



CANNABIS FACILITY CRASH COURSE

An introduction to cannabis construction

OVERVIEW

Seminar Goals

Presenter Intro

Facility & License Types

FAQs

Q & A

GOALS



Understand the different types of cannabis facilities and their basic operations



Understand what types of products are created in each type of cannabis facility



Understand some of the common misconceptions about cannabis facilities



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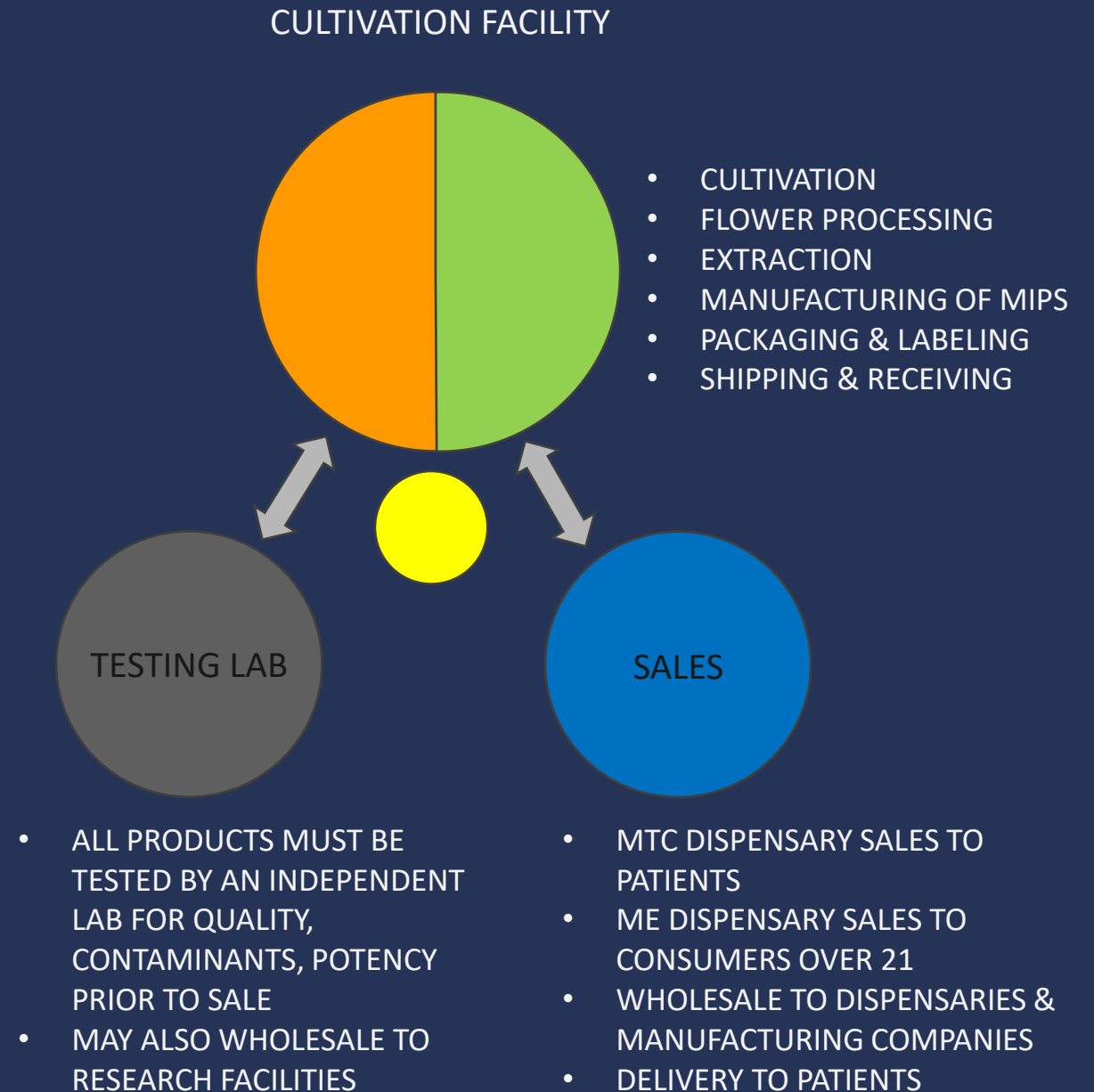


