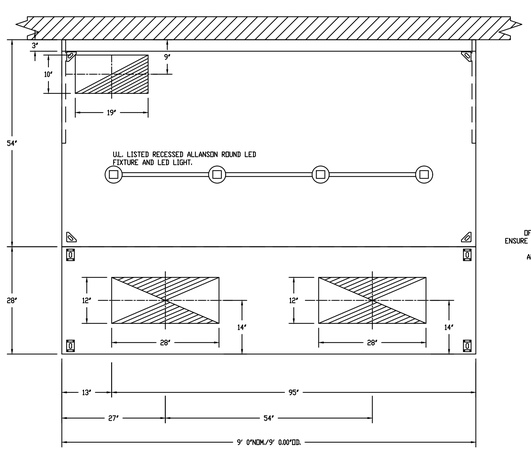
IMC 2015
SECTIONS 506, 507, & 508



SEQUENCE OF OPERATIONS:

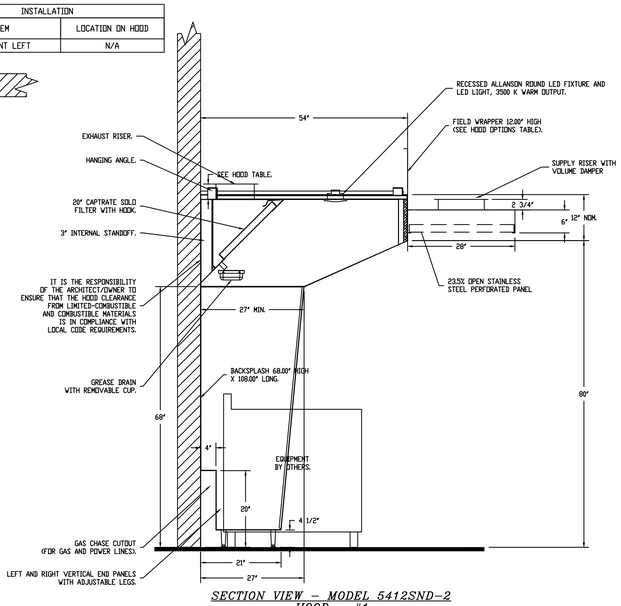
THE HOOD CONTROL PANEL IS CAPABLE OF OPERATING IN ONE OR MORE OF THE FOLLOWING STATES AT ANY GIVEN TIME:

- AUTOMATIC: THE SYSTEM OPERATES BASED ON THE DIFFERENTIAL BETWEEN ROOM TEMPERATURE AND THE TEMPERATURE AT THE HOOD CAVITY OR EXHAUST DUCT COLLAR. FANS ACTIVATE AT A CONFIGURABLE TEMPERATURE DIFFERENTIAL THRESHOLD. DEPENDING ON THE JOB CONFIGURATION EACH FAN ZONE CAN BE CONFIGURED AS STATIC OR DYNAMIC. THESE TERMS REFER TO WHETHER A VARIABLE MOTOR (SUCH AS EC MOTORS OR VFD DRIVEN MOTORS) MODULATE WITH TEMPERATURE. IF THE PANEL IS EQUIPPED WITH VARIABLE SPEED FANS AND THE ZONE IS DEFINED AS "DYNAMIC", THESE WILL MODULATE WITHIN A USER-DEFINED RANGE BASED ON THE TEMPERATURE DIFFERENTIAL. PANELS EQUIPPED WITH VARIABLE SPEED FANS AND A FAN ZONE DEFINED AS "STATIC", FANS WILL RUN AT A SET SPEED CALCULATED FOR THE DRIVE. DEMAND CONTROL VENTILATION SYSTEMS ARE CAPABLE OF MODULATING EXHAUST AND MAKE UP AIR FAN SPEEDS PER THE REQUIREMENTS OUTLINED IN IECC 403.2.8.
- MANUAL: THE SYSTEM OPERATES BASED ON HUMAN INPUT FROM AN HMI.
- SCHEDULE: A WEEKLY SCHEDULE CAN BE SET TO RUN FANS FOR A SPECIFIED PERIOD THROUGHOUT THE DAY. THERE ARE THREE OCCUPIED TIMES PER DAY TO ALLOW FOR THE USER TO SET UP A TIME THAT IS SUITABLE TO THEIR NEEDS. ANY TIME THAT IS WITHIN THE DEFINED OCCUPIED TIME, THE SYSTEM WILL RUN AT MODULATION MODE AND FOLLOW THE FAN PROCEDURE ALGORITHM BASED ON TEMPERATURE DURING THIS TIME. DURING UNOCCUPIED TIME, THE SYSTEM WILL HAVE AN EXTRA OFFSET TO PREVENT UNINTENDED ACTIVATION OF THE SYSTEM DURING A TIME WHERE THE SYSTEM IS NOT BEING OCCUPIED.
- OTHER: THE SYSTEM OPERATES BASED ON THE INPUT FROM AN EXTERNAL SOURCE (DDC, BMS OR HARD-WIRED INTERLOCK).
- FIRE: UPON ACTIVATION OF THE HOOD FIRE SUPPRESSION SYSTEM, THE EXHAUST FAN WILL COME ON OR CONTINUE TO TO RUN, THE HOOD MAKEUP AIR WILL SHUTDOWN, AND A SIGNAL WILL BE SENT FOR ACTIVATING THE SHUNT TRIP BREAKER PROVIDED BY THE ELECTRICIAN. FUEL GAS WILL SHUT OFF VIA A MECHANICAL/ELECTRICAL GAS VALVE ACTUATED BY THE HOOD FIRE SUPPRESSION SYSTEM.

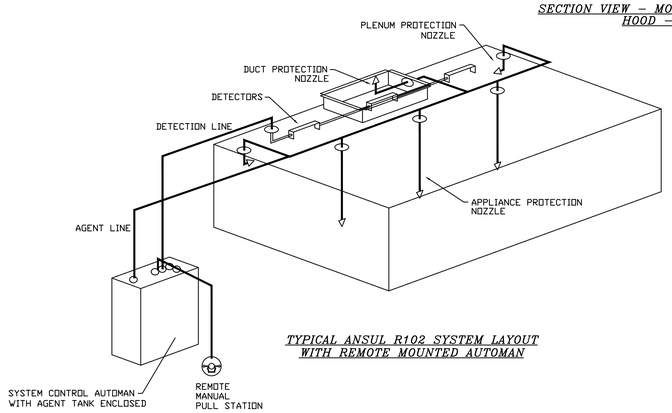


PLAN VIEW – HOOD #1
9' 0.00" LONG 5412SND-2

PLAN VIEW – HOOD #2
9' 0.00" LONG 286MISC-PSP



SECTION VIEW – MODEL 5412SND-2 HOOD – #1



TYPICAL ANSUL R102 SYSTEM LAYOUT WITH REMOTE MOUNTED AUTOMAN

SPECIFICATIONS

THE RESTAURANT FIRE SUPPRESSION SYSTEM SHALL BE THE PRE-ENGINEERED TYPE WITH A FIXED NOZZLE AGENT DISTRIBUTION NETWORK. IT SHALL BE LISTED WITH UNDERWRITERS LABORATORIES, INC. (UL)

THE SYSTEM SHALL BE CAPABLE OF AUTOMATIC DETECTION AND ACTUATION WITH LOCAL OR REMOTE MANUAL ACTUATION. ACCESSORIES SHALL BE AVAILABLE FOR MECHANICAL OR ELECTRICAL GAS LINE SHUT-OFF APPLICATIONS.

THE EXTINGUISHING AGENT SHALL BE A POTASSIUM CARBONATE, POTASSIUM ACETATE-BASED FORMULATION DESIGNED FOR FLAME KNOCKDOWN AND SECUREMENT OF GREASE RELATED FIRES. IT SHALL BE AVAILABLE IN PLASTIC CONTAINERS WITH INSTRUCTIONS FOR LIQUID AGENT HANDLING AND USAGE.

THE REGULATED RELEASE MECHANISM SHALL BE COMPATIBLE WITH A FUSIBLE LINK DETECTION SYSTEM. THE FUSIBLE LINK SHALL BE SELECTED AND INSTALLED ACCORDING TO THE OPERATING TEMPERATURE IN THE VENTILATING SYSTEM. THE FUSIBLE LINK SHALL BE SUPPORTED BY A DETECTOR BRACKET/ LINKAGE ASSEMBLY.

SPECIFICATION: CAPTRATE® GREASE-STOP® SOLO FILTER

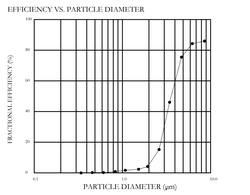
THE CAPTRATE GREASE-STOP SOLO FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-BAFFLE DESIGN IN CONJUNCTION WITH A SLOTTED REAR BAFFLE DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

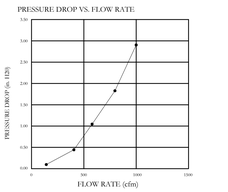
FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED.

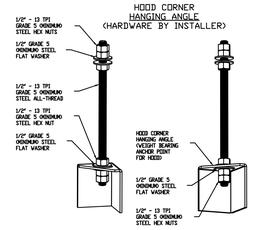
GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

THE CAPTRATE GREASE-STOP SOLO WAS TESTED TO ASTM STANDARD ASTM F2519-05.



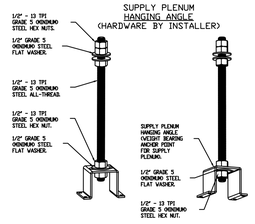


CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH.
NFPA #96
NSF STANDARD #2
UL STANDARD #1046
INT. MECH. CODE (IMC)
ULC-S649



ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.



ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR PSP HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

CAPTIVE-AIRE
N. NJ & S. NY
, Rutherford, N.J. 07070 PHONE: (201) 669-4862 FAX: (916) 747-5624 EMAIL: regs@captiveaire.com
www.captiveaire.com

Greenwood Lake Elementary School R4
80 Waterstone Rd,
GREENWOOD LAKE, NY, 10925

DATE: 3/23/21
DWG.#: 4027733
DRAWN BY: SWA
SCALE: 3/4" = 1'-0"
R4 DRAWING
SHEET NO. 1

REVISIONS

	DESCRIPTION	DATE:
1		
2		
3		
4		

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

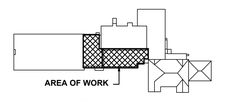
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
NY PROFESSIONAL ENGINEER
NO. 073084-1

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

½" ¼" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title
HVAC: CAPTIVE AIRE DRAWINGS

Drawing No.
H-802

File Name: F:\2019\19-194.GWLUFSD.Kitchen and Cafeteria Renovations\HVAC\H-802.dwg (Layout: H-802)
Date: Tue, Dec 28, 2021 - 4:08 PM (Name: wpb)

EXHAUST FAN INFORMATION – Job#4027733

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	ø	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS.)	SONES
1	KEF-1	DUBSHFA	2000	0.850	1383	1.000	0.4690	1	208	6.9	633 FPM	92	16.2

MUA FAN INFORMATION – Job#4027733

FAN UNIT NO.	TAG	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	DESIGN CFM	ESP.	RPM	H.P.	B.H.P.	ø	VOLT	FLA	WEIGHT (LBS.)	SONES	BURNER EFFICIENCY(%)
2	MAU-1	A1-IBT-150-15D	15MF-1-MOD	A1-IBT-150	800	1400	0.375	1455	1.000	0.5530	1	208	6.9	830	12	80

GAS FIRED MAKE-UP AIR UNIT(S)

FAN UNIT NO.	TAG	INPUT BTUs	OUTPUT BTUs	TEMP. RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE
2	MAU-1	137595	110076	66 deg F	7 in. w.c. - 14 in. w.c.	Natural

FAN OPTIONS

FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1	KEF-1	1 - Grease Box
		1 - ECM Wiring Package - PWM Signal from ECPM03 Prewire (TELCO Motor), CCW Rotation
2	MAU-1	1 - Motorized Backdraft Damper for A1-I Housing
		1 - Inlet Pressure Gauge, 0-35"
		1 - Manifold Pressure Gauge, 0 to 10" wc, 1 Furnace
		1 - Single Point Electrical Connection Single Module. If a Non-DCV Prewire is used on the IBT Heater, the #28, #47, "NS", "MA", or "E2" Option Prewire must be selected. Do not provide supply starter in prewire.
		1 - Freezestat
		1 - ECM Wiring Package - DD Supply - PWM Signal from ECPM03 Prewire (TELCO Motor)

CURB ASSEMBLIES

NO.	ON FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	KEF-1	36 LBS	Curb	23.000"W x 23.000"L x 20.000"H Vented Hinged
2	# 2	MAU-1	85 LBS	Curb	21.000"W x 71.000"L x 20.000"H Insulated
	# 2			Rail	6.000"W x 21.000"L x 20.000"H

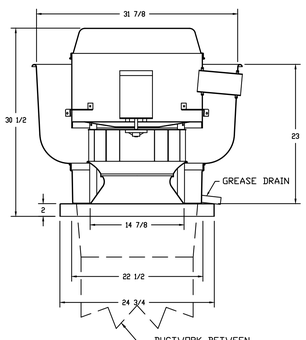
FAN #2 A1-IBT-150-15D - HEATER (MAU-1)
1. INDIRECT BENT TUBE GAS FIRED HEATER WITH 15" DIRECT DRIVE FAN, 1 FURNACE, ELECTRONIC FULL MODULATION, CONSTANT 80% EFFICIENCY, AND 6:1 MAX TURNDOWN FOR NG, (5:1 MAX TURNDOWN FOR LP). STAINLESS STEEL BURNER AND HEAT EXCHANGER.
2. INTAKE HOOD WITH EZ FILTERS.
3. SIDE DISCHARGE - AIR FLOW RIGHT -> LEFT.
4. MOTORIZED BACK DRAFT DAMPER 16" X 18" FOR SIZE 1 STANDARD & MODULAR HEATER UNITS W/EXTENDED SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4" REAR FLANGE, LOW LEAKAGE, TF1820S ACTUATOR INCLUDED.
5. GAS PRESSURE GAUGE, 0-25", 2.5" DIAMETER, 1/4" THREAD SIZE.
6. GAS PRESSURE GAUGE, 0 TO +10 INCHES WC., 2.5" DIAMETER, 1/8" THREAD SIZE, REAR THREAD.
7. SINGLE POINT ELECTRICAL CONNECTION FOR ALL IBT HEATERS WITH 1 MODULE. QNTY 1 750VA TRANSFORMER USED. IF A NON-DCV PREWIRE IS USED ON THE IBT HEATER, THE #28, #47, "MA", OR "E2" OPTION PREWIRE MUST BE SELECTED. DO NOT PROVIDE SUPPLY STARTER IN PREWIRE.
8. FREEZESTAT FACTORY SET AT 25°F AND 10 MINUTES.
9. USED WITH SIZE 1 AND SIZE 2 SIDE DISCHARGE IBT MODULES.
10. HINGED DOUBLE WALL INSULATED DOOR ASSEMBLY (BURNER/BLOWER SECTION).
IBT - US PATENT 877119 B2.

*NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE AS OUTLINED IN AMCA PUBLICATION 201. WHEN USING RECTANGULAR DUCTWORK, ELBOWS MUST BE RADIUS THROAT, RADIUS BACK WITH TURNING VANES. FLEXIBLE DUCTWORK AND SQUARE THROAT/SQUARE BACK ELBOWS SHOULD NOT BE USED. ANY TRANSITION AND/OR TURNS IN THE DUCTWORK WILL CAUSE SYSTEM EFFECT. SYSTEM EFFECT WILL DRASTICALLY INCREASE STATIC PRESSURE AND REDUCE AIRFLOW. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY. FAILURE TO PROPERLY SIZE DUCTWORK MAY CAUSE SYSTEM EFFECTS AND REDUCE PERFORMANCE OF THE EQUIPMENT. SUGGESTED STRAIGHT DUCT SIZE IS 20" x 20".

SUPPLY SIDE HEATER INFORMATION

WINTER TEMPERATURE = 9°F. TEMP. RISE = 66°F.
BTUs CALCULATED OFF ACTUAL AIR DENSITY
OUTPUT BTUs AT ALTITUDE OF 0.0 FT. = 112616.
INPUT BTUs AT ALTITUDE OF 0.0 FT. = 140770.
OUTPUT BTUs AT ALTITUDE OF 630 FT. = 110076.
INPUT BTUs AT ALTITUDE OF 630 FT. = 137595.

FAN #1 DUBSHFA - EXHAUST FAN (KEF-1)



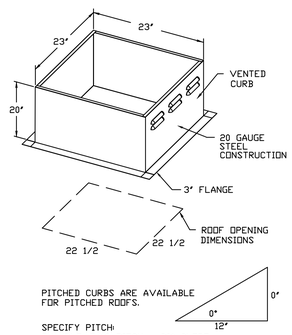
FEATURES:

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS)
- ROOF MOUNTED FANS
- RESTAURANT MODEL
- UL705 AND UL762 AND ULC-S645
- VARIABLE SPEED CONTROL
- INTERNAL WIRING
- WEATHERPROOF DISCONNECT
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE)
- HIGH HEAT OPERATION 300°F (149°C)
- GREASE CLASSIFICATION TESTING

NORMAL TEMPERATURE TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

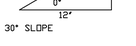
ABNORMAL FLARE-UP TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

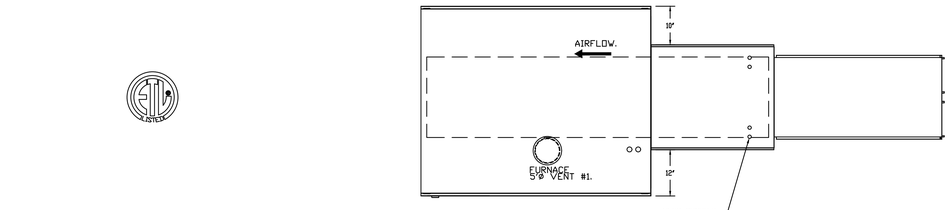
OPTIONS
GREASE BOX.
ECM WIRING PACKAGE - PWM SIGNAL FROM ECPM03 PREWIRE (TELCO MOTOR), CCW ROTATION.

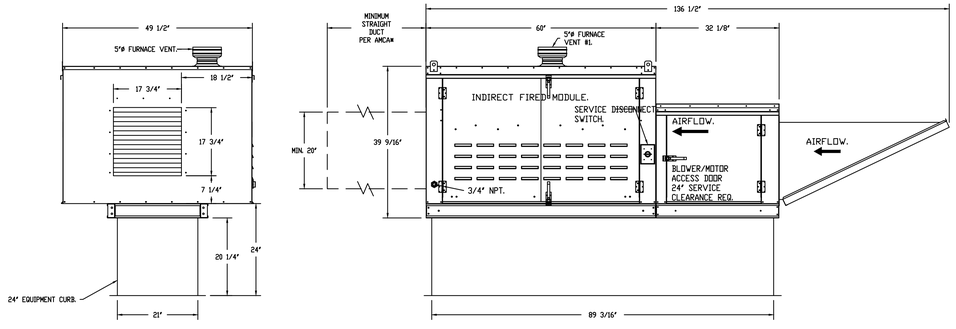


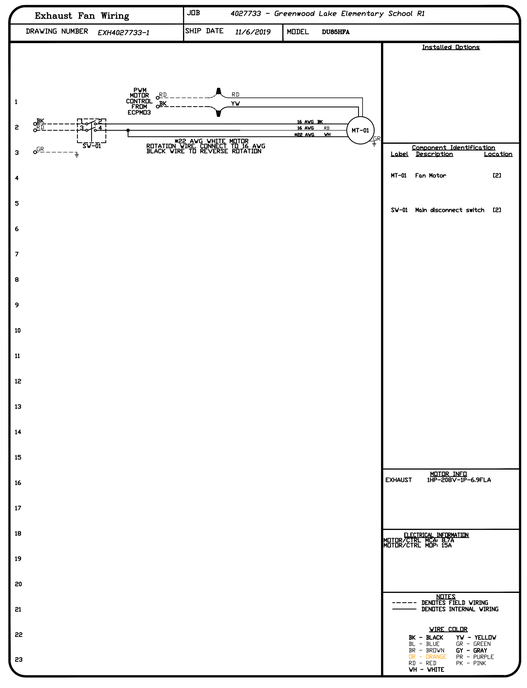
PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.

