

# DRAWING INDEX:

M-000 MECHANICAL COVER SHEET, DETAILS AND SCHEDULE M-101 MECHANICAL BASEMENT FLOOR PLAN. M-102 MECHANICAL FIRST FLOOR PLAN

AE JOB#1211

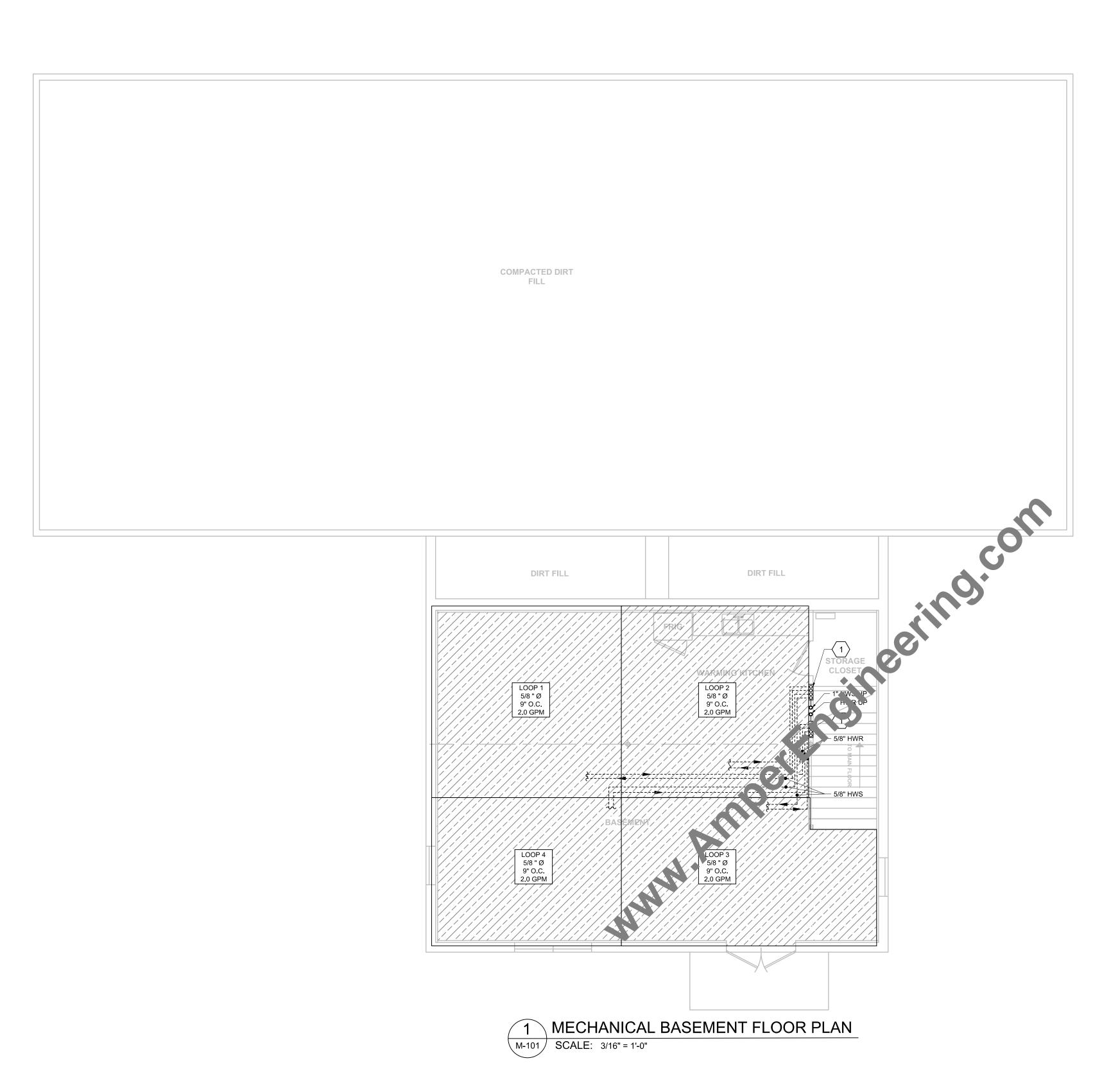
DATE ISSUED: 10-05-2020

DESIGNED BY: JAK

DRAWN BY: JAK

DRAWING TITLE:

MECHANICAL COVER SHEET,DETAILS AND SCHEDULE



GENERAL NOTES

PROFESSIONAL ENGINEERING:

ALL TUBING INSIDE THE FLOOR SHALL BE 5/8" OF SIZE AND PEX TYPE. PROVIDE O2 BARRIER.
LOOP LENGTH SHALL NOT EXTEND 400 FEET.

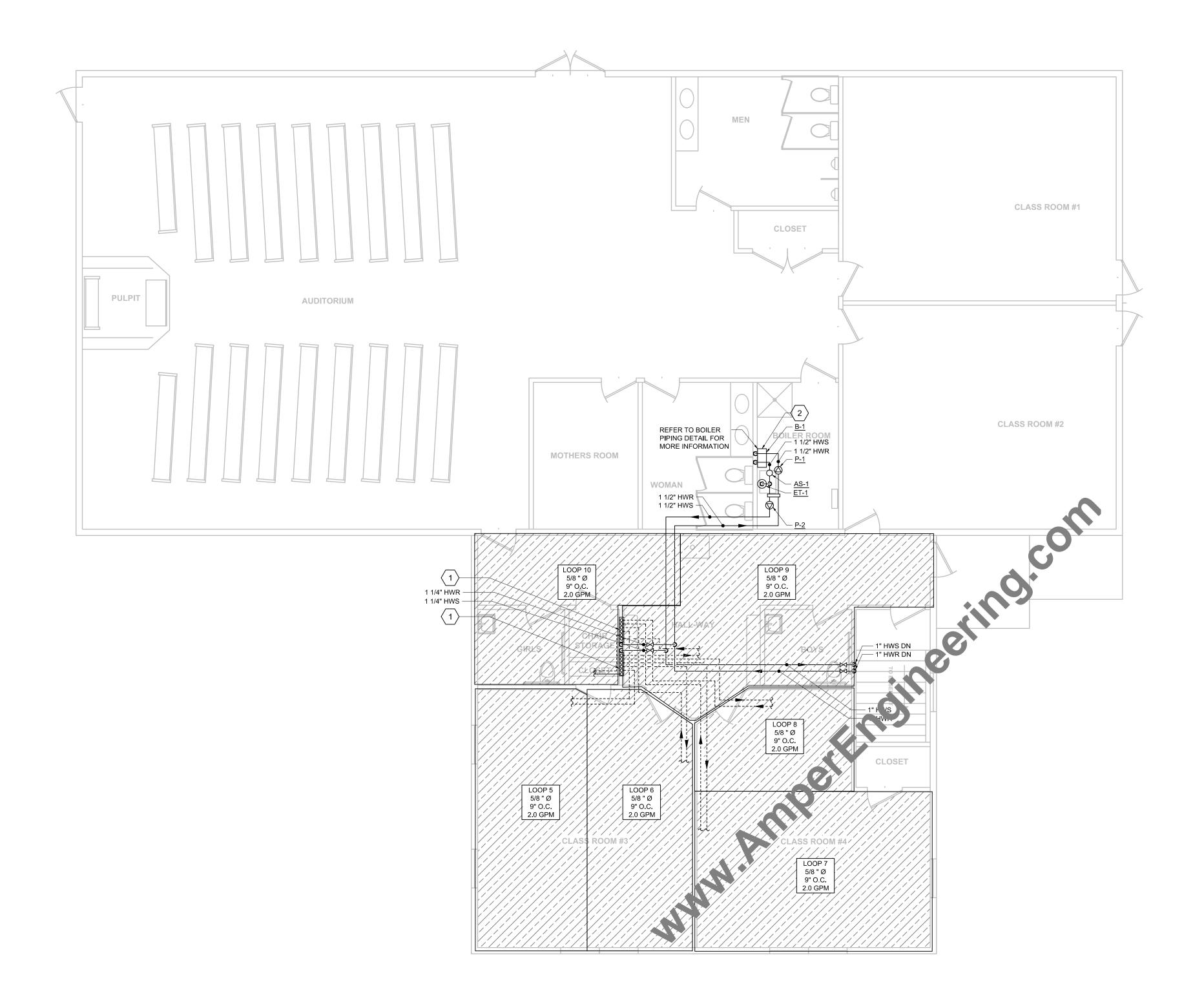
KEY NOTE #

PROVIDE 1" MANIFOLD, 4 LOOPS. UPNOR
 MANUFACTURER TRUEFLOW MODEL OR
 APPROVED EQUAL.

	Гт	i					
ENGINEER:	Lon	Jai					
PROJECT COORDINATOR:			7	]			
DATE							
REVISION							
NO.							
PROPOSED ADDITION	FOR		AIN SCHOOL		, Cd	KOAD KOAD NEW TRIBOLL DA 18066	NEW 11XII OE1, 1 X 10000
			RI	1			
	E JC						
10	ATE -05	-202	20				
DE 14	ESIC	JN]	ED	BY	:		

DRAWN BY: JAK

DRAWING TITLE: MECHANICAL BASEMENT FLOOR PLAN



1 MECHANICAL FIRST FLOOR PLAN
M-102 SCALE: 3/16" = 1'-0"

GENERAL NOTES

KEY NOTE #

1. PROVIDE 1 1/4" MANIFOLD, 6 LOOPS. UPONOR MANUFACTURER TRUFLOW MODEL OR APPROVED EQUAL.
2. ROUTE COMBUSTION AIR AND FLUE VENT UP TO THE ROOF. TERMINATE AS PER MANUFACTURER'S INSTRUCTION.

. ALL TUBING INSIDE THE FLOOR SHALL BE 5/8" OF SIZE AND PEX TYPE. PROVIDE O2 BARRIER.
2. LOOP SHALL NOT EXTEND 400 FEET.

PROFESSIONAL ENGINEERING:

BI

AE JOB#1211

DATE ISSUED: 10-05-2020

DESIGNED BY:
JAK

DRAWN BY:
JAK

DRAWING TITLE:

MECHANICAL FIRST FLOOR PLAN

DRAWING NUMBER:

M-102

#### GENERAL NOTES:

- THIS DESIGN MAY BE USED FOR SECURING PERMITS, BID, PLANNING, THE COMPANY'S REVIEW OR SOME OTHER GOAL. THIS DESIGN DOES NOT GUARANTEE THESE APPROVALS, NOR ARE THESE APPROVALS A REQUIREMENT FOR SERVICES OR THE COMPLETITION OF THIS WORK.
- THIS DESIGN IS NOT A COMPLETE SET OF CONSTRUCTION DRAWING OR SHOP DRAWINGS. THIS DESIGN REPRESENTS DIAGRAMMATIC

REPRESENTATION OF INTENDENT SCOPE OF WORK.

