# HAYNES HALL CERAMICS KILNS AND SCULPTURE FURNACE

IT IS ABSOLUTELY NECESSARY FOR ALL TRADES CONFLICTS IN LOCATIONS OF DUCTS, CONDUITS, ELECTRICAL BOXES AND OTHER ITEMS THROUGHOUT THIS



DRAWN BY: CLS REVIEWED BY: CLS REV. DESCRIPTION DATE

PPA #19-0079

CDS #1942

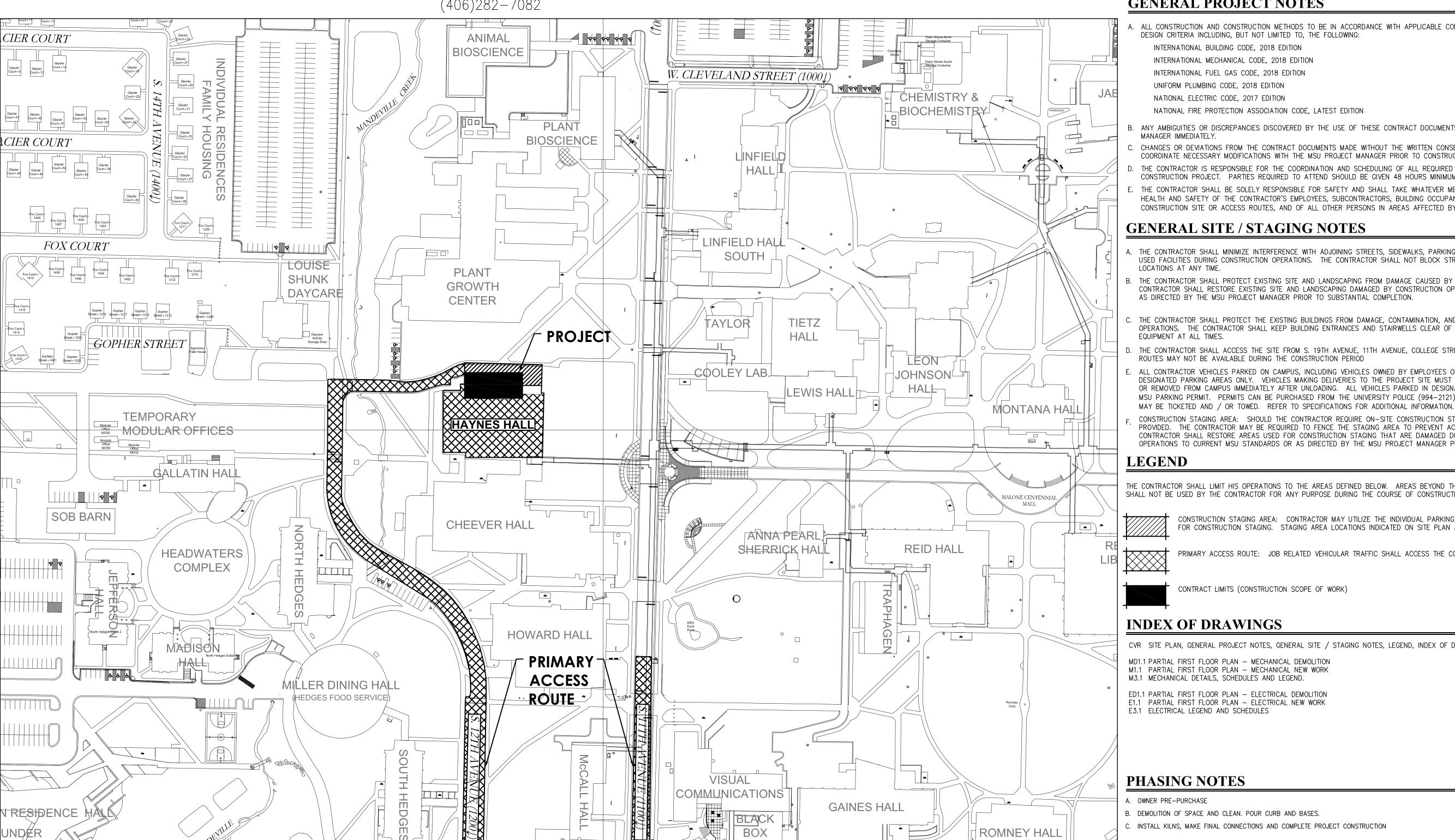
SHEET

DATE 21 AUG 2020

CONSTRUCTION DOCUMENTS 21 AUGUST, 2020

MECHANICAL AND ELECTRICAL ENGINEERS: CONSULTING DESIGN SOLUTIONS, INC. 7540 CHURCHILL RD

MANHATTAN, MT 59741 (406)282 - 7082



W. GRANT STREET (14001)

**SITE PLAN** 

CVR / NO SCALE

### **GENERAL PROJECT NOTES**

ALL CONSTRUCTION AND CONSTRUCTION METHODS TO BE IN ACCORDANCE WITH APPLICABLE CODES, GOVERNMENTAL AGENCIES, AND LOCAL

INTERNATIONAL BUILDING CODE, 2018 EDITION

INTERNATIONAL MECHANICAL CODE, 2018 EDITION

INTERNATIONAL FUEL GAS CODE, 2018 EDITION

UNIFORM PLUMBING CODE, 2018 EDITION

NATIONAL ELECTRIC CODE, 2017 EDITION NATIONAL FIRE PROTECTION ASSOCIATION CODE, LATEST EDITION

HEALTH AND SAFETY OF THE CONTRACTOR'S EMPLOYEES, SUBCONTRACTORS, BUILDING OCCUPANTS, PEDESTRIANS AT OR NEAR THE

## **GENERAL SITE / STAGING NOTES**

THE CONTRACTOR SHALL MINIMIZE INTERFERENCE WITH ADJOINING STREETS, SIDEWALKS, PARKING AREAS, AND OTHER ADJACENT OCCUPIED OR

THE CONTRACTOR SHALL ACCESS THE SITE FROM S. 19TH AVENUE, 11TH AVENUE, COLLEGE STREET OR GRANT STREET.

DESIGNATED PARKING AREAS ONLY. VEHICLES MAKING DELIVERIES TO THE PROJECT SITE MUST BE MOVED TO A DESIGNATED PARKING AREA OR REMOVED FROM CAMPUS IMMEDIATELY AFTER UNLOADING. ALL VEHICLES PARKED IN DESIGNATED PARKING AREAS MUST HAVE A VALID MSU PARKING PERMIT. PERMITS CAN BE PURCHASED FROM THE UNIVERSITY POLICE (994-2121). VIOLATORS OF MSU VEHICLE REGULATIONS

CONSTRUCTION STAGING AREA: SHOULD THE CONTRACTOR REQUIRE ON—SITE CONSTRUCTION STAGING, AN AREA FOR THIS PURPOSE WILL BE PROVIDED. THE CONTRACTOR MAY BE REQUIRED TO FENCE THE STAGING AREA TO PREVENT ACCESS FROM UNAUTHORIZED PERSONNEL. THE CONTRACTOR SHALL RESTORE AREAS USED FOR CONSTRUCTION STAGING THAT ARE DAMAGED DURING THE COURSE OF CONSTRUCTION OPERATIONS TO CURRENT MSU STANDARDS OR AS DIRECTED BY THE MSU PROJECT MANAGER PRIOR TO SUBSTANTIAL COMPLETION.

