CITY OF JONESVILLE

JONESVILLE, MI

JONESVILLE WWTP LAB RENOVATION

ISSUED FOR BIDS

MAY 10, 2021

CENTURY A&E PROJECT #CJN001

SHT. NO.	DRAWING INDEX
CS	COVER SHEET
AD1.0	ARCHITECTURAL DEMO FLOOR PLAN
A1.0	ARCHITECTURAL FLOOR PLAN
A6.0	INTERIOR ELEVATIONS AND DETAILS
MD1.0	MECHANICAL DEMOLITION PLAN
M1.0	MECHANICAL PLANS
M1.1	MECHANICAL SCHEDULES AND DETAILS
ED1.0	ELECTRICAL DEMOLITION PLAN
E1.0	ELECTRICAL PLAN

JONESVILLE WWTP
150 ECOLOGY DR.
JONESVILLE, MI

PROJECT SUMMARY

GOVERNING CODES:
2015 MICHIGAN BUILDING CODE (MBC)
2010 AMERICANS WITH DISABILITIES ACT
2015 MICHIGAN ENERGY CODE
2015 INTERNATIONAL FIRE CODE
2015 MICHIGAN PLUMBING CODE
2015 MICHIGAN MECHANICAL CODE
2017 NATIONAL ELECTRICAL CODE (NFPA 70)

OCCUPANCY CLASSIFICATION:
MBC CHAPTER 3 — B (BUSINESS – SECTION 304.1)

MAIN BUILDING AREA:		
	EXISTING BUILDING	2,070 SQ. FT.
	RENOVATED AREA	540 SQ. FT.

ALLOWABLE AREA AND HEIGHT: MBC CHAPTER 5, TABLES 504.3, 504.4 AND 506.2		
	GROUP B	23,000 SQ. FT. / FLOOR AND 3 STORIES

OCCUPANCY SEPARATIONS: MBC CHAPTER 5 TABLE 508.4		
	GROUP	RATING
	B	NO SEPARATION REQUIREMENT

CONSTRUCTION TYPE: (MBC CHAPTER 6, SECTION 602.2, TABLE 601)
NON-COMBUSTIBLE CONSTRUCTION TYPE II-B NON-SPRINKLED

FIRE RESISTANCE RATING REQUIREMENTS: MBC CHAPTER 6, TABLE 601

ELEMENT	RATING	BUILDING SYSTEM
PRIMARY STRUCTURAL FRAME	0	STEEL FRAMING
EXTERIOR BEARING WALLS	0	CMU
INTERIOR BEARING WALLS	0	CMU
EXTERIOR NON-BEARING WALLS	0	CMU
INTERIOR NON-BEARING WALLS	0	CMU
FLOOR CONSTRUCTION	0	CONCRETE SLAB
ROOF CONSTRUCTION	0	STEEL FRAMING

INTERIOR FINISHES (TABLE 803.11):
CLASS C: (200 MAXIMUM FLAME SPREAD AND 450 MAXIMUM SMOKE DEVELOPMENT RATING PER ASTM E84 OR UL723) IN ENCLOSED ROOMS.

CLASS B: (75 MAXIMUM FLAME SPREAD AND 450 MAXIMUM SMOKE DEVELOPMENT RATING PER ASTM E84 OR UL723) IN CORRIDORS AND ENCLOSURE FOR EXIT ACCESS STAIRWAYS AND RAMPS. (FOR GROUP B, NON-SPRINKLED).

FIRE EXTINGUISHERS (MBC 906) FOR GROUP B:
MAXIMUM TRAVEL DISTANCE TO 10 POUND CLASS ABC FIRE EXTINGUISHERS: 75 FEET. MOUNT ON WALL HANGER AT 60" AFF.

OCCUPANT LOAD:
OCCUPANT LOADS – MBC CHAPTER 10, TABLE 1004.1.2

FIRST FLOOR:

OCCUPANCY TYPE	SQ. FT. / OCCUPANT	SQ. FT.	OCCUPANTS
B BUSINESS	100	1,035	10

OCCUPANTS, EXIT LOADS, AND CAPACITIES:

PROJECT AREA OCCUPANT LOAD (B BUSINESS)	10 OCCUPANTS
EGRESS WIDTH – MBC SECTION 1005.2	

EXIT DOOR CAPACITY: (MBC 1005.3.2)
(2) 36" EXIT DOORS, WIDTH: 36"/EACH X 2 = 72"
REQUIRED EXIT WIDTH = 10 OCCUPANTS x .2"/OCCUPANT = 2"

CONCLUSION: 2" IS LESS THAN 72" AND MEETS DOOR CAPACITY REQUIREMENTS

MEANS OF EGRESS:

MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE (MBC 1006.2.1):
GROUP B: 100 FEET

NUMBER OF EXIT ACCESS DOORS AT ROOMS (MBC 1006.3.2):
FOR GROUP B: ROOMS WITH 49 OR LESS PERSONS SHALL BE PROVIDED WITH 1 EXIT ACCESS DOOR (2 PROVIDED).

DOOR SWINGS (MBC 1010.1.2.1) FOR GROUP B:
SWING IN DIRECTION OF EGRESS FOR ROOMS HAVING OCCUPANT LOAD OF 50 OR MORE. (NOT REQUIRED, BUT 1 PROVIDED).

MAXIMUM EXIT ACCESS TRAVEL DISTANCE TO NEAREST EXIT (MBC 1017.2):
GROUP B: 200 FEET WITHOUT SPRINKLER SYSTEM.

CORRIDOR DEAD ENDS (MBC 1020.4):
DEAD-END CORRIDOR LENGTH: (LESS THAN 20 FEET)

CENTURY A&E
Facilities Design
277 Crahen Avenue NE - Grand Rapids, MI 49525
Telephone: (616) 456-5227 / Fax: (616) 456-5228 / Web: www.centuryae.com

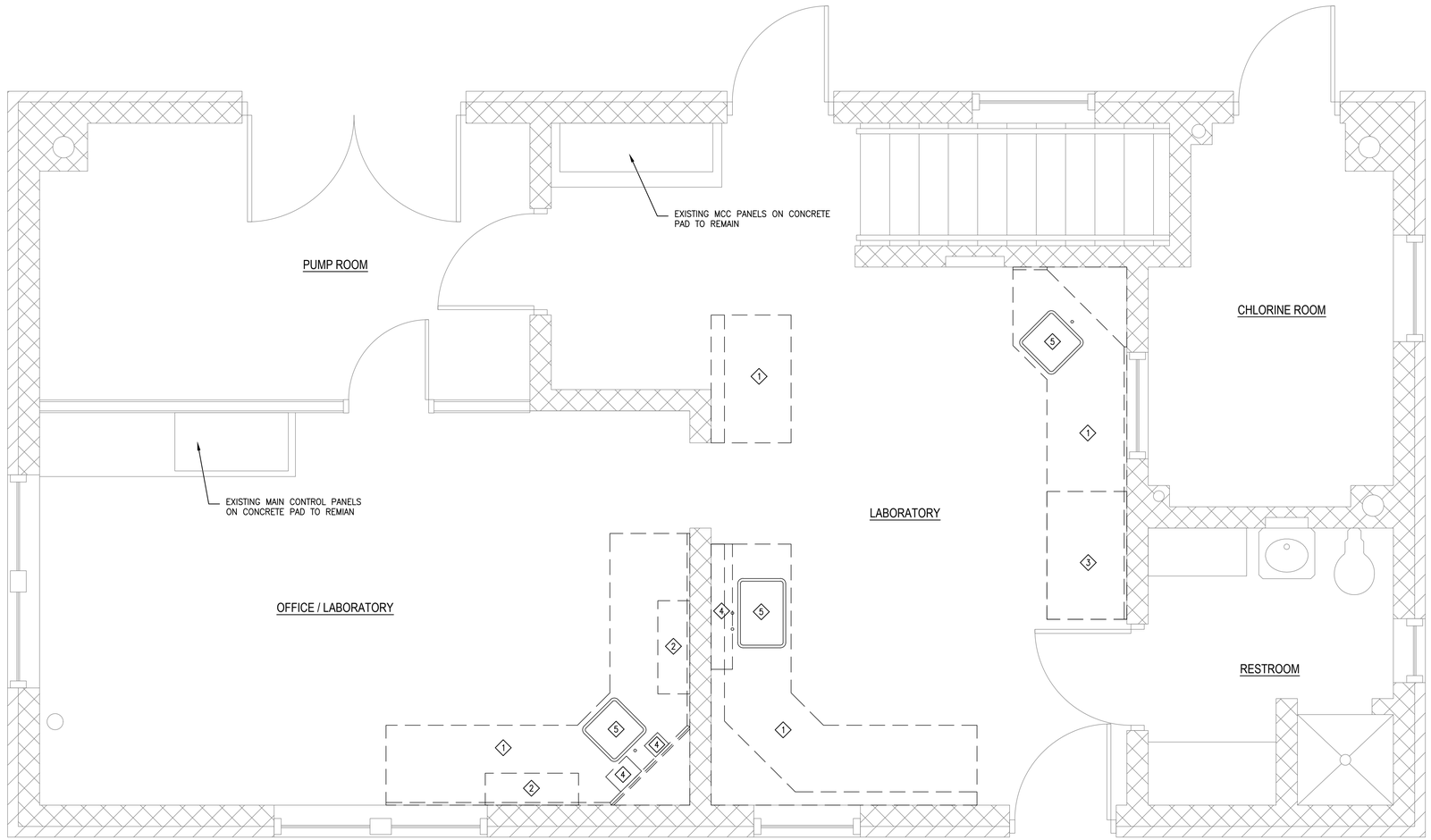
CITY OF JONESVILLE
JONESVILLE, MI
JONESVILLE WWTP LAB RENOVATION

DEMOLITION NOTES: ◇ – (SYMBOL DENOTES PLAN NOTE)