- THE SYMBOLS AND ABBREVIATIONS LIST ON THIS SHEET IS A COMPREHENSIVE STANDARD GUIDE INTENDED FOR GENERAL USE ON ALL PROJECTS, THEREFORE, NOT ALL THE SYMBOLS AND ABBREVIATIONS CONTAINED IN THIS LIST ARE NECESSARILY USED ON THIS PARTICULAR PROJECT AND SHOULD BE USED FOR CLARIFICATION
- ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE NATIONAL ELECTRICAL CODE, IECC, LIFE SAFETY CODE, LOCAL BUILDING CODE. OSHA REGULATIONS. OCAL. STATE. FEDERAL AND AUTHORITY HAVING JURISDICTION CODES APPLICABLE AT THE TIME OF THE CONSTRUCTION.
- GENERAL WORK PRACTICES FOR ELECTRICAL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NECA 1 STANDARD FOR GOOD WORKMANSHIP IN ELECTRICAL CONSTRUCTION (ANSI)
- ALL MATERIALS PROVIDED BY THE CONTRACTOR SHALL BE NEW AND FREE OF DEFECTS, LISTED/LABELED FOR THE INTENDED PURPOSE BY UNDERWRITERS (UL) OR OTHER ORGANIZATION THAT IS ACCEPTABLE TO
- THESE DRAWINGS AND ACCOMPANYING SPECIFICATIONS ARE INTENDED TO DESCRIBE AND ILLUSTRATE SYSTEMS WHICH WILL NOT INTERFERE WITH THE STRUCTURE OF THE BUILDING AND WHICH WILL FIT INTO THE AVAILABLE SPACES. THE CONTRACTOR IS RESPONSIBLE FOR CAREFULLY LAYING OUT ALL WORK TO CONFORM TO NATIONAL ELECTRICAL CODE CLEARANCES, ARCHITECTURAL, STRUCTURAL MECHANICAL AND SITE CONDITIONS. TO AVOID OBSTRUCTIONS AND TO ALLOW THE PROPER INSTALLATION OF EACH ITEM.
- DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT ONLY. COORDINATE WITH DRAWINGS OF OTHER TRADES TO FIT THE ACTUAL SPACE CONDITIONS, HEADROOM AND SPACE CONDITION TO BE
- THE DRAWINGS ARE TO BE CONSIDERED SCHEMATIC ONLY AND DO NOT NECESSARILY SHOW THE EXACT LOCATION AND DETAILS OF THE WORK TO BE INSTALLED.
- 0. UPON THE COMPLETION OF THE WORK, THE ENTIRE ELECTRICAL SYSTEM SHALL BE TESTED AND SHALL BE SHOWN TO BE IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE INTENT OF THE SPECIFICATIONS AND DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL SYSTEM READY FOR OPERATION AND INSPECTION BY AHJ.
- TEST AND INSPECT ALL WIRING AND EQUIPMENT INSTALLED UNDER THIS SECTION OF SPECIFICATIONS. ALL WIRING MUST BE FREE SHORTS AND BROKEN WIRE, LEAVE ALL MATERIALS AND APPARATUS IN PROPER AND SATISFACTORY WORKING CONDITIONS.
- . THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE CORRECT PHASE SEQUENCE OF ALL THREE-PHASE FEEDERS AND BRANCH CIRCUITS. VERIFY PROPER ROTATION OF ALL MOTORS.
- . CONDUIT RUNS WHEN SHOWN ARE DIAGRAMMATICAL, FINAL LOCATION AND ROUTING SHALL BE ESTABLISHED BY THE CONTRACTOR BASED ON THE INSTALLATION CONDITIONS AND SHALL BE VERIFIED IN THE FIELD. ALL CONDUIT TYPES AND INSTALLATION REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS.
- 4. CONDUIT RUNS SHALL BE PARALLEL WITH OR AT RIGHT ANGELS TO WALLS AND CEILINGS, CONDUIT SHALL BE SUPPORTED BY APPROVED MEANS. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH A DRAG WIRE.
- 5. PROVIDE CONDUIT EXPANSION FITTINGS WITH BONDING JUMPERS FOR ALL CONDUITS PASSING THROUGH EXPANSION JOINTS.
- 16. THE USE OF FLEXIBLE CONDUIT FROM LIGHTING FIXTURES TO JUNCTION BOX IS PERMITTED ONLY WHEN A SEPARATE GROUND WIRE IS INSTALLED WITH THE CONDUCTORS INSIDE FLEXIBLE CONDUIT. THE GROUND WIRE MUST BOND THE FIXTURE HOUSING TO THE JUNCTION BOX. MAXIMUM LENGTH SHALL BE 6'-0".
- . FLEXIBLE CONDUIT INSTALLED OUT OF DOORS. IN ANY MECHANICAL EQUIPMENT ROOMS, OR IN NORMALLY WET AREAS SHALL BE LIQUID TIGHT FLEX WITH SUITABLE FITTINGS.
- PROVIDE CONDUIT, WIRING, CIRCUITING AND REQUIRED CONNECTIONS TO ALL DEVICES, FIXTURES AND EQUIPMENT. CONNECT TO CIRCUITS AS INDICATED. CIRCUIT NUMBERS ARE FOR INFORMATION PURPOSES ONLY. ACTUAL CIRCUIT NUMBERS SHALL BE DETERMINED IN THE FIELD AND REFLECTED IN THE PANEL SCHEDULE DIRECTORY AND ON THE AS-BUILT
- 9. CONTRACTOR SHALL VERIFY AND COORDINATE ALL MOUNTING HEIGHTS OF ALL DEVICES MOUNTED IN CASEWORK OR IN ABOVE COUNTERS WITH EXISTING EQUIPMENT
- 20. UNLESS SPECIFICALLY DIRECTED OTHERWISE, FURNISH AND INSTALL EACH AND EVERY ITEM CONTAINED IN AND ASSOCIATED WITH, THE WORK INVOLVED AS SHOWN ON THE DRAWINGS AND/OR DESCRIBED IN THE ACCOMPANYING SPECIFICATIONS, TOGETHER WITH ALL APPURTENANCES, COMPONENTS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK. CONTRACTOR SHALL PROVIDE CONDUIT, WIRING AND CABLING TO ALL DEVICES. FIXTURES AND ETC. FOR A COMPLETE WORKING SYSTEM BASED ON THE CIRCUITS NOTED.
- PROVIDE INDEPENDENT SUPPORT FOR DISCONNECT SWITCHES, CONTROL STATIONS, BOXES, PANELS, ETC. WHERE NO WALLS OR OTHER STRUCTURAL SURFACE EXISTS.
- 2. EQUIPMENT SIZED AND LOCATIONS ARE APPROXIMATE. ACTUAL DIMENSIONS TO BE DETERMINED BY EQUIPMENT FURNISHED.
- 23. PROVIDE BRANCH CIRCUIT WIRING TO ALL ITEMS REQUIRING ELECTRICAL CONNECTIONS. WHERE BRANCH CIRCUIT WIRING IS NOT SHOWN, CONNECT ITEMS TO CIRCUITS INDICATED. THE CONTRACTOR SHALL DETERMINE EXACT ROUTING OF CONDUITS AND WIRING, UNI ESS. INDICATED OTHERWISE, ALL BRANCH CIRCUITS SHALL BE MINIMUM #12
- 4. PROVIDE JUNCTION BOX FOR ANY DEVICE WITH PIG TAIL SUCH AS SOLENOID VALVES, LIMIT SWITCHES, SMOKE DETECTORS AND ETC. FOR PROPER ELECTRICAL CONNECTION. PROVIDE ALL HARDWARE FOR MOUNTING OF JUNCTION BOX.
- 5. EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT THAT REQUIRE ELECTRICAL CONNECTIONS ARE SHOWN ON THE MECHANICAL AND PLUMBING DRAWINGS. COORDINATE WITH MECHANICAL AND PLUMBING CONTRACTORS.
- 26. WHEREVER THE INSTALLATION OF ELECTRICAL EQUIPMENT AS SHOWN ON THE DRAWINGS IS IMPRACTICAL DUE TO LOCAL INTERFERENCE OR UNFORESEEN FIELD CONDITIONS, THE CONTRACTOR SHALL INSTALL THE EQUIPMENT AT NEW LOCATIONS AS DIRECTED BY THE ENGINEER.
- . DESIGN IS BASED ON ALL CONDUCTORS TO BE THHN COPPER AND NO MORE THAN 4 CURRENT CARRYING CONDUCTORS IN THE SAME RACEWAY OR CONDUIT, UNLESS OTHERWISE NOTED.
- 28. WHEN EQUIPMENT IS BEING REMOVED/DEMO FROM THE FIELD, ALL WIRING ASSOCIATED WITH THE LOAD MUST BE REMOVED FROM THE JUNCTION BOX OR THE CIRCUIT BREAKER, DO NOT LEAVE UNUSED CONDUCTORS IN THE FIELD WITH ENDS TAPED WITH TAPE OR WIRE NUTS.
- 29. PROVIDE DISCONNECT SWITCHES FOR ELECTRICAL HEATER, HVAC EQUIPMENT AND EXHAUST FANS WITHIN EYE SIGHT OF THE EQUIPMENT.
- 30. PROVIDE SERVICE RECEPTACLE WITHIN 25 FEET OF EACH HVAC EQUIPMENT.