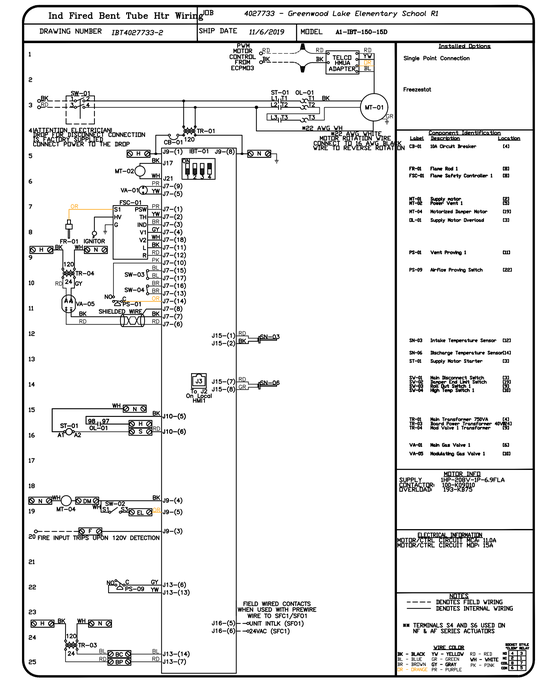
SPECIFY PITCH:
EXAMPLE: 7/12 PITCH = 30° SLOPE











CAPTIVE AIRE
N. NJ & S. NY
Rutherford, NJ. 07070 PHONE: (201) 867-4982 FAX: (919) 747-5624 EMAIL: mgb@captiveaire.com
www.captiveaire.com

REVISIONS		
	DESCRIPTION	DATE
1		
2		
3		
4		

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

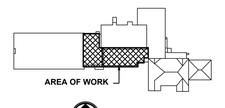
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 073084-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title
HVAC:
CAPTIVE AIRE DRAWINGS

Drawing No.
H-803

Greenwood Lake Elementary School R4
80 Waterstone Rd.,
GREENWOOD LAKE, NY, 10925

DATE: 3/23/21
DWG.#: 4027733
DRAWN BY: SWA
SCALE: 3/4" = 1'-0"
R4 DRAWING
SHEET NO. 2

File Name: F:\2019\19-194.GWLUFSD.Kitchen and Cafeteria Renovations\HVAC\H-803.dwg (Layout: H-803)
Date: Tue, Dec 28, 2021 - 4:08 PM (Name: wpb)

GENERAL NOTES:

1. THE DRAWINGS ON THESE PLANS ARE DIAGRAMMATIC. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH OTHER TRADES AND THE BUILDING STRUCTURE. NO EXTRA PAYMENTS WILL BE AUTHORIZED FOR REROUTING OR REMOVAL OF INSTALLED WORK DUE TO LACK OF COORDINATION WITH OTHER SYSTEMS.
2. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING OF WALLS, FLOORS AND CEILINGS AS REQUIRED FOR INSTALLATION OF HIS WORK.
3. THIS CONTRACTOR SHALL FURNISH AND INSTALL ACCESS PANELS AS REQUIRED WHERE ACCESSIBILITY TO COMPONENTS (VALVES, TRAPS, CLEANOUTS, ETC.) IS REQUIRED FOR MAINTENANCE AND/OR SYSTEM OPERATION.
4. ALL PENETRATIONS THROUGH FIRE RATED PARTITIONS SHALL BE SEALED FIRE AND SMOKE TIGHT WITH AN APPROPRIATE U.L. LISTED FIRESTOPPING MATERIAL AND OR SYSTEM.
5. ALL PENETRATIONS THROUGH FOUNDATIONS AND EXTERIOR WALLS SHALL BE SEALED WITH EDPM OR EDPM RUBBER GASKET AND SEALED WITH A WATERPROOF, NON-HARDENING SEALANT.
6. FURNISH AND INSTALL UNDER SINK PROTECTIVE PIPE COVER KITS ON EXPOSED PIPING AT ALL ADA ACCESSIBLE SINKS AND LAVATORIES.
7. COORDINATE FIXTURE ROUGH-INS AND INSTALLATIONS WITH THE ARCHITECTURAL PLANS.
8. ALL EXPOSED DOMESTIC WATER DISTRIBUTION PIPING IS TO BE INSULATED.
9. PROVIDE SHUT-OFF VALVES AT ALL BRANCH PIPING TAKE-OFFS (UNO) AND AT ALL CONNECTIONS TO EQUIPMENT. PROVIDE UNIONS AT ALL EQUIPMENT CONNECTIONS.
10. PROVIDE DRAINS WITH HOSE ADAPTERS AND CAPS ON PIPING AT ALL LOW POINTS. PROVIDE MANUAL VENTS ON PIPING AT ALL HIGH POINTS.
11. COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH ELECTRICAL CONTRACTOR.
12. ALL REQUIRED MOTOR STARTERS SHALL BE FURNISHED BY THIS CONTRACTOR AND INSTALLED BY THE E.C.
13. ALL REQUIRED CONTROL EQUIPMENT AND WIRING SHALL BE FURNISHED & INSTALLED BY THIS CONTRACTOR.
14. WHERE INSTALLATION OR REMOVAL OF BELOW-SLAB PIPING IS INDICATED IN EXISTING CONCRETE SLAB, THIS CONTRACTOR SHALL SAW-CUT AND EXCAVATE THE EXISTING SLAB AS REQUIRED. UPON COMPLETION OF WORK, THIS CONTRACTOR SHALL PATCH THE CONCRETE SLAB. FLOOR FINISH WORK BY G.C.
15. THE TERMS "PROVIDE" OR "FURNISH", AS USED ON THESE PLANS, INDICATE THAT THE CONTRACTOR IS TO FURNISH AND INSTALL THE REFERENCED EQUIPMENT OR SYSTEMS IN THEIR ENTIRETY AS REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM.
16. CONTRACTOR SHALL PROVIDE ALL COMPONENTS INDICATED ON DETAIL SHEETS, PLANS, SPECIFICATIONS AND ALL PERTINENT EQUIPMENT REQUIRED FOR A COMPLETE AND WORKABLE SYSTEM.
17. CONTRACT CLOSE OUT: IN THE PRESENCE OF THE OWNER, ENGINEER OR ARCHITECT; DEMONSTRATING OPERATION OF SYSTEMS AND THAT ALL SPECIFICATIONS HAVE BEEN MET TO THE SATISFACTION OF ALL PARTIES.
18. IT IS THE INTENTION THAT THESE SPECIFICATIONS, AND DRAWINGS ACCOMPANYING SAME, SHALL PROVIDE FOR THE FURNISHING AND INSTALLING OF THE () SYSTEMS COMPLETE AS SPECIFIED AND SHOWN. ANY WORK SHOWN ON THE DRAWINGS AND NOT PARTICULARLY DESCRIBED IN THE SPECIFICATIONS OR VICE VERSA, OR ANY WORK CHANGES WHICH MAY BE EVIDENTLY NECESSARY TO COMPLETE THE INSTALLATION SHALL BE FURNISHED BY THIS CONTRACTOR.
19. IT IS THE INTENT AND PURPOSE OF THESE SPECIFICATIONS AND DRAWINGS TO INCLUDE AND PROVIDE FOR ALL MATERIALS, APPLIANCES AND LABOR TO PROPERLY COMPLETE AND LEAVE IN PERFECT WORKING CONDITION THE ENTIRE SYSTEM HEREINAFTER SPECIFIED. ANY MATERIAL, LABOR OR APPLIANCE NOT SPECIFICALLY MENTIONED IN THESE SPECIFICATIONS OR SHOWN ON THE DRAWINGS, BUT NECESSARY FOR A COMPLETE INSTALLATION MUST BE FURNISHED BY THIS CONTRACTOR.
20. IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS TO PROVIDE ALTERATIONS AND/OR NEW CONSTRUCTION AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS TO PROVIDE COMPLETE NEW SYSTEMS IN EVERY RESPECT, CAPABLE OF OPERATING AS DESIGNED. IT IS NOT INTENDED THAT EVERY FITTING, MINOR DETAIL OR FEATURE BE SHOWN ON DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DETAIL NECESSARY FOR COMPLETION OF THESE SYSTEMS IN ACCORDANCE WITH GOOD PRACTICE.

PLUMBING DEMOLITION NOTES:

1. COORDINATE WITH ARCHITECTURAL PLANS FOR EXACT AREAS TO BE DEMOLISHED.
2. REMOVE ALL EQUIPMENT AND PIPING AS INDICATED ON PLAN. REMOVALS SHALL INCLUDE ALL FITTINGS, SUPPORTS AND HANGERS.
3. ANY DISCREPANCIES BETWEEN THE DEMOLITION PLANS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER. ANY DEMOLITION WORK WHICH MAY BE QUESTIONABLE DUE TO UNFORESEEN FIELD CONDITIONS SHALL NOT BE REMOVED UNTIL REVIEWED BY THE ARCHITECT, ENGINEER OR BUILDING FACILITIES MANAGER.
4. DEMOLITION WORK SHALL INCLUDE THE PREPARATION OF EXISTING EQUIPMENT OR PIPING FOR CONNECTION TO NEW WORK. COORDINATE DEMOLITION WORK WITH THE CONSTRUCTION PLANS.
5. ALL EQUIPMENT REMOVALS SHALL BECOME THE PROPERTY OF THIS CONTRACTOR. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER REMOVAL AND DISPOSAL OF DEMOLITION ITEMS OFF-SITE, UNLESS OTHERWISE NOTED.
6. ALL CUTTING AND PATCHING NECESSARY FOR THE DEMOLITION WORK SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR.
7. IT SHALL BE THE OWNER'S RESPONSIBILITY TO REMOVE ANY LOOSE EQUIPMENT, FURNITURE, SUPPLIES, ETC. THAT MAY BE LOCATED IN THE AREA OF WORK.
8. THE PLANS ARE INTENDED TO CONVEY THE EXTENT AND SCOPE OF THE DEMOLITION WORK. EVERY ITEM INTENDED FOR REMOVAL MAY NOT BE SHOWN. THE CONTRACTOR IS ADVISED TO SURVEY THE PROJECT SITE BEFORE SUBMITTING A BID FOR DEMOLITION WORK.

GENERAL PLUMBING NOTES:

1. KITCHEN FIXTURES ONLY SHALL BE SERVED WITH (140°F) HOT WATER. (120°F) HOT WATER WILL SERVE HAND WASHING FIXTURES IN KITCHEN.
2. ALL OTHER AREAS SHALL BE SERVED WITH (110°F) HOT WATER. MAXIMUM OUTLET TEMPERATURE FOR ANY FIXTURE (EXCEPT THOSE IN KITCHEN) SHALL BE SET @ 100°F.
3. DRAIN PIPING SHOWN ON PLANS SHALL BE INSTALLED BELOW THE FLOOR SHOWN (BELOW SLAB OR ABOVE CEILING OF LOWER FLOOR AS APPROPRIATE) UNLESS OTHERWISE NOTED.
4. ALL PLUMBING SUPPLY & VENT PIPING SHOWN SHALL BE INSTALLED IN THE CEILING OF THE FLOOR PLAN SHOWN, UNLESS OTHERWISE NOTED.
5. PLUMBING CONTRACTOR IS RESPONSIBLE FOR OWN CUTTING & PATCHING AS REQUIRED. FINISHING SHALL BE BY GENERAL CONTRACTOR.
6. INSTALL SECTIONALIZING VALVES AT ALL MAIN 'T' ON DOMESTIC HOT & COLD WATER SERVICE.
7. VENT PIPING UNDER SLABS SHALL BE A MINIMUM OF 2".
8. WASTE PIPING UNDER SLABS SHALL BE A MINIMUM OF 3".
9. ALL PLUMBING FIXTURES AND TRIM SHALL BE IN ACCORDANCE WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES, AS WELL AS ALL ADA AND ANSI-A-117.1 REQUIREMENTS.
10. INSTALL CONDENSATION CONTROL INSULATION: MINIMUM 1"-INCH THICK FOR ALL PIPE SIZES.
    A. COOLING COIL CONDENSATION PIPING TO WASTE PIPING FIXTURE OR INLET. (COORDINATE W/ MECHANICAL CONTRACTOR).
    B. PLUMBING PIPING AS FOLLOWS:
        a. BODY OF ROOF DRAINS AND STORM PIPE OF HORIZONTAL & VERTICAL RUNS, & OFFSETS (INCLUDING ELBOWS) OF INTERIOR DOWN SPOUT PIPING IN ALL AREAS.
        b. WASTE PIPING FROM ELECTRIC WATER COOLERS TO DRAINAGE SYSTEM.
        c. WASTE PIPING LOCATED ABOVE BASEMENT FLOOR FROM AIR HANDLING UNITS, FROM FIXTURE (INCLUDING TRAP) TO MAIN VERTICAL WASTE PIPE. (COORDINATE W/ MECHANICAL CONTRACTOR).
        d. COLD WATER PIPING.
11. HOT & HOT WATER RETURN PIPING SHALL BE INSULATED PER WRITTEN SPECIFICATIONS AND NYS ENERGY CONSERVATION CONSTRUCTION CODE.
12. PLUMBING CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ROOF DRAINS AND FOR ADDITIONAL ROOF DRAIN WORK NOT SHOWN ON PLUMBING DRAWING.
13. UNLESS OTHERWISE NOTED, ALL VALVES 2"ø & SMALLER SHALL BE QUARTER-TURN BALL VALVES AND ALL VALVES 2½" & LARGER SHALL BE GATE VALVES. ALL VALVES SHALL BE OF FULL-PORT DESIGN.
14. PLUMBING CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED & PAY ALL FEES.
15. ALL PENETRATIONS THROUGH FIRE RATED PARTITIONS SHALL BE SEALED FIRE AND SMOKE TIGHT WITH AN APPROPRIATE U.L. LISTED FIRESTOPPING MATERIAL AND OR SYSTEM.

KITCHEN PLUMBING NOTES:

1. EQUIPMENT SUPPLIED BY A VENDOR OTHER THAN THE KITCHEN EQUIPMENT CONTRACTOR SHALL HAVE ALL PLUMBING, ELECTRICAL, AND HVAC MECHANICAL CONNECTIONS VERIFIED PRIOR TO CONSTRUCTION.
2. ALL ROUGH-INS MUST BE MADE IN ACCORDANCE WITH ALL APPLICABLE STATE & LOCAL CODES.
3. REFER TO EQUIPMENT SPECIFICATIONS BOOKLET FOR ADDITIONAL INFORMATION ON SUPPLIED KITCHEN EQUIPMENT.
4. ALL ROUGH-INS AND FINAL CONNECTIONS TO BE FURNISHED AND INSTALLED BY PLUMBING CONTRACTOR.
5. GAS MAIN TO KITCHEN AREA REQUIRES A ELECTRIC-ACTUATED GAS SHUT OFF SOLENOID VALVE TO BE SUPPLIED & INSTALLED BY THE PLUMBING CONTRACTOR UNLESS OTHERWISE NOTED.
6. KITCHEN EQUIPMENT CONTRACTOR TO FURNISH GAS COOKING EQUIPMENT WITH PRESSURE REGULATORS & ALL OTHER APPURTENANCES REQUIRED PER MANUFACTURERS SPECIFICATIONS AND LOCAL CODES.
7. ALL INDIRECT DRAINS LINES ARE TO BE PIPED TO FLOOR DRAINS BY PLUMBING CONTRACTOR AND AIR GAPPED AS PER CODE.
8. PLUMBING CONTRACTOR TO FURNISH AND INSTALL HOT AND COLD WATER LINE CHECK VALVES AT ALL SPRAY SYSTEM UNIT MIXING VALVES.
9. KITCHEN EQUIPMENT TO BE PROVIDED & SET IN PLACE BY KITCHEN CONTRACTOR. ALL ROUGH-INS FINAL CONNECTIONS BY PLUMBING CONTRACTOR. COORDINATE WITH KITCHEN CONTRACTOR FOR EXACT LOCATIONS.
10. ALL FAUCETS FOR FOOD SERVICE EQUIPMENT FURNISHED BY KITCHEN EQUIPMENT CONTRACTOR TO BE INSTALLED BY THE PLUMBING CONTRACTOR.
11. SEE DWG'S A-401 & A-401-2 FOR ENLARGED KITCHEN LAYOUT PLANS, DETAILS, NOTES & MORE INFORMATION.
12. ALL APPURTENANCES AND SPECIALTIES REQUIRED FOR KITCHEN EQUIPMENT (GAS PRESSURE REGULATORS, WATER PRESSURE REDUCING VALVES, ETC.) TO BE FURNISHED BY KITCHEN EQUIPMENT CONTRACTOR AND INSTALLED BY PLUMBING CONTRACTOR.

GAS PIPING NOTES:

1. PLACEMENT OF GAS TRANSMISSION AND DISTRIBUTION LINES WITHIN CERTAIN DISTANCES OF SCHOOL BUILDINGS IS REGULATED BY THE PUBLIC SERVICE COMMISSION CODES, RULES & REGULATIONS NYCRR PART 255 AND BY THE FEDERAL DEPARTMENT OF TRANSPORTATION, PART 192.
2. GAS PRESSURE WITHIN BUILDING SHALL NOT EXCEED 1/2 PSIG. PRIOR TO CONNECTION TO GAS SERVICE. ALL INDOOR ABOVE GROUND GAS PIPING (NOT COATED OR WRAPPED) SHALL BE TESTED WITH AIR PRESSURE AT 15 PSIG FOR A PERIOD OF 1 HOUR WITH NO LOSS IN PRESSURE. ALL COATED OR WRAPPED GAS PIPING SHALL BE TESTED W/AIR PRESSURE AT 100 PSIG FOR A MINIMUM OF 1 HOUR WITH NO LOSS IN PRESSURE.
3. COORDINATE INSTALLATION AND FINAL CONNECTION OF GAS LINES WITH KITCHEN CONTRACTOR & G.C.
4. ALL GAS PIPING SHALL BE IN ACCORDANCE WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES, AS WELL AS NFPA-54.
5. RELIEF VALVES AND NORMALLY OPEN VENT VALVES SHALL BE VENTED DIRECTLY AND INDEPENDENTLY TO THE OUTDOORS.
6. PRESSURE REGULATING & OVER PRESSURE PROTECTION DEVICES LOCATED OUTSIDE SCHOOL BUILDINGS SHALL ENCLOSED IN A CABINET OR FENCED OUTSIDE AREA OF DURABLE STRUCTURAL MATERIALS WHICH WILL WITHSTAND ANY LOADS TO WHICH THEY MAY BE SUBJECTED.
7. ALL GAS PIPING 3"ø & LARGER SHALL HAVE WELDED FITTINGS & CONNECTIONS. ALL GAS PIPING 2½" & SMALLER SHALL HAVE GAS-TIGHT THREADED CONNECTIONS w/ THREAD SEALANT APPROVED FOR NATURAL GAS SERVICE.
8. ALL GAS PIPING PASSING THROUGH MASONRY WALLS SHALL BE SLEEVED w/ SCH. 80 PVC.
9. COORDINATE INSTALLATION OF GAS PIPING w/ALL OTHER TRADES PRIOR TO INSTALLATION.

MINIMUM PIPE INSULATION - COMMERCIAL

(THICKNESS IN INCHES) (a,b)

FLUID OPERATING TEMPERATURE RANGE AND USAGE, °F	NOMINAL PIPE OR TUBE SIZES				
	< 1"	1" to <1½"	1 ½" to <4"	4" to <8"	8" and larger
ABOVE 350	4½	5	5	5	5
251-350	3	4	4½	4½	4½
201-250	2½	2½	2½	3	3
141-200	1½	1½	2	2	2
105-140	1	1	1½	1½	1½
40-60	½	½	1	1	1
BELOW 40	½	1	1	1	1½

a. FOR PIPING SMALLER THAN 1½" AND LOCATED IN PARTITIONS WITHIN CONDITIONED SPACES, REDUCTION OF THESE THICKNESSES BY 1 INCH SHALL BE PERMITTED BUT NOT TO A THICKNESS LESS THAN 1".

b. FOR DIRECT-BURIED HEATING AND HOT WATER SYSTEM PIPING, REDUCTION OF THESE THICKNESSES BY 1½" SHALL BE PERMITTED BUT NOT TO THICKNESSES LESS THAN 1".