## LEGEND

THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO THE AREAS DEFINED BELOW. AREAS BEYOND THESE LIMITS ARE NOT IN CONTRACT (NIC) AND SHALL NOT BE USED BY THE CONTRACTOR FOR ANY PURPOSE DURING THE COURSE OF CONSTRUCTION.

CONSTRUCTION STAGING AREA: CONTRACTOR MAY UTILIZE THE INDIVIDUAL PARKING SPACES WITHIN THE SCOPE OF THIS PROJECT

FOR CONSTRUCTION STAGING. STAGING AREA LOCATIONS INDICATED ON SITE PLAN ARE APPROXIMATE.

PRIMARY ACCESS ROUTE: JOB RELATED VEHICULAR TRAFFIC SHALL ACCESS THE CONSTRUCTION SITE BY THIS ROUTE ONLY

CONTRACT LIMITS (CONSTRUCTION SCOPE OF WORK)

## **INDEX OF DRAWINGS**

CVR SITE PLAN, GENERAL PROJECT NOTES, GENERAL SITE / STAGING NOTES, LEGEND, INDEX OF DRAWINGS, PHASING NOTES

MD1.1 PARTIAL FIRST FLOOR PLAN - MECHANICAL DEMOLITION

M1.1 PARTIAL FIRST FLOOR PLAN - MECHANICAL NEW WORK M3.1 MECHANICAL DETAILS, SCHEDULES AND LEGEND.

ED1.1 PARTIAL FIRST FLOOR PLAN — ELECTRICAL DEMOLITION

E1.1 PARTIAL FIRST FLOOR PLAN - ELECTRICAL NEW WORK E3.1 ELECTRICAL LEGEND AND SCHEDULES

# **PHASING NOTES**

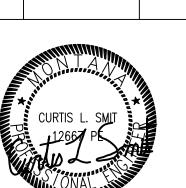
A. OWNER PRE-PURCHASE

B. DEMOLITION OF SPACE AND CLEAN. POUR CURB AND BASES.

. INSTALL KILNS, MAKE FINAL CONNECTIONS AND COMPLETE PROJECT CONSTRUCTION

FION DOCUMENTS

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PPA #19-0079 CDS #1942

FIRST FLOOR
PLAN - MECH
DEMO

SHEET

**MD1.1** 

DATE 21 AUG 2020

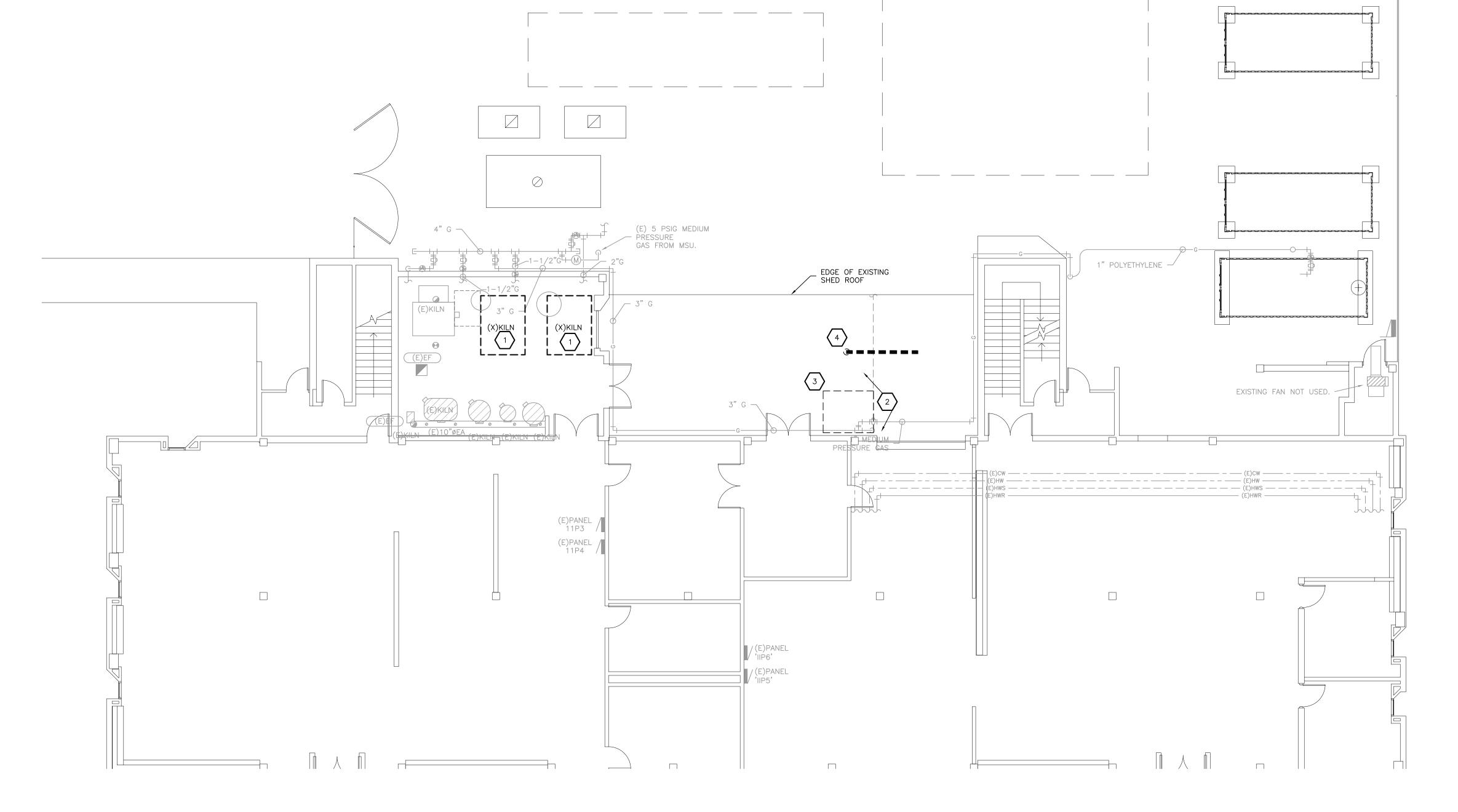
#### **GENERAL NOTES:**

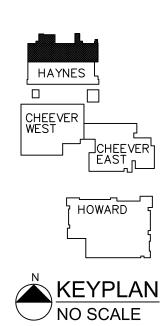
- 1. PROVIDE SCHEDULE 40 BLACK STEEL PIPING WITH THREADED FITTINGS FOR NATURAL GAS PIPING ABOVE
- 2. PROVIDE POLYETHYLENE FLEXIBLE PIPE RATED FOR GAS FOR PIPING BELOW GRADE.