- 31. ELECTRICAL CONTRACTOR TO VERIFY ACTUAL INSTALLED EQUIPMENT ELECTRICAL NAME PLATE DATA BEFORE ENERGIZING THE CIRCUIT. CONFIRM ELECTRICAL DESIGN VALUES AND ACTUAL EQUIPMENT BEING INSTALLED ARE IN COMPLIANCE WITH ELECTRICAL CODE AND MANUFACTURER INSTALLATION REQUIREMENTS.
- 32. DISCONNECT SWITCHES SHALL BE HEAVY-DUTY, QUICK-MADE, QUICK-BREAK TYPE, NEMA 1 ENCLOSURE FOR INDOOR LOCATIONS (NEMA 3R FOR OUTDOOR LOCATIONS). SWITCHES SHALL BE AS MANUFACTURED BY SQUARE 'D', GENERAL ELECTRIC, OR SIEMENS (I.T.E.), PROVIDE FUSES AS MANUFACTURED BY BUSSMAN, GOULD-SHAWMUT, OR LITTLE-FUSE. ALL CONDUCTOR TERMINALS TO BE U.L, LISTED FOR A MINIMUM OF 75°C. SWITCHES USED AS SERVICE ENTRANCE EQUIPMENT TO BE U.L. LISTED AS "SER" RATED EQUIPMENT.
- 33. PANEL BOARDS SHALL BE MANUFACTURED BY SQUARE-D, EATON, GENERAL ELECTRIC, OR SIMILAR, MEETING U.L. STANDARDS 50 AND 67 WITH U.L. LABEL. PANELS USED AS SERVICE ENTRANCE EQUIPMENT TO BE U.L. LISTED AS "SER" RATED EQUIPMENT.
- 34. BREAKERS: THERMAL, MAGNETIC TYPE, QUICK-MAKE, QUICK-BREAK, PLUG-IN TYPE FOR LOAD CENTERS AND BOLT IN TYPE FOR PANEL BOARDS AND SINGLE UNIT CONSTRUCTION. TWO POLE BREAKERS SHALL BE SINGLE UNIT COMMON TRIP TYPE, BREAKERS USED AS SWITCHES FOR 120V LIGHTING CIRCUITS SHALL BE APPROVED FOR THAT USE AND MARKED "SWD". ALL BREAKERS FOR HVAC AND REFRIGERATION EQUIPMENT SHALL BE "HACR" RATED BREAKERS.
- 35. GROUNDING SYSTEM: PERMANENTLY AND EFFECTIVELY GROUND ALL METALLIC CONDUIT, SUPPORTS, CABINETS, PANEL BOARDS AND SYSTEM NEUTRAL CONDUCTORS, MAINTAIN CONTINUITY OF EQUIPMENT GROUND THROUGHOUT THE SYSTEM. GROUND CLAMPS SHALL BE APPROVED TYPE, SPECIFICALLY DESIGNED FOR GROUNDING. WHERE GROUNDING CONDUCTOR IS ENCLOSED IN CONDUIT, GROUND CLAMP SHALL BE OF A TYPE WHICH GROUNDS BOTH CONDUCTOR AND CONDUIT. ALL CIRCUITS IN FLEXIBLE METAL OR PLASTIC CONDUIT SHALL INCLUDE A GROUND WIRE SIZED AND INSTALLED IN ACCORDANCE WITH NATIONAL
- 36. CONDUIT SHALL BE SIZED TO COMPLY WITH NEC FOR NUMBER AND SIZE OF CONDUCTORS INSTALLED PER NEC. PROVIDE SCHEDULE 40 PVC PLASTIC OR RIGID STEEL CONDUIT BELOW GRADE, MINIMUM 3/4" PROVIDE ELECTRICAL METAL TUBING (EMT) MEETING FS W-C563, FLEXIBLE METAL CONDUIT (IN LENGTHS 6' OR LESS) FOR INTERIOR LOCATIONS, EMT CONNECTORS AND COUPLING SHALL BE SET-SCREW TYPE. "MC" & "AC" TYPE CABLES MUST BE INSTALLED IN ACCORDANCE WITH N.E.C. AND CAN NOT BE SUPPORTED FROM CEILING SUPPORT
- 37. ALL CONDUIT AND RACEWAY SYSTEMS TO BE INSTALLED WITH SEPARATE GROUND CONDUCTOR. CONDUIT SYSTEM IS NOT TO BE USED AS THE SOLE GROUNDING MEANS.
- 38. CONDUCTORS: INSULATED SOFT ANNEALED 98% PURE COPPER WITH COLOR CODING, B AND S GAGE, #10 AND SMALLER TO BE SOLID, #8 AND LARGER TO BE STRANDED, MINIMUM #12 UNLESS OTHERWISE INDICATED. CONDUCTORS MUST BE INSTALLED IN ACCORDANCE WITH NEC. AND CANNOT BE SUPPORTED FROM CEILING SUPPORT WIRES. THHN MAY NOT BE USED UNDERGROUND, AT SERVICE ENTRANCE, OUTSIDE, OR IN WET LOCATIONS. ALL INSULATION TO BE RATED FOR 600 V AND TYPES AS FOLLOWS

USE-RHW	#10 AND #12: #8 TO 4/0: SERVICE ENTRANCE:	THWN OR THHN THWN OR THHN SE-RHW OR
	OVER #4/0 ORDINARY SERVICE: OVER #4/0 WET OR HOT SERVICE: WIRE THRU FLUORESCENT FIXTURES OR WHITHIN OF HTG EQIP.:	THHN OR XHHN XHHW THHN

39. ALL WIRING TO BE COLOR-CODED AS FOLLOWS:

STEM	277/480 SYS	STEM
WHITE	PHASE A:	BROWN
BLACK	PHASE B:	ORANGE
RED	PHASE C:	YELLOW
BLUE	NEUTRAL:	GRAY
GREEN	GROUND: 0	BREEN
	WHITE BLACK RED BLUE	WHITE PHASE A: BLACK PHASE B: RED PHASE C: BLUE NEUTRAL:

- 39. THE USE ALL NON-METALLIC WIRING METHODS IS PROHIBITED. USE MC CABLE OR ROUTE IN EMT RACEWAY FOR ALL WIRING.
- 40. WIRE CONNECTORS SHALL BE EQUAL TO "SCOTCH LOCK" FOR #8 AWG WIRE AND SMALLER AND EQUAL TO T & B "LOCK TIGHT" FOR #6 AWG AND
- 41 LIGHT FIXTURES & LAMPS ARE FURNISHED BY CONTRACTOR EXCEPT AS NOTED ON THE LIGHT FIXTURE SCHEDULE, FIXTURE INSTALLATION SHALL BE BY THE ELECTRICAL CONTRACTOR ACCORDING TO LOCAL CODE
- 42. EMERGENCY LIGHTING SHALL HAVE A MINIMUM OF 90 MIN. BATTERY BACK-UP, OR AS REQUIRED BY LOCAL CODE AUTHORITY, PROVIDE LOCK-ON CIRCUIT BREAKERS FOR CIRCUITS SERVING EXIT SIGN
- FIXTURES AND EMERGENCY BATTERY PACK FIXTURES. 43. LAYOUT BRANCH CIRCUIT WIRING AND ARRANGEMENT OF HOME RUNS FOR MAXIMUM ECONOMY AND EFFICIENCY. INCREASE WIRE SIZE IF 100 FEET OF LENGTH IS EXCEEDED.
- 44. CONCEAL WIRING SYSTEM ABOVE SUSPENDED CEILINGS OR IN WALL OR FLOOR CONSTRUCTION WHERE POSSIBLE, INSTALL CONDUITS PARALLEL TO BUILDING LINES, AND TO CLEAR ALL OPENING, DEPRESSIONS, PIPES, DUCTS, STRUCTURE, ETC.
- 45. INSTALL CONDUIT CONTINUOUS BETWEEN BOXES AND CABINETS WITH NO MORE THAN FOUR (4) 90 DEGREE BENDS. SECURELY FASTEN IN PLACE WITH STRAPS, HANGERS AND STEEL SUPPORTS AS REQUIRED, DO NOT SUPPORT CONDUIT FROM SUSPENDED CEILING GRID OR SUSPENSION WIRES. REAM CONDUIT ENDS BEFORE INSTALLATION AND THOROUGHLY CLEAN BEFORE INSTALLATION, OPENINGS SHALL BE PLUGGED OR COVERED TO KEEP CONDUIT CLEAN. TERMINALS ON SWITCHES AND OUTLET SHALL NOT BE USED TO "FEED THRU" TO THE NEXT SWITCH OR OUTLET.



DRAWING INDEX:

E-002 ELECTRICAL SCHEDULE AND DETAILS E-101 LIGHTING BASEMENT FLOOR PLAN E-102 LIGHTING FIRST FLOOR PLAN E-103 POWER BASEMENT FLOOR PLAN E-104 POWER FIRST FLOOR PLAN E-105 COMCHECK REPORT

E-001 ELECTRICAL COVER SHEET

PROFESSIONAL ENGINEERING: 

	Гт	i					
ENGINEER:	i c	jai					
PROJECT COORDINATOR:			7	]			
DATE							
REVISION							
NO.							
PROPOSED ADDITION	FOR		IN SCHOOL			NEW TRIBOIT PA 18066	14EW 11MI OE1, 17 18000
			RI	3			
AE	E JC	)B#	121	1			$\dashv$
DA 10-	TE-05-	E IS -202	SU 20	ED	•		
DE JA		GN]	ED	BY	•		
JA	K		ВЪ				
DR	E	ELE	CTI	RIC	LE AL EET		

							NEW ELECTRICA	L PANEL "LP "							
	MANUFACTUR	ER:									BUS	RATING:	100A		
	TYPE/MOD	EL:										MAIN:	100A MCB		
	MOUNTII	NG: SURFACE									VC	DLTAGE:	240/120V		
		RE: SURFACE									FE	D FROM:	EXISTING F	PANEL	
	LOCATIO	ON: STORAGE CL										T			
CKT NO.	LOAD DESCRIPTION	NO. POLES	CB AMPS	CONT.VA	NON CONT.VA	LOAD VA	WIRE SIZE	WIRE SIZE	LOAD VA	NON CONT.VA	CONT.VA	CB AMPS	NO. POLES	LOAD DESCRIPTION	CKT NO.
1	BASEMENT LIGHTING	1	20	350.00		350.00	(2) #12 AWG CU & (1) #12 AWG CU GND (	2) #12 AWG CU & (1) #12 AWG CU GND	600.00		600.00	20	1	FIRST FLOOR LIGHTING	2
3	BASEMENT AREA RECEPTACLES	1	20		900.00	900.00	(2) #12 AWG CU & (1) #12 AWG CU GND	2) #12 AWG CU & (1) #12 AWG CU GND	800.00	800.00		20	1	REFRIGERATOR RECEPTACLES	4
5	KITCHEN RECEPTACLES	1	20		180.00	180.00	(2) #12 AWG CU & (1) #12 AWG CU GND (	2) #12 AWG CU & (1) #12 AWG CU GND	180.00	180.00		20	1	KITCHEN RECEPTACLES	6
7	KITCHEN RECEPTACLES	1	20		180.00	180.00	(2) #12 AWG CU & (1) #12 AWG CU GND (	2) #12 AWG CU & (1) #12 AWG CU GND	180.00	180.00		20	1	STORAGE RECEPTACLES (BASEMENT)	8
9	CLASS ROOM #3 RECEPTACLES	1	20		1080.00	1080.00	(2) #12 AWG CU & (1) #12 AWG CU GND (	2) #12 AWG CU & (1) #12 AWG CU GND	1080.00	1080.00		20	1	CLASSROOM #4 RECEPTACLES	10
11	GIRL'S RESTROOM RECEPTACLE	1	20		180.00	180.00	(2) #12 AWG CU & (1) #12 AWG CU GND (	2) #12 AWG CU & (1) #12 AWG CU GND	180.00	180.00		20	1	BOY'S RESTROOM RECEPTACLE	12
13	HALL-WAY RECEPTACLES	1	20		720.00	720.00	(2) #12 AWG CU & (1) #12 AWG CU GND (	2) #12 AWG CU & (1) #12 AWG CU GND	500.00	500.00		20	1	DRINKING FOUNTAIN RECEPTACLES	14
15	B-1 (BOILER)	1	20	300.00		300.00	(2) #12 AWG CU & (1) #12 AWG CU GND (	2) #12 AWG CU & (1) #12 AWG CU GND	670.00		670.00	20	1	P-1 (CIRCULATING PUMP)	16
17	P-2 (CIRCULATING PUMP)	1	20	1600.00		1600.00	(2) #12 AWG CU & (1) #12 AWG CU GND (	2) #12 AWG CU & (1) #12 AWG CU GND	500.00	500.00		20	1	WH-1 (WATER HEATER)	18
19	SPARE	1	20									20	1	SPARE	20
21	SPARE	1	20									20	1	SPARE	22
23	SPARE	1	20								-	20	1	SPARE	24
				2250.00	3240.00					3420.00	1270.00				
	DEMAND LOAD(VA):	11060.00													
	DEMAND AMP:	46.08													