1. DEMO EXISTING LAB BASE CABINETRY.
2. DEMO EXISTING WALL CABINETRY.
3. DEMO EXISTING HOOD.
4. REMOVE EXISTING LAB FURNISHINGS, PAPER TOWEL DISPENSERS TO BE REUSED.
5. DEMO EXISTING SINKS (COORDINATE w/ PLUMBING TRADES).

GENERAL NOTES:

1. PROTECT EX. VCT FLOORING CONSTRUCTION



NORTH

1 AD1.0 DEMO FLOOR PLAN

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

CENTURY A&E
Facilities Design
277 Crahen Avenue NE - Grand Rapids, MI 49525
Telephone: (616) 456-5227 / Fax: (616) 456-5228 / Web: www.centurya-e.com

NO.	REVISIONS	BY	DATE
1	ISSUED FOR BIDS	CCN	5/10/2021

CITY OF JONESVILLE
JONESVILLE, MI
WWTP LAB CASEWORK

DEMO FLOOR PLAN

DESIGN BY: CCN
DRAWN BY: SSG
DWG. SCALE: AS NOTED

PROJECT NO: CJN001

AD1.0

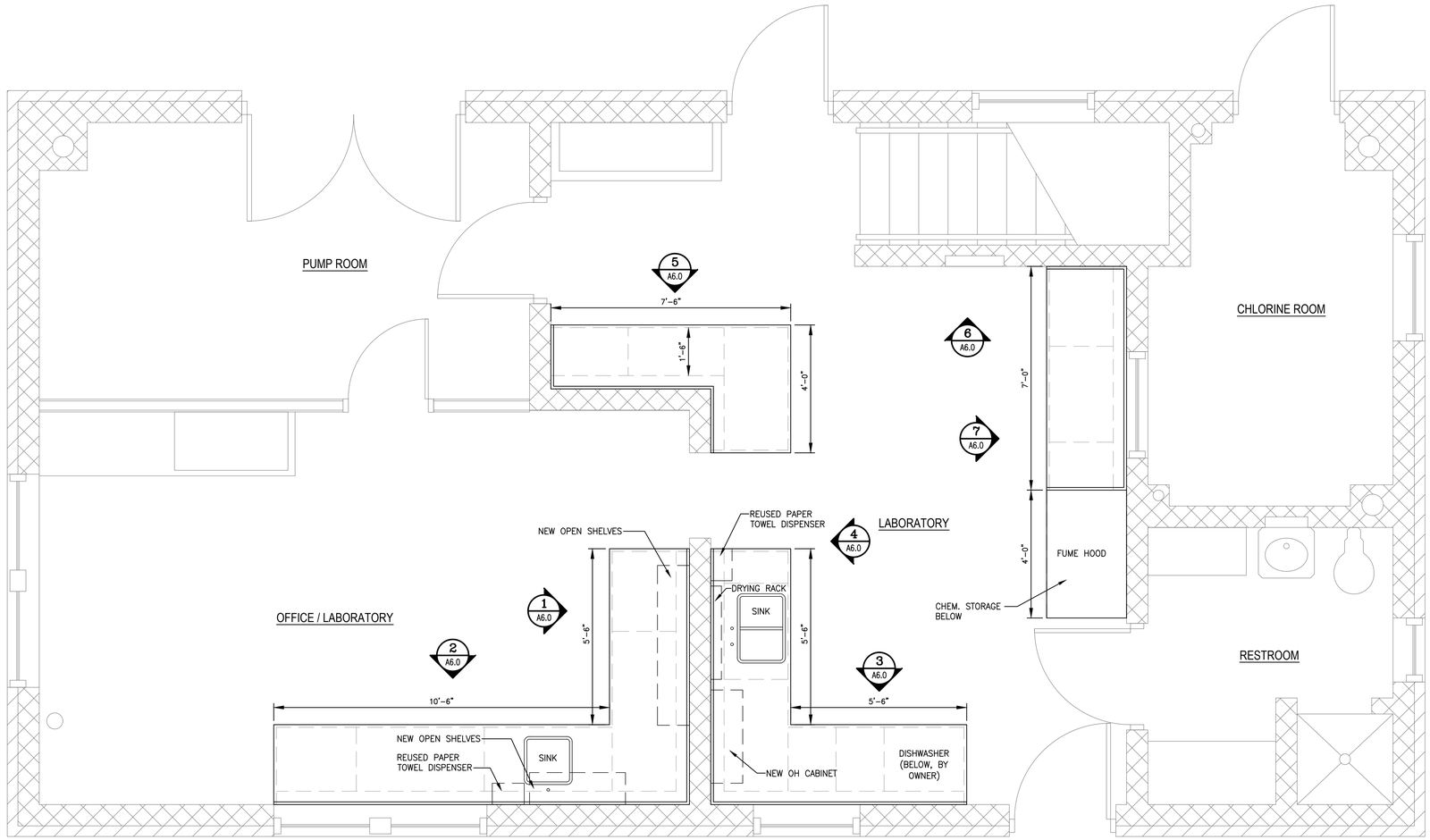
SHEET NO.

ROOM FINISH SCHEDULE

NO.	LOCATION	FLOOR		WALLS				CEILING			REMARKS
		MATERIAL	BASE	NORTH	SOUTH	EAST	WEST	MATERIAL	FINISH	HEIGHT	
1	OFFICE / LABORATORY	EX. VCT	4" RESILIENT	CMU – PT	CMU – PT	CMU – PT	CMU – PT	EX. PRECAST PLANK	PAINT	EXISTING	
2	LABORATORY	EX. VCT	4" RESILIENT	CMU – PT	CMU – PT	CMU – PT	CMU – PT	EX. PRECAST PLANK	PAINT	EXISTING	

NOTES:

1. --



1 A1.0 FLOOR PLAN

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

GENERAL NOTES:

1. PATCH VCT FLOORING AS REQUIRED.
2. ALL WALLS, DOORS, AND FRAMES IN WORK AREA TO BE PAINTED.

CENTURY A&E
Facilities Design
277 Crahen Avenue NE - Grand Rapids, MI 49525
Telephone: (616) 456-5227 / Fax: (616) 456-5228 / Web: www.centurya-e.com

NO.	BY	DATE
1	CCN	5/10/2021

ISSUED FOR BIDS
REVISIONS

CITY OF JONESVILLE
JONESVILLE, MI
WWTP LAB CASEWORK

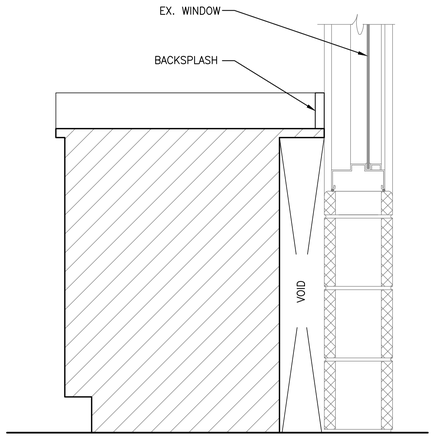
FLOOR PLAN

DESIGN BY: CCN
DRAWN BY: SSG
DWG. SCALE: AS NOTED

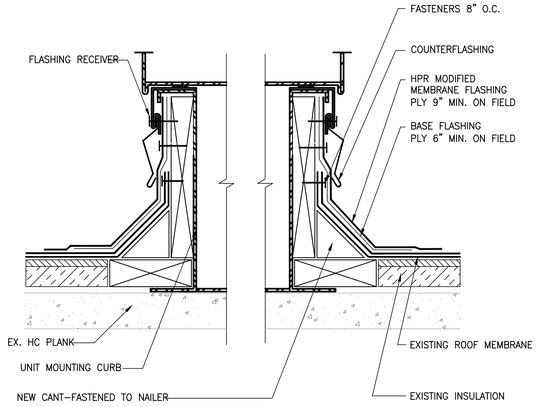
PROJECT NO: CJN001

A1.0

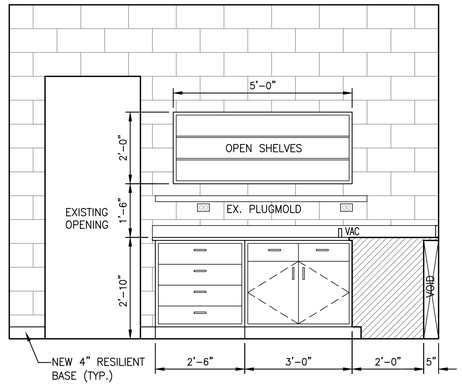
SHEET NO.