CANNABIS FACILITY & LICENSE TYPES



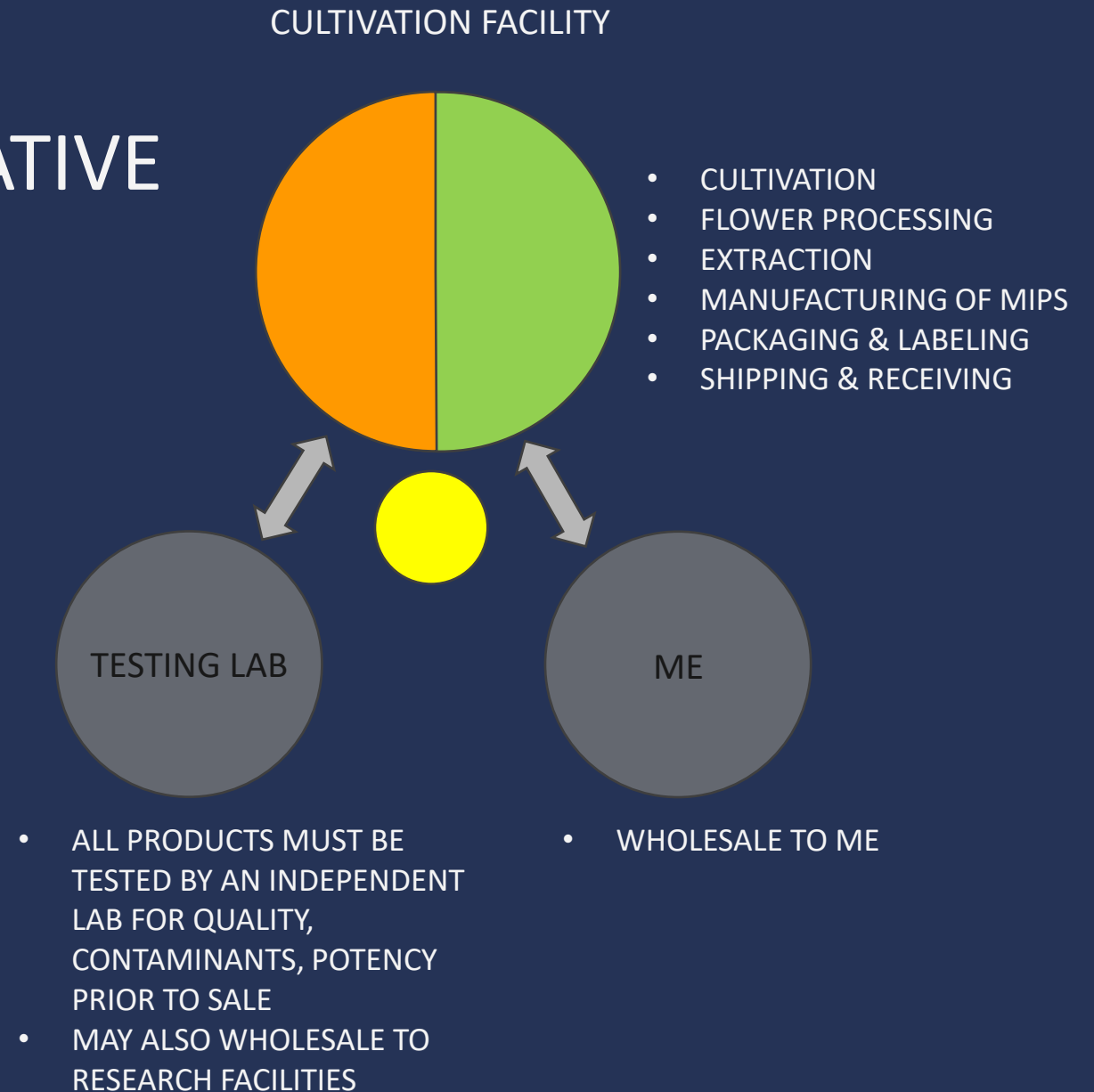
MEDICAL MARIJUANA TREATMENT CENTER (MTC)

- VERTICALLY INTEGRATED LICENSE THAT ALLOWS FOR THE CULTIVATION, MANUFACTURING, AND SALE OF MEDICAL MARIJUANA BY A SINGLE COMPANY.
- ALL PROCESSES INVOLVED FROM SEED TO SALE ARE ALLOWED UNDER THIS LICENSE TYPE, INCLUDING:
 - CULTIVATION & PROCESSING
 - EXTRACTION
 - MANUFACTURING (MIPS)
 - WHOLESALE (BUYING AND SELLING)
 - PACKAGING & LABELING
 - TRANSIT
 - DELIVERY
 - DISPENSARY SALES