DESCRIPTION

2 X 4 LED LIGHT

LED DOWN LIGHT

LED PENDANT LIGHT

LED SURFACE LIGHT

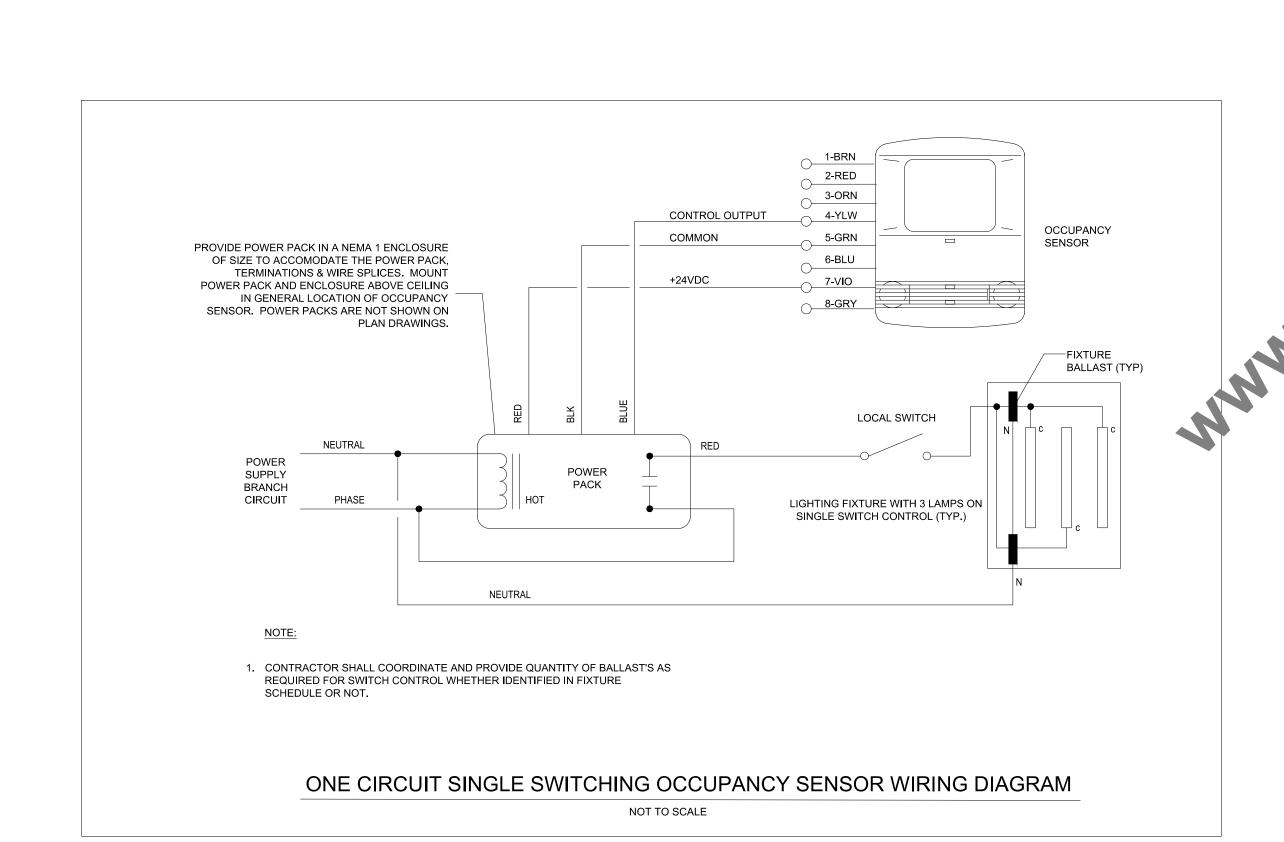
BLUE MOUNTAIN SCHOOL- LIGHTING FIXTURE SCHEDULE

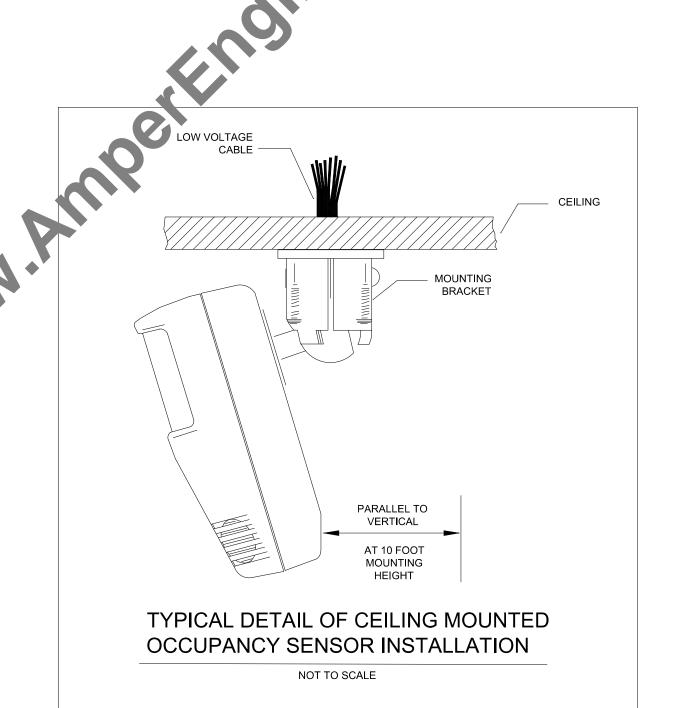
50W MAX LED

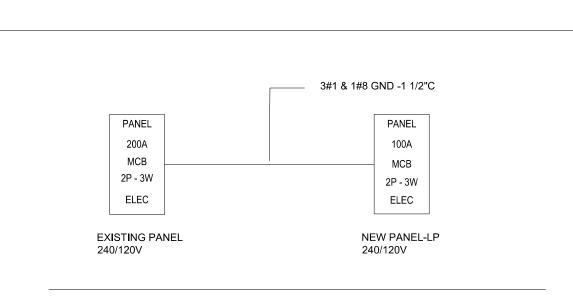
20W MAX LED

30W MAX LED

BOYS AND SESTROOM, STORAGE







WITH EMERGENCY BATTERY PACK WHERE

REQUIRED

WITH EMERGENCY BATTERY PACK WHERE

WITH EMERGENCY BATTERY PACK WHERE

WITH EMERGENCY BATTERY PACK WHERE

REQUIRED

BASEMENT 1ST TOTAL

950

ELECTRICAL RISER DIAGRAM

NOT TO SCALE

NOTE: NEW PANEL IS FED FROM EXISTING PANEL WITH 100A BREAKER. FIELD VERIFY EXISTING PANEL CONDITION AND PROVIDE NEW 100A BREAKER IF REQUIRED.

PROFESSIONAL ENGINEERING: AE JOB#1211 DATE ISSUED: 10-05-2020

DRAWN BY:
JAK

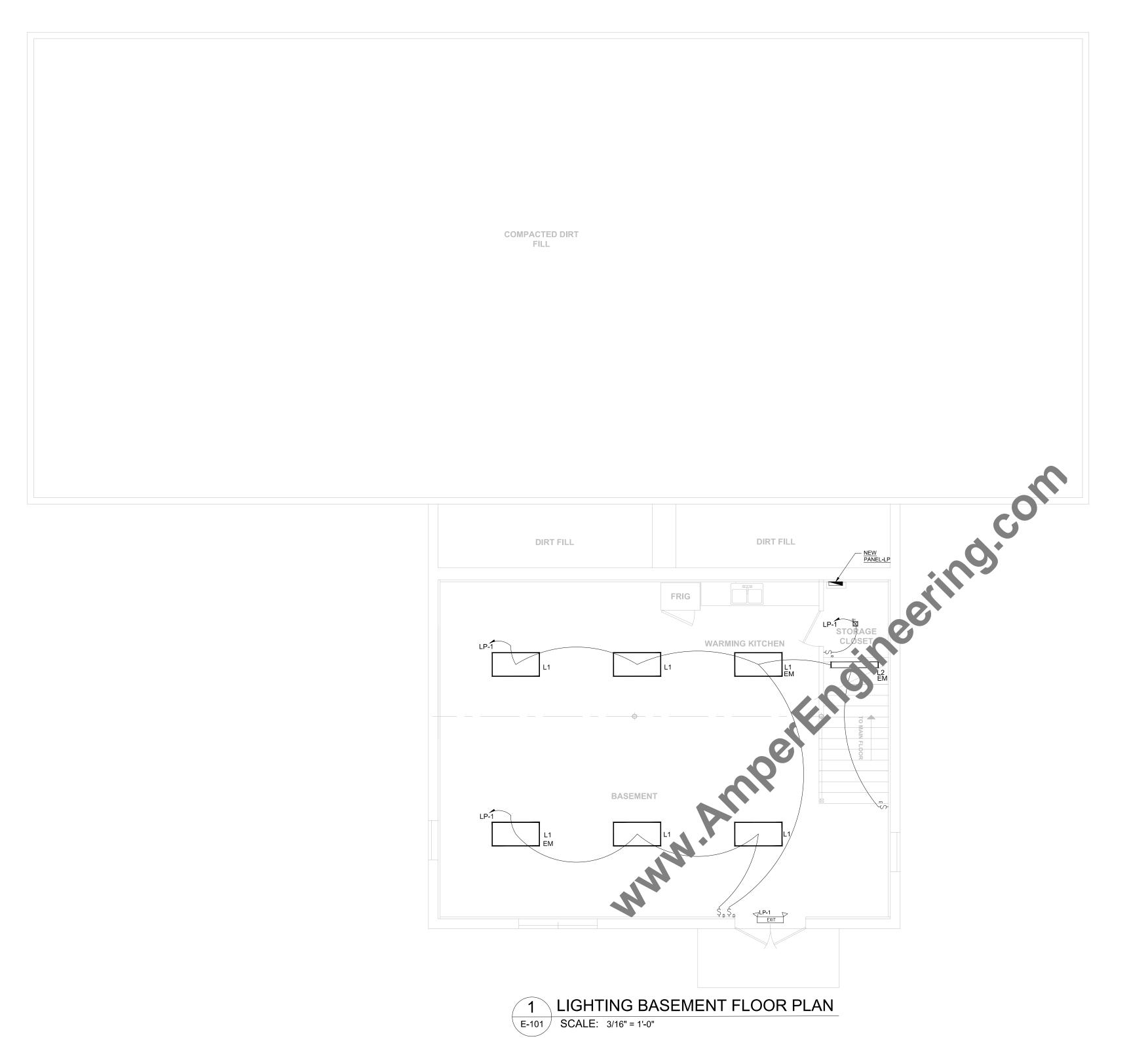
DRAWING TITLE:

**DESIGNED BY:** 

ELECTRICAL SCHEDULE AND DETAILS

DRAWING NUMBER:

E-001



INEERI 899 <b>E</b>						
ENGINEER:	[1]					
PROJECT COORDINATOR:			V			
DATE						
REVISION						
NO.						
PROPOSED ADDITION	FOR		BI AIN SCHOOL		NEW TRIPOLL PA 18066	INEW TIME OEL, I'M 19000
Λ [	7 10	D#	101	1		