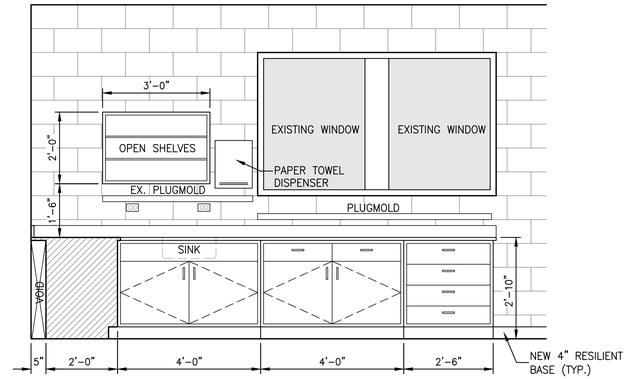
B A6.0 COUNTER AT WINDOW DETAIL
SCALE: 1-1/2" = 1'-0"



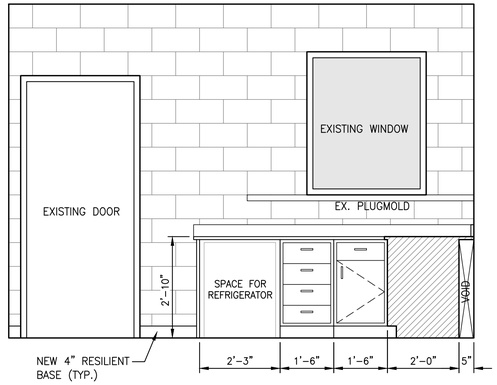
A A6.0 ROOF CURB DETAIL
NOT TO SCALE



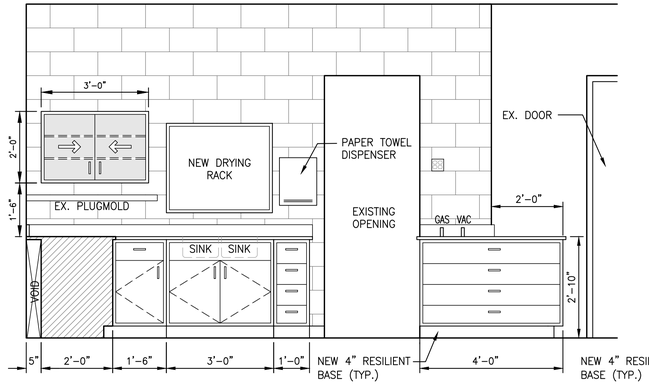
1 A6.0 ELEVATION
SCALE: 1/2" = 1'-0"



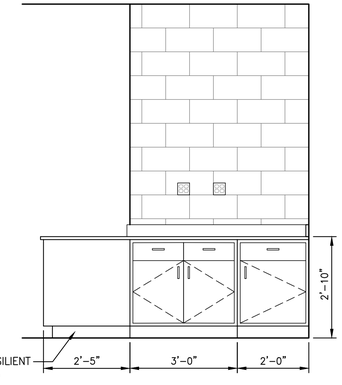
2 A6.0 ELEVATION
SCALE: 1/2" = 1'-0"



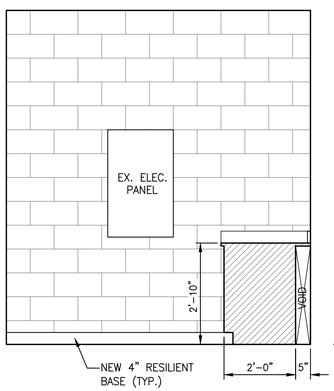
3 A6.0 ELEVATION
SCALE: 1/2" = 1'-0"



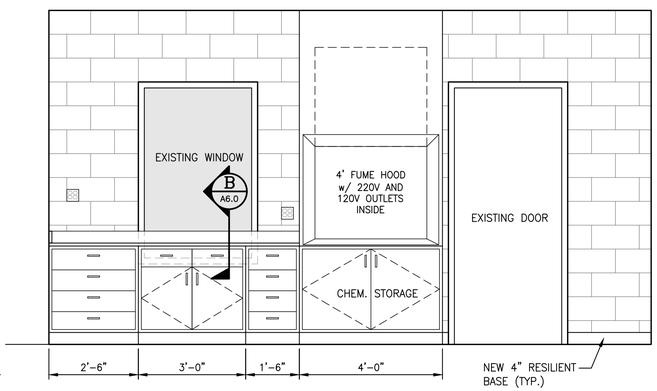
4 A6.0 ELEVATION
SCALE: 1/2" = 1'-0"



5 A6.0 ELEVATION
SCALE: 1/2" = 1'-0"



6 A6.0 ELEVATION
SCALE: 1/2" = 1'-0"



7 A6.0 ELEVATION
SCALE: 1/2" = 1'-0"

CENTURY A&E
Facilities Design
277 Crahen Avenue NE - Grand Rapids, MI 49525
Telephone: (616) 456-5227 / Fax: (616) 456-5228 / Web: www.centuryae.com

NO.	REVISIONS	BY	DATE
1	ISSUED FOR BIDS	CCN	5/10/2021

CITY OF JONESVILLE
JONESVILLE, MI
WWTP LAB CASEWORK

INTERIOR ELEVATIONS AND DETAILS

DESIGN BY: CCN
DRAWN BY: SSG
DWG. SCALE: AS NOTED
PROJECT NO: CJN001

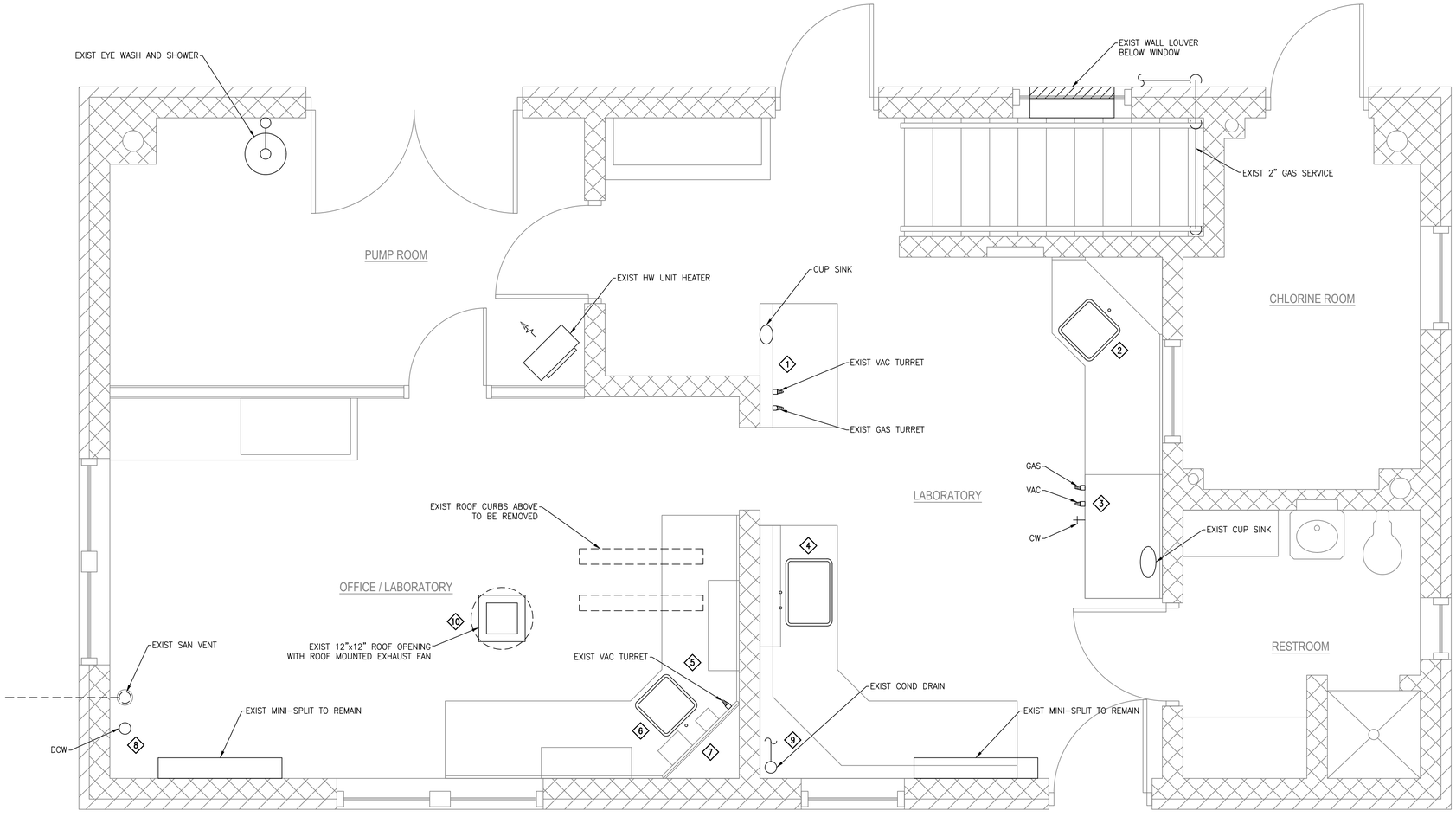
A6.0
SHEET NO.