PIPING SYMBOLS

- DIRECTION OF FLOW
- ANCHOR
- PIPE GUIDE
- REDUCER OR INCREASER
- ECCENTRIC REDUCER
- TOP CONNECTION, 45° OR 90°
- BOTTOM CONNECTION, 45° OR 90°
- SIDE CONNECTION
- CAPPED OUTLET
- PIPE DOWN TURN
- PIPE RISE
- UNION
- DIRECTION OF PIPE PITCH (DOWN)

PLUMBING LINE TYPES

- EXISTING TO BE REMOVED
- EXISTING TO REMAIN
- COLD WATER SUPPLY
- G — NATURAL GAS
- HOT WATER RETURN
- HOT WATER SUPPLY
- IW — INDIRECT WASTE
- SAN — SANITARY LINE
- ST — STORM LINE
- VENT PIPE

GENERAL SYMBOLS

- POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK
- POINT OF DISCONNECT
- X / XX — INDICATES SECTION LETTER / INDICATES DRAWING NUMBER WHERE LOCATED
- PUMP

VALVE SYMBOLS

- GATE VALVE - THREADED/FLANGED
- GATE VALVE WITH 3/4" HOSE ADAPTER
- GLOBE VALVE - THREADED/FLANGED
- CHECK VALVE
- STRAINER
- WYE STRAINER (WITH BALL VALVE & HOSE CONNECTION)
- STRAINER WITH VALVED DRAIN AND QUICK-COUPLE HOSE CONNECTOR
- FLEXIBLE CONNECTION
- ANGLE GLOBE VALVE
- BUTTERFLY VALVE
- BALL VALVE
- CONTROL VALVE (CV) - FLOAT-OPERATED
- MODULATING CONTROL VALVE
- MODULATING CONTROL BUTTERFLY VALVE
- TWO POSITION CONTROL VALVE
- THREE-WAY MODULATING CONTROL VALVE
- THREE-WAY TWO POSITION CONTROL VALVE
- PRESSURE REGULATING VALVE
- PRESSURE REDUCING VALVE (PRV)
- TEMPERATURE & PRESSURE RELIEF VALVE
- SAFETY OR PRESSURE RELIEF VALVE
- AUTOMATIC BALANCING CONTROL VALVE
- WATER BALANCE DEVICE
- WATER FLOW MEASURING DEVICE
- CIRCUIT SETTER VALVE
- GATE VALVE WITH GLOBE-VALVED BYPASS
- TRIPLE DUTY VALVE
- LC — WATER LEVEL CONTROLLER
- M — FLOW METER
- COMBINATION BALANCING AND SHUT-OFF VALVE
- MANUAL AIR VENT
- TEST PLUG (PRESSURE/TEMPERATURE)
- PLUG VALVE
- LUBRICATED PLUG VALVE

ABBREVIATIONS

A	MEDICAL AIR
ACT	ACOUSTIC CEILING TILE
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
AW	ACID WASTE PIPE
BTUH	BRITISH THERMAL UNITS/HOUR
CLG	CEILING
CO	CLEAN OUT
CP	CONDENSATE PUMP
CW	DOMESTIC COLD WATER
DIA	DIAMETER
D	DRAIN
DN	DOWN
DP	DIFFERENTIAL PRESSURE
E.C.	ELECTRICAL CONTRACTOR
ECC	ENGINEERING CONTROL CENTER
EMD	END OF MAIN DRIP (STEAM)
ET	EXPANSION TANK
EUH	ELECTRIC UNIT HEATER
EXIST	EXISTING
FC	FLEXIBLE CONNECTION
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FLR.	FLOOR
FPC	FIRE PROTECTION CONTRACTOR
G.C.	GENERAL CONTRACTOR
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
G.SAN	"GREASE LADEN" SANITARY DRAINAGE PIPE
H.C.	HVAC CONTRACTOR
HP	HORSE POWER
HTWR	HIGH TEMP. HOT WATER RETURN PIPE (140°F)
HTWS	HIGH TEMP. HOT WATER PIPE (140°F)
HW	DOMESTIC HOT WATER PIPE (120°F)
HWR	DOMESTIC HOT WATER RETURN PIPE (120°F)
IW	INDIRECT WASTE
LBS/HR	POUNDS PER HOUR
LF	LINEAR FEET
MAX.	MAXIMUM
MBH	ONE THOUSAND BTUH
MER	MECHANICAL EQUIPMENT ROOM
MIN.	MINIMUM
MV	MEDICAL VACUUM
NOM.	NOMINAL
O	OXYGEN
P	PUMP
P.C.	PLUMBING CONTRACTOR
PD	PRESSURE DROP (FEET OF WATER)
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE IN.
SAN	SANITARY DRAINAGE PIPE
S.S.	STAINLESS STEEL
ST	STORM DRAINAGE PIPE
UH	UNIT HEATER
U.N.O.	UNLESS NOTED OTHERWISE
V	VENT PIPE
VI	VIBRATION ISOLATOR
VIF	VERIFY IN FIELD
VTR	VENT THROUGH ROOF
WCO	WALL CLEAN OUT
WF	WATER FILTER
WFM	WATER FLOW MEASURING DEVICE
WH	WATER HEATER

LEGEND AND SCHEDULE OF PLUMBING EQUIPMENT

SYMBOL	MANUFACTURER	CATALOG #	DESCRIPTION
WC-1	AMERICAN STANDARD	2292.100	"CADET" ELONGATED 1.6 GPF PRESSURE ASSISTED TOILET: VITREOUS CHINA, ELONGATED SIPHON ACTION 14" HIGH BOWL, CLOSE COUPLED TANK, 2 BOLT CAPS, "SPEED CONNECT" TANK/BOWL COUPLING SYSTEM, FLUSHES ON 1.6 GALS. ADA COMPLIANT FOR ELEMENTARY STUDENTS. COLOR WHITE, SUPPLY W/ #5311.012 SEAT WITH COVER. COLOR TO MATCH TOILET. ADA COMPLIANT.
LV-1	AMERICAN STANDARD	0355.012	"LUCERNE" WALL HUNG LAV: VITREOUS CHINA, FRONT OVERFLOW, FAUCET HOLES ON 4 CENTERS. SUPPLY WITH SYMMONS "SCOT" LAVATORY FAUCET (MODEL #S-60-GH) GRID DRAIN, TAILPIECE, SUPPLY STOPS AND FITTINGS. COLOR WHITE.
MS-1	FIAT	MSB2424	MOLDED STONE MOP SINK BASIN. 24"x24" C/W GRID STRAINER, 2" OUTLET. SUPPLY WITH MODEL #A880 WALL SERVICE FAUCET AND ALL NECESSARY HARDWARE FOR A COMPLETE INSTALLATION.
WF-1	ELKAY	ENLZS8WS	LZ SERIES WATER FOUNTAIN.
GI-1	ZURN	Z1170	GREASE INTERCEPTOR. SIZE 800 W/ 3" INLET/OUTLET. 100 LBS. GREASE CAPACITY.
FS	ZURN	Z1750	12"X12"X6" DEEP, 16 GAUGE, STAINLESS STEEL LIGHT-DUTY SANI-FLOR RECEPTOR WITH NON-TILT, LOOSE SET FULL GRATE WITH ½" SQUARE OPENINGS AND ANTI-SPLASH STAINLESS STEEL INTERIOR DOME STRAINER.
FD	ZURN	Z-415-V	FLOOR DRAIN: DURA-COATED CAST IRON BODY WITH BOTTOM OUTLET, COMBINATION INVERTIBLE MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH TYPE "H" POLISHED, NICKEL BRONZE STRAINER WITH FLASHING CLAMP DEVICE, 3" OUTLET. BACKWATER VALVE.
FCO	ZURN	ZN-1400	"LEVEL-TROL" ADJUSTABLE FLOOR CLEANOUT: DURA-COATED CAST IRON BODY, GAS AND WATERTIGHT ABS TAPERED THREAD PLUG, ROUND SCORIATED POLISHED NICKEL BRONZE TOP ADJUSTABLE TO FINISHED FLOOR. SIZE TO MATCH PIPE.
WCO	ZURN	Z-1446	WALL CLEANOUT: DURA-COATED CAST IRON BODY, GAS AND WATERTIGHT ABS TAPERED THREAD PLUG, ROUND SMOOTH STAINLESS STEEL WALL ACCESS COVER WITH SECURING SCREW. SIZE TO MATCH PIPE.

SIMPLEX SEWAGE EJECTOR PUMP SCHEDULE

TAG	MANUFACTURER	MODEL NO.	DISCHARGE SIZE	TOTAL DYNAMIC HEAD	FLOWRATE	MOTOR HP	PUMP HOUSING	MODE	WEIGHT	ELECTRICAL DATA: VOLTAGE/PHASE/FREQ	ELECTRICAL DATA: AMPERAGE	REMARKS
SE-1	ZOELLER PUMP COMPANY	BN264	2" NPT	12'	40 GPM	4/10	CAST IRON	AUTOMATIC	40 LBS.	115/1/60	9.4	---
SE-2	ZOELLER PUMP COMPANY	BN267	3" NPT	13'	60 GPM	1/2	CAST IRON	AUTOMATIC	47.5 LBS.	115/1/60	10.4	---

SIMPLEX SEWAGE EJECTOR BASIN SCHEDULE

TAG	MANUFACTURER	MODEL NO.	DISCHARGE SIZE	VENT DISCHARGE	BASIN SIZE	BASIN MATERIAL	BASIN CAPACITY	COVER STYLE	INLET SIZE	INLET TYPE	REMARKS
SB-1	ZOELLER PUMP COMPANY	31-0027	2"	3"	24" x 30"	FIBERGLASS	60 GALLONS	STEEL	4"	CAST IRON	---
SB-2	ZOELLER PUMP COMPANY	31-1103	3"	3"	24" x 36"	POLY STRUCTURAL FOAM	72 GALLONS	SOLID FIBERGLASS	4"	COMBO HUB	---

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

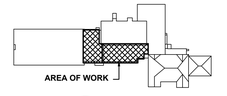
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by: SBL
Checked by: EDF
Project No.: FE# 19-194
Scale: AS NOTED
Date: 1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 072004-1

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



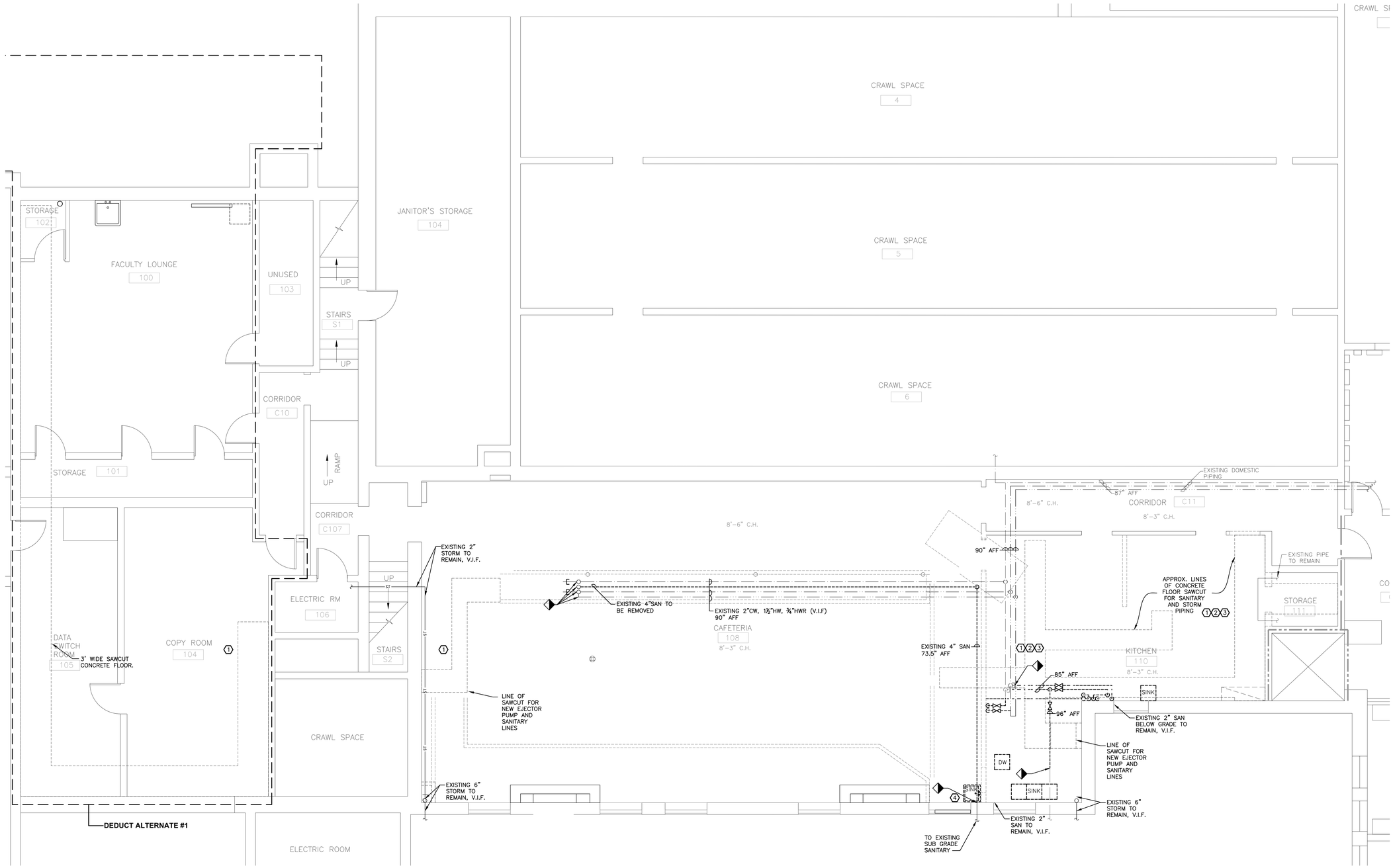
FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title
PLUMBING: SYMBOLS, NOTES, AND ABBREVIATIONS

Drawing No.
P-001

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\PLUMB\P-001.dwg (Layout: P-001)
Date: Tue, Dec 28, 2021 - 4:08 PM (Name: wpb)



1 PARTIAL BASEMENT PLAN - EXISTING PIPING

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

KEYED NOTES:

1. PLUMBING CONTRACTOR SAWCUT THE EXISTING CONCRETE FLOOR AS REQUIRED FOR ALL NEW SUBGRADE SANITARY AND VENT PIPING.
2. ALL EXISTING SANITARY IS TO BE REMOVED BACK TO THE POINT OF ORIGIN WITHIN THE KITCHEN AND CAPPED FOR THE INSTALLATION OF NEW SANITARY AND VENT PIPING.
3. ALL EXISTING VENT PIPING IS TO BE COMPLETELY REMOVED. P.C. SHALL CUT & PATCH AS REQUIRED. G.C. TO PROVIDE ALL FINAL FINISHES.
4. DEMOLISH SANITARY PIPE UP TO INTERIOR FACE OF WALL TO ALLOW FOR RECONNECTION DURING NEW CONSTRUCTION.

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

SED PROJECT NUMBER

44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
NY PROFESSIONAL ENGINEER NO. 073084-1

GREENWOOD LAKE UNION FREE SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL

AREA OF WORK

KEY PLAN

FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

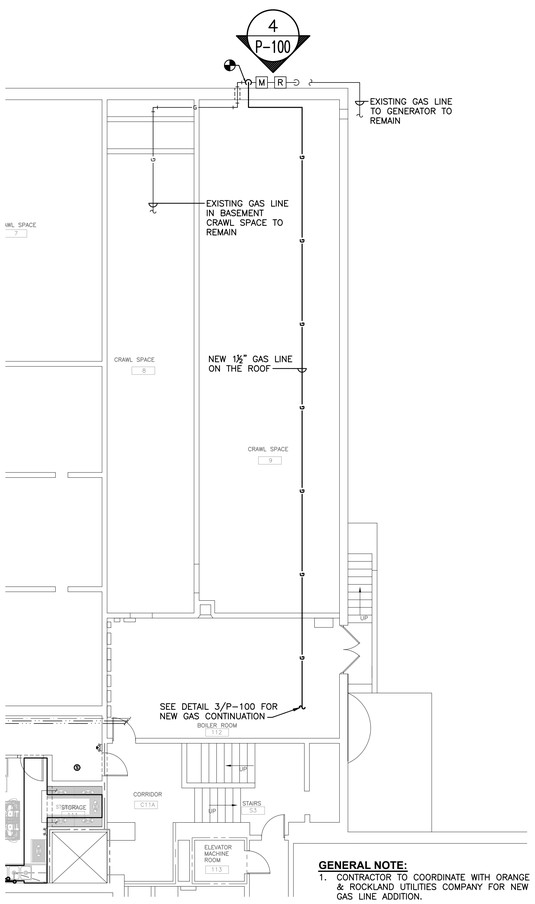
Drawing Title

PLUMBING: PARTIAL BASEMENT DEMO PIPING PLAN

Drawing No.

PD-100

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\PLUMB\P-100 & PD-100.dwg (Layout: PD-100)
Date: Tue, Dec 28, 2021 - 4:08 PM (Name: wpb)

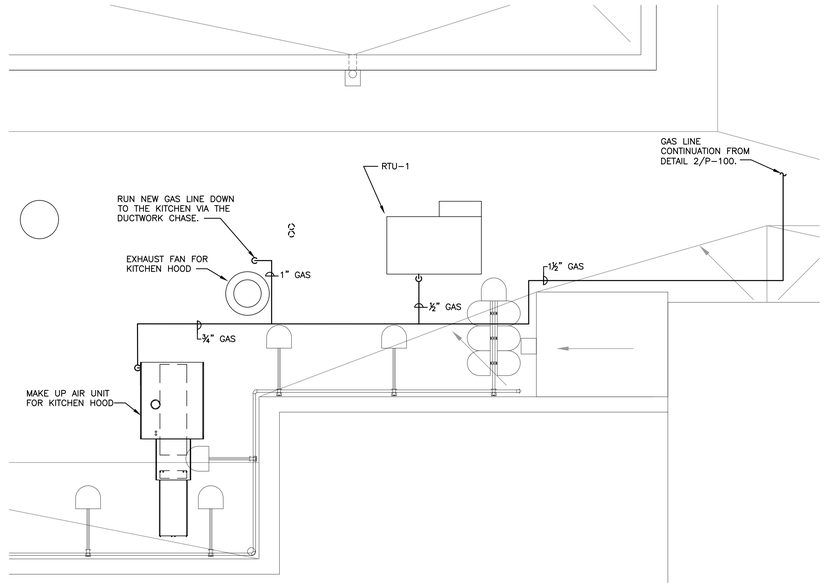


GENERAL NOTE:

1. CONTRACTOR TO COORDINATE WITH ORANGE & ROCKLAND UTILITIES COMPANY FOR NEW GAS LINE ADDITION.

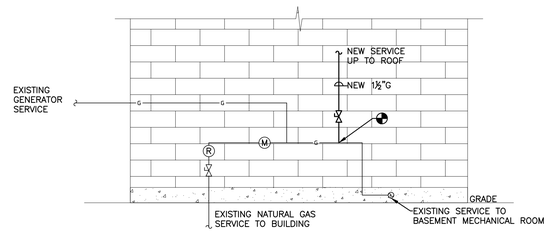
2 PARTIAL BASEMENT - NEW GAS PIPING PLAN

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



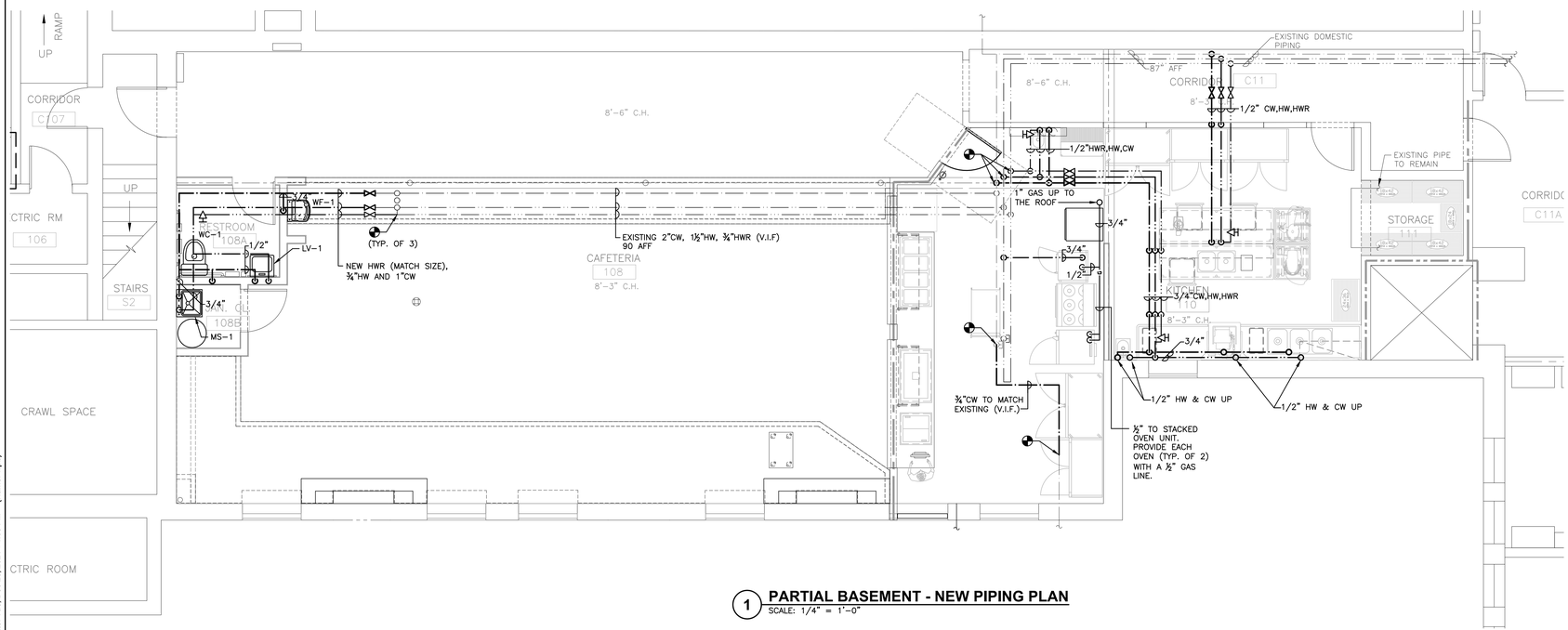
3 PARTIAL ROOF PLAN - NEW GAS PIPING PLAN CONTINUATION

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



4 PARTIAL GAS MAIN RISER

N.T.S.