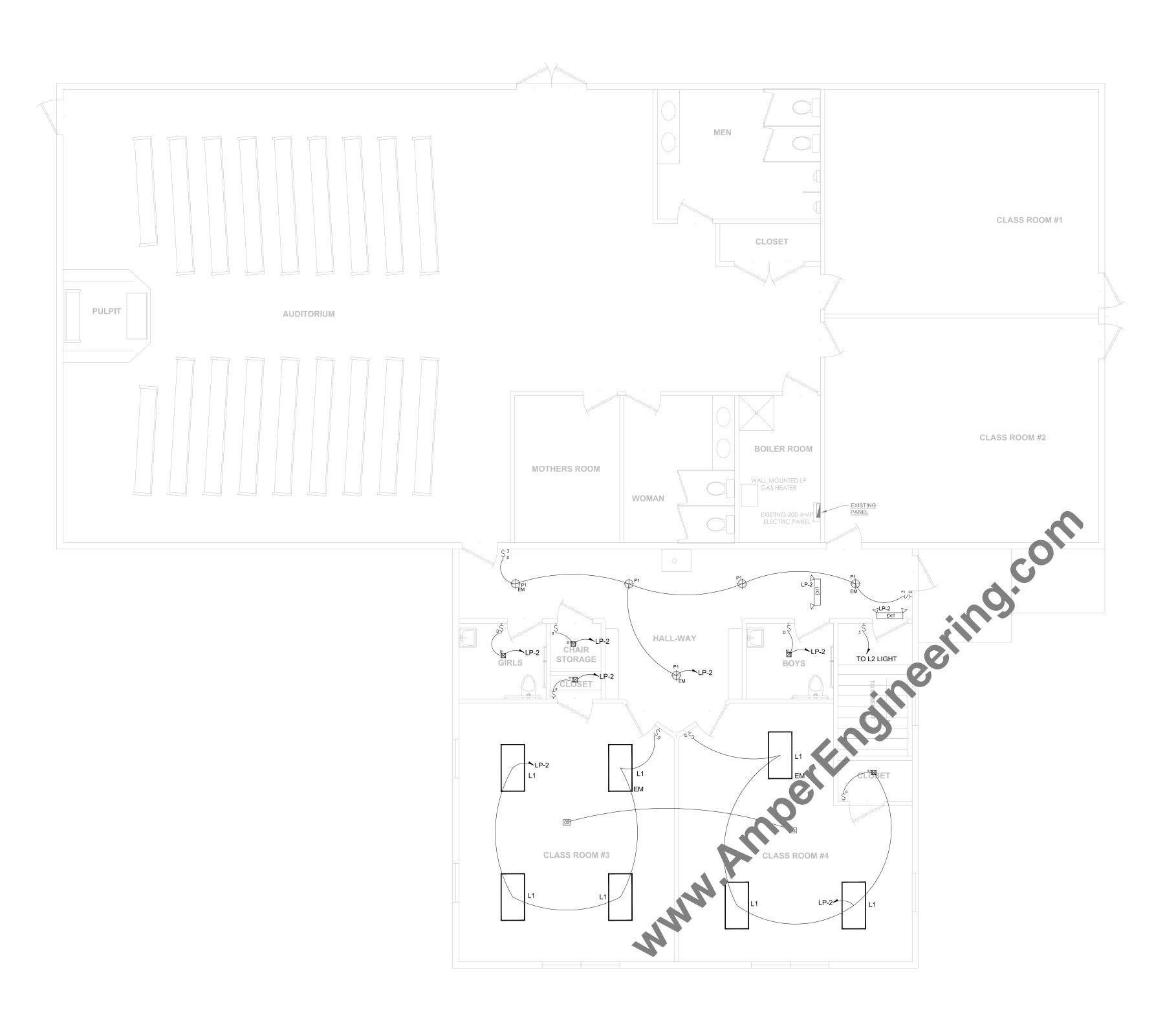
| AE JOB#1211

DATE ISSUED: 10-05-2020

DESIGNED BY: JAK

DRAWN BY: JAK

DRAWING TITLE: LIGHTING BASEMENT FLOOR PLAN



1 LIGHTING FIRST FLOOR PLAN
E-102 SCALE: 3/16" = 1'-0"

PROFESSIONAL ENGINEERING: **\**201-920-2

2899 <u>F</u>	<b></b> in	fo@	Am	per	Eng	gine	erir
ENGINEER:	Γτ <b>Σ</b>						
PROJECT COORDINATOR:	Ton	26	7	]			
DATE							
REVISION							
NO.							
PROPOSED ADDITION	FOR		BI AIN SCHOOL	4	0,000	NFW TRIPOLL PA 18066	
DA 10	E JC ATE -05-	E IS -202	SU 20	ED			

DRAWN BY: JAK

DRAWING TITLE: LIGHTING FIRST FLOOR PLAN



**\**201-920-289

399 🛭	☑in	fo@	Am	per	Eng	gine	eri
ENGINEER:	[7						
PROJECT COORDINATOR:			7	]			
DATE							
REVISION							
NO.							
PROPOSED ADDITION	FOR		BI AIN SCHOOL		C & C & C	NEW TRIBOIT PA 18066	INEW INITIOES, I'M 18000
ΑТ	7 IC	<b>)</b> D#					
AL	E JC	א מי	121	1			

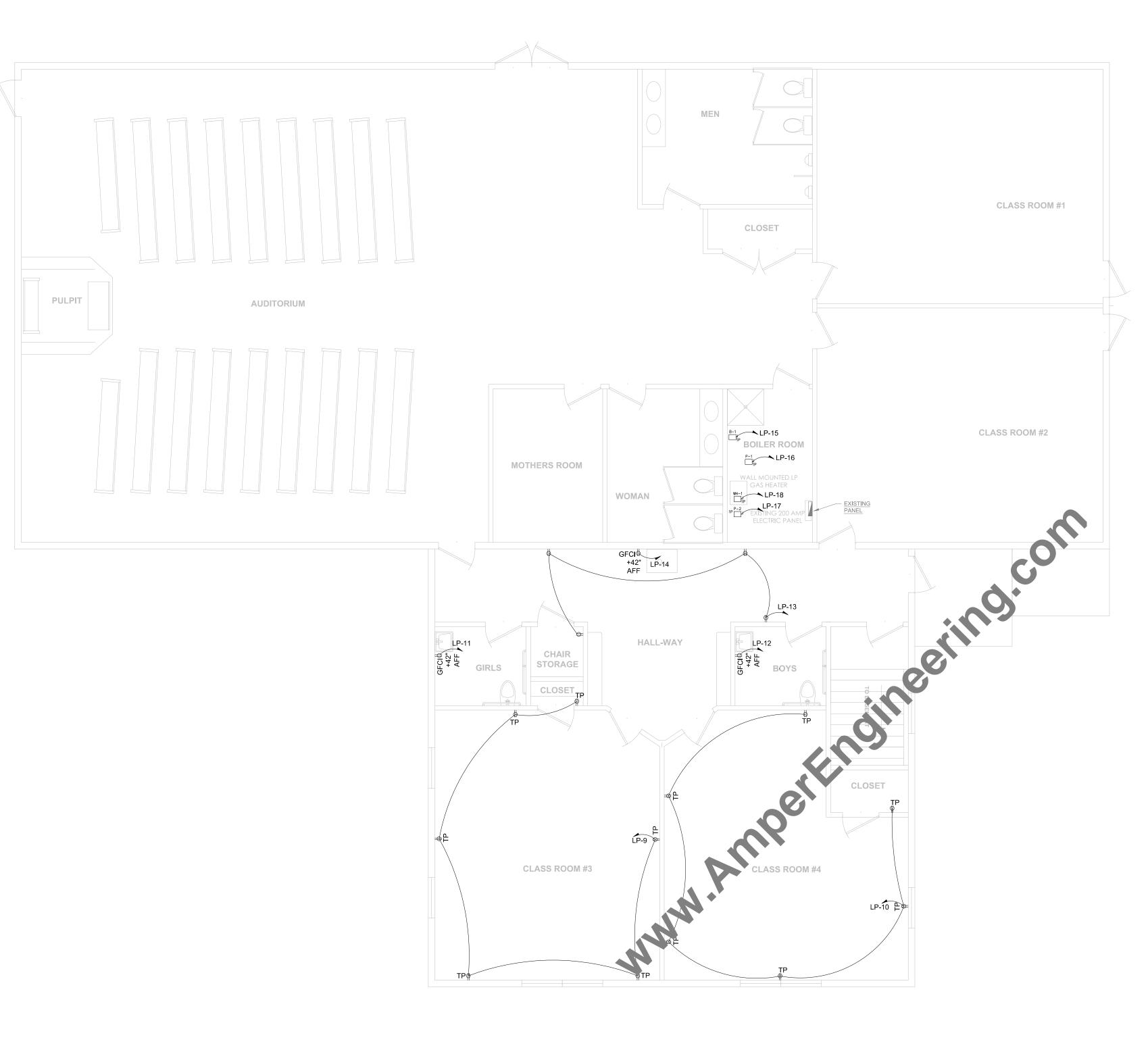
DATE ISSUED: 10-05-2020

DESIGNED BY: JAK

DRAWN BY: JAK

DRAWING TITLE:

POWER BASEMENT FLOOR PLAN DRAWING NUMBER:



1 POWER FIRST FLOOR PLAN
E-104 SCALE: 3/16" = 1'-0"

PROFESSIONAL ENGINEERING: **\**201-920-2

2899 🛚	Гт		7411	ipei			CIII
ENGINEER:	Ĭan	Jan					
PROJECT COORDINATOR:			٧	]			
DATE							
REVISION							
NO.							
PROPOSED ADDITION	FOR		BI AIN SCHOOL		4 0 0	NEW TRIPOLL DA 18066	INEW INITIOES, I'M 180000
AF	E JC	)B#	121	1			
D/	ATE-05-	EIS	SU		:		
	ESIC			BY	:		

DRAWN BY: JAK DRAWING TITLE:

POWER FIRST FLOOR PLAN



#### **Project Information**

2015 IECC Energy Code: BLUE MOUNTAIN SCHOOL Project Title Project Type: Alteration

Construction Site: Owner/Agent: Designer/Contractor: 5469 OWL VALLEY ROAD NEW TRIPOLI, PA 18066

### Allowed Interior Lighting Power

A Area Calegory	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B X C)
1-BASEMENT/KITCHEN (Common Space Types:Dining Area - Cafeteria/Fast Food)	1060	0.65	689
2-STORAGE CLOSET (Common Space Types:Storage >=50 - <=1000 sq.ft.)	93	0.63	59
3-RESTROOMS (Common Space Types:Restrooms)	100	0.98	98
4-HALLWAY (Common Space Types:Corridor/Transition >== 8 ft wide)	330	0.66	218
5-STAIR (Common Space Types:Stairweil)	75	0.69	52
6-CLASS ROOM (Common Space Types:Classroom/Lecture/Training)	822	1.24	1019
		Total Allowed Watts	= 2134

Proposed Interior Lighting Power									
A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	Đ Fixture Watt.	(C X D)					
BASEMENT/KITCHEN ( Common Space Types:Dining Area - Cafeteria/Fast Food 106 LED 1: L1: 2*4 LED LIGHT: Other:	0 sq.tt.)	6	50	300					
STORAGE CLOSET ( Common Space Types:Storage >=50 - <=1000 sq.ft. 93 sq.ft.) LED 2: B1: LED DOWN LIGHT: Other:	1	4	20	80					
RESTROOMS ( Common Space Types:Restrooms 100 sq.ft.) LED 2: B1: LED DOWN LIGHT: Other:	1	2	20	40					
HALLWAY ( Common Space Types:Corridor/Transition >=8 ft wide 330 sq.ft.) LED 3: P1: LED PENDANT LIGHT: Other:	1	5	30	150					
STAIR ( Common Space Types:Stairwell 75 sq.ft.) LED 4: L2: LED SURFACE LIGHT: Other:	1	1	30	30					
CLASS ROOM ( Common Space Types:Classroom/Lecture/Training 822 sq.ft.)									