GENERAL NOTES:

1. FIELD VERIFY AND FIELD MARK ALL ITEMS TO BE DEMOLISHED, AND REVIEW WITH THE ENGINEER AND OWNER PRIOR TO STARTING DEMOLITION WORK.
2. UNLESS OTHERWISE NOTED, DEMOLITION OF A PARTICULAR ITEM INCLUDES DEMOLITION OF ALL ASSOCIATED HANGERS, SUPPORTS, DUCTWORK, PIPING, ACCESSORIES, ETC. NON-FUNCTIONAL ITEMS ARE NOT TO BE LEFT ABANDONED IN PLACE.
3. NOT ALL PLAN NOTES ARE USED FOR EVERY FACILITY.
4. DEMOLITION OF EXISTING POWER AND CONTROL WIRE AND CONDUIT, CONTROL PANELS, THERMOSTATS, FAN SWITCHES, ETC. IS SHOWN ON THE ELECTRICAL DRAWINGS.

DEMOLITION NOTES: (DENOTED ON SHEET BY ◇)

1. REMOVE EXISTING CUP SINK AND ASSOCIATED DRAIN AND COLD WATER PIPING. CAP BELOW FLOOR AT MAIN. REMOVE EXISTING VACUUM AND GAS TURRET AND ASSOCIATED PIPING. TEMPORARILY CAP GASES ABOVE FLOOR FOR FUTURE RECONNECTION TO NEW TURRETS.
2. REMOVE EXISTING LAB SINK AND ASSOCIATED SANITARY, HOT/COLD WATER PIPING. CAP BELOW FLOOR AT MAIN.
3. REMOVE EXISTING LAB FUME HOOD AND ASSOCIATE CUP SINK, SANITARY DRAIN AND COLD WATER PIPING BELOW FLOOR AT MAIN. REMOVE AND CAP GAS AND VACUUM PIPING AND CAP AT MAIN BELOW FLOOR. REMOVE INTERNAL EXHAUST FAN AND EXHAUST DUCT THROUGH ROOF. TEMPORARILY CAP ROOF OPENING.
4. REMOVE EXISTING LAB SINK AND ASSOCIATED SANITARY DRAIN, AND HOT/COLD WATER PIPING. TEMPORARILY CAP FOR FUTURE RECONNECTION.
5. REMOVE EXISTING VACUUM TURRET AND ASSOCIATED PIPING. TEMPORARILY CAP GASES ABOVE FLOOR FOR FUTURE RECONNECTION TO NEW TURRET.
6. REMOVE EXISTING LAB SINK AND ASSOCIATED SANITARY DRAIN, AND HOT/COLD WATER PIPING. TEMPORARILY CAP FOR FUTURE RECONNECTION.
7. REMOVE EXISTING WALL MOUNTED DISTILLATION UNIT AND ASSOCIATED COLD WATER PIPING. SALVAGE UNIT FOR FUTURE RE-INSTALLATION. TEMPORARILY CAP COLD WATER FOR FUTURE USE.
8. REMOVE REMAINING COLD WATER PIPING AT FLOOR LEVEL. CAP AT MAIN BELOW FLOOR.
9. REMOVE REMAINING ABANDONED CONDENSATE DRAIN BACK TO DRAIN.
10. REMOVE EXISTING EXHAUST FAN FROM ROOF AND ASSOCIATED ELECTRICAL CONNECTIONS AND MAKE SAFE. EXISTING OPENING TO REMAIN FOR NEW SUPPLY AIR DUCT.



1 DM1.0 DEMO MECHANICAL FLOOR PLAN

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

CENTURY A&E
Facilities Design
277 Crahen Avenue NE - Grand Rapids, MI 49525
Telephone: (616) 456-5227 / Fax: (616) 456-5228 Web: www.centurya-e.com