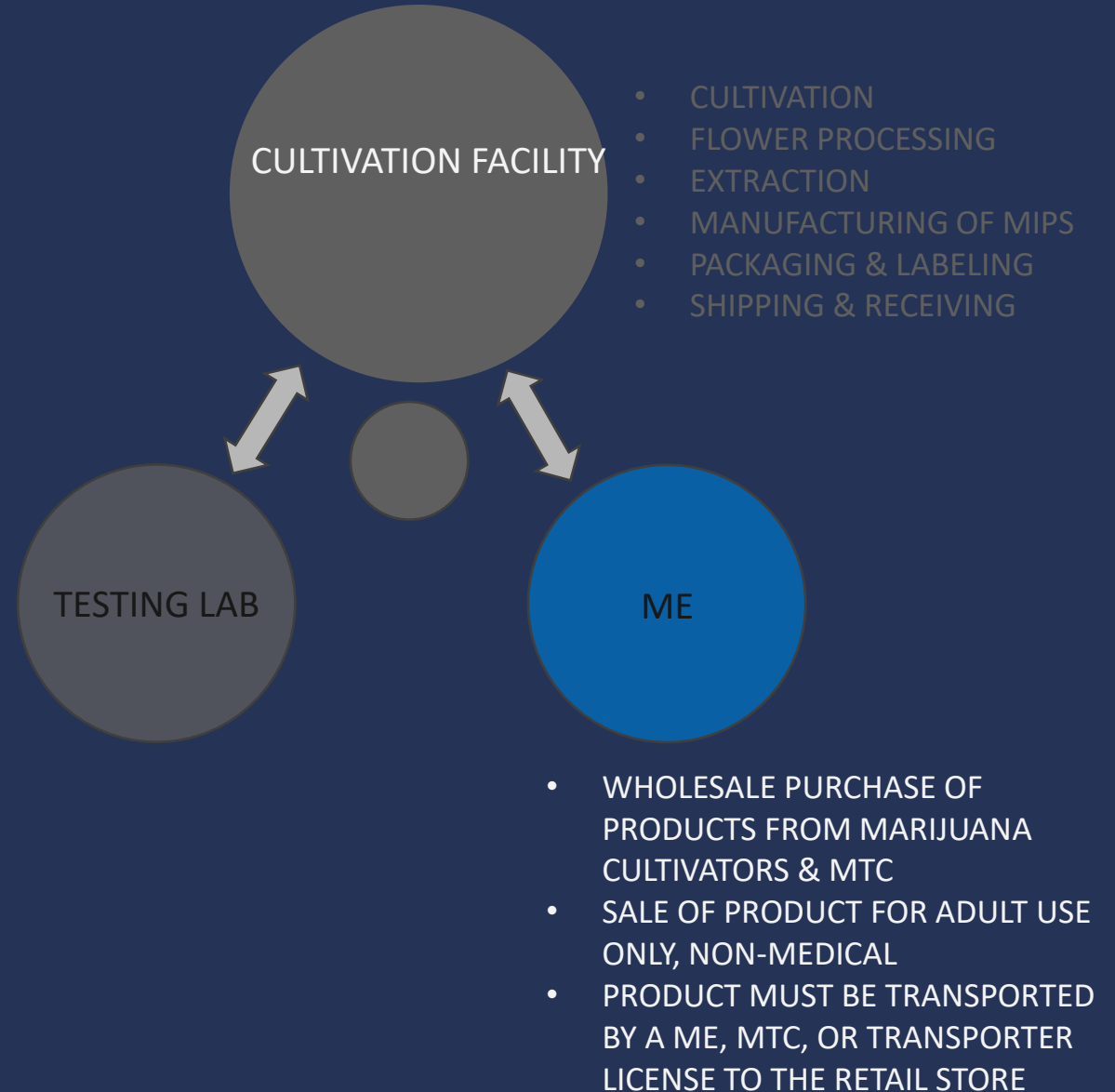
CRAFT MARIJUANA COOPERATIVE

- THIS LICENSE ALLOWS A NUMBER OF INDIVIDUAL GROWERS & MANUFACTURERS TO OPERATE AS A COOP.
- CULTIVATION UP TO 100,000 SF OF CANOPY IS ALLOWED ON MULTIPLE SITES.
- MANUFACTURING IS ALLOWED IN UP TO 3 LOCATIONS.
- MUST OPERATE ACCORDING TO THE PRINCIPLES OF THE INTERNATIONAL COOPERATIVE ALLIANCE.