#### Interior Lighting PASSES Interior Lighting Compliance Statement

LED 1: L1: 2\*4 LED LIGHT: Other:

Compliance Statement: The proposed interior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2015 IECC requirements in COMcheck Version 4.1.4.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Total Proposed Watts =

Project Title:	BLUE MOUNTAIN SCHOOL	Report	date:	10/05/	20
Data filename:	C:\Users\Admin\Dropbox\CDS WORKING FILES\BLUE MOUNTAIN SCHOOL\WORKING FILE\BL MOUNTAIN Comcheck.cck	.UE P	age	1 of	6

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5. 2 [FI17] <sup>3</sup>	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	□Complies □Does Not □Not Observable □Not Applicable	
[FI18] <sup>1</sup>	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	See the Interior Lighting fixture schedule for values.
C408.2.5. 1 [FI16] <sup>3</sup>	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	□Complies □Does Not □Not Observable	
C408.3 [F133] <sup>1</sup>	Lighting systems have been tested to ensure proper calibration, adjustment.	□Not Applicable □Complies □Does Not	· · · · · · · · · · · · · · · · · · ·
·pro	programming, and operation.	□Not Observable □Not Applicable	

## Additional Comments/Assumptions:

1 High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Data filename: C.\Users\Admin\Dropbox\CD5 WORKING FILES\BLUE MOUNTAIN SCHOOL\WORKING FILE\BLUE Page 5 of 6 MOUNTAIN Comcheck.cck

# COMcheck Software Version 4.1.4.0 Energy Code: 2015 IECC

Requirements: 0.0% were addressed directly in the COMcheck software Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions	
[PR4] <sup>3</sup>	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	□Complies □Does Not □Not Observable □Not Applicable		

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3) Project Title: BLUE MOUNTAIN SCHOOL Report date: 10/05/20 Data filename: C:\Users\Admin\Dropbox\CDS WORKING FILES\BLUE MOUNTAIN 5CHOOL\WORKING FILE\BLUE Page 3 of 6 MOUNTAIN Comcheck.cck

Section #	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
& Req.ID		vario	
C405.2.1 (EL15) <sup>1</sup>	Lighting controls installed to uniformly reduce the lighting load by at least	☐Complies	
[ECID].	50%.	Does Not	
	2070.	□Not Observable	
	· · · · · · · · · · · · · · · · · · ·	□Not Applicable	
C405.2.1	Occupancy sensors installed in	OComplies October	
(EF18);	required spaces.	Does Not	
		□Not Observable	
		□Not Applicable	
	Independent lighting controls installed per approved lighting plans and all	Complies	
3	manual controls readily accessible and	□Does Not	
[EL23] <sup>2</sup>	visible to occupants.	□Not Observable	
		□Not Applicable	
C405.2.2.	Automatic controls to shut off all	□Complies	
1	building lighting installed in all	□Does Not	
[EL22] <sup>2</sup>	buildings.	□Not Observable	
		☐Not Applicable	
C405.2.3	Daylight zones provided with	□Complies	
[EL16] <sup>2</sup>	individual controls that control the	□Does Not	
	HODFING.	☐Not Observable	
	ingriting.	□Not Applicable	
		☐Complies	
C405.2.3.	equipped with required lighting	□Does Not	
1, C405.2.3.	controls.	☐Not Observable	
2		□Not Applicable	
(EF50),			
C405 7 7	Freigned groups with drulinkt agen		
	Enclosed spaces with daylight area under skylights and rooftop monitors	Does Not	
1.	are equipped with required lighting	□Not Observable	
C405.2.3.	controls.	ONOt Applicable	
3 [EL21] <sup>1</sup>		minor Appacable	
(Lezzi			
C405.2.4	Separate lighting control devices for	☐Complies	***************************************
(EL4) <sup>1</sup>	specific uses installed per approved	Does Not	
	lighting plans.	□Not Observable	
		Not Applicable	
C405.2.4	Additional Interior lighting power	DComplies	***************************************
(EF8) <sub>7</sub>	allowed for special functions per the	ODoes Not	
	approved lighting plans and is	☐Not Observable	
	automatically controlled and separated from general lighting.	☐Not Applicable	
C405.3	Exit signs do not exceed 5 watts per	Complies	
(EL6)1	face.	Does Not	
		□Not Observable	
		□Not Applicable	

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3) ( 'ect Title: BLUE MOUNTAIN SCHOOL Report date: 10/05/20 filename: C:\Users\Admin\Dropbox\CDS WORKING FILES\BLUE MOUNTAIN SCHOOL\WORKING FILE\BLUE Page 4 of 6
MOUNTAIN Comcheck.cck

PROFESSIONAL ENGINEERING: 

	Гт	i						
ENGINEER:								
	Ton							
PROJECT COORDINATOR:			V					
DATE								
REVISION								
NO.								
PROPOSED ADDITION	FOR		JOCHOS NIV		C C C	KOAD NEW TRIBOLL BA 18066	NEW INITION, I'M 19000	
			RI	7				
AE	E JC	)B#	<sup>1</sup> 121	1				
	ATE -05-		SU 20	ED	:			
DE JA		GN.	ED	ВҮ	:			
DR JA		WN	ВЪ	7.				
DR	RAV		NG '			:		

COMCHECK REPORT

#### PLUMBING GENERAL NOTES:

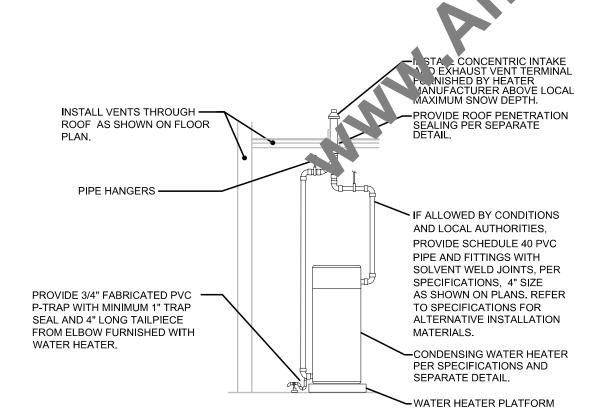
- 1. THE SYMBOLS ARE FOR THE CONVENIENCE OF THE CONTRACTOR. CONTRACTOR SHALL VERIFY QUANTITIES AND FURNISH ALL MATERIALS REQUIRED FOR FULLY OPERATIONAL SYSTEM, WHETHER SPECIFIED OR NOT.
- REFER TO ARCHITECTURAL FLOOR PLANS AND ELEVATION FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL
  PLUMBING FIXTURES BEFORE INSTALLATION OR MAKE-UP OF PIPE. PLUMBING FIXTURES SHALL BE MOUNTED AT HEIGHTS
  SHOWN ON THE ARCHITECTURAL PLANS.
- 3. CONTRACTOR SHALL VERIFY THAT FIXTURES SUPPLIED ARE APPROVED PER ALL APPLICABLE STATE, LOCAL AND GOVERNING AUTHORITIES
- 4. REFER TO THE PLUMBING ROUGH-IN SCHEDULE FOR THE SIZES OF BRANCH PIPES TO PLUMBING FIXTURE.
- 5. FOR CLARITY, NOT ALL VALVES HAVE BEEN SHOWN. PROVIDE BALL VALVES FOR ALL WATER ISOLATION AND SUPPLY TAKEOFFS
- 6. COORDINATE ALL PLUMBING ROUTING WITH GENERAL CONTRACTOR AND OTHER TRADES. PROVIDE NECESSARY OFFSETS TO AVOID CONFLICTS AND TO MAINTAIN REQUIRED EQUIPMENT ACCESS AND SERVICEABILITY.
- 7. PIPING LOCATIONS HAVE BEEN SHOWN FOR CLARITY AND DO NOT NECESSARILY REFLECT THE SPECIFIC LOCATION OF PIPE. COORDINATE ROUTING OF ALL PIPING WITH ALL OTHER TRADES BEFORE INSTALLATION
- 8. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, AND OTHER APPROPRIATE DRAWINGS OR PHYSICALLY AT SITE.
- 9. ANY CHANGES REQUIRED TO ELIMINATE CONFLICTS OR THAT RESULT FROM A FAILURE TO COORDINATE SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COST OR EXPENSE TO OTHERS.
- 10. VERIFY UNDERGROUND PIPE SIZES, INVERT ELEVATIONS, AND LOCATIONS PRIOR TO BEGINNING ANY WORK.
- 11. VALVE SHALL BE LINE SIZE UNLESS NOTED OTHERWISE.
- 12. PROVIDE TRAP PRIMERS WHERE REQUIRED BY LOCAL AUTHORITIES.
- 13. COORDINATE PIPE ROUTING AWAY FROM ELECTRICAL PANELS. DO NOT INSTALL PIPING OVER ELECTRICAL PANEL.
- 14. VERIFY LOCATION AND DEPTH OF UTILITIES AT A POINT OF CONNECTION BEFORE START OF PIPING INSTALLATION.

	PLUMBING ROUGH-IN SCHEDULE										
FIXTURE TYPE	DOMESTIC C.W.	DOMESTIC H.W.	SANITARY	VENT	REMARK						
WC	1 "	-	4"	2"	TANK TYPE-PUBLIC						
LAV	3/8"	3/8"	1 1/4"	1 1/4"	NOTE 1 & 2						
KS	1/2"	1/2"	1 1/2"	1 1/2"	NOTE 1 & 2 (KITCHEN TYPE SINK)						
ED	_	_	2"	1 1/2"	_						

1. SANITARY RISER UP IN WALL TO FIXTURE SHALL BE A MINIMUM OF 2".
2. 1/2" CW AND HW APPLIES TO THE FINAL VERTICAL RISER-DROP TO EACH FIXTURE. BRANCH PIPING TO VERTICAL DROP SHALL BE A MINIMUM OF 3/4" UNLESS NOTED OTHERWISE.
3. SIZES SHOWN ARE MINIMUMS. SIZES SHOWN ON THE DRAWING THAT AREA LARGER THAN THE SIZE IS LISTED IN THE SCHEDULE SHALL DICTATE THE ROUGH-IN SIZE.

	GAS WATER HEATER SCHEDULE										
TAG	MANUFACTURER	MODEL	INPUT BTUH	TYPE OF GAS	STORAGE (GALLONS)	RECOVERY @ 80 °F RISE GPH	ΓES				
WH-1	A.O. SMITH	BTH-120	1,99,000	LIQUID PROPANE	60	20 1 TC	) 5				
NOTES: 1. GAS SUPI	PLY PRESSURE RANGE IS	8.5" MIN - 14" MAX.									