NO.	DATE	BY	REVISIONS
1	5 / 10 /2021	CDN	ISSUED FOR BIDS

CITY OF JONESVILLE
JONESVILLE, MI
WWTP LAB CASEWORK

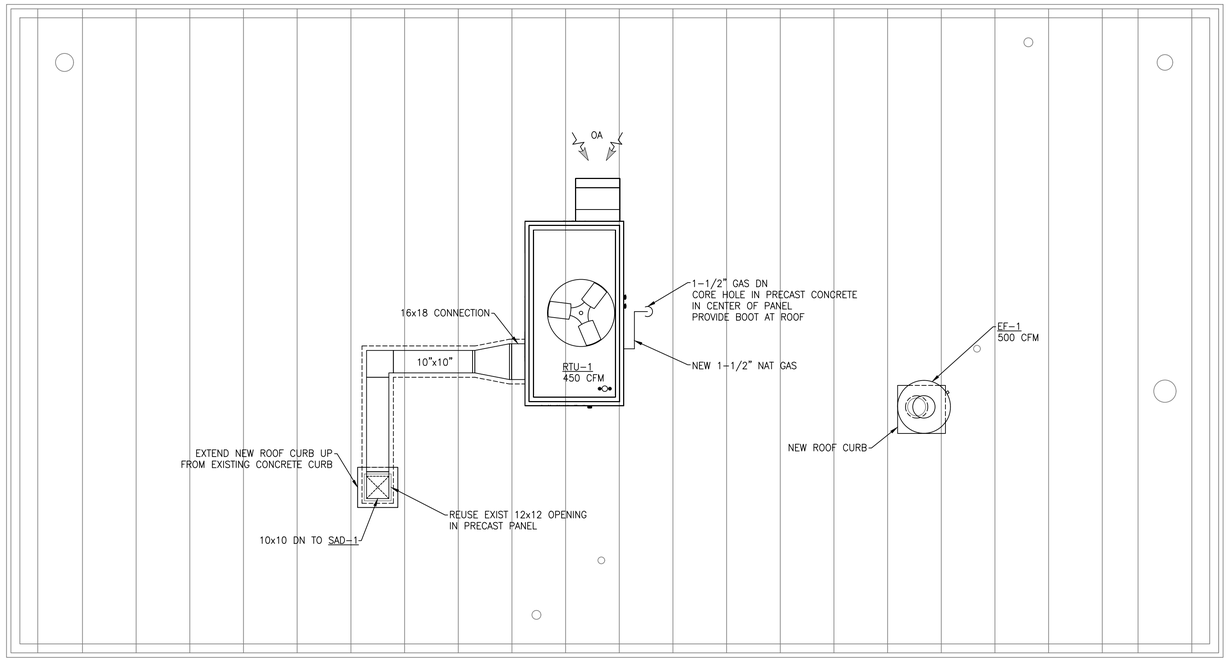
DEMO MECHANICAL FLOOR PLAN

DESIGN BY: TMB
DRAWN BY: JPG
DWG. SCALE: AS NOTED

PROJECT NO: CJN001

DM1.0

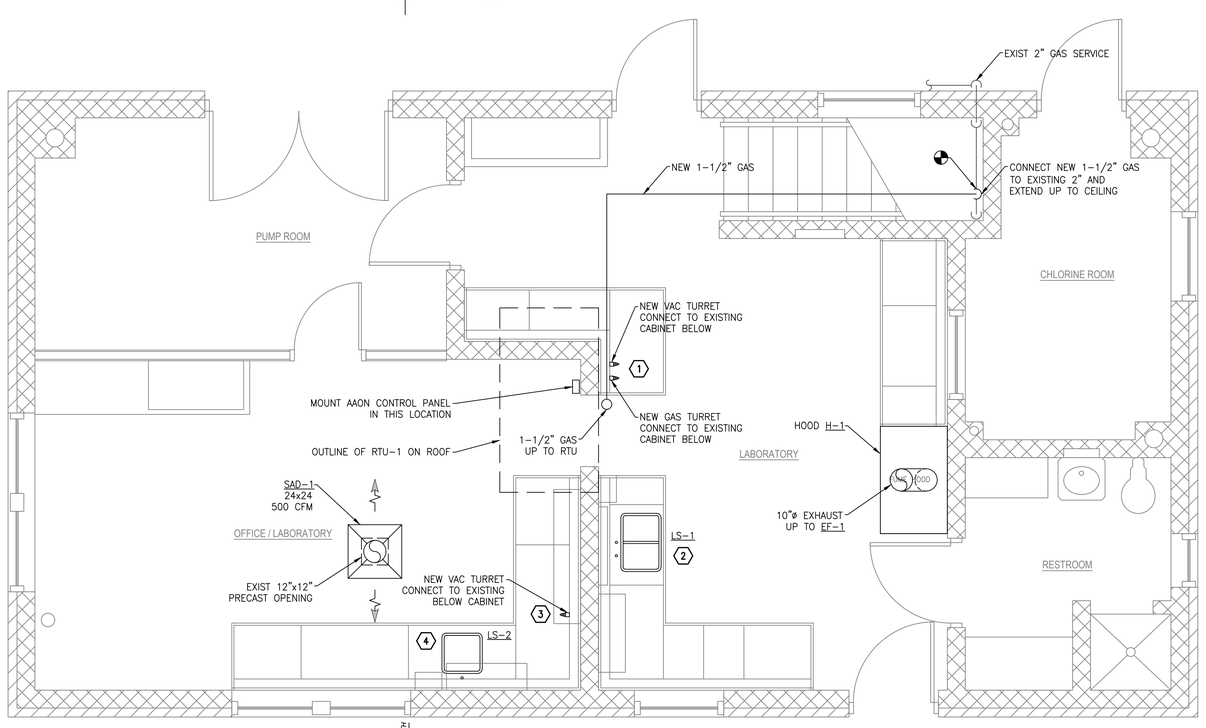
SHEET NO.



NORTH

1 / M1.0 MECHANICAL ROOF PLAN

SCALE: 3/8" = 1'-0"



NORTH

2 / M1.0 PLUMBING/MECHANICAL PLAN

SCALE: 3/8" = 1'-0"

GENERAL NOTES:

1. FIELD VERIFY ALL DIMENSIONS.
2. DRAWINGS ARE SCHEMATIC IN NATURE. NOT ALL WORK IS SHOWN. ASSUME ADDITIONAL FITTINGS, OFFSETS, ACCESSORIES, ETC. ARE REQUIRED.
3. FIELD VERIFY EXACT LOCATION AND MOUNTING HEIGHT FOR ALL NEW EQUIPMENT, HEATERS, LOUVERS, FANS, ETC., AND OBTAIN APPROVAL FROM THE ENGINEER PRIOR TO STARTING INSTALLATION.
4. ALL EXPOSED NATURAL GAS PIPING IS TO BE PAINTED RED TO MATCH EXISTING.
5. SUPPORT GAS PIPING OVER ROOF WITH GALVANIZED UNITSTRUT MOUNTED ON "DURA BLOC" RUBBER SUPPORTS. COLD GALVANIZE ALL RAW EDGES OF UNITSTRUT.
6. SUPPORT ALL DUCTWORK OVER ROOF WITH GALVANIZED UNITSTRUT ON "DURA BLOC" RUBBER SUPPORTS. COLD GALVANIZE ALL RAW EDGES OF UNITSTRUT.
7. PROVIDE MANUAL BALANCE DAMPERS ON ALL DIFFUSER RUNOUT DUCTS.
8. INSULATE ALL EXPOSED SUPPLY AIR ON THE ROOF WITH 2" OF RIGID INSULATION AND WRAP WITH PVC COVERING SEALED WEATHER TIGHT.

PLAN NOTES: (DENOTED ON SHEET BY ⟨#⟩)

1. INSTALL NEW GAS AND VACUUM TURRETS AND RECONNECT TO EXISTING PIPING AT WALL BELOW CABINET.
2. INSTALL NEW DOUBLE COMPARTMENT SINKS LS-1 AND FAUCET AND RECONNECT HOT WATER, COLD WATER, AND ACID WASTE TO EXISTING CONNECTIONS UNDER THE SINK.
3. INSTALL NEW VACUUM TURRET AND RECONNECT TO EXISTING VAC PIPING BELOW COUNTER.
4. INSTALL NEW SINGLE COMPARTMENT SINK AND FAUCET AND RECONNECT HOT WATER, COLD WATER, AND ACID WASTE TO EXISTING CONNECTION UNDER SINK.

CENTURY A&E
Facilities Design
277 Crahen Avenue NE - Grand Rapids, MI 49525
Telephone: (616) 456-5227 / Fax: (616) 456-5228 / Web: www.centuryae.com

NO.	BY	DATE
1	CDN	5/10/2021

ISSUED FOR BIDS — REVISIONS

CITY OF JONESVILLE
JONESVILLE, MI
WWTP LAB CASEWORK

MECHANICAL FLOOR PLANS

DESIGN BY: TMB
DRAWN BY: JPG
DWG. SCALE: AS NOTED

PROJECT NO: CJN001

M1.0
SHEET NO.

LABORATORY SINK SCHEDULE

TAG	LOCATION	DESCRIPTION	DIMENSIONS (INSIDE L"/W"/D")	SINK MODEL	MATERIAL	TYPE	SINK TRIM					
							FAUCET DESCRIPTION	MODEL	COATING	DRAIN OUTLET	EYE WASH	NOTES
LS-1	LAB BENCH	DOUBLE COMPARTMENT	18 x 15 x 11	PL-30	RESIN	DROP-IN	GOOSE NECK W/ INTEGRAL HW / CW FAUCETS	L084WSA	EPOXY	FIXED GRID	NO	1, 2, 3,4, 5, 6, 7, 8, 8, 9,10
LS-2	LAB BENCH	SINGLE COMPARTMENT	16 x 16 x 9.6	PL-19	RESIN	DROP-IN	GOOSE NECK W/ INTEGRAL HW / CW FAUCETS	L412VB-BH	EPOXY	FIXED GRID	NO	1, 2, 3,4, 5, 6, 7, 8, 8, 9,10

1 ALL SINKS AND TRIM TO BE FURNISHED BY LAB FURNITURE SUPPLIER
2 REFER TO ARCHITECURAL PLANS AND ELEVATIONS FOR SPECIFIC CONFIGURATION
3 LAB BENCH TO BE ROUTERED TO ALLOW FLUSH MOUNT OF SINK LIP
4 ALL GOOSE NECK FAUCETS TO EXTEND TO BE SWIVLE MOUNT AND EXTEND TO CENTER OF SINK.
5 SINK FAUCET(S) ARE BASED ON "WATER SAVER"
6 SINK WASTE TO BE ROUTED TO ACID DILUTION TANK UNDER LAB BENCH
7 ALL FIXTURE FAUCETS AND VALVES SHALL BE WHITE EPOXY COATING.
8 ALL RESIN SINKS ARE BASED ON "PRIME INDUSTRIES INC."
9 ALL FAUCET GOOSE NECK SHALL HAVE VACUUM BREAKERS
10 PROVIDE POINT OF USE MIXING VALVES ON ALL HOT WATER SUPPLIES TO LAB SINKS.

ROOFTOP UNIT SCHEDULE

MARK	AREA SERVED	MANUF	MODEL	AIRFLOW (CFM)	MIN OA (CFM)	ESP (IN WC)	AMB (°F)	COOLING CAPACITY							HEATING			ELECTRICAL				WEIGHT (LBS)	NOTES
								EAT (°F)		LAT (°F) COIL		TOTAL (MBH)	SENSIBLE (MBH)	EER	EAT(°F)	INPUT (MBH)	OUTPUT (MBH)	V/PH/HZ	FLA	MOCP			
								DB	WB	DB	WB				DB								
RTU-1	LAB FUME HOOD	AAON	RQ-003-3-H-31B	500	500	0.70	95.00	89	73	47.59	55.4	33.77	19.33	11.20	0.00	60	12	460/3/60	11	15		835	1, 2, 3

1. FURNISH WITH R410A DX COOLING AND MEDIUM GAS HEAT, STANDARD EFFICIENCY, DUAL COMPRESSORS, SIDE OUTLET CONFIGURATION, MICROPROCESSOR CONTROLS, THRU-BASE ELECTRICAL, NON-FUSED DISCONNECT, AND STAINLESS STEEL DRAIN PAN, AND WALL MOUNTED CONTROL PANEL.
2. SET TO OPERATE AT 100% OUTSIDE AIR WITH EF-1 EXHAUSTING 100% DURING LAB HOOD OPERATION.
3. DIGITAL SCROLL COMPRESSOR, CONVENIENCE OUTLET, 4" FILTERS, DISCONNECT, HOT GAS REHEAT, AND HAND-HELD CONTROLLER.