1 PARTIAL BASEMENT - NEW PIPING PLAN

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

File Name: F:\2019\19-194.GWLUFSD Kitchen and Cafeteria Renovations\PLUMB\P-100 & PD-100.dwg (Layout: P-100)
Date: Tue, Dec 28, 2021 - 4:08 PM (Name: wpb)

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER

44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

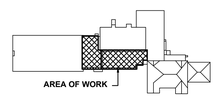
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
NY PROFESSIONAL ENGINEER
NO. 073084-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

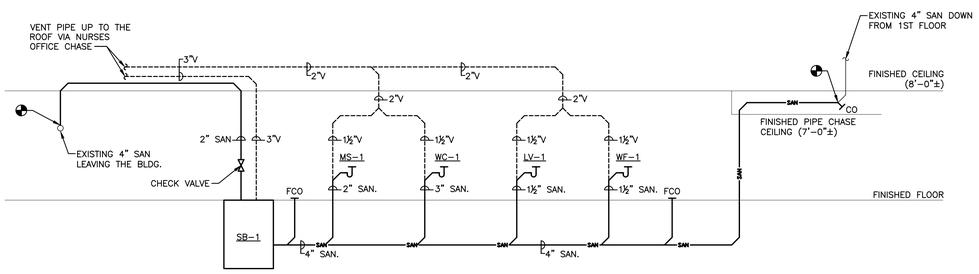
⅜" ¼" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title

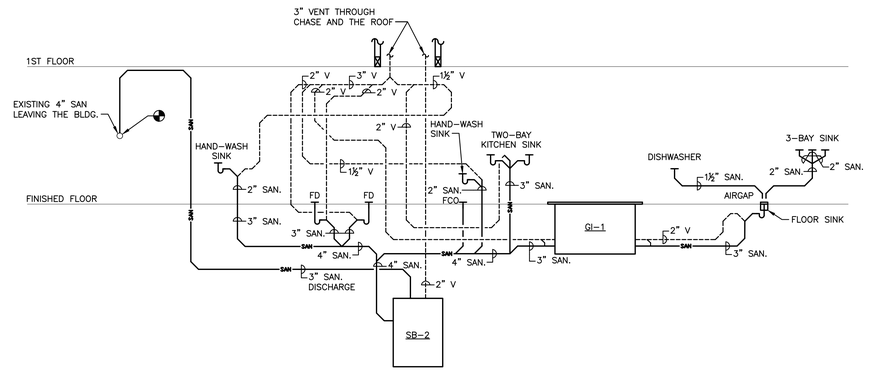
PLUMBING:
PARTIAL BASEMENT
NEW PIPING PLAN

Drawing No.

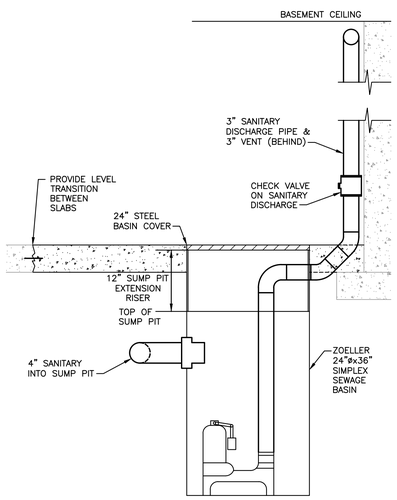
P-100



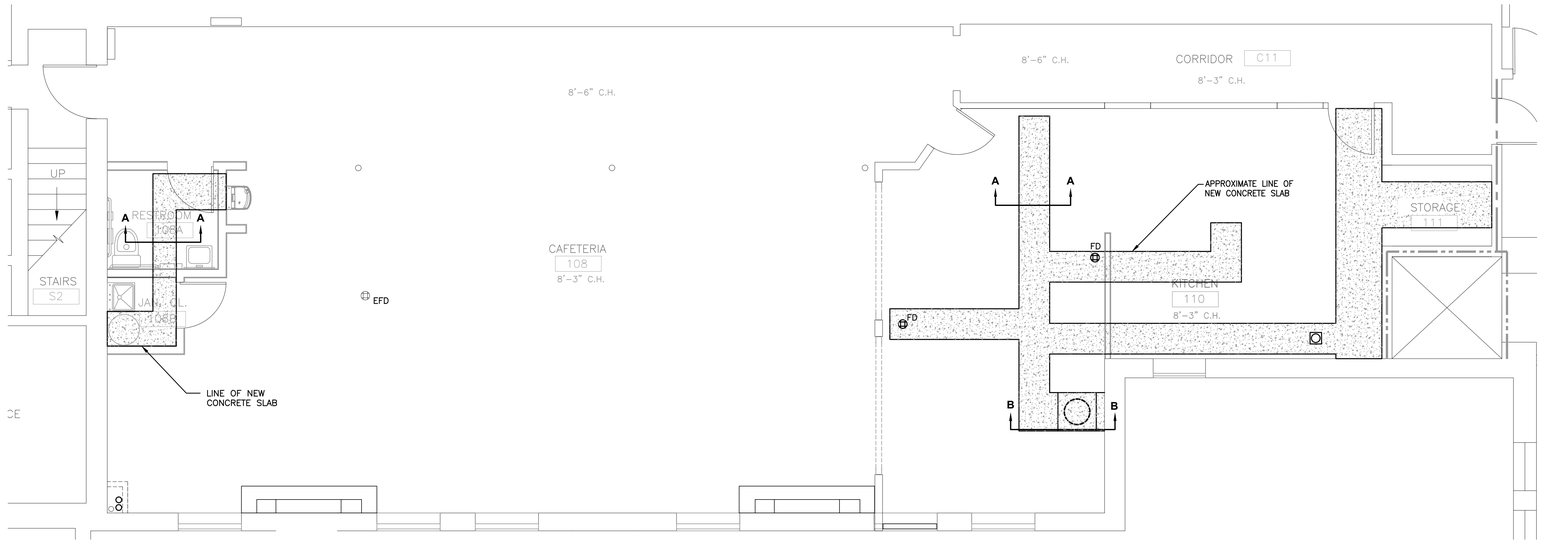
5 BATH ROOM & JANITORS CLOSET SANITARY/VENTING RISER DIAGRAM
N.T.S.



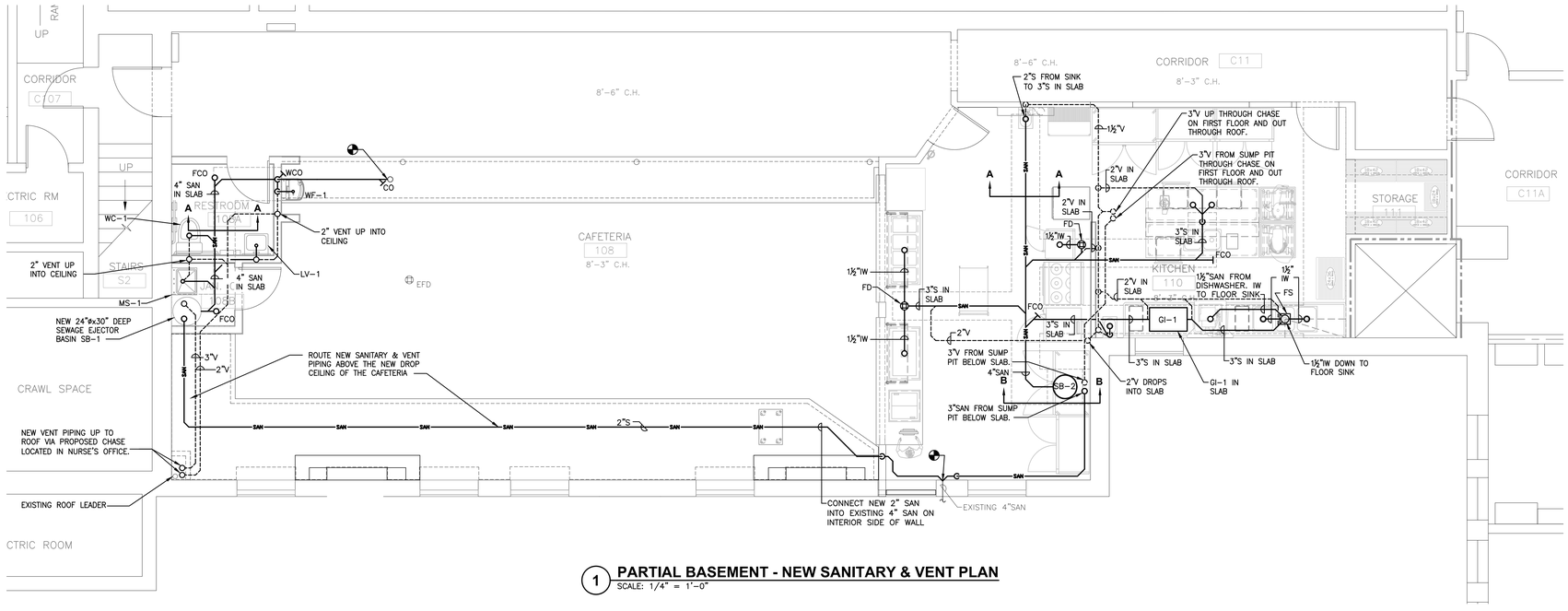
6 KITCHEN SANITARY/VENTING RISER DIAGRAM
N.T.S.



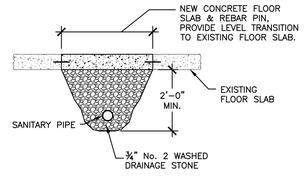
2 SECTION B-B
N.T.S.



3 PARTIAL BASEMENT - NEW CONCRETE AREAS
SCALE: 1/4" = 1'-0"



1 PARTIAL BASEMENT - NEW SANITARY & VENT PLAN
SCALE: 1/4" = 1'-0"



4 SECTION A-A
N.T.S.

GENERAL NOTES:

1. P.C. TO SAWCUT CONCRETE FLOOR OF KITCHEN AS REQUIRED TO ALLOW FOR A COMPLETE AND OPERATIVE SYSTEM.
2. REFER TO ARCHITECTURAL DWG'S FOR ALL FINAL CHASE LOCATIONS.
3. EXISTING BASEMENT STORM DRAINAGE NOT SHOWN FOR CLARITY PURPOSES.

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
NY PROFESSIONAL ENGINEER NO. 072004-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL

FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

⅜" ¼" ½" 0 1" 2"
REFERENCE SCALE

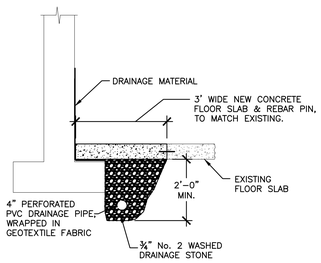
Drawing Title

PLUMBING:
PARTIAL BASEMENT
NEW SANITARY & VENT PLAN

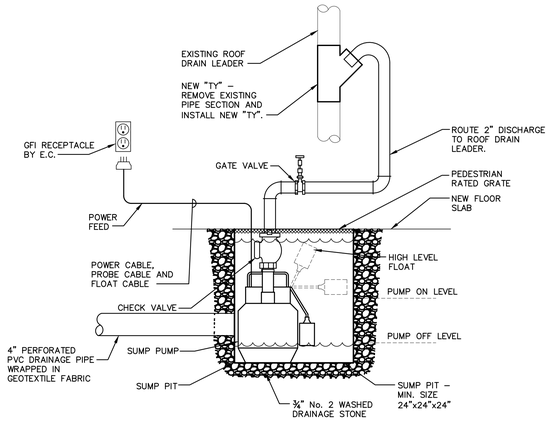
Drawing No.

P-200

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\P\LUMBP-200.dwg (Layout: P-200)
Date: Tue, Dec 28, 2021 - 4:08 PM (Name: wpb)



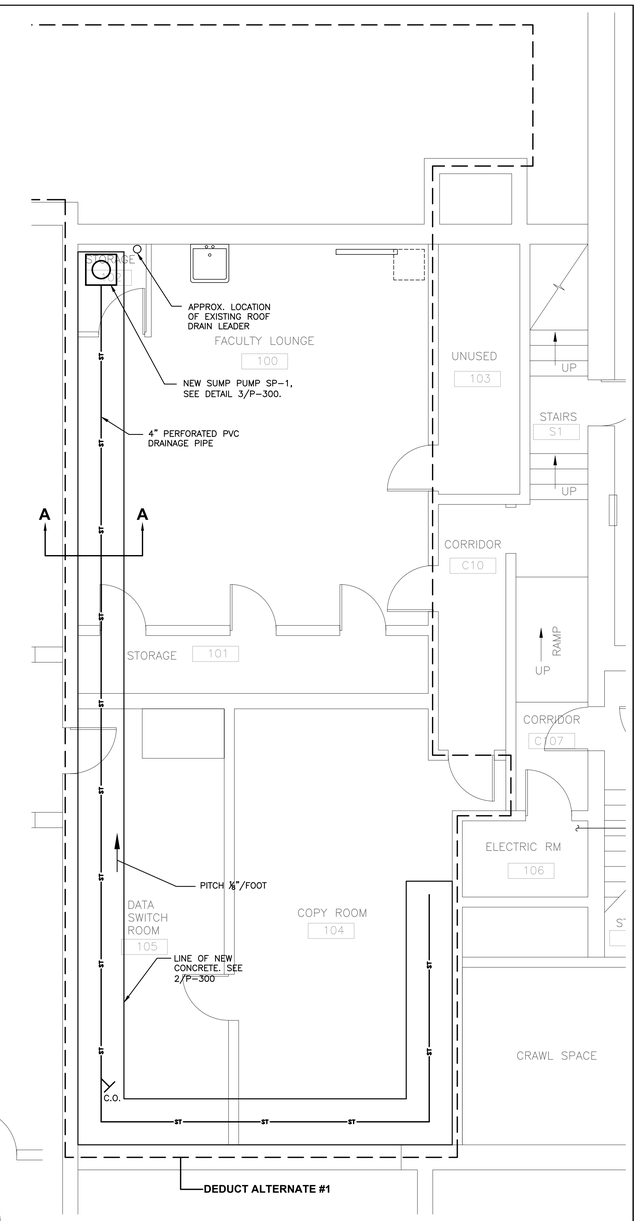
2 SECTION A-A
N.T.S.



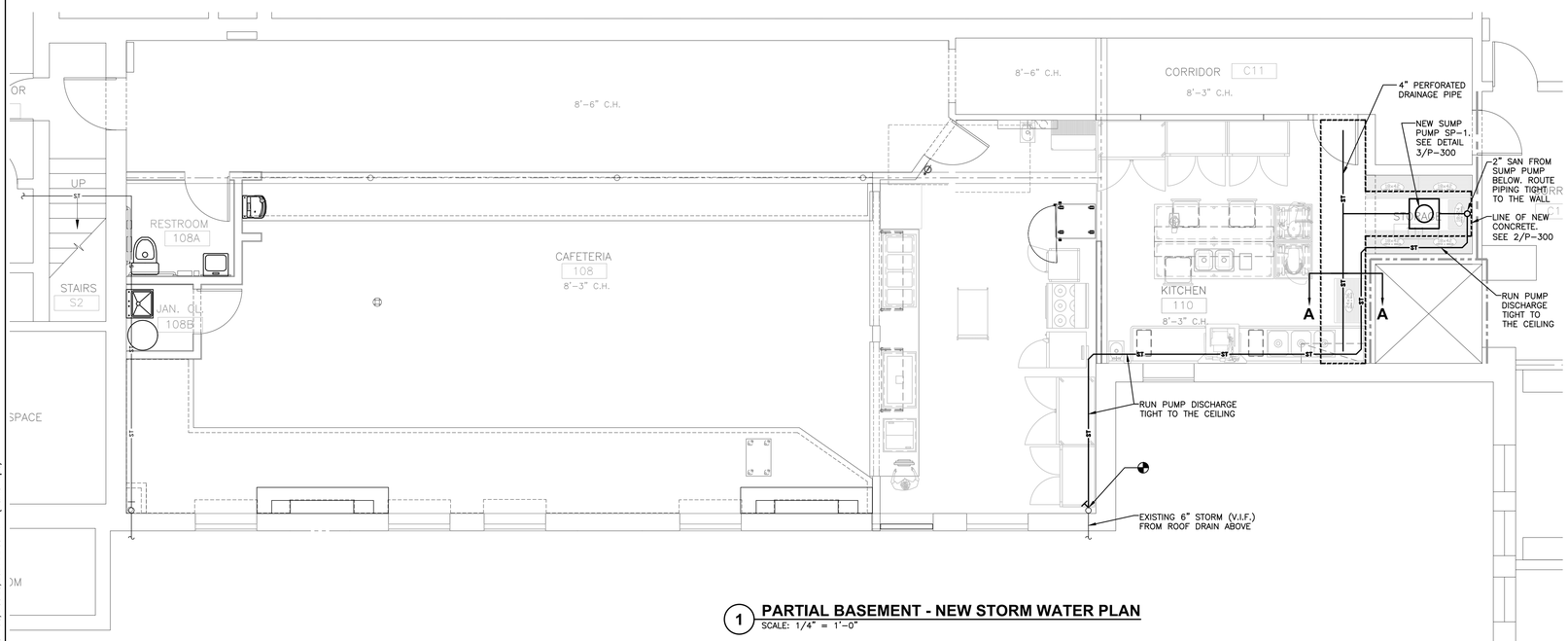
SUMP PUMP SCHEDULE
"STANCOR" AS STANDARD OR APPROVED EQUAL

UNIT NO.	LOCATION	PUMP DATA NO.	GPM	T.D.H. (FT.)	SOLIDS (IN.)	DISCHARGE (IN.)	H.P.	VOLT/ø	FLA	MIN. SUMP DIMENSIONS AREA (IN.)	DEPTH (IN.)	MODEL	REMARKS
SP–1	SUMP PUMP PIT	2	30	15	3/8	2	0.4	115/1	5	24x24	24	SE40	25 FT. CORD

3 SUMP PUMP DETAIL
N.T.S.



4 PARTIAL BASEMENT - NEW SUMP PIPING PLAN
SCALE: 1/4" = 1'–0"



1 PARTIAL BASEMENT - NEW STORM WATER PLAN
SCALE: 1/4" = 1'–0"

File Name: F:\2019\19-194.GWLUFSD.Kitchen and Cafeteria Renovations\PLUMB\P-300.dwg (Layout: P-300)
Date: Tue, Dec 28, 2021 - 4:08 PM (Name: wpb)

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19–194
Scale	AS NOTED
Date	1–8–21

ERIC D. FELLENZER, P.E.
NY PROFESSIONAL ENGINEER NO. 073084–1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL

AREA OF WORK

KEY PLAN

FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

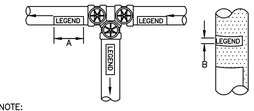
⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title

PLUMBING
PARTIAL BASEMENT
NEW STORM WATER PLAN

Drawing No.