MARIJUANA RETAILER

- THIS LICENSE IS FOR OPERATING AN ADULT USE / RECREATIONAL DISPENSARY
- THIS IS A RETAIL STORE WHERE CONSUMERS OVER 21 ARE ABLE TO PURCHASE CANNABIS PRODUCTS USING ONLY A VALID ID
- CUSTOMER INFORMATION CANNOT BE STORED FOR TRACKING PURPOSES
- NO CONSUMPTION IS ALLOWED ON SITE UNLESS THEY ALSO HAVE A SOCIAL CONSUMPTION ESTABLISHMENT LICENSE



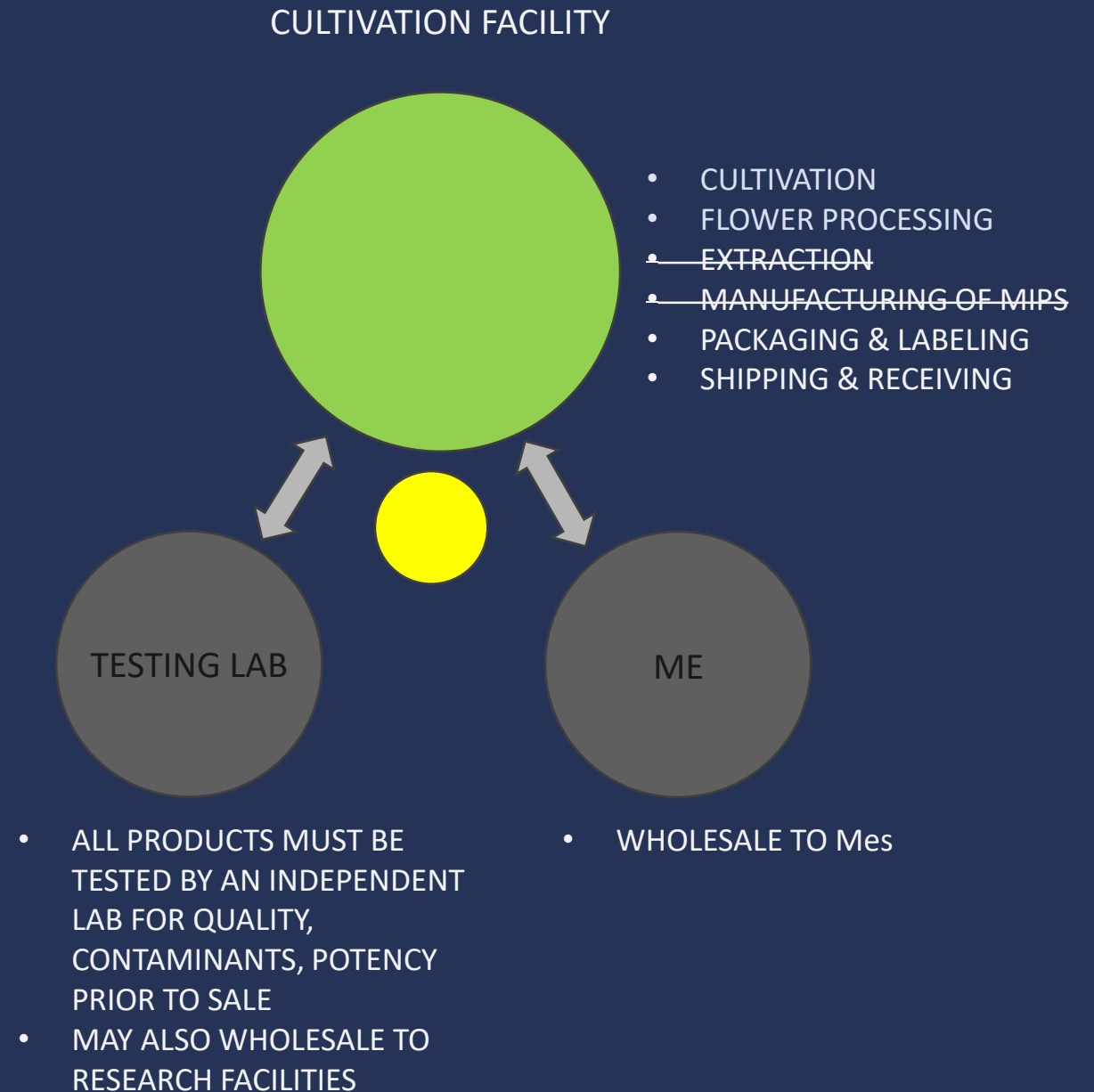
MARIJUANA PRODUCT MANUFACTURER

- THIS LICENSE ALLOWS FOR RAW CANNABIS PLANT MATERIAL TO BE TRANSFORMED INTO OTHER TYPES OF PRODUCTS VIA EXTRACTION AND PROCESSING
- LICENSE HOLDERS CAN OBTAIN PLANT MATERIAL VIA WHOLESALE FROM CULTIVATORS OR THROUGH AN AFFILIATED CULTIVATION LICENSE
- EXTRACTION OCCURS THROUGH SOLVENT-FREE OR SOLVENT-BASED PROCESSES UTILIZING SPECIAL EXTRACTION EQUIPMENT
- MANUFACTURING FACILITIES OFTEN HAVE COMMERCIAL KITCHENS AND SPECIAL PROCESSING LABS FOR THE CREATION OF MIPS