EXHAUST FAN SCHEDULE

MARK	AREA	TYPE	MANUF	MODEL	AIRFLOW (CFM)	SP (IN WC)	DBA	OVERALL DIMENSIONS (IN)	ROOF/WALL OPENING (IN)	MOTORIZED DAMPER	WEIGHT (LBS)	VFD	MOTOR		FAN RPM	ELECT V / PH / Hz	NOTES
													HP	WATTS			
EF-1	LAB HOOD EXHAUST FAN	POLYPROPYLENE	PLASTEC	JET 20	500	0.6	75	23 x 23 x 33 HIGH	21X21	NO	60	NO	1/3	2500	1075	115/1/60	1,2,3,4,5

1 PROVIDE 18" DOUBLE WALL INSULATED ROOF CURB .
2 PROVIDE WITH WEATHER HOOD.
3 FAN TO BE INTERLOCKED WITH ROOF TOP MAU
4 PROVIDE WITH PREWIRED NON-FUSED DISCONNECT.
5 PROVIDE WITH SPEED CONTROL FOR BALANCING

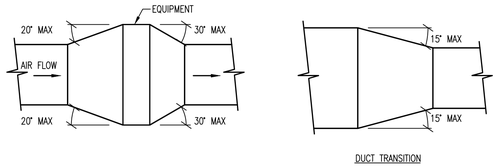
DIFFUSER, REGISTER & GRILLE SCHEDULE

MARK	TYPE	MANUF	MODEL	CFM RANGE	FACE SIZE (IN)	NECK SIZE (IN)	VOLUME DAMPER	FINISH	FRAME	NOTES
SAD-1	CEILING SUPPLY	TITUS	RADIAL-TECH AL	300-500	24 X 24	10	NO	WHITE	SURFACE MOUNTED	1

1 ALUMINUM CONSTRUCTION

FUME HOOD SCHEDULE

MARK	DESCRIPTION
H-1	LABORATORY FUME HOOD H-1: BMC AIR FOIL BY-PASS HOOD MODELS B-9040, 48" WIDE WITH STANDARD BASE CABINET TWO LF35-7 FILLER PANELS, DISHED EPOXY RESIN COUNTERTOP, LESS CUP SINK AND SERVICE FIXTURES, LESS COLD WATER FIXTURE, COMPLETE WITH BLOWER SWITCH, LIGHT SWITCH AND DUPLEX 110V OUTLETS. 33-7/8" DEEP, 48" WIDE, 48" HIGH, 31" OVER-ALL SASH HEIGHT, WITH 35" HIGH BY 30" DEEP BASE CABINET. 6"X12" DUCT COLLAR. 867 CFM @ 100 FPM, .39" SP. DESIGN BASED ON 18" SASH HEIGHT, 500 CFM AT 100 FPM.

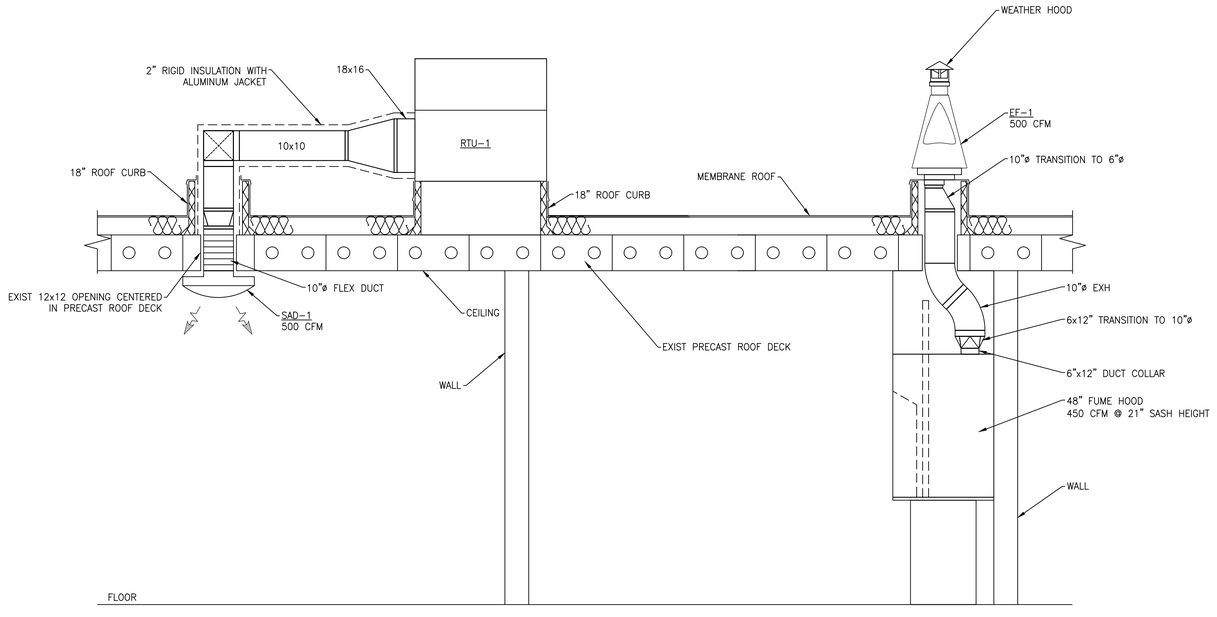


DUCT TRANSITION W/EQUIPMENT

DUCT TRANSITION

NOTES:
1. UNLESS OTHERWISE INDICATED ON PLANS, MAXIMUM ANGLES SHOWN SHALL APPLY.

TYPICAL DUCT TRANSITION DETAIL
SCALE: NOT TO SCALE



1 / M1.1 MECHANICAL SECTION
SCALE: 1/2" = 1'-0"

CENTURY A&E
Facilities Design
277 Crahen Avenue NE - Grand Rapids, MI 49525
Telephone: (616) 456-5227 / Fax: (616) 456-5228 / Web: www.centuryae.com