P-300



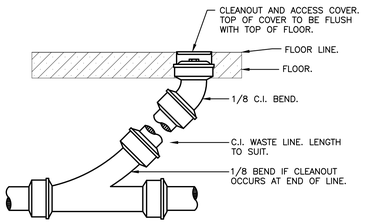
NOTE:
IDENTIFICATION MARKERS OR STRIPS TO BE PLACED ON ALL EXPOSED COVERED AND UNCOVERED PIPES AT 50'–0" INTERVALS AND AT ALL VALVES, BRANCHES, CHANGE IN DIRECTION OF FLOW AND ON BOTH SIDES OF WALLS WHERE PIPES PASS THROUGH SAME. ARROWS OF SAME COLOR AS IDENTIFICATION MARKERS SHALL ALSO BE PLACED ON PIPES POINTING AWAY FROM MARKER INDICATING OF FLOW.

SIZE OF LEGEND LETTERS

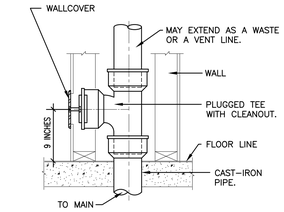
OUTSIDE DIAMETER OF PIPE OR COVERING		LENGTH OF COLOR FIELD A		SIZE OF LETTERS B	
INCHES	MM	INCHES	MM	INCHES	MM
¾" TO 1¼"	19 TO 32	8"	200	½"	13
1½" TO 2"	38 TO 51	8"	200	¾"	19
2½" TO 6"	64 TO 150	12"	300	1¼"	32
8" TO 10"	200 TO 250	24"	600	2½"	64
OVER 10"	OVER 250	32"	800	3½"	89

SERVICE	BACKGROUND OR COLOR BAND	IDENTIFICATION MARKER
DOMESTIC COLD WATER	GREEN	WHITE ON GREEN
DOMESTIC HOT WATER	YELLOW	BLACK ON YELLOW
DOMESTIC HOT WATER RETURN	YELLOW	BLACK ON YELLOW
NATURAL GAS	YELLOW	BLACK ON YELLOW
SANITARY DRAIN	GREEN	WHITE ON GREEN

1 TYPICAL PIPE IDENTIFICATION DETAIL
N.T.S.



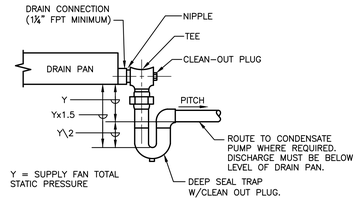
2 FLOOR CLEANOUT
N.T.S.



ROUND: ZURN Z–1446
(T, PLUG & ROUND COVER)

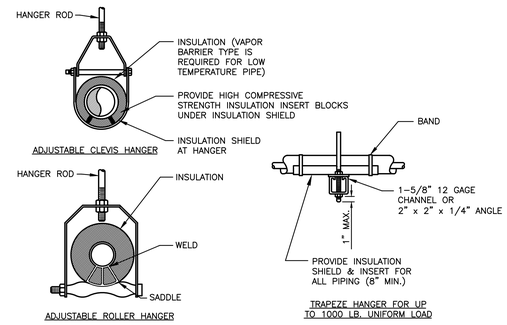
SQUARE: ZURN Z–1447
(T, PLUG & SQUARE ACCESS PANEL)

3 WALL CLEANOUT DETAIL
N.T.S.



NOTES:
1. ALLOW SUFFICIENT SPACE BELOW DRAIN PAN FOR TRAP.
2. PITCH DRAIN FOR PROPER RUN–OFF.
3. MANUALLY PRIME FILL TRAP BEFORE START–UP TO FORM INITIAL DRAIN SEAL.
4. SUPPORT LENGTHY DRAIN LINES TO PREVENT SAG AND CONDENSATE OVERFLOW.

4 CONDENSATE DRAIN DETAIL
N.T.S.

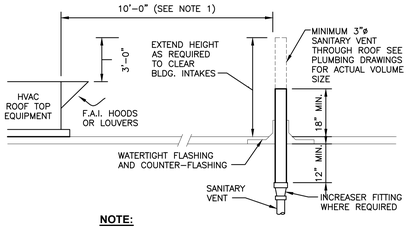


INDIVIDUAL PIPE HANGER ROD & SPACING SCHEDULE

NOMINAL PIPE DIAMETER (IN.)	3/4	1	1 1/2	2	2 1/2	3	4	5	6	–
HANGER ROD SIZE (IN.)	3/8	3/8	3/8	3/8	1/2	1/2	5/8	5/8	7/8	–
MAXIMUM SUPPORT SPACING (FT.)										
STEEL PIPE	6	7	9	10	11	12	14	16	17	–
COPPER TUBE	6	6	8	9	10	10	12	14	14	–

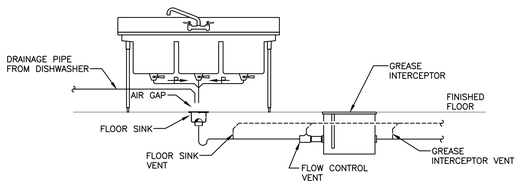
NOTE: TRAPEZE HANGER SPACING SHALL BE BASED ON SPACING OF SMALLEST PIPE ON TRAPEZE. TRAPEZE SHALL BE DESIGNED WITH A FACTOR OF SAFETY OF 5 FOR CENTER OF SPAN CONCENTRATED LOAD

5 TYPICAL PIPE HANGERS
N.T.S.

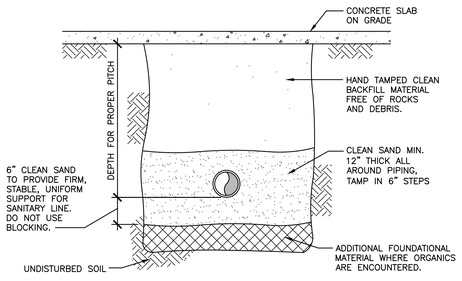


NOTE:
1. DISTANCE FOR MEDICAL FACILITY MUST BE 25'–0" MIN.

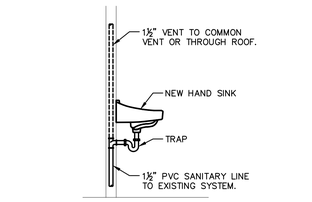
6 SANITARY VENT TERMINATION
N.T.S.



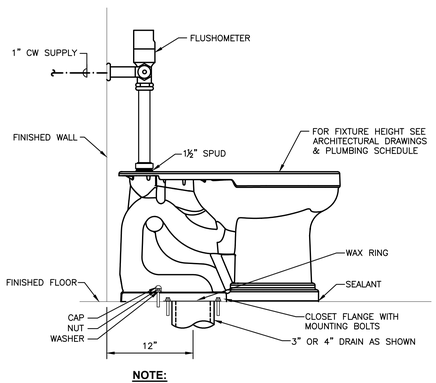
7 THREE COMPARTMENT SINK DETAIL
N.T.S.



TYPICAL SANITARY LINE BELOW SLAB DETAIL
N.T.S.

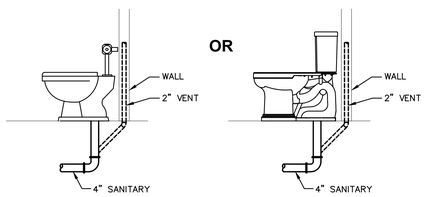


9 SINK DRAINAGE / VENT DETAIL
N.T.S.

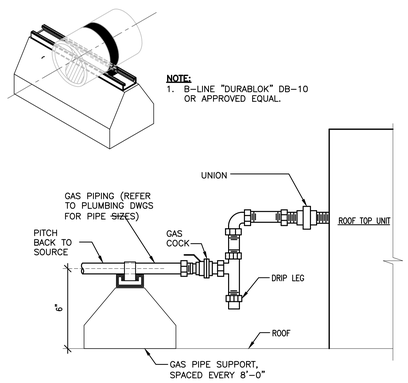


NOTE:
INSTALL PER MANUFACTURER'S REQUIREMENTS

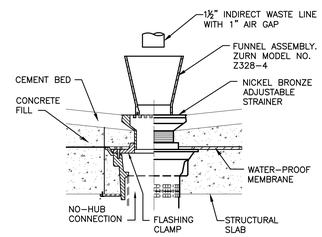
10 FLOOR MOUNTED FLUSH VALVE DETAIL
N.T.S.



11 BELOW SLAB 45° SANITARY VENT DETAIL
N.T.S.



12 ROOF TOP HVAC GAS SERVICE DETAIL
N.T.S.



NOTE:
1. FABRICATE TYPICAL FUNNEL ASSEMBLY TO ALLOW FOR REMOVAL OF FUNNEL G.C. TO PROVIDE FLUSH SECURE CAP AT DRAIN FOR WHEN MILLWORK AND EQUIPMENT IS NOT IN PLACE.

13 FLOOR DRAIN WITH FUNNEL ASSEMBLY DETAIL
N.T.S.

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44–21–11–02–0–002–015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

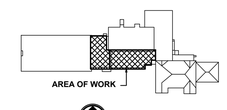
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB–DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19–194
Scale	AS NOTED
Date	1–8–21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 073084–1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title
PLUMBING DETAILS

Drawing No.
P-701

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\PLUMB\P-701.dwg (Layout: P-701)
Date: Tue, Dec 28, 2021 - 4:08 PM (Name: wpb)

GENERAL NOTES:

1. ALL CONDUITS ARE SHOWN DIAGRAMMATICALLY, EXACT RUNS SHALL BE DETERMINED IN FIELD EXCEPT WHERE SPECIFICALLY DIMENSIONED ON CONDUIT LAYOUTS. CONTRACTOR SHALL FOLLOW MINIMUM SPACING REQUIREMENTS TO REDUCE ELECTROMAGNETIC INTERFERENCE. COORDINATE CONDUIT ROUTING WITH ALL OTHER TRADES.
2. ALL EXPOSED CONDUIT SHALL BE RUN PARALLEL TO BUILDING WALLS AND BEAMS EXCEPT WHERE OTHERWISE SHOWN. CONTRACTOR SHALL INSTALL CONDUIT IN SUCH A MANNER TO AVOID ALL INTERFERENCES.
3. DEFLECTION/EXPANSION FITTINGS SHALL BE PROVIDED WHERE RIGID METAL CONDUIT CROSSES STRUCTURAL EXPANSION JOINTS.
4. EXPOSED CONDUIT SHALL BE SUPPORTED ON WALLS OR CEILINGS BY APPROVED HANGERS OF ANGLE OR CHANNEL CONSTRUCTION. CONDUITS SHALL BE SUPPORTED AT LEAST EVERY EIGHT (8) FEET.
5. ALL SPARE CONDUITS SHALL BE TERMINATED AS SHOWN ON CONDUIT LAYOUTS AND SHALL BE CAPPED 3" ABOVE FINISHED FLOOR.
6. NO CONDUIT SHALL BE SMALLER THAN ¾" UNLESS NOTED OTHERWISE ON PLANS.
7. EXACT CONDUIT STUB-UP LOCATIONS ARE TO BE DETERMINED BY THE ELECTRICAL CONTRACTOR BASED ON CERTIFIED MANUFACTURER'S DRAWINGS OF THE RESPECTIVE EQUIPMENT. CONDUIT SHALL BE INSTALLED TO AGREE WITH EQUIPMENT FURNISHED.
8. ALL LIGHTING WIRING SHALL BE #12AWG. UNLESS OTHERWISE NOTED. THE NUMBER OF WIRES SHOWN ON THE DRAWINGS IS NOT NECESSARILY THE CORRECT NUMBER REQUIRED. THE CONTRACTOR SHALL INSTALL AS MANY AS ARE NECESSARY FOR PROVIDING A COMPLETE ELECTRICAL SYSTEM IN EACH CASE.
9. CONDUITS PASSING THROUGH BUILDING FLOORS OR WALLS BELOW GRADE ARE TO BE INSTALLED WITH WATERTIGHT THRU WALL CONDUIT SEAL FITTINGS.
10. EQUIPMENT FURNISHED BY OTHERS SHALL BE INSTALLED & ENERGIZED BY THE ELECTRICAL CONTRACTOR.
11. CONDUITS IN STRUCTURAL SLABS ARE TO BE SPACED SO AS TO PROVIDE NO LESS THAN THREE CONDUIT DIAMETERS, CENTER TO CENTER, WHEREVER POSSIBLE. LARGER SPACING IS PREFERRED.
12. CONTINUOUS ROWS OF CONDUITS ARE NOT TO BE PLACED IMMEDIATELY ALONG BEARING ENDS OF SLABS.
13. THE ELECTRICAL CONTRACTOR SHALL NOT ENDANGER THE STABILITY OF THE STRUCTURE OR ANY PART THEREOF BY CUTTING, DRILLING OR OTHERWISE, AND SHALL NOT IN ANY WAY CUT OR ALTER THE WORK OF ANY OTHER CONTRACTOR, EXCEPT WITH THE WRITTEN CONSENT OF AND UNDER THE DIRECTION OF THE ARCHITECT AND/OR GENERAL CONTRACTOR.
14. THE ELECTRICAL CONTRACTOR SHALL SECURE ALL APPROVALS AND CERTIFICATES AND PAY ALL FEES FOR ALL THE WORK INSTALLED. CERTIFICATES SHALL BE DELIVERED TO THE GENERAL CONTRACTOR BEFORE FINAL PAYMENT WILL BE MADE.
15. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST APPLICABLE VERSION OF THE NEC AS WELL AS ALL STATE AND LOCAL CODES.
16. THE DRAWINGS INDICATE AND THE SPECIFICATIONS DESCRIBE THE GENERAL ARRANGEMENTS AND LOCATION OF OUTLET BOXES, ETC. THE CONTRACTOR SHALL, WITHOUT EXTRA COST TO THE OWNER, MAKE ALL REASONABLE MODIFICATIONS IN THE WORK AS MAY BE REQUIRED TO PREVENT CONFLICT WITH EXISTING CONDITIONS, THE WORK OF OTHER TRADES AND FOR THE PROPER INSTALLATION OF THE WORK.
17. PRIOR TO SUBMISSION OF BID PROPOSAL, THE CONTRACTOR SHALL VISIT THE SITE AND EXAMINE CAREFULLY THE EXISTING CONDITIONS AND THE DIFFICULTIES THAT WILL BE INCURRED DURING THE PERFORMANCE OF HIS WORK.
    - A. VERIFY & COORDINATE CONDUIT ROUTING.
    - B. VERIFY & COORDINATE SCOPE OF DEMOLITION WORK.
    - C. VERIFY & COORDINATE SCOPE OF WORK INVOLVING CONNECTIONS TO EXISTING BASE BUILDING SYSTEMS.
    - D. VERIFY SCOPE OF WORK THAT HAS TO BE DONE WITH EXISTING FIRE ALARM SYSTEM AS REQUIRED TO ACCOMMODATE ALL ADDED DEVICES.
    - E. VERIFY WITH GENERAL CONTRACTOR SCOPE OF WORK ASSOCIATED WITH RIGGING OF EQUIPMENT TO BE PREPURCHASED.
    - F. COORDINATE WITH THE BUILDING ENGINEER AND GENERAL CONTRACTOR SHUT DOWNS OF EXISTING FACILITIES.
18. ARRANGE FOR SITE VISIT WITH THE BLDG. OWNER REPRESENTATIVE AND GENERAL CONTRACTOR.
19. CLAIMS FOR ADDITIONAL COMPENSATION ARISING DUE TO THE FAILURE OF THE CONTRACTOR TO FULLY UNDERSTAND THE SITE CONDITIONS SHALL NOT BE PAID FOR BY ANY OTHER PARTY.
20. CONNECTIONS TO EXISTING WORK:
    - A. INSTALL NEW WORK AND CONNECT TO EXISTING WORK WITH MINIMUM INTERFERENCE TO EXISTING FACILITIES.
    - B. TEMPORARY SHUTDOWNS OF EXISTING SERVICES:
        - a.AT NO ADDITIONAL CHARGES.
        - b.AT TIMES NOT TO INTERFERE WITH NORMAL OPERATION OF EXISTING SERVICES.
        - c.ONLY WITH WRITTEN CONSENT OF THE GENERAL CONTRACTOR AND/OR BUILDING OWNERS REPRESENTATIVE.
    - C. ALARM AND EMERGENCY SYSTEMS: NOT TO BE INTERRUPTED.
    - D. MAINTAIN CONTINUOUS OPERATION OF EXISTING FACILITIES AS REQUIRED WITH NECESSARY TEMPORARY CONNECTIONS BETWEEN NEW AND EXISTING WORK.
    - E. CONNECT NEW WORK TO EXISTING WORK IN NEAT AND ACCEPTABLE MANNER. RESTORE EXISTING DISTURBED WORK TO ORIGINAL CONDITION, INCLUDING MAINTENANCE OF WIRING CONTINUITY AS REQUIRED.
    - F. PRIOR TO DEMOLITION OF AN EXISTING POWER PANEL, THE CONTRACTOR SHALL SEARCH OUT ALL EXISTING CIRCUITS FED FROM THE PANEL TO PREVENT ANY ACCIDENTAL SERVICE INTERRUPTIONS.
21. LEAVE WIRE SUFFICIENTLY LONG TO PERMIT MAKING FINAL CONNECTIONS. CONDUIT OVER 10 FEET IN WHICH WIRING IS NOT INSTALLED–FURNISH PULL STRING.
22. DO NOT PULL THERMOPLASTIC WIRES AT TEMPERATURES LOWER THAN 32 DEG F (0 DEG C). PROVIDE CABLE SUPPORTS FOR WIRE IN RISER CONDUITS AS REQUIRED BY CODE.
23. LOCATIONS INDICATED FOR LOCAL WALL SWITCHES ARE SUBJECT TO MODIFICATIONS AT OR NEAR DOORS. INSTALL SWITCH ON SIDE OPPOSITE HINGE; VERIFY FINAL DOOR HINGE LOCATION IN FIELD PRIOR TO SWITCH OUTLET INSTALLATION.
24. JUNCTION & PULL BOXES: DO NOT LOCATE EXPOSED IN FINISH SPACES UNLESS REQUIRED BY NEC. WHERE NECESSARY, REROUTE CONDUIT OR MAKE OTHER ARRANGEMENTS FOR CONCEALMENT. PROVIDE PULL BOXES AS INDICATED AND WHEREVER NECESSARY TO FACILITATE PULLING OF WIRE AND COORDINATE LOCATIONS WITH OTHER TRADES. COVERS OF JUNCTION AND PULL BOXES SHALL BE ACCESSIBLE. FOR EMPTY CONDUITS, INSTALL PULL BOXES EVERY 100 FEET AND AS INDICATED. COORDINATE LOCATIONS WITH OTHER TRADES.
25. SUPPORT PANEL, JUNCTION & PULL BOXES INDEPENDENTLY TO BUILDING STRUCTURE WITH NO WEIGHT BEARING ON CONDUIT.
26. ALL ACCESS DOOR LOCATIONS SHALL BE REVIEWED BY ARCHITECT PRIOR TO INSTALLATION.
27. FOR EACH LOCATION OF OTHER TRADES EQUIPMENT, SEE RESPECTIVE TRADE DRAWINGS.
28. FOR RECEPTACLE & OUTLETS MOUNTING HEIGHTS AND POSITION (HORIZONTAL, VERTICAL), COORDINATE WITH ARCHITECT, OWNER, REPRESENTATIVE & DATA/ COMMUNICATION CONSULTANT.
29. CONTRACTOR SHALL PROVIDE AND INSTALL ALL COMPONENTS INDICATED ON DETAILS SHEETS, PLANS, SPECIFICATIONS AND ALL PERTINENT EQUIPMENT REQUIRED FOR A COMPLETE WORKABLE SYSTEM.
30. USE OF ISOLATED TYPE GROUNDING CONDUCTOR FOR IG TYPE RECEPTACLES, PLUG MOLDS & EQUIPMENT DOES NOT RELIEVE REQUIREMENT FOR GROUNDING CONDUIT SYSTEM, DEVICES AND EQUIPMENT AS REQUIRED BY ALL APPLICABLE CODES. PROVIDE AND INSTALL GROUNDING FITTING, EQUIPMENT GROUND WIRING ETC. AS REQUIRED.
31. ALL CONDUITS, TRANSFORMERS ETC. SHALL BE SUPPORTED FROM STRUCTURAL STEEL ONLY. COORDINATE WITH GENERAL CONTRACTOR.
32. PROVIDE BARRIERS IN ALL PULL BOXES FOR CONDUIT SETS.
33. PAINT AND RUST PROOF ALL HARDWARE & CONDUITS ON ROOF AND IN EXPOSED AREAS AS DIRECTED BY GENERAL CONTRACTOR.
34. NUMBER SHOWN ADJACENT TO LIGHTING FIXTURES, RECEPTACLES, OUTLETS, JUNCTION BOXES ETC. INDICATES CIRCUIT NUMBER.
35. ALL GROUND CONNECTIONS TO THE BUILDING STEEL SHALL BE EXOTHERMIC WELDED.
36. FLEXIBLE CONNECTIONS IN EXPOSED AREAS SHALL NOT EXCEED 18" MAXIMUM.
37. ALL EQUIPMENT DEVICES, WIRING, ETC. SHOWN ON THE DRAWINGS IS NEW UNLESS OTHERWISE NOTED.
38. ELECTRICAL CONTRACTOR SHALL PROVIDE SLEEVES/ OPENINGS FOR ALL CONDUIT RISERS PENETRATING WALLS, ROOF & FLOOR SLABS. ALL ROOF AND MECH. ROOMS SLAB PENETRATIONS SHALL BE WATERPROOF. METHOD OF PENETRATIONS & FIRE/WATER WATER PROOFING SHALL BE APPROVED BY ARCHITECT AND STRUCTURAL ENGINEER, COORDINATE WITH GENERAL CONTRACTOR.
39. ELECTRICAL CONTRACTOR SHALL BECOME FAMILIAR AND COMPLY WITH OWNERS BUILDING STANDARDS FOR CONSTRUCTION.
40. ALL FINAL CONNECTIONS TO VIBRATING EQUIPMENT (MOTORS, GENERATORS ETC.) SHALL BE THROUGH A LIQUID TIGHT FLEXIBLE METAL CONDUIT.
41. LOCATION OF ALL SLAB PENETRATIONS FOR SLEEVES & CONDUITS SHALL BE REVIEWED & APPROVED BY STRUCTURAL ENGINEER & ARCHITECT.
42. CONTRACTOR SHALL WIRE NO MORE THAN EIGHT CONVENIENCE RECEPTACLES TO A 20A SINGLE POLE CIRCUIT. UTILIZE 2–#12&1 #12 GND IN ¾" CONDUIT & 1–20A SINGLE POLE CIRCUIT BREAKER FOR EACH CIRCUIT. INSTALL ADDITIONAL CIRCUIT AS NECESSARY TO MEET THIS REQUIREMENT.
43. ALL PENETRATIONS THROUGH FIRE RATED PARTITIONS SHALL BE SEALED FIRE AND SMOKE TIGHT WITH AN APPROPRIATE U.L. LISTED FIRESTOPPING MATERIAL AND OR SYSTEM.
44. THE TERMS "PROVIDE" OR "FURNISH", AS USED ON THESE PLANS, INDICATE THAT THE CONTRACTOR IS TO FURNISH AND INSTALL THE REFERENCED EQUIPMENT OR SYSTEMS IN THEIR ENTIRETY AS REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM.
45. CONTRACT CLOSE OUT: IN THE PRESENCE OF THE OWNER, ENGINEER OR ARCHITECT; DEMONSTRATING OPERATION OF SYSTEMS AND THAT ALL SPECIFICATIONS HAVE BEEN MET TO THE SATISFACTION OF ALL PARTIES.
46. IT IS THE INTENTION THAT THESE SPECIFICATIONS, AND DRAWINGS ACCOMPANYING SAME, SHALL PROVIDE FOR THE FURNISHING AND INSTALLING OF THE () SYSTEMS COMPLETE AS SPECIFIED AND SHOWN. ANY WORK SHOWN ON THE DRAWINGS AND NOT PARTICULARLY DESCRIBED IN THE SPECIFICATIONS OR VICE VERSA, OR ANY WORK CHANGES WHICH MAY BE EVIDENTLY NECESSARY TO COMPLETE THE INSTALLATION SHALL BE FURNISHED BY THIS CONTRACTOR.
47. IT IS THE INTENT AND PURPOSE OF THESE SPECIFICATIONS AND DRAWINGS TO INCLUDE AND PROVIDE FOR ALL MATERIALS, APPLIANCES AND LABOR TO PROPERLY COMPLETE AND LEAVE IN PERFECT WORKING CONDITION THE ENTIRE SYSTEM HEREINAFTER SPECIFIED. ANY MATERIAL, LABOR OR APPLIANCE NOT SPECIFICALLY MENTIONED IN THESE SPECIFICATIONS OR SHOWN ON THE DRAWINGS, BUT NECESSARY FOR A COMPLETE INSTALLATION MUST BE FURNISHED BY THIS CONTRACTOR.
48. IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS TO PROVIDE ALTERATIONS AND/OR NEW CONSTRUCTION AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS TO PROVIDE COMPLETE NEW SYSTEMS IN EVERY RESPECT, CAPABLE OF OPERATING AS DESIGNED. IT IS NOT INTENDED THAT EVERY FITTING, MINOR DETAIL OR FEATURE BE SHOWN ON DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DETAIL NECESSARY FOR COMPLETION OF THESE SYSTEMS IN ACCORDANCE WITH GOOD PRACTICE.