## CONSTRUCTION NOTES

- EXISTING KILN, HOOD AND FLUE/EXHAUST DUCT TO BE REMOVED BY MSU STAFF.

  ELECTRICAL AND GAS TO BE DISCONNECTED BY MSU STAFF FOR CONTRACTOR TO REMOVE AS NEEDED FOR NEW WORK. SEE M1.1 FOR NEW KILNS. COORDINATE SCHEDULE AT LEAST ONE MONTH IN ADVANCE WITH MSU PROJECT MANAGER.
- EXISTING BELOW GRADE YARD GAS PIPING IN THIS AREA HAS BEEN DETERMINED TO BE DISCONNECTED AND ABANDONED IN PLACE. REMOVE ANY PIPING CONFLICTING WITH NEW WORK AS NEEDED.
- REMOVE (E) CONCRETE AS NECESSARY TO ALLOW FOR NEW INSTALLATION.
- 4 EXISTING HOIST TO REMAIN.





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

Aug 18, 2020 - 3:46pm - 1942 MDL dwg S:\2019 PROJECTS\1942 MSU HAYNES KILNS\1942 M\

FACILITIES PLANNING,
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PPA #19-0079 CDS #1942

FIRST FLOOR **PLAN - MECH NEW** 

> SHEET M1.1

DATE 21 AUG 2020

GENERAL NOTES

1. COORDINATE ALL UTILITY INTERRUPTIONS WITH THE OWNER AND PROVIDE 5 WORKING DAYS NOTIFICATION PRIOR TO ANY UTILITY SHUT DOWN.

(E) MEDIUM

\_\_ (E)3"G

GAS FROM MSU.

- PRESSURE (ABOUT 5PSIG)

- 2. ITEMS SHOWN DARK AND DASHED AND/OR NOTED WITH (X) ARE TO BE REMOVED. ITEMS SHOWN IN LIGHT LINE AND/OR NOTED WITH (E) ARE EXISTING TO REMAIN. ITEMS SHOWN IN HEAVY LINE AND/OR NOTED WITH (N) ARE NEW. NEW ITEMS ARE NOTED AS FOLLOWS: OFOI: OWNER FURNISHED, OWNER INSTALLED.
- OFCI: OWNER FURNISHED, CONTRACTOR INSTALLED. EQUIPMENT WILL BE MOVED AND SET IN PLACE BY OWNER'S PERSONNEL. CONTRACTOR TO CONNECT ALL SERVICES.
- 3. DISPOSE OF ALL DEMOLISHED ITEMS OFF SITE. OWNER HAS THE FIRST RIGHT TO SALVAGE ANY EQUIPMENT SCHEDULED FOR DEMOLITION.
- 4. EXACT ROUTING AND SIZES OF EXISTING DUCTWORK, PLUMBING AND PIPING IN THE BUILDING IS DIFFICULT TO DETERMINE DUE TO CONCEALMENT IN OR BEHIND EXISTING CONSTRUCTION. DRAWINGS SHOW APPROXIMATE EXISTING CONDITIONS, HOWEVER, FIELD VERIFICATION WILL BE
- 5. PROVIDE SCHEDULE 40 BLACK STEEL PIPING WITH THREADED FITTINGS FOR NATURAL GAS
- 6. PROVIDE POLYETHYLENE FLEXIBLE PIPE RATED FOR GAS FOR PIPING BELOW GRADE.

LARGE SCALE PLAN - MECHANICAL

(N)60/ CU/ F1

/k/Ln/

(E)4"G →

(E)KILN

(E)KILW

(E)EF

(E)KILN

# NOTE: PROTECT ALL KILNS AND ELECTRICAL SYSTEMS FROM MOISTURE THROUGHOUT CONSTRUCTION NEW COLUMN (TYP) (E) 5 PSIG MEDIUM GAS FROM MSU. EDGE OF EXISTING SHED ROOF 1" POLYETHYLENE --EXISTING COLUMN TO REMAIN 10"ø FLUE UP THROUGH ROOF. OFFSET WEST OF EXISTING COLUMN (N)BURNOUT KILN WITH AFTER BURNER ELECTRICAL PANEL EXISTING FAN NOT USED. -NO MOISTURE 3" G ─ 1-1/2 SEE LARGE SCALE PLAN ON THIS SHEET . + - - - - - - - -(E)PANEL 11P3 (E)PANEL 11P4 (E)PANEL 'IIP6' (E)PANEL

**APPROXIMATELY** 

(E) REGULATOR TO REMAIN

M1.1 NO SCALE

(E)1-1/2

(E)1-1/2"

TO EXISTING

GAS EQUIPMENT -IN BUILDING

REMOVE THIS SECTION AND ROUTE PIPING AS SHOWN -FOR NEW FITTINGS

5 PSI SERVICE LINE

1 \GAS CONNECTION DETAIL

- NEW GAS VALVE

NEW REGULATOR

TO BURNOUT KILN

AND FURNACE

#### CONSTRUCTION NOTES

- NEW 12 CU.FT. KILN (OFCI) WITH HOOD, GAS CONNECTION AND ELECTRICAL POWER. PROVIDE HIGH TEMPERATURE STAINLESS STEEL CHIMNEY TO EXTERIOR. PROVIDE GAS VALVE, DRIP LEG AND UNION AT GAS CONNECTION.
- NEW 60 CU.FT. KILN (OFCI) WITH HOOD, GAS CONNECTION AND ELECTRICAL POWER.

