BUILDING CODE AND LIFE SAFETY ANALYSIS

SUMMARY		
"B/U" GROUP USE OCCUPANCY		(IBC 304.1)
"U" OCCUPANCY WITH A "B" INDICENTAL USE, 2 HOUR SEPARATION REQUIRED		
SPECIAL REQUIREMENTS BASED ON OCCUPANCY	N/A	(UFC 3-600-01)
GENERAL BUILDING LIMITATIONS		
AREAS BASED ON USE GROUP "U" 3456SF/300 = 12 OCCUPANTS		(IBC TABLE 503)
NUMBER OF STORIES PERMITTED	2 STORIES	(IBC TABLE 503)
STORY INCREASE FOR FULLY SPRINKLED	N/A	(IBC 506)
PLANNED BUILDING STORIES	1 STORIES	
TOTAL AREA PERMITTED	8,500 SF	(IBC TABLE 503)
AREA INCREASE FOR FULLY SPRINKLED	N/A	(IBC 506)
PLANNED BUILDING AREA	3,456 SF	
BUILDING HEIGHT PERMITTED	55 FT	(IBC TABLE 503)
HEIGHT INCREASE FOR FULLY SPRINKLED	N/A	(IBC 506)
PLANNED BUILDING HEIGHT	24 FT	
SEPARATION OF OCCUPANCIES	2 HOUR SEPARATION FOR B/U OCCUPANCY	(IBC TABLE 508.4)
INCIDENTAL USE	N/A	(IBC 509)
TYPE OF CONSTRUCTION		
TYPE "IIB" NON-COMBUSTIBLE		(IBC 601)
PRE-ENGINEERED METAL BUILDING (PEMB)		
FIRE-RESISTANT CONSTRUCTION		
BUILDING ELEMENTS - FIRE-RESISTANCE RATING		(IBC TABLE 601)
PRIMARY STRUCTURAL FRAMING	0 HR	
BEARING WALLS - EXTERIOR	0 HR	
BEARING WALLS - INTERIOR	0 HR	
NON-BEARING WALLS AND PARTITIONS - INTERIOR	0 HR	2 HR SEPARATION AT B/U
FLOOR CONSTRUCTION AND ASS. SECONDARY	0 HR	
ROOF CONSTRUCTION AND ASS. SECONDARY	0 HR	
FIRE SEPARATION DISTANCE	X > 30 FT	(IBC TABLE 602)
MAX AREA OF EXTERIOR OPENINGS	NOT REQUIRED	(IBC TABLE 705.8)
FIRE WALLS	N/A	(IBC TABLE 706.4)
FIRE BARRIERS	N/A	(IBC TABLE 707.3.10)
FIRE PARTITIONS	2 HOUR SEPARATION FOR B/U OCCUPANCY	(IBC 708)
SMOKE BARRIERS	N/A	(IBC 709)
SMOKE PARTITIONS	N/A	(IBC 710)
SHAFT ENCLOSURES	N/A	(IBC 713.4)
INTERIOR WALL & CEILING FINISHES - EXITS & STAIRWAYS	N/A	(IBC TABLE 803.13)
INTERIOR WALL & CEILING FINISHES - CORRIDORS	N/A	(IBC TABLE 803.13)
INTERIOR WALL & CEILING FINISHES - ROOMS	CLASS II	(IBC TABLE 803.13)
FLOOR FINISHES	CLASS II	(IBC 804)
FIRE PROTECTION SYSTEMS		
AUTOMATIC SPRINKLER SYSTEM - FULLY SPRINKLED THROUGHOUT	NOT REQUIRED	(IBC 903.2)
STANDPIPE SYSTEM	N/A	(IBC 905.3, NFPA 14)
FIRE EXTINGUISHERS	CLASS A, 4A-60B-C AS INDICATED OR AS DIRECTED BY LOCAL FIRE AUTHORITY	(IBC 906.3, NFPA 10)
FIRE ALARM & DETECTION SYSTEM	DETECTORS, ALARMS, EXTINGUISHERS- NO FIRE SUPPRESSION SYSTEM REQUIRED	(IBC 907.2.2, NFPA 101)
MEANS OF EGRESS / EXITS		
REQUIRED EXIT WIDTH / OCCUPANTS - STAIRS (#OCC. X .3 INCHES)	0 REQUIRED / 0 PROVIDED	(IBC 1005)
REQUIRED EXIT WIDTH / OCCUPANTS - DOORS, OTHER (12 OCCUPANTS. X .2 INCHES)	2.4 INCHES	(IBC 1005)
ACCESSIBLE MEANS OF EGRESS	1 REQUIRED / 2 PROVIDED	(IBC 1009)
MAX. COMMON PATH OF EGRESS	300 FEET, NON SPRINKLED	(IBC TABLE 1017.2)
MAX. EXIT ACCESS TRAVEL DISTANCE	300 FEET, NON SPRINKLED	(IBC TABLE 1017.2)
CORRIDOR FIRE-RESISTANCE RATING	N/A	(IBC TABLE 1020.1)
MIN. CORRIDOR WIDTH	44 INCHES	(IBC TABLE 1020.2)
MAX. CORRIDOR DEAD END	50 FEET	(IBC 1020.4)
EXITS	1 REQUIRED / 3 PROVIDED	(IBC TABLE 1006.2.1)
PLUMBING FIXTURES		
WATER CLOSETS	1 REQUIRED / 1 PROVIDED	(IBC TABLE 2902.1)
LAVATORIES	1 REQUIRED / 1 PROVIDED	(IBC TABLE 2902.1)
DRINKING WATER DISPENSER	1 REQUIRED / 1 PROVIDED	(IBC TABLE 2902.1)
MOP BASINS	1 REQUIRED / 1 PROVIDED	(IBC TABLE 2902.1)