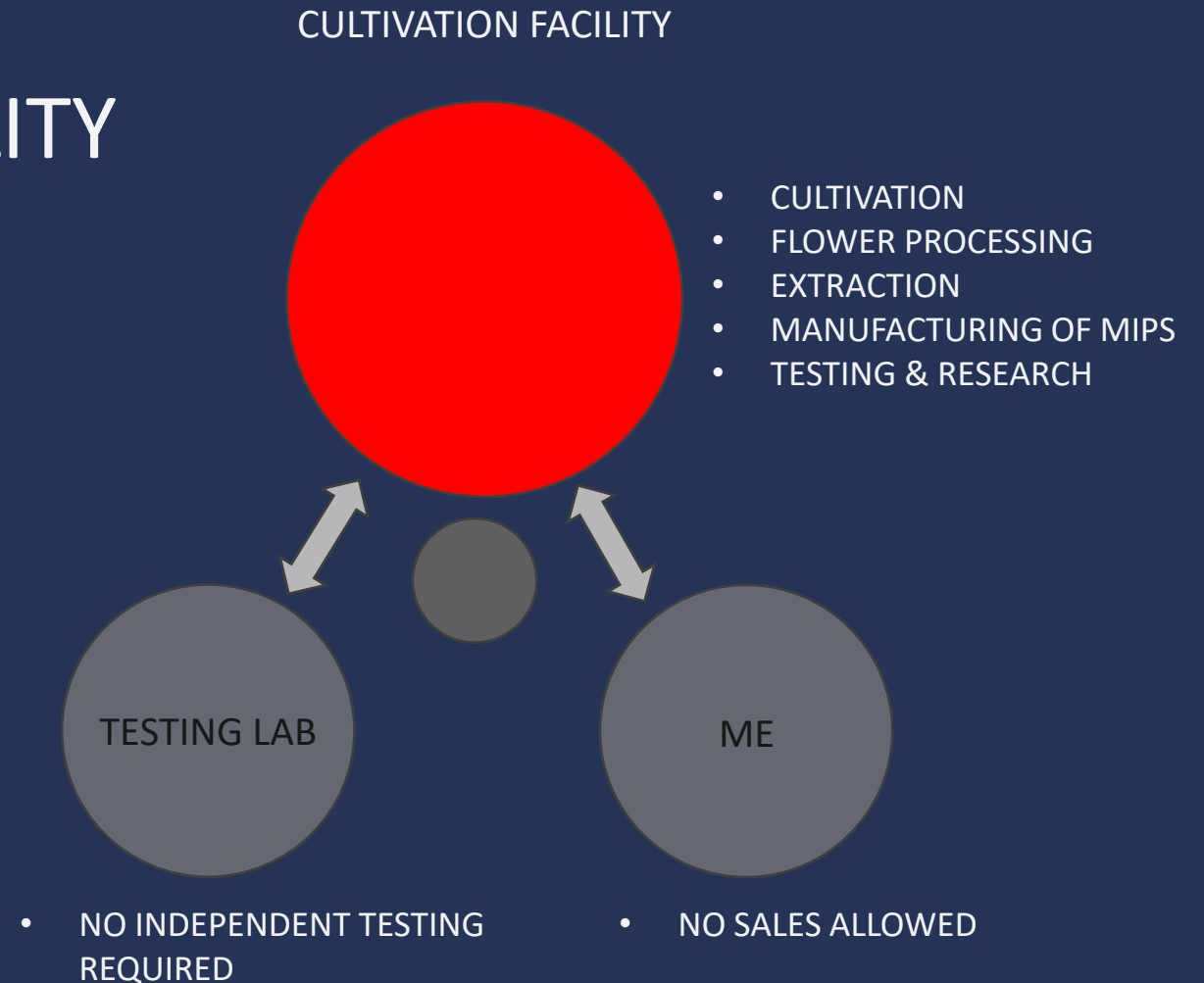
MARIJUANA CULTIVATOR

- THIS LICENSE ALLOWS FOR THE CULTIVATION AND PROCESSING OF CANNABIS PLANTS, AND THE PACKAGING AND LABELING OF CANNABIS FLOWER FOR WHOLESALE TO DISPENSARIES AND MANUFACTURERS
- CULTIVATION LICENSES ARE DIVIDED INTO ELEVEN TIERS WHICH ESTABLISH HOW MUCH “CANOPY” AN OPERATOR CAN GROW IN THEIR FACILITY
- CULTIVATION IS MOST OFTEN 100% INDOORS IN THE NORTHEAST, THOUGH CAN ALSO OCCUR IN GREENHOUSES OR OUTDOORS



MARIJUANA RESEARCH FACILITY (MRF)