NO.	REVISIONS	DATE	BY
1	ISSUED FOR BIDS	5 / 10 / 2021	CDN

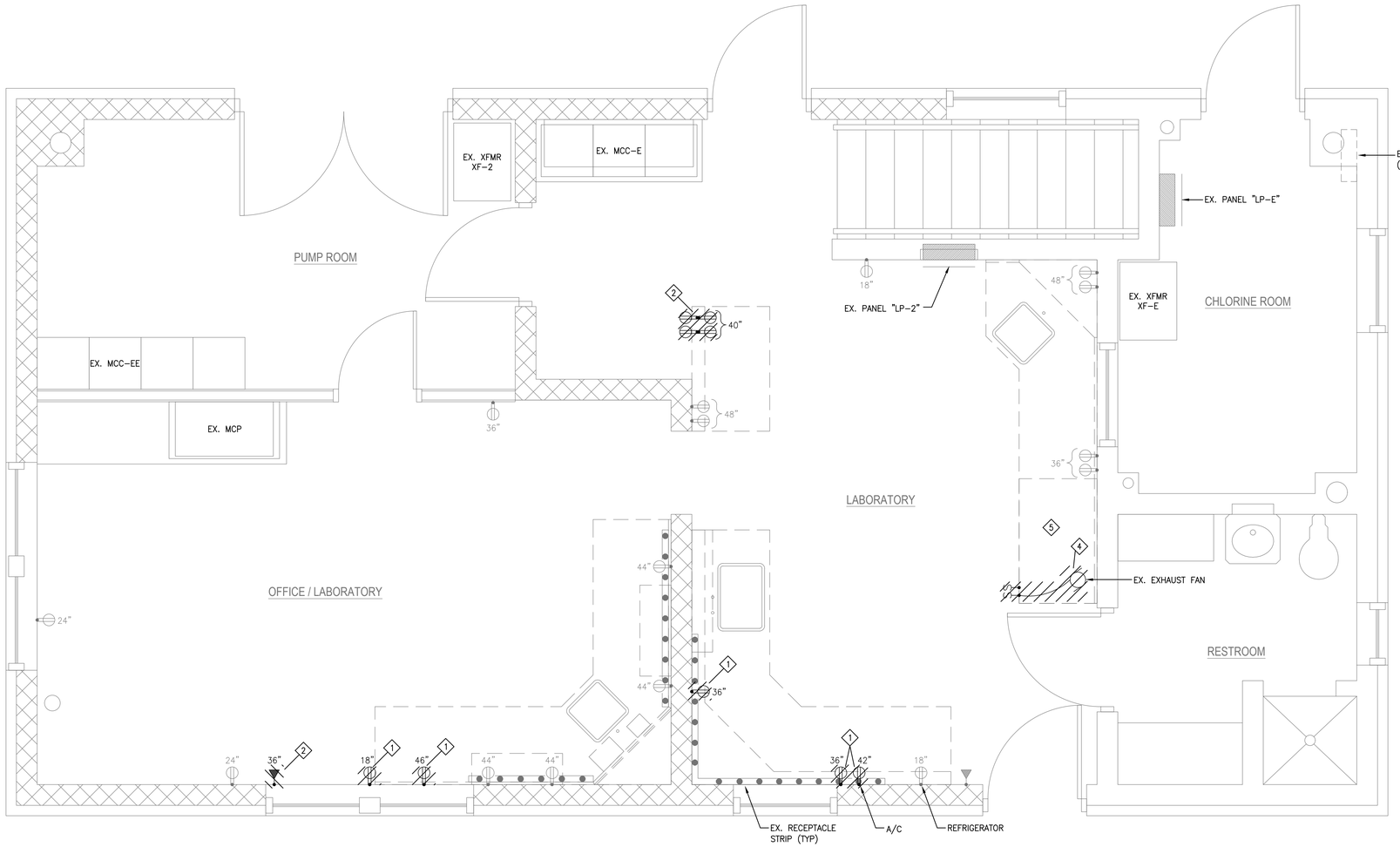
CITY OF JONESVILLE
JONESVILLE, MI
WWTP LAB CASEWORK

MECHANICAL SCHEDULES AND DETAILS

DESIGN BY: TMB
DRAWN BY: JPG
DWG. SCALE: AS NOTED

PROJECT NO: CJN001

M1.1
SHEET NO.



ELECTRICAL DEMOLITION PLAN

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

GENERAL NOTES:

1. CONTRACTOR TO VERIFY THE CIRCUIT BREAKER WHICH FEEDS EACH RECEPTACLE IN ROOMS WHERE CABINETS ARE BEING REPLACED (ALL WALLS).
2. RESTORE ALL SURFACES WHERE CONDUIT IS REMOVED. PATCH AND PAINT HOLES IN WALLS.

DEMOLITION NOTES: (DENOTED ON SHEET BY ◇)

1. DISCONNECT AND REMOVE RECEPTACLES INDICATED. REMOVE WIRING BACK TO THE NEXT DEVICE IN CIRCUIT. RECONNECT WIRING AS REQUIRED TO MAINTAIN THE REMAINING DEVICES IN THE CIRCUIT. PROVIDE CONDUIT & CONDUCTORS AS REQUIRED.
2. DISCONNECT TELEPHONE WIRE AND CONDUIT TO BELOW FLOOR. CHIP OUT GROUT AROUND CONDUIT. PROTECT WIRE TO BE REUSED.
3. DISCONNECT AND PROTECT FOR CONNECTION TO NEW RECEPTACLES ON ADJACENT WALL.
4. DISCONNECT AND REMOVE CONDUIT AND WIRE ASSOCIATED WITH FUME HOOD. EXISTING CIRCUIT LP2-4, LP2-26 AND LP2-28.
5. DISCONNECT AND REMOVE ABANDONED CONDUIT NEAR EXISTING FAN AND ROOF PENETRATION.

CENTURY A&E
Facilities Design
277 Crahen Avenue NE - Grand Rapids, MI 49525
Telephone: (616) 456-5227 / Fax: (616) 456-5228 / Web: www.centuryae.com

NO.	DATE	BY
1	8 / 28 / 2020	CDN
2	9 / 11 / 2020	CDN

ISSUED FOR 90% REVIEW
ISSUED FOR 100% REVIEW
REVISIONS

CITY OF JONESVILLE
JONESVILLE, MI
WWTP LAB CASEWORK

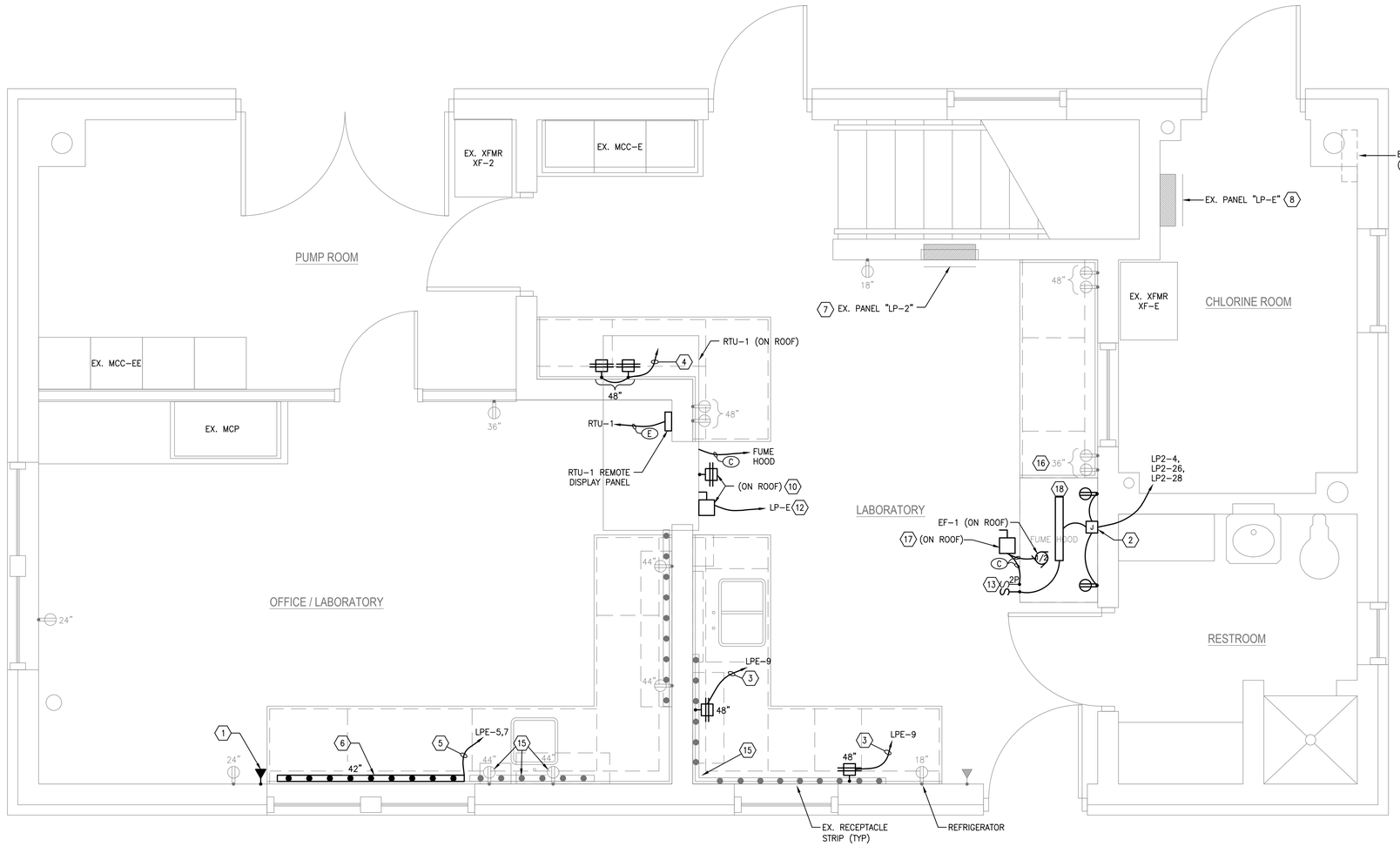
ELECTRICAL DEMOLITION PLAN

DESIGN BY: TLM
DRAWN BY: ELS
DWG. SCALE: AS NOTED

PROJECT NO: CJN001

ED1.0

SHEET NO.



ELECTRICAL PLAN

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

GENERAL NOTES:

1. GENERALLY ITEMS DEPICTED IN "LIGHT" LINE WEIGHT ARE INTENDED TO INDICATE EXISTING EQUIPMENT. ITEMS IN DARK LINE WEIGHT INDICATES NEW ITEMS TO BE PROVIDED AS PART OF THIS PROJECT. IF LINE WEIGHT IS UNCLEAR, PROVIDE NEW.
2. COORDINATE NEW WORK WITH NEW LAB FURNATURE AND EQUIPMENT.
3. LABEL ALL RECEPTACLES, EXISTING AND NEW WITH PANELBOARD NAME AND CIRCUIT.