APPLICABLE BUILDING CODES

ALL CURRENT CODES AS ADOPTED PER PA UCC 403.21
2015 INTERNATIONAL BUILDING CODE (IBC) AND LOCAL CODE ORDINANCES
NFPA 70 (2014) NATIONAL ELECTRICAL CODE
2014 NFPA 101 SAFETY CODE
29 CFR (OSHA)
2010 ADA STANDARDS (CFR 28 PART 36)/ ICC/ANSI A117.1 2009 EDITION
2015 INTERNATIONAL FUEL GAS CODE (IFGC)
2015 INTERNATIONAL PLUMBING CODE
2015 INTERNATIONAL FIRE CODE WITH STATE AND LOCAL AMENDMENTS (IFC)
2015 INTERNATIONAL MECHANICAL CODE (IMC)
2015 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
NFPA 10 (2018) STANDARD FOR PORTABLE FIRE EXTINGUISHERS

PLUMBING FIXTURES

Floor Drain - Round: 6" Strainer - 2" Drain	**6" Strainer - 2" Drain**		**2**
Toilet-Commercial-Wall-3D: 19" Seat Height - ADA Stall	**19" Seat Height - ADA Stall**	**RESTROOM**	**1**
TT-ADA Wall Mounted Sink: 22" x 27"	**22" x 27"**	**RESTROOM**	**1**
Mop_Sink_1577: 30X30	**30X30**	**PROCESS AREA**	**1**
Sink Kitchen-Single: Single Sink	**Single Sink**	**LAB/OFFICE ROOM**	**1**
Water Heater: Water Heater	**Water Heater**	**PROCESS AREA**	**2**

LIFE SAFETY LEGEND

C.P.E. = XX'
COMMON PATH OF EGRESS = __ FEET
PATH OF TRAVEL SYMBOL

T.D. = XX'
TRAVEL DISTANCE = __ FEET
PATH OF TRAVEL SYMBOL

FEC
FIRE EXTINGUISHER AND SURFACE MOUNTED CABINET

EXIT
EGRESS EXIT
EXITDETAIL 1/A-102
EGRESS DOORWAY

OCCUPANCY - USE CLASSIFICATION (IBC 1004.1.2)
OCCUPANT LOAD FACTOR (IBC 1004.1.2)

SQUARE FOOT AREA OF SPACE
NUMBER OF OCCUPANTS PER SPACE

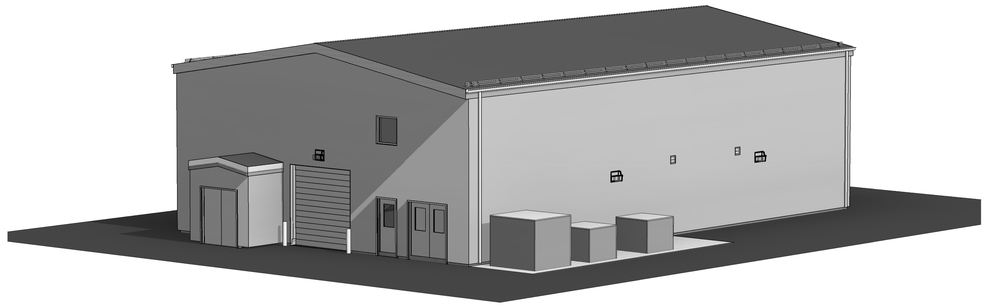
0" 0"
EXITING WIDTH REQUIRED
EXITING WIDTH PROVIDED

