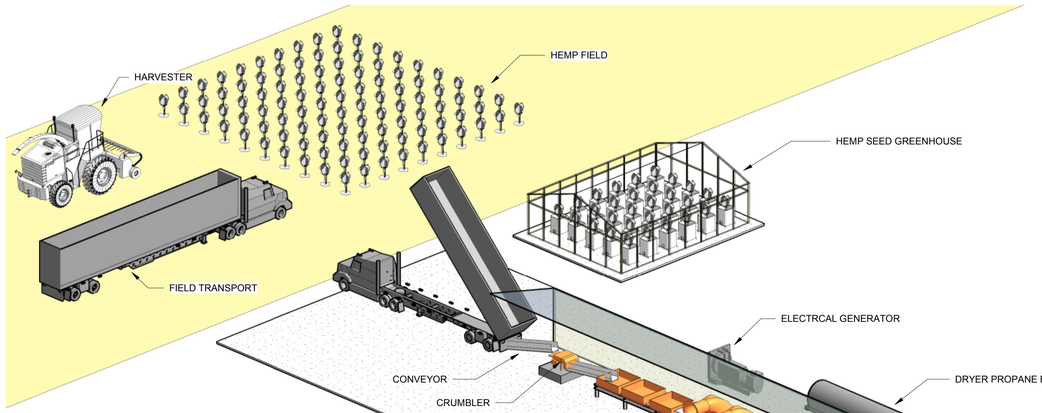
F:\BY DESIGN ENGINEERING PROJECT FILES\2019-000 EXAMPLE PROJECTS FOR MANUFACTURERS\ETHANOL\EX_PROJ ETHANOL-2017.rvt