PLAN NOTES: (DENOTED ON SHEET BY (#))

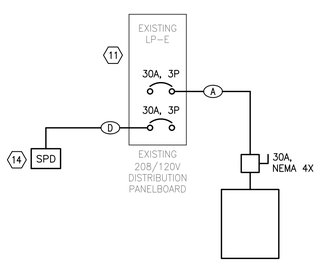
1. PROVIDE NEW TELEPHONE JACK. RECONNECT CIRCUIT AND RACEWAY FROM BELOW THE FLOOR. MATCH HEIGHT OF EXISTING TELEPHONE JACK.
2. CIRCUIT TO EXISTING 20 AMP CIRCUIT(S) IN LP-2. CONNECT TO FUMEHOOD WIRING PER MANUFACTURER'S INSTRUCTIONS.
3. CIRCUIT TO EXISTING 20A CIRCUIT BREAKER IN LP-E.
4. CONNECT TO EXISTING CIRCUIT. PROVIDE CONDUIT AND WIRE AS REQUIRED.
5. PROVIDE GFIC CIRCUIT BREAKER IN EXISTING PANELBOARD LPE, SQUARE-D TYPE NQOD.
6. PROVIDE NEW RECEPTACLE STRIP TO MATCH EXISTING. LEGRAND PLUGMOLD 2400 SERIES WITH DUPLEX RECEPTACLES 12" ON CENTER, AND WITH GBA WIRING CONFIGURATION.
7. REPLACE UP TO (8) SINGLE POLE AND (4) DOUBLE POLE CIRCUIT BREAKERS THAT FEED "COUNTERTOP" RECEPTACLES, WITH GFIC BREAKERS IN EXISTING PANELBOARD, SQUARE-D TYPE NQOB. FIELD VERIFY CIRCUIT BREAKERS THAT FEED POWER TO RECEPTACLES ABOVE THE COUNTERTOP.
8. REPLACE UP TO (7) SINGLE POLE "LAB RECPTS" CIRCUIT BREAKERS WITH GFIC BREAKERS IN EXISTING PANELBOARD, SQUARE-D TYPE NQOD. FIELD VERIFY CIRCUIT BREAKERS THAT FEED POWER TO RECEPTACLES ABOVE THE COUNTERTOP.
9. UTILIZE A SPARE 20A CIRCUIT BREAKER IN LP-E.
10. PATCH ROOF MEMBRANE AS REQUIRED. TYPICAL FOR ALL CONDUITS ROUTED TO ROOF MOUNTED EQUIPMENT. DISCONNECT AND RECEPTACLE PROVIDED AS PART OF RTU.
11. PROVIDE (2) 30A 3P CIRCUIT BREAKERS TO FEED RTU-1 AND A NEW SURGE PROTECTION DEVICE.
12. COORDINATE MOUNTING REQUIREMENTS WITH EQUIPMENT MANUFACTURER.
13. PROVIDE 2 POLE SWITCH. WIRE ONE POLE TO EF-1 AND THE OTHER POLE TO RTU-1. SWITCH SHALL CALL FOR BOTH UNITS TO RUN. MOUNT SWITCH IN FUME HOOD. FIELD COORDINATE AS REQUIRED.
14. MERSEN SURGE-TRAP XR SERIES, BUSSMANN SURGE POD HEAVY DUTY OR EQUAL, SUBMIT SHOP DRAWING FOR APPROVAL. MOUNT NEAR PANELBOARD. TWIST CONDUCTORS AS RECOMMENDED BY MFR.
15. CONTRACTOR TO PROVIDE GFI PROTECTION OF ALL RECEPTACLES WITHIN 6FT. FROM A SINK. REPLACE EXISTING CIRCUIT BREAKER(S) WITH GFCI TYPE BREAKER. WHERE THAT IS NOT POSSIBLE, REPLACE EXISTING RECEPTACLE(S) WITH GFCI TYPE RECEPTACLE.
16. MOVE EXISTING RECEPTACLE ENCLOSRE MOUNTING HEIGHT TO 48". MOUNT RECEPTACLE ENCLOSURE TO WALL AS REQUIRED. INSTALL NEW CONDUIT AND WIRE ROUTED DOWN FROM CEILING. INSTALL NEW RECEPTACLES.
17. PATCH ROOF MEMBRANE AS REQUIRED. TYPICAL FOR ALL CONDUITS ROUTED TO ROOF MOUNTED EQUIPMENT. DISCONNECT PROVIDED BY FAN SUPPLIER, INSTALLED BY ELECTRICAL CONTRACTOR.
18. LIGHT FIXTURE PROVIDED AS PART OF FUME HOOD ASSEMBLY.

CONDUIT AND CABLE SCHEDULE

MARK	DESCRIPTION	
(#)		
A	3#10, 1#10 GND – 1"C	
B	3#12, 1#12 GND – 3/4"C	
C	2#12, 1#12 GND – 3/4"C	
D	4#10, 1#10 GND – 1"C	
E	8#14, 2/C#18SH – 1"C	
NOTE:		

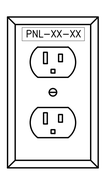
POWER LEGEND

- LIGHT FIXTURE.
- 30MM PUSH BUTTON STATION ENCLOSURE WITH PUSH BUTTONS OR SELECTOR SWITCHES MOUNTED 48" AFF. NEMA 4, 4X, 12, 13
- SINGLE POLE TOGGLE SWITCH 48" AFF WALL MOUNTED OUTLET BOX. INSTALL MULTIPLE SWITCHES UNDER COMMON COVER PLATE. SUBSCRIPT AT SWITCH SYMBOL INDICATES THE FOLLOWING:
  2 – DOUBLE POLE TS – TIMER SWITCH F – FUSED
  3 – THREE WAY K – KEY OPERATED M – MANUAL MOTOR STARTER
  4 – FOUR WAY D – DIMMER STYLE OC – OCC-SENSOR
- DUPLEX CONVENIENCE RECEPTACLE, WALL MOUNTED OUTLET BOX.
- DUPLEX CONVENIENCE RECEPTACLE, WALL MOUNTED OUTLET BOX, WITH INTERNAL GROUND FAULT INTERRUPTOR.
- SURFACE MOUNTED, MULTI-OUTLET, METALLIC RACEWAY WITH RECEPTACLES IN RACEWAY 18" ON CENTER, OR CLOSER AS SHOWN. LABEL RACEWAY ABOVE/BELOW EACH RECEPTACLE WITH PANEL AND CIRCUIT NUMBER.
- JUNCTION BOX.
- PANELBOARD, ADJACENT LINE INDICATES FRONT OF PANEL.
- PHONE/DATA OUTLET FLUSH MOUNTED IN WALL: PROVIDE CABLE FOR EACH PHONE AND DATA JACK/PORT TO IT RACK OR PHONE BOARD, IN CONDUIT. LABEL EACH PORT WITH UNIQUE LABEL THAT MATCHES THE CABLE LABEL (ON EACH END).
- LP-1,3 3#12,1#12GND-3/4"C — CIRCUIT HOME RUN TO PANELBOARD, "LP", CIRCUIT "1" AND "3". NUMBER OF POWER CONDUCTORS, NEUTRAL, GROUND, AND CONDUIT SIZE SHOWN, 3/4" MIN.



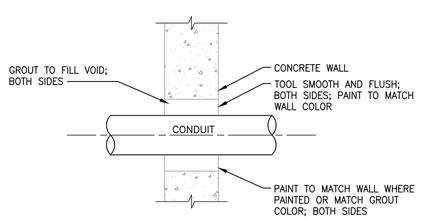
PARTIAL SINGLE LINE DIAGRAM

SCALE : NONE



OUTLET LABEL DETAIL

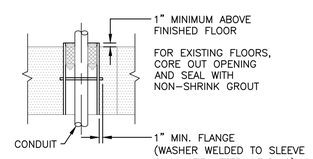
SCALE : NONE



INTERIOR WALL PENETRATION DETAIL

SCALE : NONE

FIRE STOP WHERE REQUIRED BY CODE



INTERIOR FLOOR CONDUIT SLEEVE DETAIL

SCALE : NONE

CENTURY A&E
Facilities Design
277 Crahen Avenue NE - Grand Rapids, MI 49525
Telephone: (616) 456-5227 / Fax: (616) 456-5228 / Web: www.centuryae.com

NO.	REVISIONS	BY	DATE
1	ISSUED FOR BIDS	CDN	5/31/2021

CITY OF JONESVILLE
JONESVILLE, MI
WWTP LAB CASEWORK
ELECTRICAL PLAN

DESIGN BY: TLM
DRAWN BY: ELS
DWG. SCALE: AS NOTED
PROJECT NO: CJN001

E1.0
SHEET NO.