  PROVIDE HIGH TEMPERATURE STAINLESS STEEL CHIMNEY TO EXTERIOR. PROVIDE GAS VALVE, NEW 60 CU.FT. KILN (OFCI) WITH HOOD, GAS CONNECTION AND ELECTRICAL POWER. DRIP LEG AND UNION AT GAS CONNECTION.
- NEW METAL MELT FURNACE (OFCI) WITH GAS PIPING, ELECTRICAL POWER. NO CHIMNEY REQUIRED FOR THIS UNIT. COORDINATE WITH OWNER FOR INSTALLATION OF OWNER FURNISHED REMOVABLE WEATHER COVER. PROVIDE GAS VALVE, DRIP LEG AND UNION AT GAS CONNECTION.
- NEW BURN OUT KILN (OFCI) WITH AFTER BURNER. GAS THE TROOP, LELECTION, LEVEL CONCRETE PAD. NEW BURN OUT KILN (OFCI) WITH AFTER BURNER. GAS PIPING, ELECTRICAL POWER, EXISTING SHED ROOF TO THE EXTERIOR. PROVIDE NEW 6'x6'x6" THICK CONCRETE PAD. PROVIDE GAS VALVE, DRIP LEG AND UNION AT GAS CONNECTION.
- NEW CURB/PIT FOR MELT FURNACE. SEE DETAILS FOR CURB/PIT INSTALLATION DETAILS AND DIMENSIONS. SAWCUT ANY EXISTING CONCRETE AND INSTALL NEW CURB/PIT RECESSED IN AREA INDICATED.
- NEW GAS REGULATOR (OR REPLACE EXISTING SPRING/ORIFICE) RATED FOR 5 PSIG INLET PRESSURE AND 14"W.C. OUTLET PRESSURE, 500,000 BTU/HR. INSTALL DOWNSTREAM OF EXISTING ISOLATION SHUTOFF VALVE.
- (7) RELOCATE EXISTING REGULATOR TO LOCATION SHOWN.
- PROVIDE NEW GAS REGULATOR RATED FOR 5 PSIG INLET PRESSURE AND 14"W.C. OUTLET PRESSURE, 250,000 BTU/HR. PROVIDE NEW GAS SHUTOFF VALVE IN LINE TO NEW KILN.
- EXISTING 1-1/2" GAS VALVE AND LINE SERVES EXISTING EQUIPMENT. SEE DETAIL 1/M1.1. REMOVE THREADED 90 AFTER 1-1/2" GAS VALVE:
  - PROVIDE A NEW 1-1/2" TEE,
  - RECONNECT EXISTING LINE AND REGULATOR.
  - PROVIDE NEW 1-1/2" GAS SHUT OFF VALVE.
  - PROVIDE NEW GAS REGULATOR RATED FOR 5PSIG INLET PRESSURE AND 16"W.C. OUTLET PRESSURE, 800,000 BTU/HR. INSTALL DOWNSTREAM OF EXISTING ISOLATION SHUTOFF VALVE.

ן HOWARD

NO SCALE

PARTIAL FIRST FLOOR PLAN - MECHANICAL NEW WORK SCALE: 1/8" = 1'-0" (24"x36" Sheet Size)





HAYNES HALL CERA

DOCUMENT

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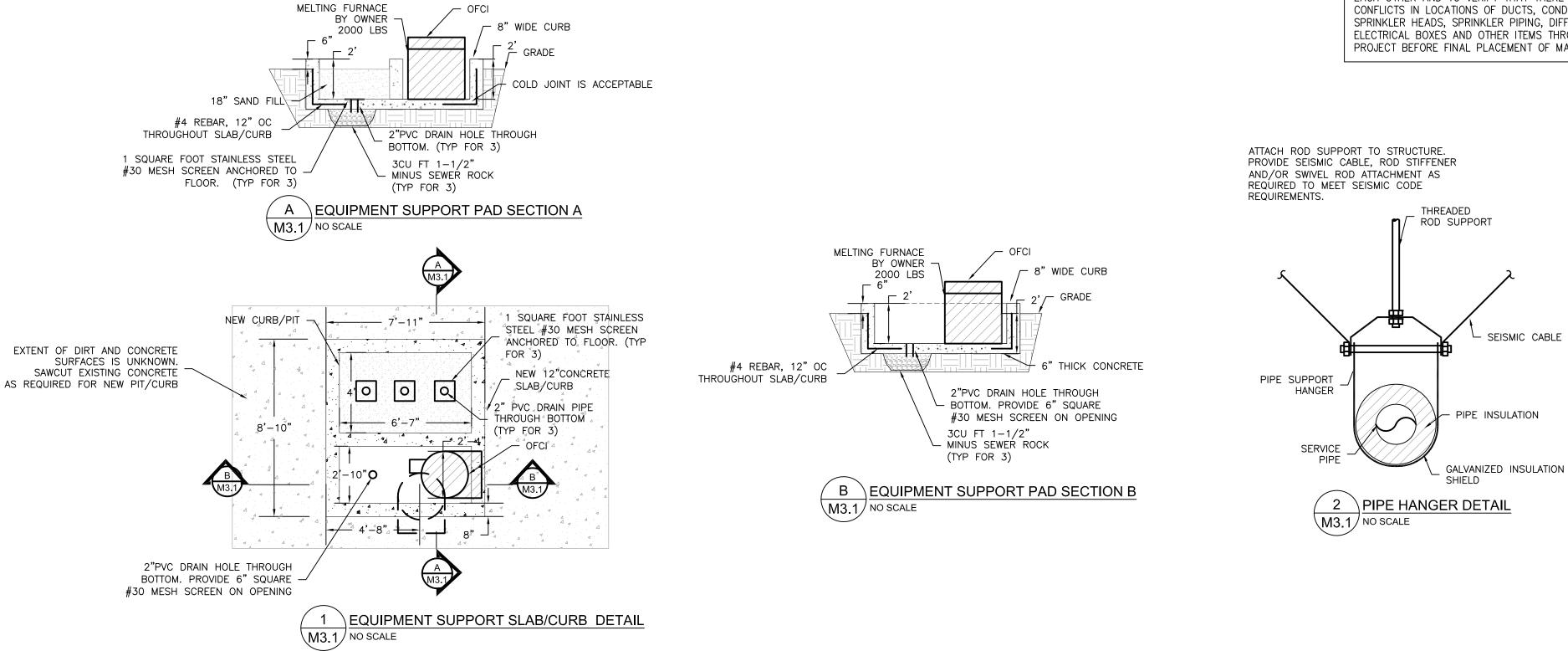
PPA #19-0079

MECH DETAILS

SHEET

M3.1

DATE 21 AUG 2020



MAINTAIN WEATHER TIGHT ROOF THROUGHOUT COMPLETION OF THE PROJECT.
MAINTAIN ALL ROOFING WARRANTIES. ROOFING TO BE PERFORMED BY COMPANY

COMPANY TO PROVIDE WARRANTY LETTER AT COMPLETION OF THE PROJECT

COORDINATE ALL FLASHINGS WITH EXISTING ROOFING MATERS AND PROFILES.

FLASH TO EXISTING ROOF

MATCH EXISTING ROOF ASSEMBLY

OPERATION.

5 KILN VENTING DETAIL

M3.1 NO SCALE

- EXISTING ROOF STRUCTURE

NOTE: BASIS OF DESIGN FOR FLUE IS

LINER, 1" INSULATION AND GALVANIZED

SELKIRK CHIMNEY SYSTEM GALVA—TEMP HT, DOUBLE WALL FLUE WITH STAINLESS STEEL

EXTERIOR. RATED FOR 1000°F CONTINUOUS

FLUE DIMENSIONS ARE APPROXIMATE. FIELD

VERIFY EXACT DIMENSIONS OF FLUE VENTING

PRIOR TO ORDERING. PROVIDE ALL LENGTHS

FITTINGS, SUPPORTS , CAPS AND ACCESSORIES

REQUIRED FOR A COMPLETE INSTALLATION.

OF THE ORIGINAL ROOF WARRANT.

INSTALL THROUGH

EXISTING ROOF -

OPENING

OFCI -

AVOID ALL EXISTING STRUCTURAL ELEMENTS.