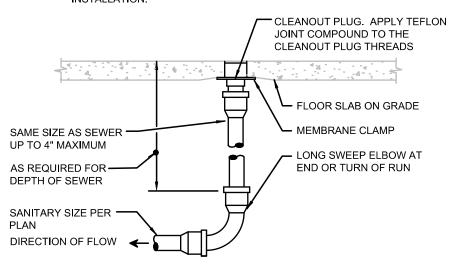
GAS SUPPLY PRESSURE RANGE IS 8.5" MIN - 14" MAX.
 PROVIDE CONCENTRIC VENT ASSEMBLY FOR INTAKE AND EXHAUST.
 SET WATER HEATER DISCHARGE TEMPERATURE AT 120 F
 PROVIDE 120V CIRCUIT FOR BLOWER AND CONTROLS, HARD-WIRED
 PROVIDE CONDENSATE DRAIN NEUTRALIZATION KIT.



2 GAS WATER HEATER VENTING DETAIL

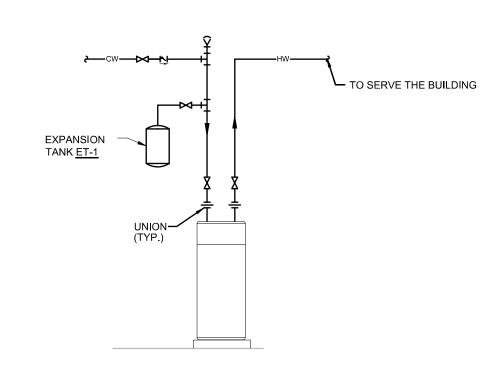
	PLU	IMBING SYMBOL LIST
		NOT ALL SYMBOLS MAY APPLY.
SYMBOL:		DESCRIPTION:
	cw	COLD WATER
	<u> </u>	HOT WATER
	- — SAN	SANITARY
	v	VENT
		PIPE CONTINUATION
<del></del>		PIPE CAP
		PIPE DOWN
		PIPE UP OR UP/DOWN
———⊖		PIPE SERVING FIXTURE ON FLOOR ABOVE (EXAMPLE: FD = FLOOR DRAIN)
_		PITCH PIPE IN DIRECTION
<b></b>		DIRECTION OF FLOW IN PIPE
$+ \bigcirc$		WATER HAMMER ARRESTOR
$\bigcirc$		VACUUM BREAKER
CW	COLD W	/ATER
FCO	FLOOR	CLEAN OUT
FD	FLOOR	DRAIN
HW	HOT WA	
KS	KITCHE	
LAV SAN	LAVATO SANITA	
SAN V	VENT	IX I
v VTR		HALLBOOE
WC		HRU ROOF CLOSET
WHA		HAMMER ARRESTOR
V V I I/~\	WAIER	TIAMMINICIT ANNESTON

PROVIDE CLEANOUT WITH ADJUSTABLE CLEANOUT TOP WITH VARIATIONS SUITABLE FOR FLOOR COVERING (CARPET MARKER, RECESSED FOR TILE, SCORIATED FOR UNFINISHED FLOORS). CLEAN THE TOP OF EXPOSED FCO AFTER INSTALLATION.



LOCATE AT BUILDING EXIT, AT ENDS OF RUNS, AT TURNS OF PIPE GREATER THAN 45°, AT 50' INTERVALS ON STRAIGHT RUNS, AND/OR WHERE SHOWN ON PLANS AND RISERS. PROVIDE BACKFILL PER ARCHITECTURAL SPECIFICATIONS. LOCATE CLEANOUT WHERE THERE IS 18" CLEAR AROUND, FOR ACCESSIBILITY. CONSULT LOCAL CODES AND OFFICIALS FOR OTHER REQUIREMENTS.





3 GAS WATER HEATER PIPING DETAIL
NO SCALE

# DRAWING INDEX:

P-000 PLUMBING COVER SHEET, DETAILS AND SCHEDULE P-101 WASTE WATER BASEMENT FLOOR PLAN.
P-102 WASTE WATER FIRST FLOOR PLAN.

P-103 DOMESTIC WATER BASEMENT FLOOR PLAN. P-104 DOMESTIC WATER FIRST FLOOR PLAN.

P-300 PLUMBING RISERS.

PROFESSIONAL ENGINEERING:

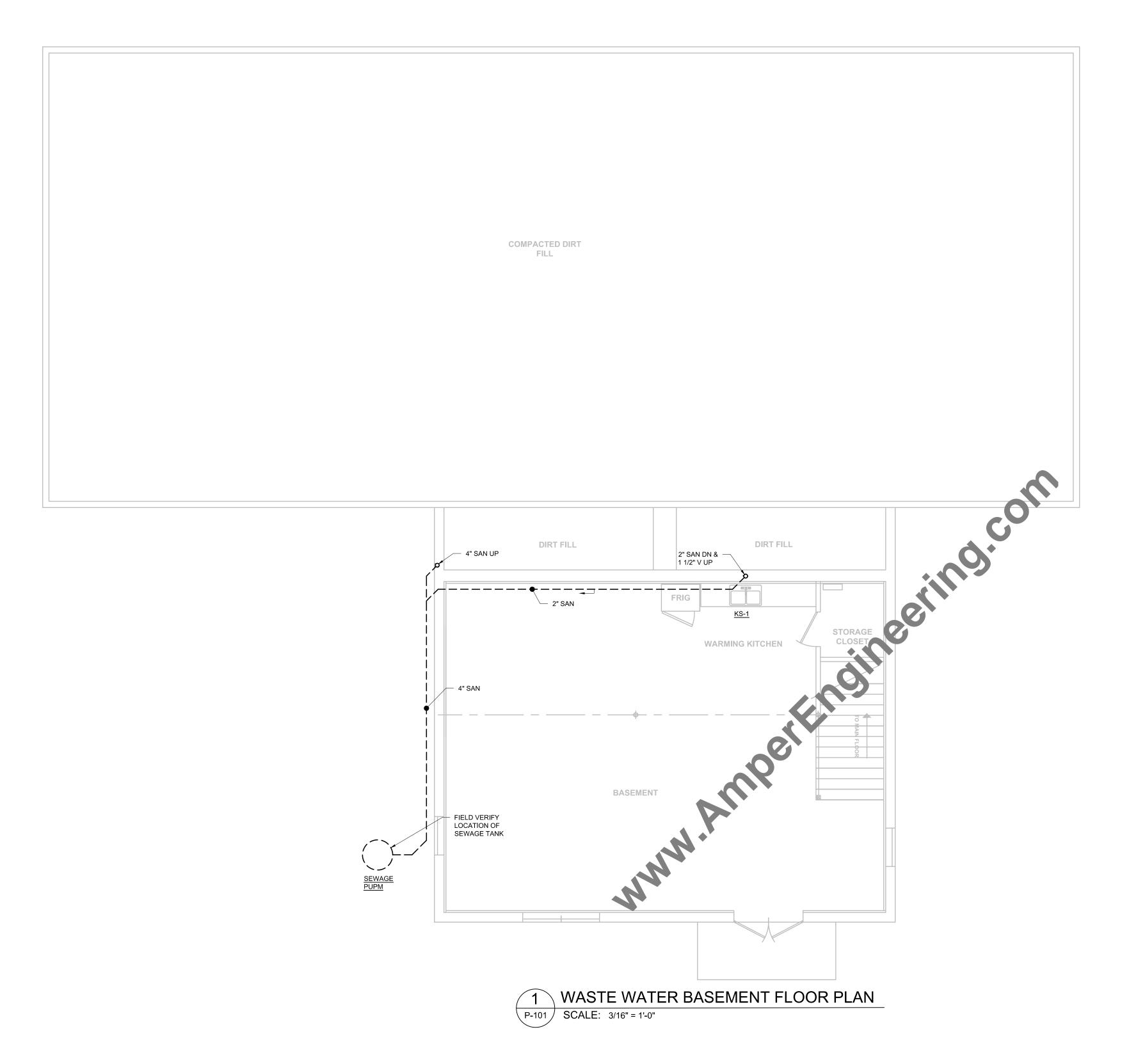
DURAK EVRIM ERCAN P.E.
ENGINEERING CONSULTING ESTIMATING

201-920-2899 ☑ info@AmperEngineering.com

rti

	Гт	ำ					
ENGINEER:	Ton	Jail					
PROJECT COORDINATOR:			7	]			
DATE							
REVISION							
NO.							
PROPOSED ADDITION	FOR		BI AIN SCHOOL		C • C d	NFW TRIPOLL PA 18066	
AF	E JC	)B#	121	.1			
10-	-05	-202					
JA	K		ED BY		:		$\dashv$
JA	K		1G		LE	:	$\dashv$
СО	VEI AN	R S	JM HEI SCH	ET,I	DET	'AII E	LS
DF	RAV	VIN	IG :	NU	ME	BER	<b>:</b>

P-000



<b>\</b> 201-920-	-2899 <u></u>	<b>⊿</b> in	fo@	Am	per	Eng	gine	eriı
		_	•					
		Гт	1					
	ENGINEER:							
		Ton	Jan					
	PROJECT COORDINATOR:			V	]			
	DATE							
	REVISION							
	NO.							
	PROPOSED ADDITION	FOR		BI AIN SCHOOL			NFW TRIPOLL PA 18066	
	AE	E JC	)B#	121	1			

DATE ISSUED: 10-05-2020

DESIGNED BY: JAK

DRAWN BY: JAK

DRAWING TITLE: WASTE WATER BASEMENT FLOOR PLAN



1 WASTE WATER FIRST FLOOR PLAN
P-102 SCALE: 3/16" = 1'-0"

PROFESSIONAL ENGINEERING:

201-920-2899 
 ☐info@AmperEngineering.com

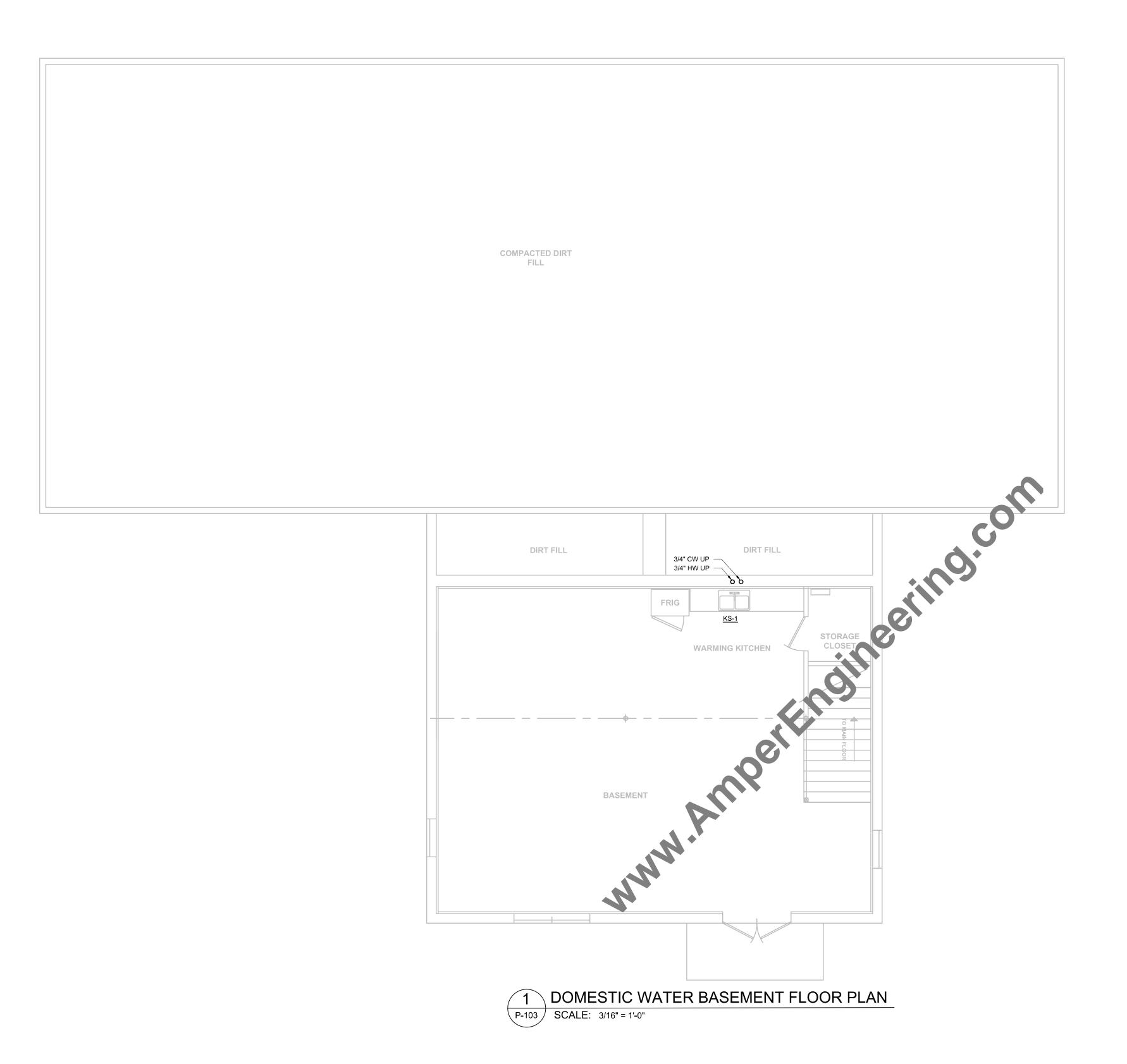
ENGINEER:	[1]						
PROJECT COORDINATOR:			7				
DATE							
REVISION							
NO.							
BI AIN SCHOOL  ROAD  ROAD  NO.  ROAD  NEW TRIPOLI, PA 18066							
	E JC						
$\mathbf{D}^{A}$	<b>ATE</b>	IS	SII	ED	•		

10-05-2020

DESIGNED BY: JAK

DRAWN BY: JAK

DRAWING TITLE: WASTE WATER FIRST FLOOR PLAN



 201-920-2899 
 ☐info@AmperEngineering.com AE JOB#1211

DATE ISSUED: 10-05-2020

DESIGNED BY: JAK

DRAWN BY: JAK

DRAWING TITLE: DOMESTIC WATER BASEMENT FLOOR PLAN



DOMESTIC WATER FIRST FLOOR PLAN P-104 | SCALE: 3/16" = 1'-0"

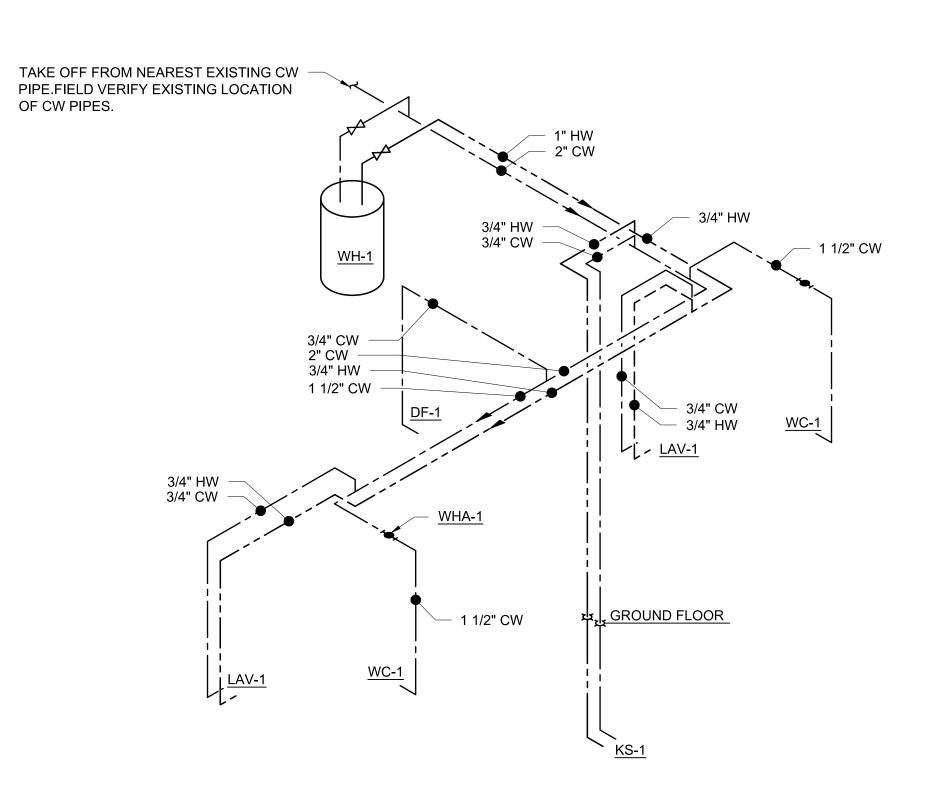
PROFESSIONAL ENGINEERING:

<b>\</b> 201	-920-2	899 <mark>[</mark>	<b>⊿</b> in'	fo@	Am	per	Eng	gine	erin I	g.cc	om
			Γτ	i							
		نۂ									
		ENGINEER:									
		ENC									
			1911	700							
		ά									
		PROJECT COORDINATOR:									
		COORD									
		JECT (									
		PRO			7						
		DATE									
		DA									
		ION									
		REVISION									
		R									
		).									
		NO.									
					HO		۲	ے ر <u>۔</u>			
		LION				)	(	KOA 1806	1 000		
		DDI	دہ		AIN SCHOOL			I DA	1, 17		
		PROPOSED ADDITION	FOR					KUAD NEW TRIPOLL PA 18066			
		SOAC						$V \perp R$	\ \ \ \ \		
		PRO					,	NF/			
					_	4					
					RI	ב					
			Е ЈО								
		D/ 10	ATE -05-	IS 202	SU 20	ED	:				

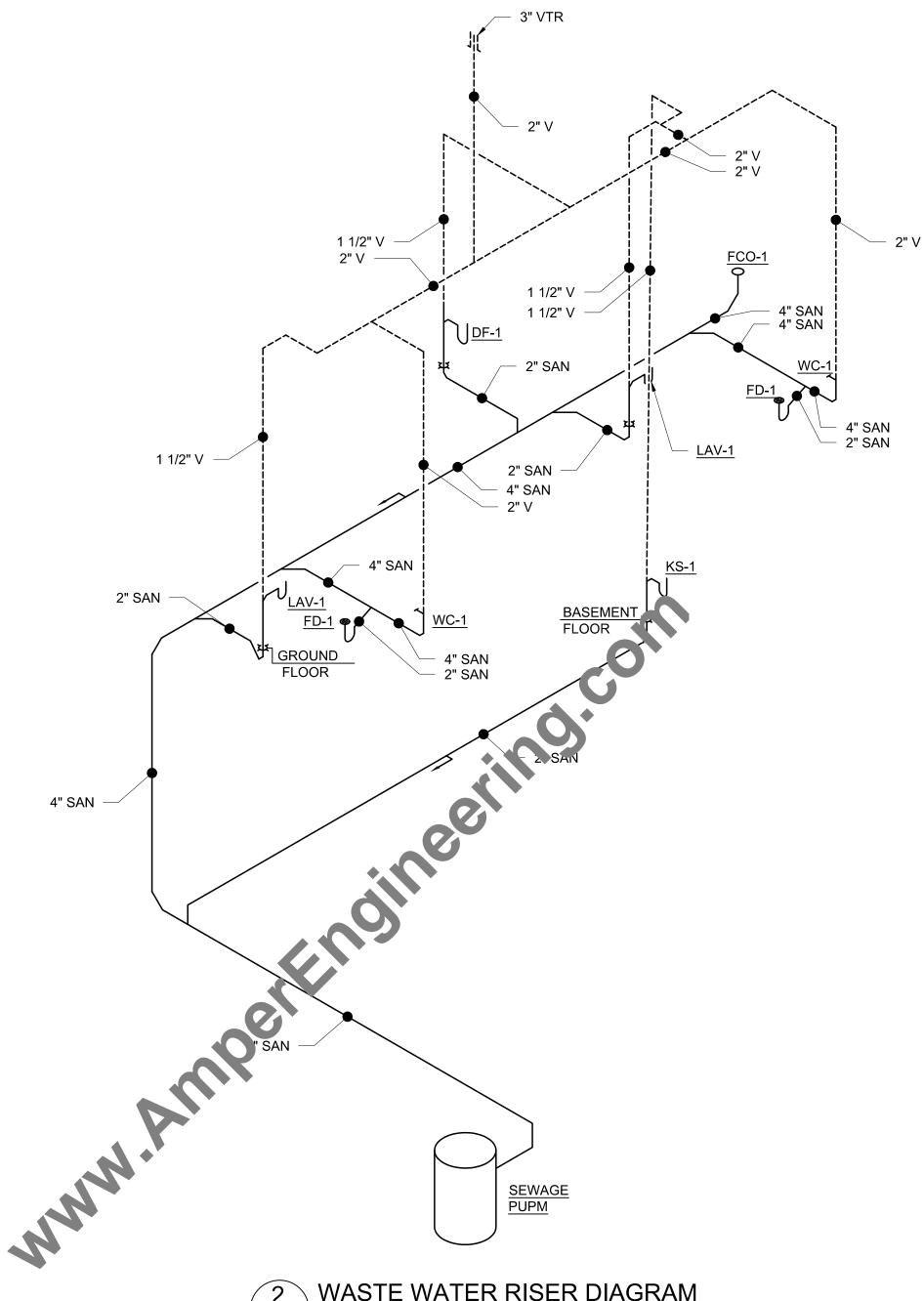
DESIGNED BY: JAK

DRAWN BY: JAK

DRAWING TITLE: DOMESTIC WATER FIRST FLOOR PLAN



1 DOMESTIC WATER RISER DIAGRAM P-300 SCALE: N.T.S



2 WASTE WATER RISER DIAGRAM
P-300 SCALE: N.T.S

PROFESSIONAL ENGINEERING:

DURAK EVRIM ERCAN P.E.

	INEERI 899							
	ENGINEER:	Гт	์ 1					
	EN	Lon	Jall					
	PROJECT COORDINATOR:			7	]			
	DATE							
	REVISION							
	NO.							
	PROPOSED ADDITION FOR			BI AIN SCHOOL		; NEW TRIPOLI, PA 18066		
	AE JOB#1211  DATE ISSUED: 10-05-2020  DESIGNED BY: JAK							

DRAWN BY: JAK

DRAWING TITLE: PLUMBING RISERS