ELECTRICAL DEMOLITION NOTES:

1. COORDINATE WITH ARCHITECTURAL PLANS FOR EXACT AREAS TO BE DEMOLISHED.
2. DISCONNECT AND REMOVE ALL DEVICES, FIXTURES, FIRE ALARM DEVICES, DATA/TEL. OUTLETS, POWER CONNECTIONS TO HVAC EQUIPMENT AND DISCONNECT SWITCHES, CONDUIT & WIRING FROM ALL WALLS/CEILINGS BEING REMOVED, WITHIN THIS AREA BACK TO POWER PANEL OF ORIGIN. ALL EXISTING CIRCUIT BREAKERS SHALL REMAIN IN PLACE AND LABELED AS "SPARE".
3. ALL EXISTING DEVICES SCHEDULED TO REMAIN SHALL BE EXTENDED/RE-CIRCUITED TO MAINTAIN CONTINUITY OF CIRCUIT/DEVICES.
4. REMOVALS SHALL INCLUDE, BUT NOT BE LIMITED TO DEVICES, FIXTURES, FIRE ALARM DEVICES, DATA/TEL. OUTLETS, POWER CONNECTIONS TO HVAC EQUIPMENT AND DISCONNECT SWITCHES, CONDUIT & WIRING.
5. ELECTRICAL CONTRACTOR TO PROVIDE ALL NECESSARY TEMPORARY WORK AND/OR MATERIALS TO RENDER EXISTING SYSTEM OPERATIONAL DURING ALL PHASES OF CONSTRUCTION IN ALL OCCUPIED SPACES. INCLUDING BUT NOT LIMITED TO, POWER, DATA, LIGHTING, EMERGENCY COMPONENTS & ALARMS. COORDINATE WITH ALL TRADES, OWNER AND OVERALL CONSTRUCTION PHASING SCHEDULE.
6. ALL CUTTING AND PATCHING NECESSARY FOR THE DEMOLITION WORK SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR.
7. IT SHALL BE THE OWNER'S RESPONSIBILITY TO REMOVE ANY LOOSE EQUIPMENT, FURNITURE, SUPPLIES, ETC. THAT MAY BE LOCATED IN THE AREA OF WORK.
8. THE PLANS ARE INTENDED TO CONVEY THE EXTENT AND SCOPE OF THE DEMOLITION WORK. EVERY ITEM INTENDED FOR REMOVAL MAY NOT BE SHOWN. THE CONTRACTOR IS ADVISED TO SURVEY THE PROJECT SITE BEFORE SUBMITTING A BID FOR DEMOLITION WORK.

SWITCHBOARDS, PANEL BOARDS, INDUSTRIAL CONTROL PANELS, METER SOCKET ENCLOSURES, AND MOTOR CONTROL CENTERS THAT ARE LIKELY TO REQUIRE EXAMINATION, ADJUSTMENT SERVICING OR MAINTENANCE WHILE ENERGIZED SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. THE MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE OF THE EQUIPMENT.

LIGHTING SYMBOLS

- CEILING MOUNTED OCCUPANCY SENSOR. WATTSTOPPER MODEL DT-355.
- EXIT LIGHT (SEE SCHEDULE)
- $ 1P, 20A, TOGGLE SWITCH, PROVIDE WITH MATCHING FACE PLATE, COLOR BY ARCHITECT. MOUNT 48" AFF.
- $3 1P, 20A, 3-WAY TOGGLE SWITCH, PROVIDE WITH MATCHING FACE PLATE, COLOR BY ARCHITECT. MOUNT 48" AFF.
- $V 1P, 20A, TOGGLE SWITCH WITH BUILT-IN VACANCY SENSOR, PROVIDE WITH MATCHING FACE PLATE, COLOR BY ARCHITECT. MOUNT 48" AFF.
- $D 1P, 20A, DIMMER SWITCH, PROVIDE WITH MATCHING FACE PLATE, COLOR BY ARCHITECT. MOUNT 48" AFF.
- $3D 1P, 20A, 3-WAY DIMMER SWITCH, PROVIDE WITH MATCHING FACE PLATE, COLOR BY ARCHITECT. MOUNT 48" AFF.
- EMERGENCY WALL PACK FIXTURE (SEE SCHEDULE)
- EMERGENCY WALL PACK FIXTURE WITH EXIT SIGN (SEE SCHEDULE)
- EXISTING CAFETERIA FIXTURE TO BE REMOVED
- EXISTING CORRIDOR AND KITCHEN FIXTURE TO BE REMOVED
- EXISTING NURSE'S OFFICE FIXTURE TO BE REMOVED AND RELOCATED
- EXISTING LOBBY FIXTURE TO BE REMOVED AND RELOCATED

COMMUNICATION SYMBOLS

- TV OUTLET. PROVIDE & INSTALL PULL STRING FROM OUTLET LOCATION TO ABOVE CEILING EACH IN ¾" CONDUIT. MOUNT 18" AFF UNLESS OTHERWISE NOTED.
- EXISTING SECURITY OCCUPANCY SENSOR.
- EXISTING CAMERA
- EXISTING WALL MOUNTED SENSOR. FUNCTION UNKNOWN

FIRE ALARM SYMBOLS

- P FIRE ALARM PULL STATION (EDWARDS: SIGA-278)
- S SMOKE DETECTOR. A=AUXILIARY CONTACTS. (EDWARDS: SIGA-OSD)
- S STROBE ONLY ADA COMPLIANT (EDWARDS: GWRF)
- S/A FIRE ALARM SPEAKER WITH STROBE. ADA COMPLIANT (EDWARDS: EG4RFS2VM)
- H/S OR H/S FIRE ALARM HORN W/STROBE ADA COMPLIANT (EDWARDS: GWVRF)
- S_{CO} SMOKE/CARBON MONOXIDE COMBINATION DETECTOR (EDWARDS: SIGA-OSCD)

POWER SYMBOLS

- SPEC GRADE NEMA 5-20R RECEPTACLE. -GFI INDICATES GROUND FAULT INTERRUPTION -WP INDICATES WEATHER PROOF ENCLOSURE
- SPEC GRADE NEMA 5-20R RECEPTACLE. MOUNT AT 44" AFF OR 6" ABOVE COUNTER, UON. -GFI INDICATES GROUND FAULT INTERRUPTION -WP INDICATES WEATHER PROOF ENCLOSURE
- 2P, 3 WIRE, 250V GROUNDING NEMA 6-30R RECEPTACLE. -GFI INDICATES GROUND FAULT INTERRUPTION -WP INDICATES WEATHER PROOF ENCLOSURE
- 1P, 3 WIRE, 125V QUAD RECEPTACLE. -GFI INDICATES GROUND FAULT INTERRUPTION -WP INDICATES WEATHER PROOF ENCLOSURE
- SPECIAL PURPOSE CONNECTION.
- J JUNCTION BOX, SIZE PER N.E.C.
- N/F 3P, NON-FUSED DISCONNECT SWITCH, FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. SHALL HAVE THE SAME # OF POLES AS CONNECTING CIRCUIT UNLESS OTHERWISE NOTED.
- 3P, FUSED DISCONNECT SWITCH, FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. SHALL HAVE THE SAME # OF POLES & AMPERE RATING AS CONNECTING CIRCUIT UNLESS OTHERWISE NOTED.
- PB PULL BOX
- 208Y/120V, 3ø, 4W PANEL BOARD (SEE SCHEDULE)
- CONDUIT HOME RUN TO DESIGNATED PANEL. REFER TO PANEL SCHEDULE FOR CONDUIT & CABLE QUANTITY AND SIZE.
- DOUBLE HOME RUN
- TRIPLE HOME RUN
- GROUND
- 100A–1P CIRCUIT BREAKER – 100A TRIP – SINGLE POLE
- 100A–3P FUSE SWITCH – 100A FUSE – 3 POLE
- MOTOR

ABBREVIATIONS

A	AMPERE
ACT	ACOUSTIC CEILING TILE
AFF	ABOVE FINISHED FLOOR
AL	ALUMINUM
AUTO	AUTOMATIC
AWG	AMERICAN WIRE GAUGE
C	CONDUIT
CAT	CATALOG
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CLG	CEILING
CU	COPPER
DP	DISTRIBUTION PANEL
DIV	DIVISION
DS	DISCONNECT (LOCKOUT) SWITCH
DWG	DRAWING
EA	EACH
E.C.	ELECTRICAL CONTRACTOR
ELEC.	ELECTRICAL
E.P.O.	EMERGENCY POWER OFF
EQUIP.	EQUIPMENT
FA	FIRE ALARM
FAP	FIRE ALARM PANEL
FL	FLOOR
FLEX	FLEXIBLE
FT	FEET OR FOOT
FLUOR.	FLUORESCENT
F.W.E.	FURNISHED WITH EQUIPMENT
G, GND	GROUND
GEN.	GENERATOR
GFI	GROUND FAULT INTERRUPTER
G.C.	GENERAL CONTRACTOR
HP	HORSEPOWER
HVAC	HEATING, VENTILATING & AIR CONDITIONING
HZ	HERTZ
IC	INTERRUPTING CAPACITY
IG, I	ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
JB	JUNCTION BOX
KV	KILO VOLT
KVA	KILO VOLT AMP
KW	KILO WATT
LED	LIGHT-EMITTING DIODE
LP	LIGHTING PANEL
LTG	LIGHTING
M.C.	MECHANICAL CONTRACTOR
MCM	THOUSAND CIRCULAR MILS
MCB	MAIN CIRCUIT BREAKER
MECH	MECHANICAL
MDP	MAIN DISTRIBUTION PANEL
MLO	MAIN LUGS ONLY
MTD	MOUNTED
MTG	MOUNTING
N	NEUTRAL
NIC	NOT IN CONTRACT
NEC	NATIONAL ELECTRIC CODE
NTS	NOT TO SCALE
NM	NON-METALLIC CONDUIT
P	POLE
PB	PULL BOX
ø	PHASE
PWR	POWER
RECEPT.	RECEPTACLE
REQ.	REQUIRED
RGS	RIGID GALVANIZED STEEL
RM	ROOM
R&R	REMOVE & RELOCATE
SCHED.	SCHEDULE
SECT.	SECTION
SPEC.	SPECIFICATION
SPKR.	SPEAKER
SW	SWITCH
SWBD	SWITCH BOARD
SYS	SYSTEM
TEL	TELEPHONE
TC	TIME CLOCK
TYP	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
UPS	UN-INTERRUPTABLE POWER SUPPLY
VFC	VARIABLE FREQUENCY CONTROLLER
VIF	VERIFY IN FIELD
VSD	VARIABLE SPEED DRIVE
WP	WEATHER PROOF
W	WATT

ELECTRICAL LINE TYPES

- –/–/–/– or ------ EXISTING TO BE REMOVED
- EXISTING TO REMAIN
- NEW DEVICE
- NEW WIRING
- NEW FIXTURE

GENERAL SYMBOLS

- POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK
- POINT OF DISCONNECT
- X/XX INDICATES SECTION LETTER
- INDICATES DRAWING NUMBER WHERE LOCATED

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

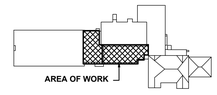
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
ERIC D. FELLENZER
075084
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER
NO. 075084-1

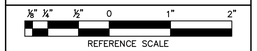
GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



KEY PLAN

FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A,
Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100,
Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735



REFERENCE SCALE

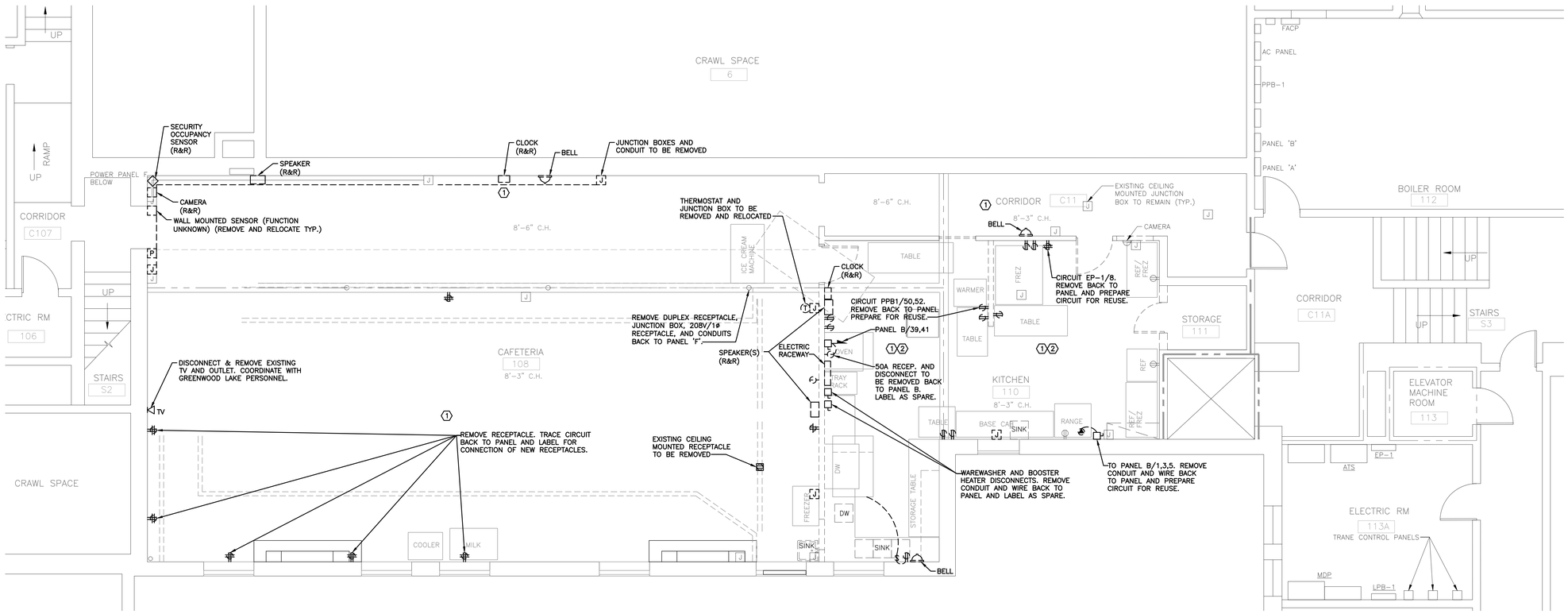
Drawing Title

ELECTRICAL: SYMBOLS, NOTES, AND ABBREVIATIONS

Drawing No.