10"ø DOUBLE WALL FLUE

STAINLESS STEEL LINER

NEW STORM COLLAR AND TALL CONE BOOT

RATED FOR 1000°F

FLASHING

(N)60 CU FT KILN

CERTIFYING THAT ROOF WORK WAS PERFORMED IN ACCORDANCE WITH ROOFING

CERTIFIED BY EXISTING MANUFACTURER TO BE SUITABLE FOR THIS WORK. ROOFING

MANUFACTURER RECOMMENDATIONS AND THAT WORK IS WARRANTED FOR REMAINDER

FLUE CAP

8"ø DOUBLE WALL FLUE

STAINLESS STEEL LINER RATED FOR 1000°F

SEAL WEATHER TIGHT.

TO REMAIN

NEW STORM COLLAR AND

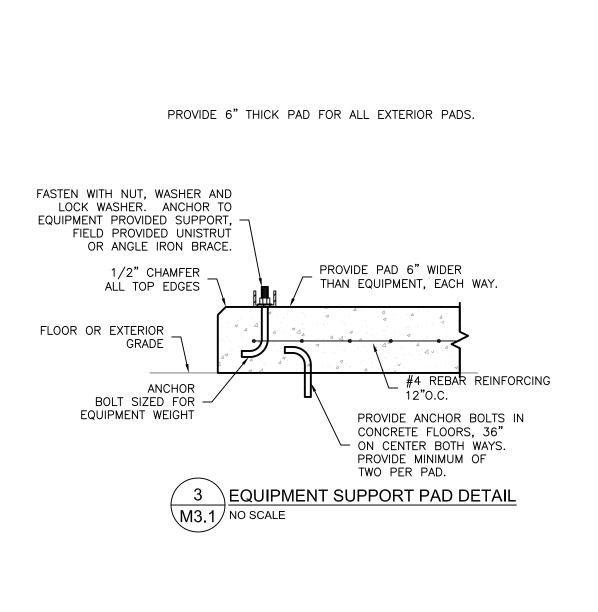
- FLASHING IN EXISTING CURB

EXISTING ROOF CURB

INSTALL THROUGH

- EXISTING ROOF

OPENING



MECHANICAL LEGEND (NOT ALL SYMBOLS ARE USED ON THIS PROJECT)

**──┴**── PRESSURE REDUCING VALVE

—— PRESSURE GAUGE

PIPE BOTTOM CONNECTION

——

PIPE TOP CONNECTION

— III UNION

PIPE SLEEVE

O PIPE RISE

PIPE CAP

PIPE TURN DOWN

PIPE CONNECTION

PIPE END CLEANOUT

FLOOR DRAIN

ROOF DRAIN

& LABEL

(MINIMUM)

EXHAUST GRILLE

**FXISTING TO REMAIN** 

EXHAUST AIR

ELECTRICAL

FAN COIL UNIT

FLOOR DRAIN

FIRE DAMPER

FLOOR SINK

HEATING WATER

(GLYCOL) SUPPLY

HOSE BIB

HP/HPU HEAT PUMP UNIT

FD/SD

HWS

FLOOR CLEANOUT

FIRE/SMOKE DAMPER

DOMESTIC HOT WATER

FIRE EXTINGUISHER

EXHAUST FAN

PLUMBING FIXTURE

POINT OF CONNECTION TO

EXACT SIZE AND LOCATION

DUCT TURN WITH R EQUAL TO DIA

**ABBREVIATIONS** 

MANUF

MECH

RG-##

HEATING WATER

MANUFACTURER

1000 BTU/HR

MECHANICAL

OUTSIDE AIR

ON CENTER

RETURN AIR

ROOF DRAIN

RETURN GRILLE

PRESS. REDUCING VALVE

REMOVE AND RELOCATE

MOP SINK

LOUVER

LAVATORY

(GLYCOL) RETURN

FIRE SPRINKLER HEAD

EXISTING PIPING. FIELD VERIFY

SUPPLY DUCT DROP

SUPPLY DUCT RISE

SUPPLY DUCT DOWN TO NEXT FLOOR

SUPPLY UP TO NEXT FLOOR

RETURN/EXHAUST DUCT DROP

RETURN/EXHAUST DUCT DOWN TO NEXT FLOOR

RETURN/EXHAUST DUCT RISE

FOR DUCT LINER

R SQUARE TO ROUND TRANSITION

SD/SG

WCO

DUCT TRANSITION

RETURN/EXHAUST UP TO NEXT FLOOR

DUCT SIZE - FIRST NUMBER INDICATES

VOLUME DAMPER, MOTORIZED DAMPER

SUPPLY AIR

SUPPLY FAN

SHOWER

TYPICAL

URINAL

SMOKE DAMPER

SANITARY SEWER

TRANSFER GRILLE

STORM SEWER

SANITARY VENT

WATER CLOSET

WALL CLEANOUT

SUPPLY DIFFUSER/GRILLE

TEMPERATURE CONTROL

VENT THROUGH ROOF

EXISTING TO BE REMOVED

INDICATES ROUND DUCTWORK

FLEXIBLE DUCT CONNECTION

DUCT WIDTH, NET INTERIOR SIZE INCREASE

\_\_\_\_\_CW\_\_\_\_\_ OMESTIC COLD WATER \_\_\_\_\_ GATE VALVE

SECTION TAG DESIGNATION

AND SHEET LOCATION

AND SHEET LOCATION

DUCT TURN WITH SINGLE TURNING VANES. SPACING LESS THAN 3",

DETAIL TAG DESIGNATION

——G—— NATURAL GAS (7"W.C.)

BELOW GRADE STORM

— — v— — SANITARY VENT

BELOW GRADE SANITARY SEWER

-----ss----- ABOVE GRADE SANITARY SEWER

QUIPMENT AND

DIFFUSER TAG AND

OUTLET AIRFLOW (CFM)

EQUIPMENT TAG

QVAV1-1 THERMOSTAT AND UNIT SERVED

RADIUS GREATER THAN 4"

AMERICANS W/ DISABILITIES (E)

ACT COMPLIANT EQUIPMENT

ABOVE FINISHED FLOOR

BRANCH SELECTOR UNIT

DOMESTIC COLD WATER

DIRECT DIGITAL CONTROL

AIR HANDLING UNIT

COMBUSTION AIR

CONTINUATION

CHILLED WATER

(GLYCOL SUPPLY)