GENERAL PROCESS BLOCK SEQUENCE DIAGRAM

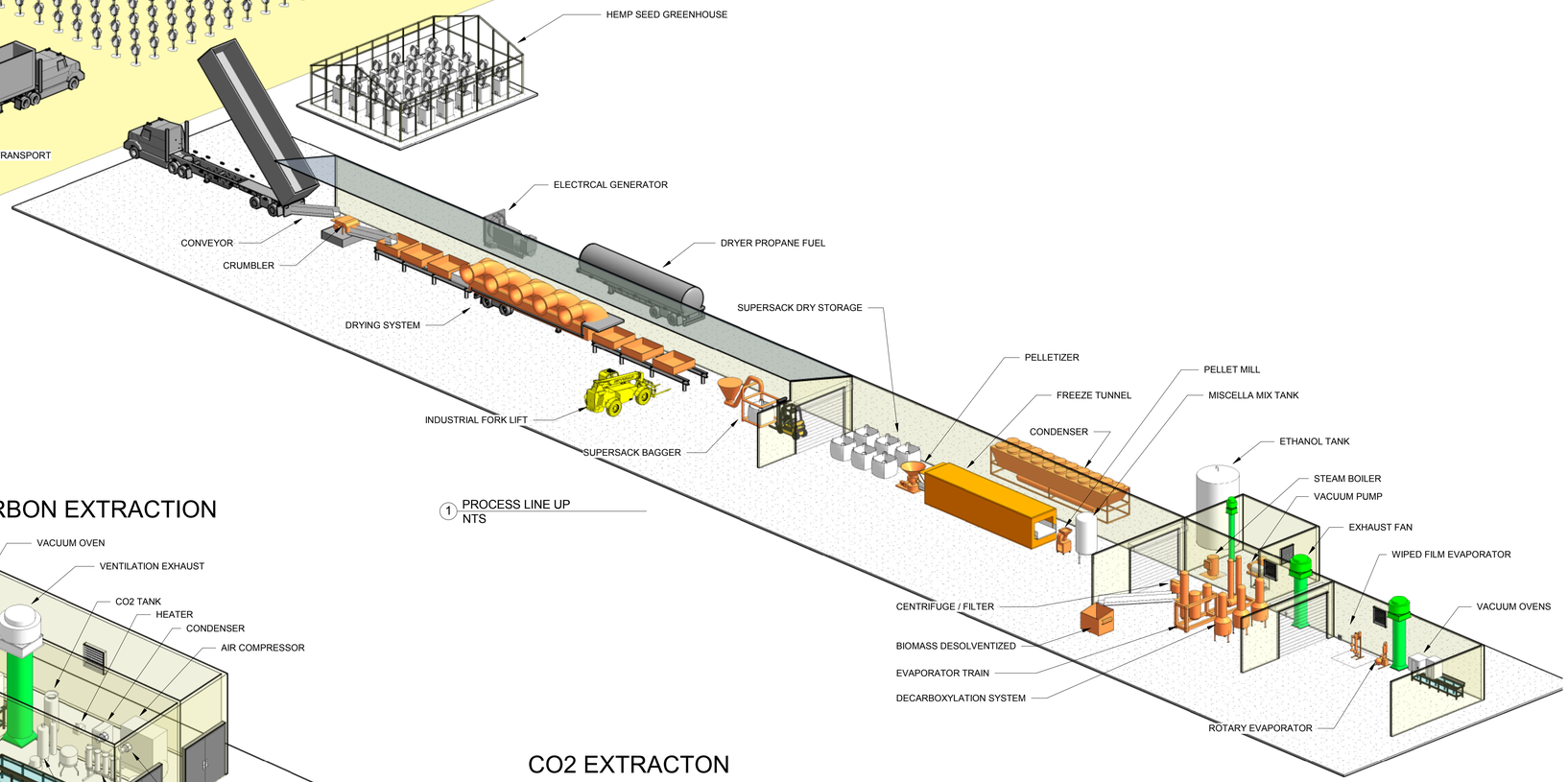
HEMP OIL EXTRACTION PROCESS

SEED PLANTS → FIELD CROP → PROCESS DIRECTION → TRANSPORT → CRUMBLE → DRYER → SUPERSACK TO RECEIVING BIN → CONVEYOR → SUPERSACK CONTAINER → PROCESS DIRECTION → PELLETIZER → FREEZE TUNNEL → CONVEYOR → MILL/GRINDER → CONVEYOR → MIX TANK → MISCELA HOLDING TANK → CENTRIFUGE → ETHANOL/OIL SOLUTION → PROCESS DIRECTION → DISTILLATION → CONCENTRATOR → 90% CRUDE OIL TANK → DECARBOXYLATION → WIPED FILM EVAPORATOR → OIL PROCESSING ROOM ENCLOSURE

2 PROCESS FLOW DIAGRAM REV0
NTS

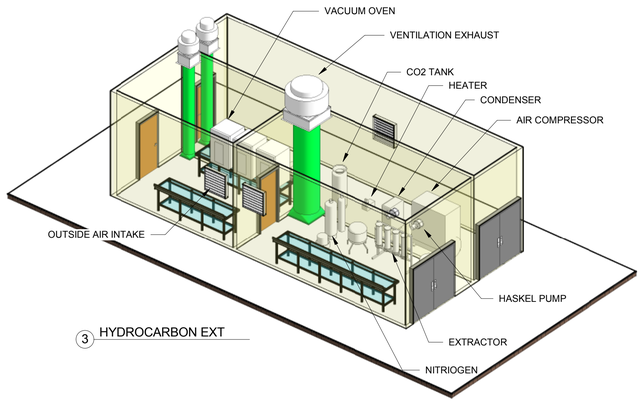


ETHANOL EXTRACTION



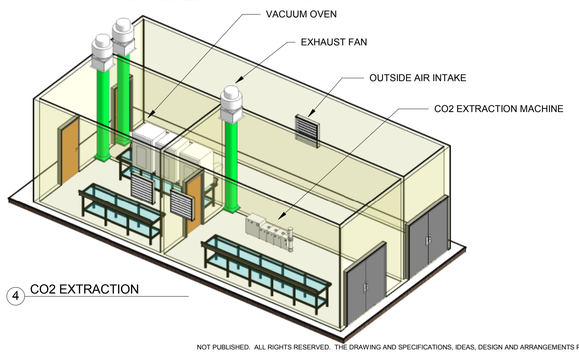
1 PROCESS LINE UP
NTS

HYDROCARBON EXTRACTION



3 HYDROCARBON EXT

CO2 EXTRACTON



4 CO2 EXTRACTION

MECHANICAL EQUIPMENT...

DESCRIPTION
AIR COMPRESSOR
BIO MASS BIN
BIOMASS DRYER
BOILER
CENTRIFUGE
CHILLER
CONVEYOR
CRUMBLER
ETHANOL
EVAPORATOR
FEED WATER SYSTEM
FREEZE TUNNEL
GRINDER MILL
HARVESTER
IND FORK LIFT
MISCELLA TANK
OPEN TOP HEMP DRYER BOX
PELLETIZER
PROCESS CHILLER
PROCESS FLUID HEATER
PROCESS VACUUM PUMP
Roof Curb
ROTARY EVAP
SUPER SACK
SUPER SACK FILL STATION
UPBLAST EXHAUST FAN
VACUUM OVEN
VACUUM PUMP
WIPED FILM EVAP

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PROJECT NAME

HEMP OIL PROCESSING CONCEPT

ADDRESS

TBD

Job No.: 2019-000

ISSUE DATE: NOV. 2019
AUTHOR: Author
CHECKED: Checker
DESIGNED: Designer
STATUS
PRELIMINARY

SHEET TITLE
HEMP OIL PROCESSING LINE

Revisions

NO.	DATE	ITEM

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SHEET SIZE FOR SCALE APPLICATION IS 24" X 36"

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