E-001

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\ELEC\E-001.dwg (Layout: E-001)
Date: Tue, Dec 28, 2021 - 4:10 PM (Name: wpb)



1 PARTIAL BASEMENT PLAN - EXISTING POWER PLAN

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

GENERAL NOTE:

1. EC TO TRACE ALL CIRCUITS BACK TO ORIGINATING PANEL. LABEL ALL CIRCUITS AS APPROPRIATE. ALL CIRCUITS BEING DEMO'D AND NOT BEING REUSED SHALL BE LABELED AS SPARE.

KEYED NOTES:

(1) ELECTRICAL CONTRACTOR TO FIELD SURVEY ALL EXISTING ELECTRICAL CONDITIONS (PANELS, DISCONNECTS, JUNCTION BOXES, RECEPTACLES, ETC.) PRIOR TO ANY WORK. ANY DISCREPANCIES BETWEEN THE CONTRACT DRAWINGS AND THE EXISTING CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE SCHOOL DISTRICT'S DIRECTOR OF FACILITIES OR A/E.

(2) DEMO ALL EXISTING ELECTRICAL CONDITIONS (PANELS, DISCONNECTS, RECEPTACLES, WIRING, CONDUIT, ETC.) TO MAKE WAY FOR NEW KITCHEN EQUIPMENT. SEE SHEET E-100 FOR NEW KITCHEN POWER PLAN

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK * ERIC D. FELLENZER * 073084 * LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 073084-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL

AREA OF WORK

KEY PLAN

FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

⅜" ½" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title

ELECTRICAL: PARTIAL BASEMENT POWER DEMO PLAN

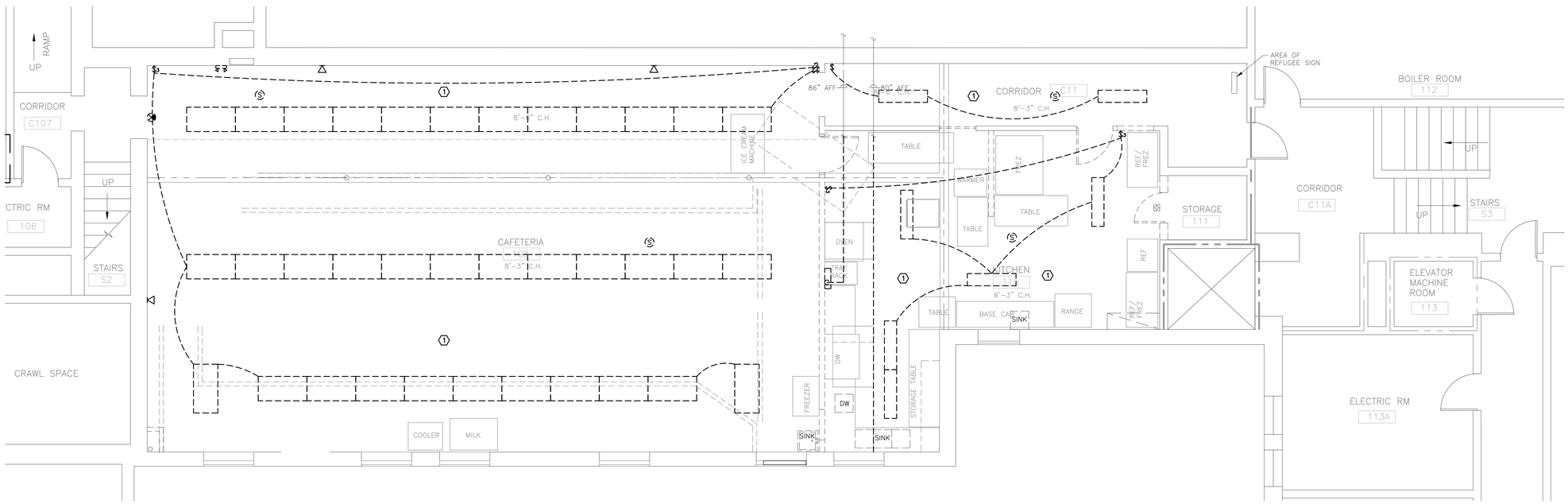
Drawing No.

ED-100

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovation\ELEC\E-100 & ED-100.dwg (Layout: ED-100)
Date: Tue, Dec 28, 2021 - 4:08 PM (Name: wpb)



1 **PARTIAL FIRST FLOOR PLAN - EXISTING DEMOLITION RCP**
SCALE: 1/4" = 1'-0"



1 **PARTIAL BASEMENT PLAN - EXISTING DEMOLITION RCP**
SCALE: 1/4" = 1'-0"

KEYED NOTES:

1. ELECTRICAL CONTRACTOR TO FIELD SURVEY ALL EXISTING ELECTRICAL CONDITIONS (PANELS, DISCONNECTS, JUNCTION BOXES, RECEPTACLES, ETC.) PRIOR TO ANY WORK. ANY DISCREPANCIES BETWEEN THE CONTRACT DRAWINGS AND THE EXISTING CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE SCHOOL DISTRICT'S DIRECTOR OF FACILITIES OR A/E.

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\ELEC\ED-200.dwg (Layout: ED-200)
Date: Tue, Dec 28, 2021 - 4:08 PM (Name: wpb)

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

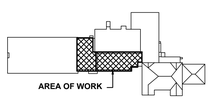
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
ERIC D. FELLENZER
035847
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER
NO. 073084-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



KEY PLAN

FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A,
Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100,
Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

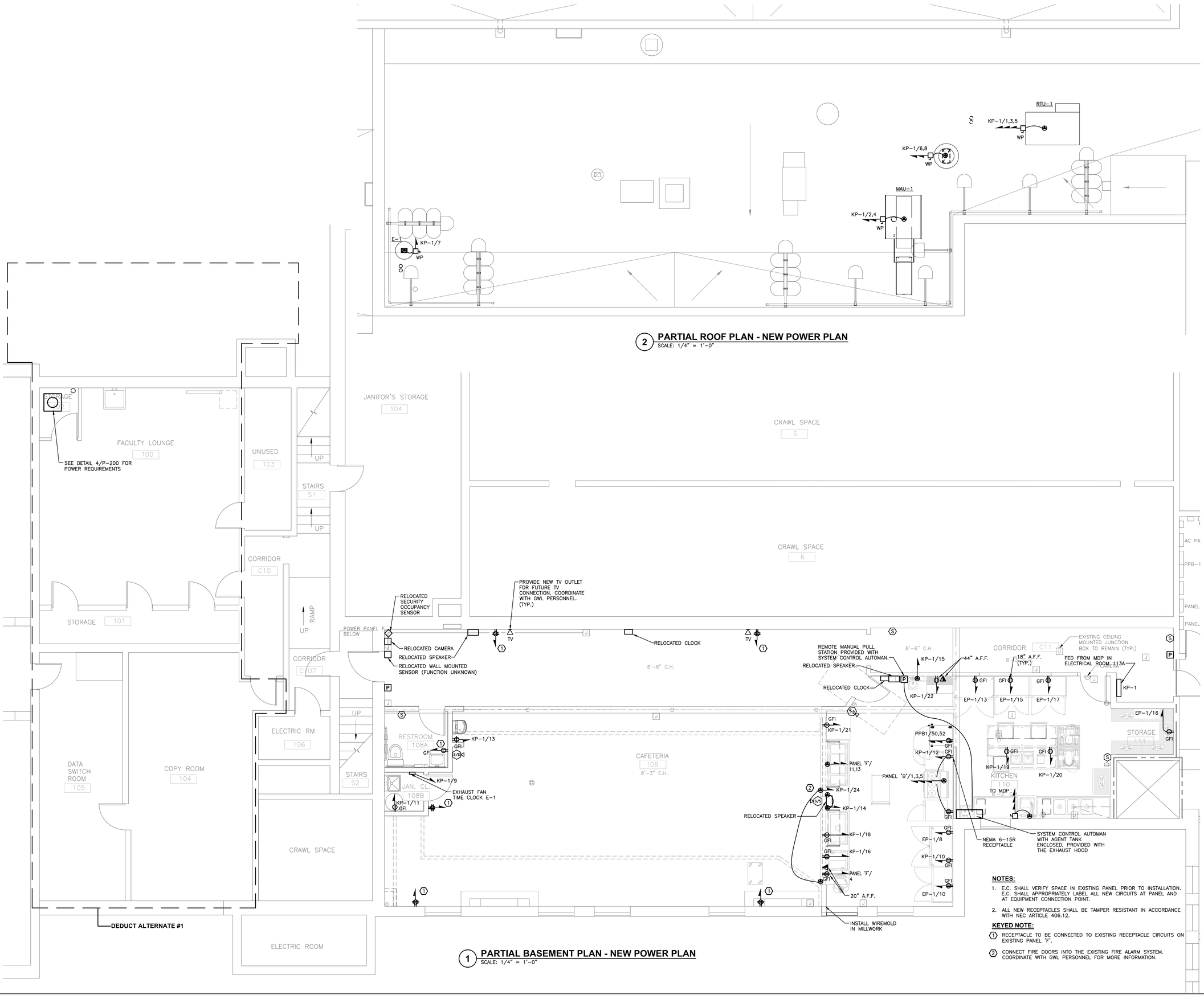
⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title

ELECTRICAL:
PARTIAL BASEMENT & FIRST FLOOR LIGHTING DEMO PLAN

Drawing No.

ED-200



2 PARTIAL ROOF PLAN - NEW POWER PLAN
SCALE: 1/4" = 1'-0"

1 PARTIAL BASEMENT PLAN - NEW POWER PLAN
SCALE: 1/4" = 1'-0"

NOTES:

1. E.C. SHALL VERIFY SPACE IN EXISTING PANEL PRIOR TO INSTALLATION. E.C. SHALL APPROPRIATELY LABEL ALL NEW CIRCUITS AT PANEL AND AT EQUIPMENT CONNECTION POINT.
2. ALL NEW RECEPTACLES SHALL BE TAMPER RESISTANT IN ACCORDANCE WITH NEC ARTICLE 406.12.

KEYED NOTE:

(1) RECEPTACLE TO BE CONNECTED TO EXISTING RECEPTACLE CIRCUITS ON EXISTING PANEL 'F'.

(2) CONNECT FIRE DOORS INTO THE EXISTING FIRE ALARM SYSTEM. COORDINATE WITH GWL PERSONNEL FOR MORE INFORMATION.

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
073084
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 073084-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL

AREA OF WORK

KEY PLAN

FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

REFERENCE SCALE

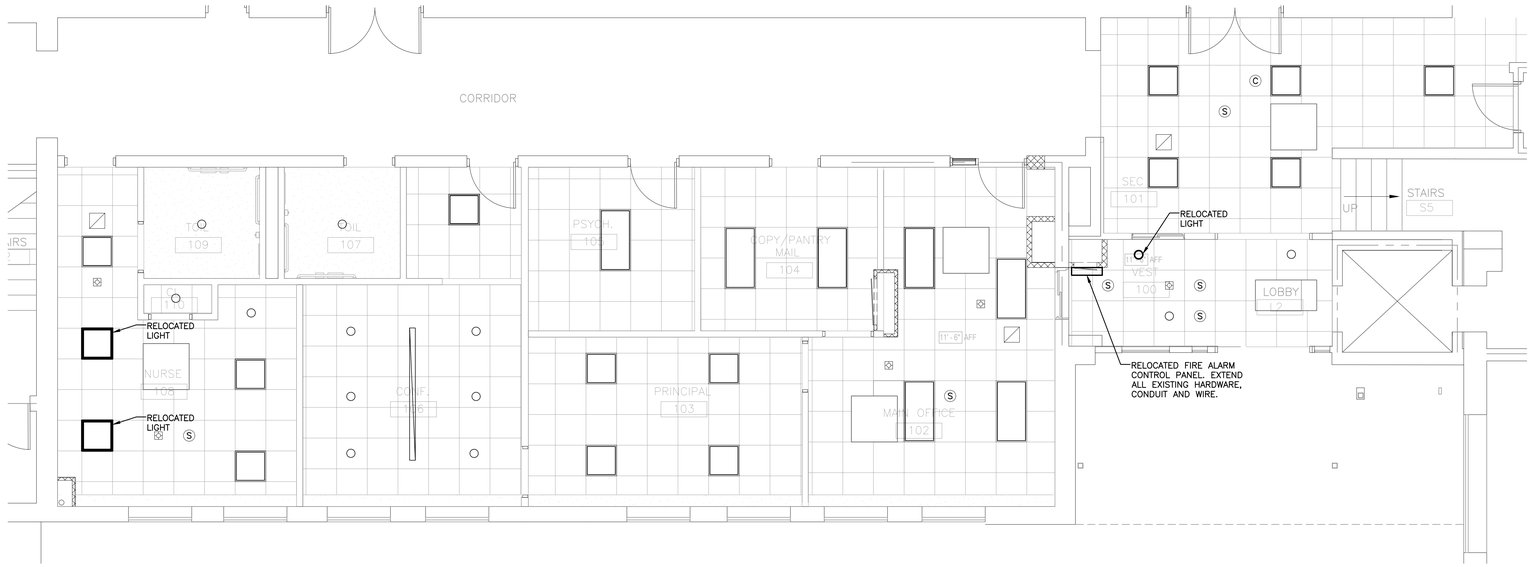
Drawing Title

ELECTRICAL: NEW PARTIAL BASEMENT AND ROOF POWER PLANS

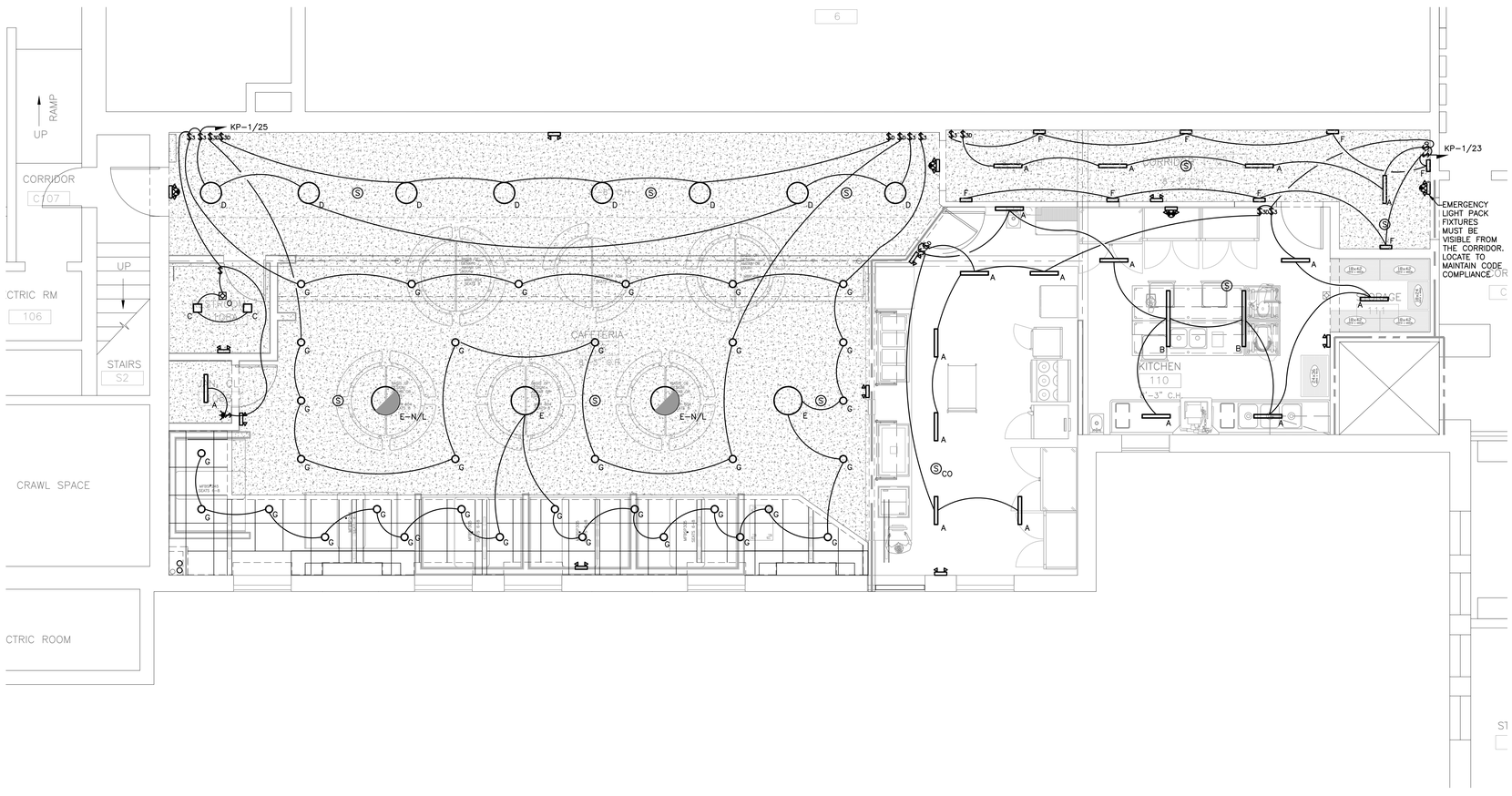
Drawing No.