CHILLED WATER

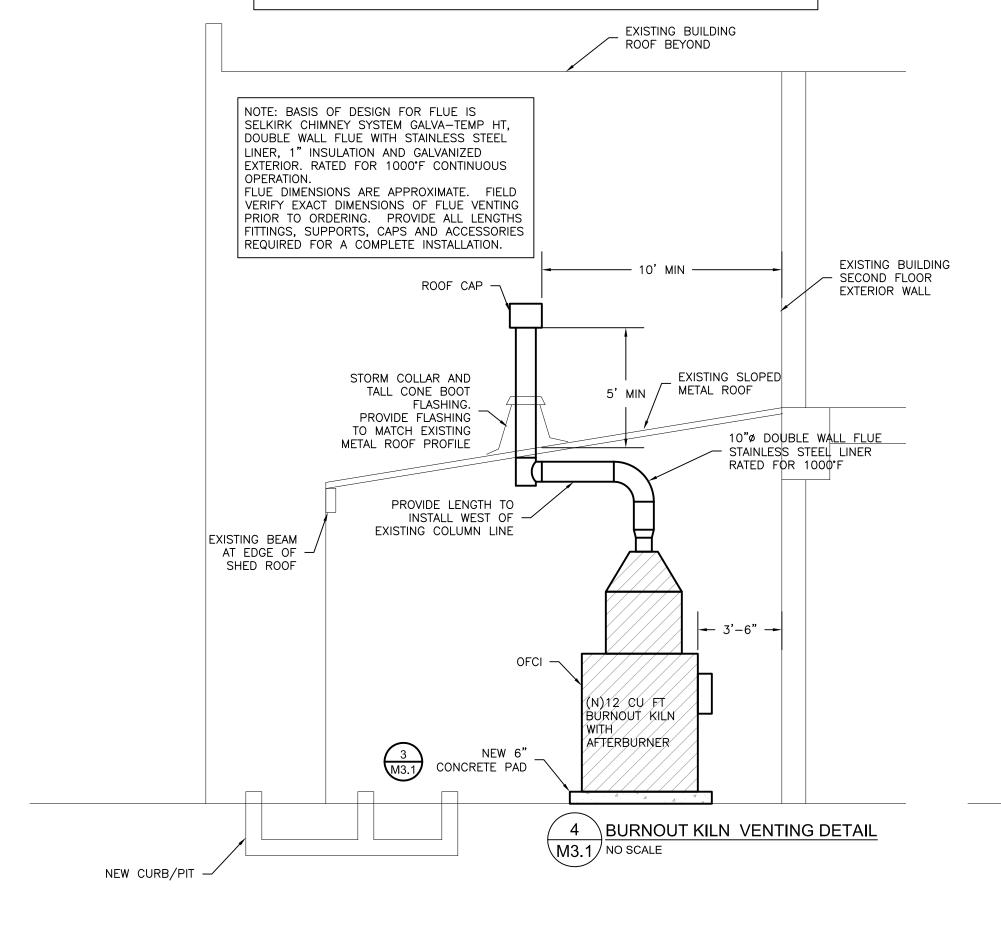
(GLYCOL RETURN)

DRINKING FOUNTAIN

CL FANOUT

BACK DRAFT DAMPER

ACCESS DOOR



MAINTAIN WEATHER TIGHT ROOF THROUGHOUT COMPLETION OF THE PROJECT.

COMPANY TO PROVIDE WARRANTY LETTER AT COMPLETION OF THE PROJECT

COORDINATE ALL FLASHINGS WITH EXISTING ROOFING MATERS AND PROFILES.

OF THE ORIGINAL ROOF WARRANT.

AVOID ALL EXISTING STRUCTURAL ELEMENTS.

MAINTAIN ALL ROOFING WARRANTIES. ROOFING TO BE PERFORMED BY COMPANY

CERTIFYING THAT ROOF WORK WAS PERFORMED IN ACCORDANCE WITH ROOFING

CERTIFIED BY EXISTING MANUFACTURER TO BE SUITABLE FOR THIS WORK. ROOFING

MANUFACTURER RECOMMENDATIONS AND THAT WORK IS WARRANTED FOR REMAINDER

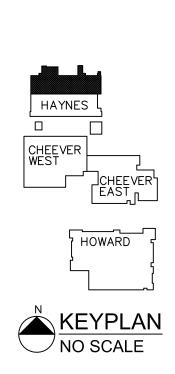


#### GENERAL NOTES

- PROVIDE NEW CONDUCTORS IN EXISTING RACEWAYS THAT ARE FEASIBLE TO RE-USE. USE EXISTING BACKBOXES WITH NEW DEVICES IN APPROPRIATE AREAS.
- ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH NEC, STATE AND LOCAL BUILDING CODE.
- 3. RETURN ANY USABLE/ SALVAGEABLE ELECTRICAL DEVICES TO OWNER INCLUDING BUT NOT LIMITED TO: LIGHT FIXTURES, ELECTRICAL HEATERS, PANELS, CIRCUIT BREAKERS ETC. CONFIRM WITH OWNER ITEMS THAT ARE DESIRABLE FOR RETENTION.
- 4. ALL ITEMS ON DEMOLITION PLANS AND PROVIDED WITH A (X) ARE TO BE REMOVED UNLESS NOTED OTHERWISE. ITEMS PROVIDED WITH AN (E) ARE TO REMAIN. NOTE ITEMS SHOWN IN THE DEMOLITION PLANS ARE BASED ON "EXISTING AS—BUILTS". ADDITIONAL ELECTRICAL ITEMS MAY BE ENCOUNTERED THAT ARE NOT SHOWN.
- 5. ANY WORK THAT REQUIRES POWER DISRUPTIONS SHALL BE SCHEDULED, MINIMUM OF 5 WORKING DAYS AHEAD OF TIME, AND APPROVED BY THE OWNER. ALL WORK SHALL BE PERFORMED WITH NO DISRUPTION OF THE OWNER'S BUSINESS.

#### CONSTRUCTION NOTES

- EXISTING KILN, HOOD AND FLUE/EXHAUST DUCT TO BE REMOVED BY MSU STAFF. ELECTRICAL AND GAS TO BE DISCONNECTED BY MSU STAFF FOR CONTRACTOR TO REMOVE AS NEEDED FOR NEW WORK. SEE E1.1 FOR NEW KILNS. COORDINATE SCHEDULE AT LEAST ONE MONTH IN ADVANCE WITH MSU PROJECT MANAGER.
- WALL MOUNTED ELECTRICAL EQUIPMENT TO REMAIN. NEW KILN TO BE INSTALLED A MINIMUM OF 18" AWAY FROM WALL.
- 3 EXISTING PANELBOARDS ARE WESTINGHOUSE 'NQB' TYPE.