AREA OF WORK INDICATING OCCUPANCY CALCULATIONS

EXIT
ACCESSIBLE EXIT

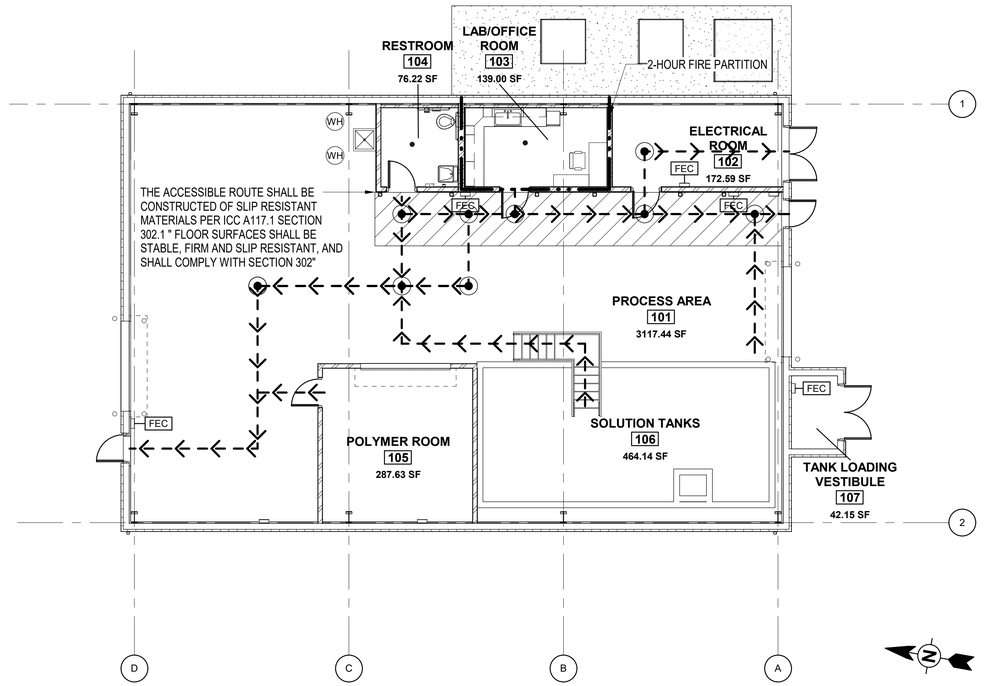
PRE-ENGINEERED METAL BUILDING (PEMB):

THE PRE-ENGINEERED STRUCTURE SHALL BE DESIGNED, INSPECTED AND CERTIFIED BY THE MANUFACTURER. MANUFACTURER TO PROVIDE STATE CERTIFIED PLANS AND STRUCTURAL CALCULATION PER IBC 1704. MANUFACTURER TO PROVIDE BUILDING ENGINEERING (BUILDING REACTIONS) AND ANCHOR BOLT REQUIREMENTS TO THE STRUCTURAL ENGINEER OF RECORD WHO WILL DESIGN THE BUILDING FOOTINGS AND FOUNDATIONS.



PERSPECTIVE

SCALE:



LIFE SAFETY PLAN

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

ISSUE FOR CONSTRUCTION

TETRA TECH
www.tetratech.com

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF ABANDONED MINE RECLAMATION
HARRISBURG OFFICE

NO.	BY	DATE	DESCRIPTION
1	RS	05.13.2020	PERMITTING REVIEW COMMENTS
0	RS	04.17.2020	ISSUE FOR CONSTRUCTION

REVISIONS

REGISTERED ARCHITECT COMMONWEALTH OF PENNSYLVANIA MATTHEW B. ANDERSON No. RA409097
5-13-2020

SUBMITTED BY: TETRATECH, INC
APPROVED BY: -- (BAMR PROJECT MANAGER TITLE AND OFFICE)

DATE: 05.13.2020 | PLOT DATE: 05.13.2020 | SCALE: AS NOTED
DRAWN BY: RS | CHECKED BY: MBA
FILE NAME: 212C-PB-00875_GLADDEN TREATMENT PLANT - AS19
ALL EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR AT THE SITE

BUREAU OF ABANDONED MINE RECLAMATION
GLADDEN ACID MINE DRAINAGE TREATMENT PLANT
SOUTH FAYETTE TOWNSHIP | ALLEGHENY COUNTY
CONTRACT NO. AMD 02(0441)101.1
CODE REVIEW
DRAWING NUMBER: A-003

Bar measures 1 inch, otherwise drawing is not to scale

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5/13/2020 3:57:35 PM C:\Users\RALEIGH.SMITH\Documents\212C-PB-00875_GLADDEN TREATMENT PLANT - AS19_raleigh.smithB38SL.rvt