E-100

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\ELEC\E-100 & ED-100.dwg (Layout: E-100)
Date: Tue, Dec 28, 2021 - 4:08 PM (Name: wpb)



2 NEW PARTIAL 1ST FLOOR - RCP
SCALE: 1/4" = 1'-0"



1 NEW PARTIAL BASEMENT PLAN - RCP WITH PROPOSED FIRE WALL OPTION 1
SCALE: 1/4" = 1'-0"

GENERAL NOTE:

1. CONNECT ALL EMERGENCY WALL PACK FIXTURES AND EXIT SIGNS TO LOCAL LIGHTING CIRCUIT.

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

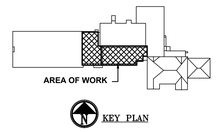
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
ERIC D. FELLENZER
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 072084-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



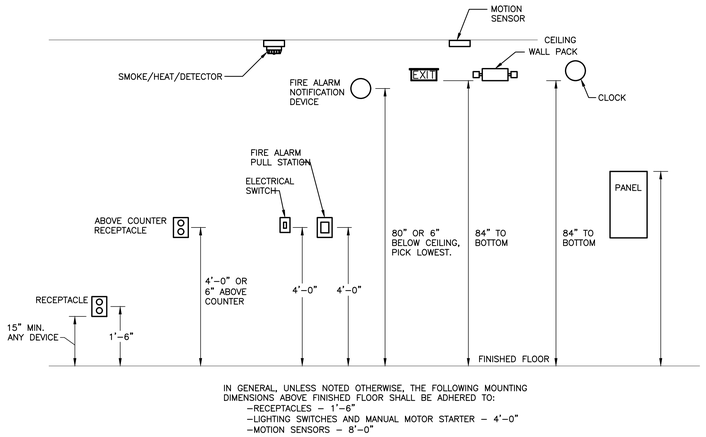
FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A,
Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100,
Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

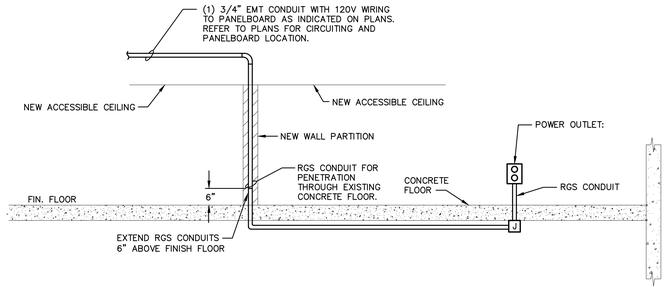
Drawing Title
ELECTRICAL:
NEW PARTIAL BASEMENT & FIRST FLOOR LIGHTING PLAN

Drawing No.
E-200

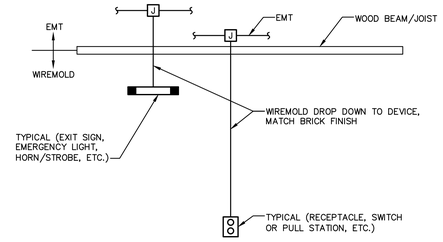
File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\ELEC\E-200.dwg (Layout: E-200 BASEMENT RCP)
Date: Tue, Dec 28, 2021 - 4:08 PM (Name: wpb)



4 MOUNTING HEIGHTS OF ELECTRICAL DEVICES
N.T.S.

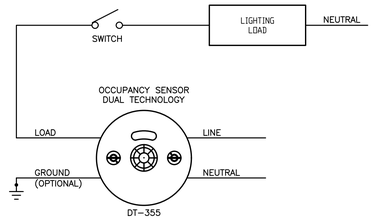


2 FLOOR POWER/ DATA OUTLETS
N.T.S.

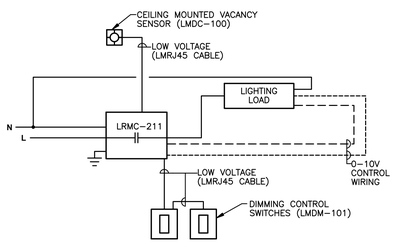


NOTES:
1. WHERE ABLE ALL WIRING SHALL BE INSTALLED CONCEALED IN NEW (OR EXISTING) PARTITIONS (NORTH SIDE ROOM) OF BUILDING.
2. IN ALL OTHER CASES, PROVIDE WIREMOLD DROPS FROM ABOVE WOOD BEAMS/CEILING.

3 EXPOSED CONDUIT DETAIL - TYPICAL
N.T.S.

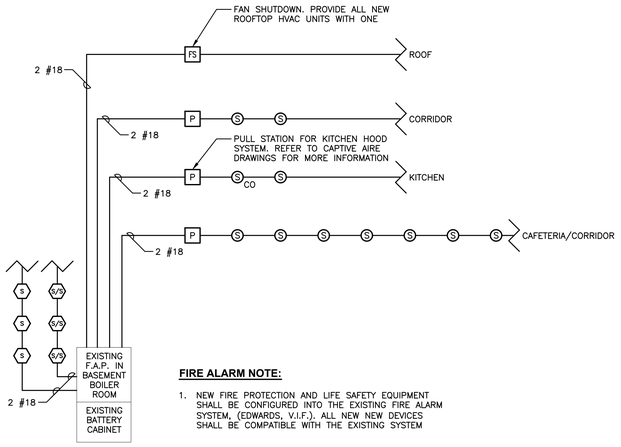


4 SWITCHING DETAIL
N.T.S.



NOTES:
1. ALL EQUIPMENT BY WATTSTOPPER OR EQUIVALENT.
2. ALL DAYLIGHT SENSOR TO BE LOCATED NEAR THE WINDOWS. NOT SHOWN ON PLANS, E.C. SHALL COORDINATE LOCATION IN FIELD.

6 TYPICAL DIMMING DETAIL
N.T.S.



FIRE ALARM NOTE:
1. NEW FIRE PROTECTION AND LIFE SAFETY EQUIPMENT SHALL BE CONFIGURED INTO THE EXISTING FIRE ALARM SYSTEM, (EDWARDS, V.I.F.). ALL NEW NEW DEVICES SHALL BE COMPATIBLE WITH THE EXISTING SYSTEM

5 FIRE ALARM / DETECTION SYSTEM SCHEMATIC
N.T.S.

FIRE ALARM NOTES:
1. REFER TO THE FLOOR PLANS FOR LOCATION & QUANTITY OF FIRE ALARM DEVICES.
2. ALL FIRE ALARM WIRING SHALL BE IN TEFLON WIRE AND SHALL BE CONCEALED IN CEILING SPACES & WALLS. ALL NEW FIRE ALARM DEVICES SHALL BE CONNECTED TO THE EST3 FIRE ALARM CONTROL PANEL IN THE BASEMENT BOILER ROOM.
3. SYSTEM SCHEMATIC IS A DIAGRAMMATIC REPRESENTATION OF THE FIRE ALARM SYSTEM. THE SYSTEM SHALL BE INSTALLED AND WIRED AS PER THE SYSTEM MANUFACTURER'S RECOMMENDATION FOR A COMPLETE AND OPERABLE SYSTEM.
4. CONTRACTOR IS RESPONSIBLE FOR ALL FILING AND FINAL INSPECTION AS PER THE LOCAL AUTHORITY HAVING JURISDICTION.
5. CONTRACTOR TO PROVIDE AND INSTALL ALL NECESSARY MODULES, INTERFACE MODULES AND DEVICES REQUIRED TO PROVIDE AN OPERABLE ALARM SYSTEM IN COMPLIANCE WITH ALL CODES.
6. ACTIVATION OF THE SMOKE DETECTORS SHALL CAUSE A GENERAL ALARM AFTER THE SMOKE DETECTOR PERFORMS VERIFICATION.
7. ACTIVATION OF ANY PULL STATION OR HEAT DETECTOR SHALL IMMEDIATELY CAUSE THE ALARM PANEL TO ENTER THE ALARM MODE.
8. CONTRACTOR SHALL PROVIDE ALL NECESSARY ADDITIONAL RELAY DEVICES OR POWER TRANSFORMERS FOR PROPER OPERATION OF THE FAN SHUT-DOWN UNITS AND OTHER RELATED DEVICES.
9. BATTERY BACKUP SHALL PROVIDE A MINIMUM OF 24 HRS. OPERATION WITH A 15 MINUTE ALARM AT THE END OF 24 HRS.
10. NEW FIRE ALARM COMPONENTS SHALL BE TESTED IN ACCORDANCE WITH NFPA CODES 70, 70E, 72, BCNYS, FCNYS, LSC101 (2000)-CH.32 NEW BOARD AND CARE OCCUPANCY AS WELL AS ALL LOCAL AND STATE CODE REQUIREMENTS.
11. CONTRACTOR SHALL PROVIDE ALL ADDITIONAL APPURTENANCES AS REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM. MODEL NUMBERS GIVEN MAY NOT INCLUDE ALL SPECIFIC REQUIRED ACCESSORIES FOR COMPLETE INSTALLATION.
12. PROVIDE APPURTENANCES NECESSARY SUCH THAT IF MORE THEN TWO STROBES ARE VISIBLE THEY SHALL FLASH IN SYNC.
13. ENTIRE FIRE DETECTION AND ALARM SYSTEM SHALL BE FURNISHED AND INSTALLED BY A N.Y. STATE LICENSED ALARM CONTRACTOR.
14. FIRE ALARM CONTRACTOR SHALL INTERCONNECT NEW SMOKE AND CO DETECTORS WITH THE EXISTING FIRE ALARM SYSTEM FOR PRIMARY POWER AND BATTERY BACKUP. CO ALARM SHALL ANNUNCIATE AS A SUPERVISORY CONDITION.
15. ALL AIR HANDLING SYSTEMS RATED 2,000 CFM OR MORE SHALL BE PROVIDED WITH DUCT SMOKE DETECTORS FAN SHUTDOWNS CONNECTED TO THE FIRE ALARM SYSTEM.
16. CONTRACTOR SHALL PROVIDE MAKEUP AIR UNIT SUPPLY FAN SHUTDOWN RELAY AND CONNECT IT AS AN OUTPUT ON THE EST3 FIRE ALARM CONTROL PANEL.
17. CONTRACTOR SHALL CONNECT ROLLING FIRE DOOR TO THE EXISTING EST3 FIRE ALARM CONTROL PANEL.
18. CONTRACTOR SHALL REMOVE, RELOCATE, AND RE-INSTALL THE EXISTING FIRE ALARM CONTROL PANEL AS SHOWN ON DRAWINGS AD-101, A-101 & E-200. EXTEND ALL EXISTING WIRING, CONDUIT, HARDWARE , ETC. AS NEEDED TO MAINTAIN CONTINUITY. PROVIDE ALL ADDITIONAL HARDWARE, CONDUIT AND WIRE REQUIRED FOR A COMPLETE INSTALLATION.

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

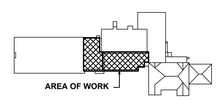
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
NY PROFESSIONAL ENGINEER NO. 073084-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940
t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601
t 845-454-9704 fx 855-320-8735

REFERENCE SCALE: 1/8" 1/4" 1/2" 0 1" 2"

Drawing Title
ELECTRICAL: DETAILS

Drawing No.
E-701

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\ELEC\E-701.dwg (Layout: E-701)
Date: Tue, Dec 28, 2021 - 4:08 PM (Name: vvpb)

LOAD	CONDUCTORS	C.B.		C.B.	CONDUCTORS	LOAD
ROOFTOP UNIT (RTU-1)	(3)#10, (1)#10 GND, 3/4"C	30	1 2	15	(3)#12, (1)#12 GND, 3/4"C	MAKE UP AIR (MAU-1)
			3 4			
			5 6		(3)#12, (1)#12 GND, 3/4"C	KITCHEN EXHAUST (KEF-1)
BR EXHAUST (E-1)	(2)#12, (1)#12 GND, 3/4"C	15	7 8			
E-1 TIME CLOCK			9 10		(2)#12, (1)#12 GND, 3/4"C	SEWAGE EJECTOR (SE-2)
SEWAGE EJECTOR (SE-1)			11 12			STEAMER & GAS OVENS
WATER COOLER (WF-1)			13 14			FOOD PROJECTORS
EXHAUST HOOD CONTROLS			15 16			ICE CREAM DISPENSER
---	---	--	17 18			DROP-IN COLD WELL
FOOD CUTTER & CAN OPENER	(2)#12, (1)#12 GND, 3/4"C	20	19 20	20		SLICER & MIXER
REFRIGERATOR SELF-SERVE			21 22			WORK STATION
KITCHEN/CORRIDOR LTG			23 24			KITCHEN FIRE DOORS
CAFE/BR LTG			25 26		---	SPARE
SPARE	---		27 28	--		SPACE
SPACE		--	29 30			

NEW POWER PANEL - KP-1

TYPE: SQUARE 'D' NQ
RATING: 208/120V, 3ø, 4W
MAINS: 100 A MCB
BRACING: 22K AIC
ENCLOSURE: NEMA 1 SURFACE
POLES: 30

NOTES:
1. ALL WIRE SHALL BE DUAL RATED THHN/THWN COPPER CONDUCTOR UNLESS OTHERWISE NOTED.
2. ALL CIRCUITS SHALL HAVE FULL SIZE INSULATED GREEN GROUND UNLESS OTHERWISE NOTED.

LOAD	CONDUCTORS	C.B.	A ø B ø C ø	C.B.	CONDUCTORS	LOAD
SPARE	- - -	60		60	(4)#4, (1)#10 GND, 1"C	KITCHEN DISHWASHER (NOTE 2)
EP-1	EXISTING	100		100	(4)#1, (1)#8 GND, 2"C	KP-1 (NOTE 2)
CPB1	EXISTING	125		125	EXISTING	ELEVATOR
PPB1	EXISTING	225		125	EXISTING	CPA1
ELECTRIC ROOM	EXISTING	400		125	EXISTING	CHILLER

EXISTING MAIN DISTRIBUTION PANEL - MDP

TYPE: GE SPECTRA SERIES
RATING: 208/120V, 3ø, 4W
MAINS: V.I.F.
BRACING: V.I.F.
ENCLOSURE: NEMA 1 SURFACE

NOTES:
1. ALL WIRE SHALL BE DUAL RATED THHN/THWN COPPER CONDUCTOR UNLESS OTHERWISE NOTED.
2. NEW IN EXISTING SPARE.

LEGEND AND SCHEDULE OF LIGHTING EQUIPMENT

SYMBOL	MANUFACTURER	MODEL #	DESCRIPTION	LAMP
A	METALUX	2SNLED-LD5-16SL-SLW-UNV-LB35-CD1-U	2' SURFACE MOUNT LED FIXTURE. 120-277V, 1600 LUMENS, 3500K, 80 + CRI, 0-10V DIMMING WITH FULL FROST LENS AND DAMP LOCATION LISTING.	LED 14W 112.4 Lm/W
B	METALUX	4SNLED-LD5-15SL-SLW-UNV-LB35-CD1-U	4' SURFACE MOUNT LED FIXTURE. 120-277V, 1500 LUMENS, 3500K, 80 + CRI, NON-DIMMING WITH FULL FROST LENS AND DAMP LOCATION LISTING.	LED 13W 118.7 Lm/W
C	COOPER	SMD6S12 935WHE	6" SQUARE SURFACE MOUNT DOWNLIGHT. 120-277V, 1200 LUMENS, 3500K, 90 + CRI, NON-DIMMING.	LED 15.6W 79.5 Lm/W
D	XAL USA	VELA-DIR-RD-SUR-WH-OP-35K-C80-UNV-010V-02000L-DM-1.5FT	18" ROUND SURFACE MOUNT LED FIXTURE. 120-277V, 2000 LUMENS, 3500K, 80 + CRI, 0-10V DIMMING.	LED 20W 102 Lm/W
E	XAL USA	VELA-DIR-RD-SUR-WH-OP-35K-C80-UNV-010V-03000L-DM-2FT	2' ROUND SURFACE MOUNT LED FIXTURE. 120-277V, 3000 LUMENS, 3500K, 80 + CRI, NON-DIMMING.	LED 27W 111 Lm/W
E-N/L	XAL USA	VELA-DIR-RD-SUR-WH-OP-35K-C80-UNV-010V-03000L-DM-2FT	2' ROUND SURFACE MOUNT NIGHT LIGHT. POWERED FROM LOCAL CIRCUIT ON UNSWITCHED POWER SIDE.	LED 27W 111 Lm/W
F	MODERN FORMS	WS-27610-35-AL	10" LED WALL SCONCE. 120-277V, 1400 LUMENS, 3500K, 90 + CRI, NON-DIMMING WITH A BRUSHED ALUMINUM FINISH.	LED 22W 63.63 Lm/W
G	COPPER	SMD6R12935WHE	6" ROUND SURFACE MOUNT DOWNLIGHT. 120-277V, 1200 LUMENS, 3500K, 90 + CRI, 0-10V DIMMING.	LED 15.3W 82.8 Lm/W
	LITHONIA	ELM2L-UVOLT-LTP-SDRT	ELM2L SERIES THERMOPLASTIC EMERGENCY LIGHT WITH TWO HIGH PERFORMANCE LED LIGHTS, SELF DIAGNOSTICS AND BATTERY CAPABLE OF PROVIDING 90 MINUTES OF CONTINUOUS BACKUP. WHITE HOUSING.	(2) LED 2.4W
	LITHONIA	LHQM-LED-R-HO-SD	LHQM SERIES THERMOPLASTIC COMBINATION EMERGENCY EXIT SIGN WITH TWO HIGH PERFORMANCE LED LIGHTS, SELF DIAGNOSTICS AND BATTERY CAPABLE OF PROVIDING 90 MINUTES OF CONTINUOUS BACKUP. WHITE HOUSING AND DIRECTION ARROWS REQUIRED.	(2) LED 1.5W/9.6V

LOAD	CONDUCTORS	C.B.		C.B.	CONDUCTORS	LOAD
SEWAGE EJECTOR WEST	EXISTING	30	1 2	20	EXISTING	SEWAGE EJECTOR EAST
			3 4			
EXISTING SUMP PUMP FACILITY		30	5 6			
			7 8	20		FREEZER
SUMP PUMP		20	9 10			FREEZER
SUMP PUMP KITCHEN			11 12			ELEVATOR SUMP
KITCHEN RECEPTS			13 14			EXISTING SUMP ELEVATOR AREA
KITCHEN RECEPTS			15 16		- - -	SPARE
KITCHEN RECEPTS			17 18	30	EXISTING	DRYER
			19 20			
			21 22			
			23 24			
			25 26			
			27 28			
			29 30			
			31 32			
			33 34			
			35 36			
			37 38			
			39 40			
			41 42			

EXISTING POWER PANEL - EP-1 (DEMOLITION)

TYPE: EATON POW-R-LINE PRL1A
RATING: 208/120V. 3ø, 4W
MAINS: 100 A MCB
BRACING: 22K AIC
ENCLOSURE: NEMA 1, SURFACE
POLES: 42

LOAD	CONDUCTORS	C.B.		C.B.	CONDUCTORS	LOAD
SEWAGE EJECTOR WEST	EXISTING	30	1 2	20	EXISTING	SEWAGE EJECTOR EAST
			3 4			
EXISTING SUMP PUMP FACILITY		30	5 6			
			7 8	20	(2)#12, (1)#12 GND, 3/4"C	REACH-IN REFRIGERATOR
SUMP PUMP		20	9 10			REACH-IN REFRIGERATOR
SUMP PUMP KITCHEN			11 12		EXISTING	ELEVATOR SUMP
FREEZER	(2)#12, (1)#12 GND, 3/4"C		13 14			EXISTING SUMP ELEVATOR AREA
FREEZER			15 16		(2)#12, (1)#12 GND, 3/4"C	NEW KITCHEN SUMP PUMP
FREEZER			17 18	30	EXISTING	DRYER
			19 20			
			21 22			
			23 24			
			25 26			
			27 28			
			29 30			
			31 32			
			33 34			
			35 36			
			37 38			
			39 40			
			41 42			

EXISTING POWER PANEL - EP-1 (CONSTRUCTION)

TYPE: EATON POW-R-LINE PRL1A
RATING: 208/120V. 3ø, 4W
MAINS: 100 A MCB
BRACING: 22K AIC
ENCLOSURE: NEMA 1, SURFACE
POLES: 42

NOTES:
1. ALL NEW WIRE SHALL BE DUAL RATED THHN/THWN COPPER CONDUCTOR UNLESS OTHERWISE NOTED.
2. ALL NEW CIRCUITS SHALL HAVE FULL SIZE INSULATED GREEN GROUND UNLESS OTHERWISE NOTED.

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

SED PROJECT NUMBER
44-21-11-02-0-002-015

CAPITAL IMPROVEMENTS

LEGEND

No.	Date	Revisions
	12/29/21	FOR BID

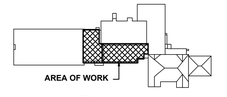
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

Drawn by	SBL
Checked by	EDF
Project No.	FE# 19-194
Scale	AS NOTED
Date	1-8-21

ERIC D. FELLENZER, P.E.
STATE OF NEW YORK
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER NO. 072004-1

GREENWOOD LAKE
UNION FREE
SCHOOL DISTRICT

GREENWOOD LAKE ELEMENTARY SCHOOL



N KEY PLAN

FELLENZER ENGINEERING LLP
FE #: 19-194
www.fellp.com
22 Mulberry St., Suite 2A, Middletown, NY 10940 t 845-343-1481 fx 845-343-4986
181 Church St., Suite 100, Poughkeepsie, NY 12601 t 845-454-9704 fx 855-320-8735

⅛" ¼" ½" 0 1" 2"
REFERENCE SCALE

Drawing Title
ELECTRICAL SCHEDULES

Drawing No.
E-801

File Name: F:\2019\19-194 GWLUFSD Kitchen and Cafeteria Renovations\ELEC\E-801.dwg (Layout: E-801)
Date: Tue, Dec 28, 2021 - 4:08 PM (Name: wpb)