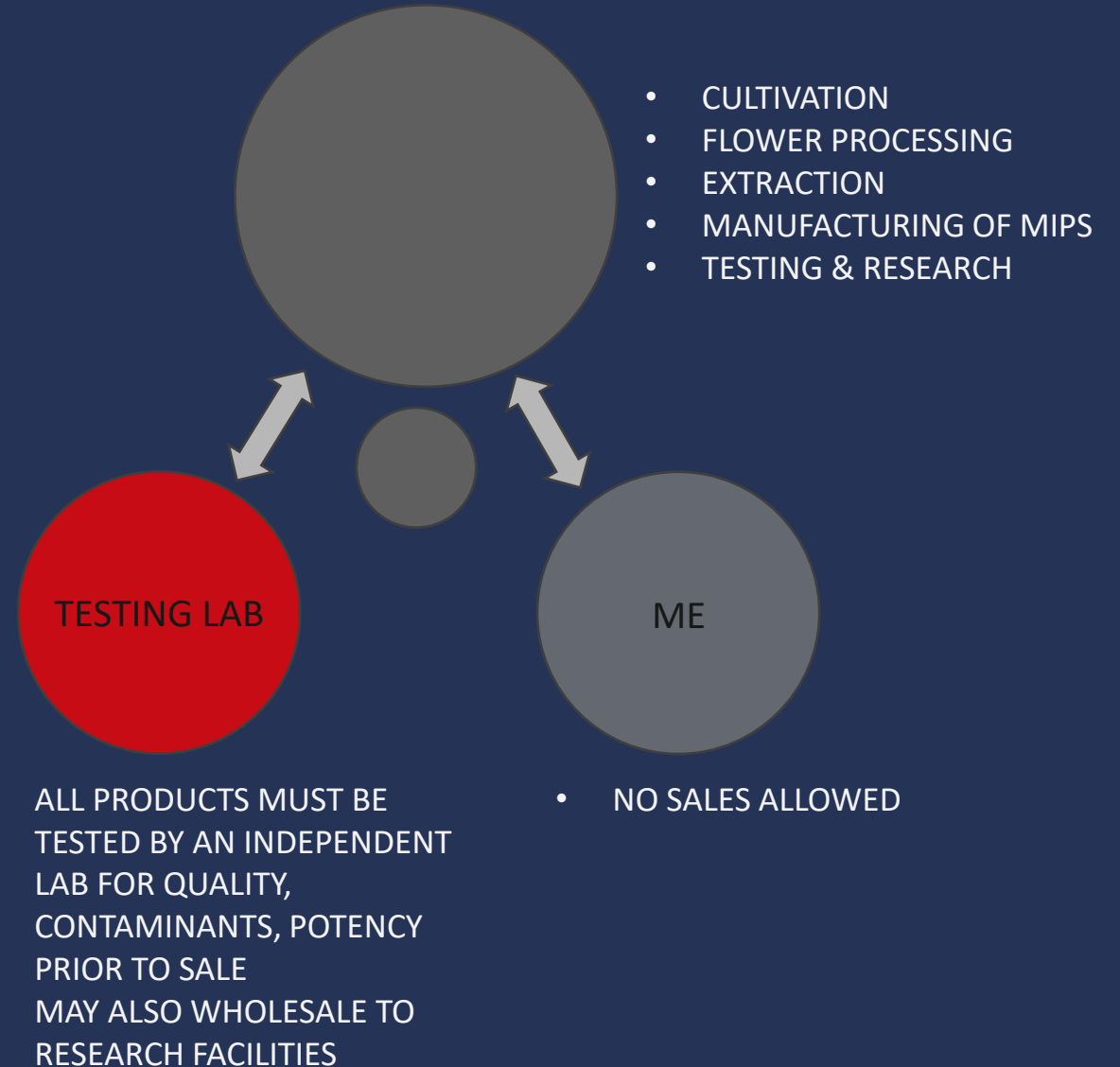
- THIS LICENSE IS USED FOR CONDUCTING RESEARCH ON MARIJUANA AND MARIJUANA PRODUCTS.
- MOST OFTEN OBTAINED BY ACADEMIC INSTITUTIONS, NON-PROFIT INSTITUTIONS, AND CORPORATIONS
- THE SOLE PURPOSE OF THESE FACILITIES IS RESEARCH – CANNABIS CAN BE GROWN, PURCHASED, AND PROCESSED BUT NEVER SOLD TO OTHER FACILITIES OR CUSTOMERS
- MRFs ARE NOT REQUIRED TO GROW OR MANUFACTURE
- CCC ISSUED RESEARCH PERMITS ARE REQUIRED FOR EACH INDIVIDUAL RESEARCH PROJECT