ONSTRUCTION DOCUMENTS

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RUCTION

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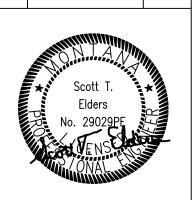
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DRAWN BY: STE

REVIEWED BY: STE

REV. DESCRIPTION DATE



PPA#19-0079

CDS #1942
FIRST FLOOR

PLAN - ELEC DEMO SHEET

ED1.1

DATE 21 AUG 2020

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

(X)KILN

(E)PANEL 11P3 (E)PANEL 11P4 

# GENERAL NOTES

- 1. INSTALL ALL NEW WORK TO MEET CURRENT CODES AND INSTALLATION STANDARDS.
- 2. COORDINATE ALL UTILITY INTERRUPTIONS WITH THE OWNER AND PROVIDE 72 HOURS NOTIFICATION PRIOR TO ANY UTILITY SHUT DOWN, UNLESS NOTED OTHERWISE.
- 3. RECEPTACLES WITH A SOLID CENTER ARE TO BE PROVIDED AS GROUND FAULT CIRCUIT INTERRUPTER(GFCI) RECEPTACLES. EACH RECEPTACLE SHOWN WITH A FILLED CENTER SHALL BE PROVIDED WITH A GFCI RECEPTACLE. PROVIDING ONE (1) GFCI RECEPTACLE
- 4. NEW CONDUCTORS SHALL BE COPPER AND A MINIMUM OF #12 GAUGE.
- 5. NEW WIRING DEVICES SHALL BE SPECIFICATION GRADE AND RATED FOR 20 AMPS.
- 6. PROVIDE UNI-STRUT BACKING MOUNTED DIRECTLY TO THE BUILDINGS STRUCTURE TO SUPPORT THE ELECTRICAL EQUIPMENT SHOWN ON THE DRAWINGS.

#### CONSTRUCTION NOTES

- PROVIDE 30A, HEAVY DUTY RATED SAFETY SWITCHES AT EACH KILN WITH LIQUID TIGHT PROVIDE 30A, HEAVY DUTY RATED SAFETY SWITCHES AT EACH KILN WITH LIQUID TIGHT FLEXIBLE CONDUIT FROM THE SAFETY SWITCH TO THE KILN. NEMA 1 RATED FOR THE
- PROVIDE 30A, SWITCH-RATED RECEPTACLES FOR THE EXTERIOR DISCONNECTS, SIMILAR TO THE MELTRIC 'DS30' SERIES. PROVIDE 'SO' CORD FROM THE PROVIDED EQUIPMENT TO MATCHING SWITCH RATED PLUG(S). IF EQUIPMENT IS NOT RATED FOR EXTERIOR USE, USER WILL BE USING THE EQUIPMENT AT HIS/HER OWN RISK. CIRCUIT BREAKERS FEEDING THE

WHICH PROTECTS MULTIPLE STANDARD RECEPTACLES IS NOT ALLOWED.

(N)BURNOUT

LARGE SCALE PLAN - ELECTRICAL

123

119

125

126

11P4-25,27,29

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— (E)HOIST TO REMAIN

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

- (E)HOIST TO REMAIN

(1) SURFACE MOUNT CONDUIT ALONG WALL, NEAR CEILING TO SERVE NEW KILNS.

INTERIOR LOCATIONS.

EQUIPMENT SHALL BE GFCI RATED.

KEYPLAN NO SCALE

PARTIAL FIRST FLOOR PLAN - ELECTRICAL NEW WORK SCALE: 1/8" = 1'-0"

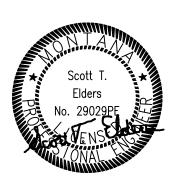
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ION DOCUMENTS CONSTRUC

**ENGINEERING** 

DRAWN BY: STE REVIEWED BY: STE

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CDS #1942 FIRST FLOOR **PLAN - ELEC** NEW

SHEET

DATE 21 AUG 2020

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→ 11P4-32,34,36

(N)KILN

(E)KILN

(N)12CU KILN

SEE LARGE SCALE PLAN— ELECTRICAL

113

114

115

(E)PANEL 11P3

(E)PANEL 11P4

(N)BURNOUT KILN WITH \_ AFTER BURNER

118

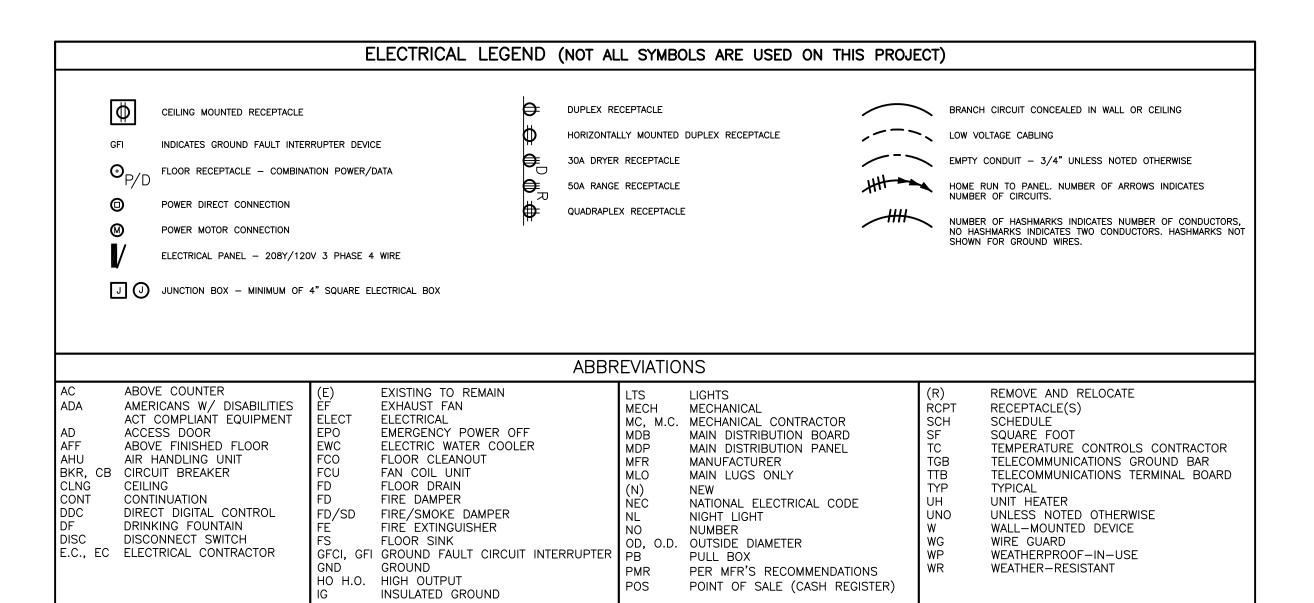
(E)PANEL 'IIP5'

11P4−26,28,30 **←** 

(E)KILN

108

(N)60CU KILN



AMPS POLES    VA	BRE	KER	DESCRIPTION	CIRC	UIT	PH	PHASE LOADS			RCUIT	DESCRIPTION	BRE	EAKEF
1	AMPS	POLES		VA	#	Α	В	С	#	VA		AMPS	POL
1	20	1	(E)OUTLETS-108-114-115-HALL		1	0			2		(E)108, N. WIREMOLD	20	1
20	20	1	(E)RM 113-114-115		3		0		4		(E)108, N. WIREMOLD	20	1
1	20				5			0	6		(E)108, N. WIREMOLD	20	1
1	20	1	(E)RM 112		7	0			8		(E)RM 112	20	1
1	20	1	(E)RM 113		9		0		10		(E)EX FAN 1-8, RM 113	20	1
20	20	1	(E)OUTLETS RM 112		11			0	12		(E)EX FAN 1-8, RM 112	20	1
1	30	1	(E)WEST KILN		13	0			14		SPARE	20	1
	20				15		0		16		SPARE	20	1
55   2   (E)KILN OUTLET RM 112	30	1	(E)CLAY MIXER RECPT. RM 113		17			0	18		(E)LIGHTS RM 109	20	1
	-	-			19	0	'		20		SPARE	20	1
70	55	2	(E)KILN OUTLET RM 112		21		0		22			20	1
	-	-			23			0	24		(E)KILN OUTLE RM 112	55	2
20     1     SPARE     29     0     30     SPARE     20       30     3     (E)CLAY MIXER     31     0     32     HUMDIFIER     20       -     -	70	1	(E)KILN OUTLET RM 112		25	0	'		26			-	-
30   3   (E)CLAY MIXER	-	-			27		0		28		SPARE	20	1
	20	1	SPARE		29			0	30		SPARE	20	1
	30	3	(E)CLAY MIXER		31	0	'		32		HUMIDIFIER	20	1
80     3     (E)LARGE OVEL KILN     37     0     38     PROVISION       -     -	-	-			33		0		34				
39 0 40 PROVISION 41 0 42 PROVISION	-	-			35			0	36		PROVISION		1
41 0 42 PROVISION	80	3	(E)LARGE OVEL KILN		37	0			38				
	-	-			39		0		40				
	-	-			41			0	42		PROVISION		
				•	•	0	0	0				•	
			TOTAL LOADS:	0	WATT	S							

MPS PO		DESCRIPTION	CIRC	UIT	PH	ASE LOA	ADS	CIRCL	JIT DESCRIPTION	BRE	AKER
	DLES	1	VA	#	Α	В	С	#	VA	AMPS	POLE
20 ′	1	(E)OUTLETS RM 108 WIREMOLD S.		1	0			2	(E)OUTLETS RM 108 WIREMOLD S.	20	1
20 -	1	(E)OUTLETS RM 108 WIREMOLD S.		3		0	Ī	4	(E)OUTLETS RM 108 WIREMOLD S.	20	1
20 ′	1	(E)OUTLETS RM 108 WIREMOLD S.		5	1		0	6	(E)OUTLETS RM 108 WIREMOLD S.	20	1
20 ′	1	(E)OUTLETS RM 108 WIREMOLD S.		7	0	1		8	(E)OUTLETS RM 108 WIRMOLD N.	20	1
20 ′	1	(E)OUTLETS RM 108 WIREMOLD S.		9		0	Ī	10	(E)OUTLETS RM 108 WIRMOLD N.	20	1
20 ′	1	(E)OUTLETS RM 108 WIREMOLD S.		11	1		0	12	(E)OUTLETS RM 108 WIRMOLD N.	20	1
20 -	1	(E)OUTLETS RM 108 WIREMOLD N.		13	0	1		14	(E)ENTRY HEATER AND STORAGE LITE	20	1
20 -	1	(E)ENTRY HEATER AND STORAGE LITE		15		0		16	(E)N. COLLECTOR	20	1
20 -	1	(E)ENTRY EATER RM 109		17			0	18	(E)S. COLLECTOR	20	1
20 ′	1	(E)S. COLLECTOR		19	0	1		20	(E)UNKNOWN	20	1
20 ′	1	(E)S. COLLECTOR		21		0	Ī	22	SPARE	20	1
20 ′	1	SPARE		23	İ		0	24	SPARE	20	1
		PROVISION		25	0	1		26	PROVISION		
		PROVISION		27		0		28	PROVISION		
		PROVISION		29	İ		0	30	PROVISION		
		PROVISION		31	0	1		32	PROVISION		
		PROVISION		33		0	Ī	34	PROVISION		
		PROVISION		35			0	36	PROVISION		
		PROVISION		37	0	1		38	PROVISION		
		PROVISION		39		0		40	PROVISION		
		PROVISION		41	1		0	42	PROVISION		

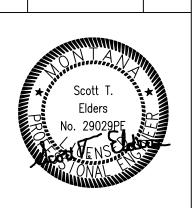
BRE	AKER	DESCRIPTION	CIRC	UIT	PHASE LOADS			CIF	RCUIT	DESCRIPTION	BRE/	AKER
MPS	POLES	1	VA	#	Α	В	С	#	VA	1	AMPS	POLE
20	1	(E)OUTLETS RM 108 WIREMOLD S.		1	0			2		(E)OUTLETS RM 108 WIREMOLD S.	20	1
20	1	(E)OUTLETS RM 108 WIREMOLD S.		3		0	1	4		(E)OUTLETS RM 108 WIREMOLD S.	20	1
20	1	(E)OUTLETS RM 108 WIREMOLD S.		5			0	6		(E)OUTLETS RM 108 WIREMOLD S.	20	1
20	1	(E)OUTLETS RM 108 WIREMOLD S.		7	0	1		8		(E)OUTLETS RM 108 WIRMOLD N.	20	1
20	1	(E)OUTLETS RM 108 WIREMOLD S.		9		0	1	10		(E)OUTLETS RM 108 WIRMOLD N.	20	1
20	1	(E)OUTLETS RM 108 WIREMOLD S.		11			0	12		(E)OUTLETS RM 108 WIRMOLD N.	20	1
20	1	(E)OUTLETS RM 108 WIREMOLD N.		13	0	1		14		(E)ENTRY HEATER AND STORAGE LITE	20	1
20	1	(E)ENTRY HEATER AND STORAGE LITE		15		0	1	16		(E)N. COLLECTOR	20	1
20	1	(E)ENTRY EATER RM 109		17			0	18		(E)S. COLLECTOR	20	1
20	1	(E)S. COLLECTOR		19	0	1		20		(E)UNKNOWN	20	1
20	1	(E)S. COLLECTOR		21		0		22		SPARE	20	1
20	1	SPARE		23			0	24		SPARE	20	1
15	3	(N)BURN OUT KILN 'GFCI RATED BKR'	1200	25	3001	1		26	1801	(N)60 CUFT KILN	20	3
-	-		1200	27		3001	Ī	28	1801		-	-
-	-		1200	29	1		3001	30	1801		-	-
20	3	(N)METAL MELT FURNACE 'GFCI RATED BKR'	1801	31	3001		,	32	1200	(N)12 CUFT KILN	15	3
-	-		1801	33		3001		34	1200		-	-
-	-		1801	35			3001	36	1200		-	-
		PROVISION		37	0	1		38		PROVISION		
		PROVISION		39		0		40		PROVISION		
		PROVISION		41			0	42		PROVISION		
	_	TOTAL LOADS: DEMAND:	18006	WATT	6002 S	6002	6002					





TION DOCUMENTS

DRAV	VN BY:	STE	
REVIE	WED BY:	STE	
REV.	DESCRI	PTION	DATE



PPA#19-0079

CDS #1942 ELECTRICAL LEGEND AND SCHEDULES

SHEET

DATE 21 AUG 2020