INDEPENDENT TESTING LABORATORY (ITL)

- THIS LICENSE IS ONLY AVAILABLE TO COMPANIES AND INDIVIDUALS WHAT DO NOT HOLD ANY OTHER LICENSE TYPE AND ARE FINANCIALLY INDEPENDENT OF ANY LICENSED MTC OR ME
- ALL PRODUCTS AVAIALBLE FOR SALE TO PATIENTS OR CONSUMERS MUST BE TESTED PRIOR TO FINAL LABELING AND STOCKING IN A DISPENSARY
- LABS PROCESS SMALL AMOUNTS OF CANNABIS AND MIPS TO TEST FOR QUALITY, PRESENCE OF CONTAMINANTS, POTENCY, AND OTHER COMPLIANCE ITEMS OUTLINED BY THE CCC
- LABS ARE NOT AUTHORIZED TO BUY OR SELL ANY PRODUCTS

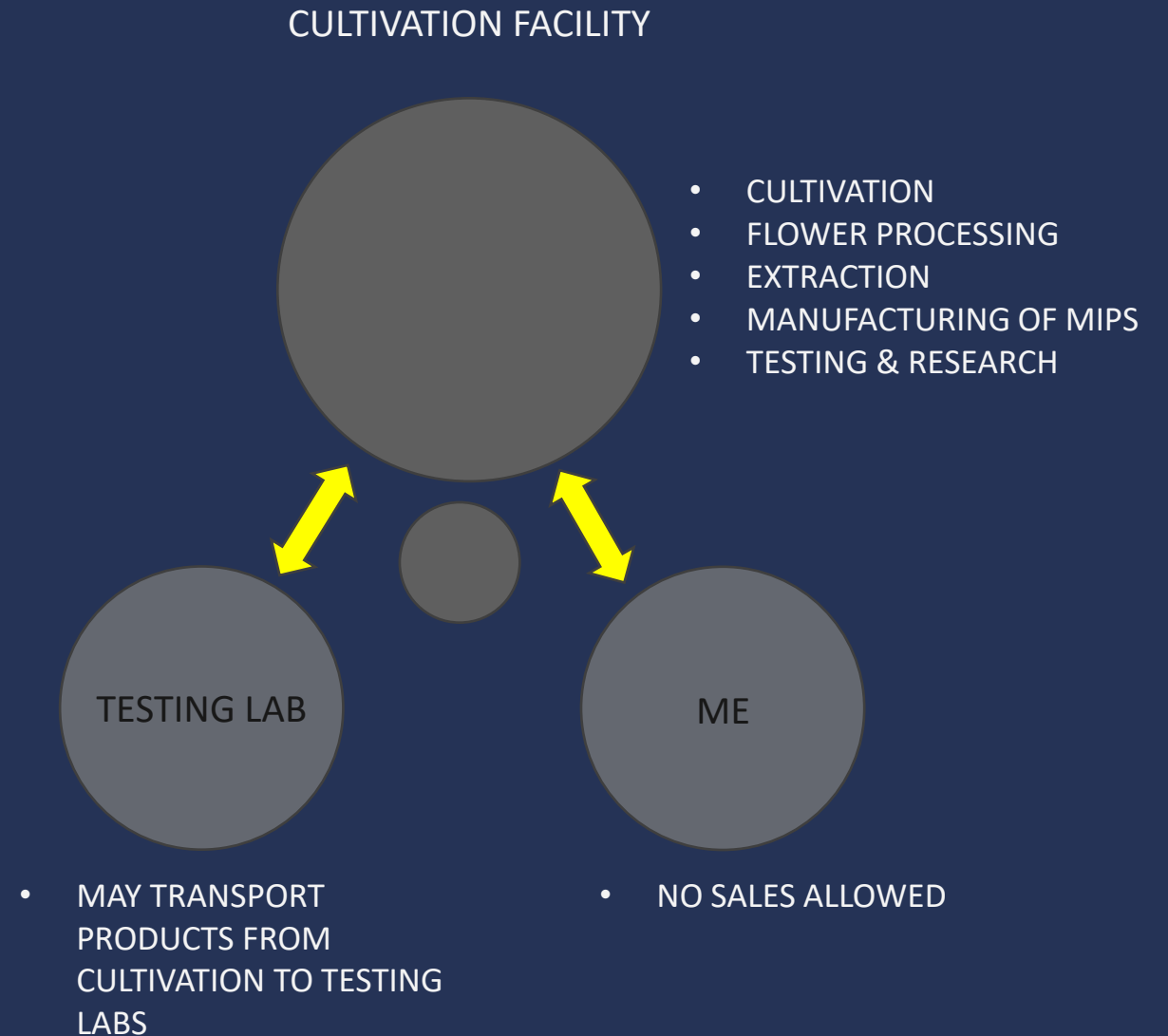
CULTIVATION FACILITY



TRANSPORTER

- **MARIJUANA TRANSPORTER**

- THE TRANSPORTER LICENSE ALLOWS FOR THE POSSESSION AND MOVEMENT OF MARIJUANA BETWEEN CULTIVATION & MANUFACTURING FACILITIES AND DISPENSARIES
- TRANSPORTERS CAN BE INDEPENDENT OR AFFILIATED WITH OTHER LICENSE TYPES. THIS ALLOWS FOR MTCs AND MEs WITH THEIR OWN DISPENSARIES TO TRANSPORT THEIR OWN PRODUCTS
- TRANSPORTERS CANNOT SELL MARIJUANA TO ANYONE OR WAREHOUSE PRODUCT FOR SALES



DELIVERY & COURIER

- MARIJUANA COURIER

- THIS LICENSE ALLOWS FOR THE DELIVERY OF MARIJUANA DIRECTLY TO CONSUMERS OR PATIENTS AT HOME
- LICENSE HOLDER MUST HAVE AN AGREEMENT WITH THE MTC OR ME FROM WHICH THE PRODUCT ORIGINATES
- COURIERS ARE NOT ALLOWED TO MAKE SALES, ONLY FULFILL ORDERS FROM MTCs OR Mes
- THIS DELIVERY METHOD IS SIMILAR TO DOOR DASH OR GRUB HUB IN THAT THE DRIVERS PICK UP FROM THE DISPENSARY AND DELIVER TO CUSTOMERS



- MARIJUANA DELIVERY OPERATOR

- THIS LICENSE ALLOWS FOR THE PURCHASE, STORAGE, AND DELIVERY OF CANNABIS PRODUCTS DIRECTLY TO CONSUMERS
- OPERATOR IS ALLOWED TO WHOLESALE AND STORE PRODUCT IN THEIR OWN WAREHOUSES FOR DELIVERY UPON RECEIPT OF ORDERS
- THIS IS THE “AMAZON” STYLE OF DELIVERY WHERE MULTIPLE VENDORS OR BRANDS ARE HELD IN STOCK FOR DELIVERY DIRECTLY FROM THE OPERATOR WAREHOUSE

WHAT IS A DISPENSARY?



SEED ME &
CANNABIS MUSEUM

PHOTO BY BOSTON GLOBE

COMMERCIAL CORRIDOR
TENANT FITOUT



NETA MTC & ME
BROOKLINE, MA

PHOTO BY NETACARE.ORG

ADAPTIVE REUSE OF HISTORIC
BANK



NATURE'S REMEDY ME
TYNGSBOROUGH, MA

NEW CONSTRUCTION
STANDALONE



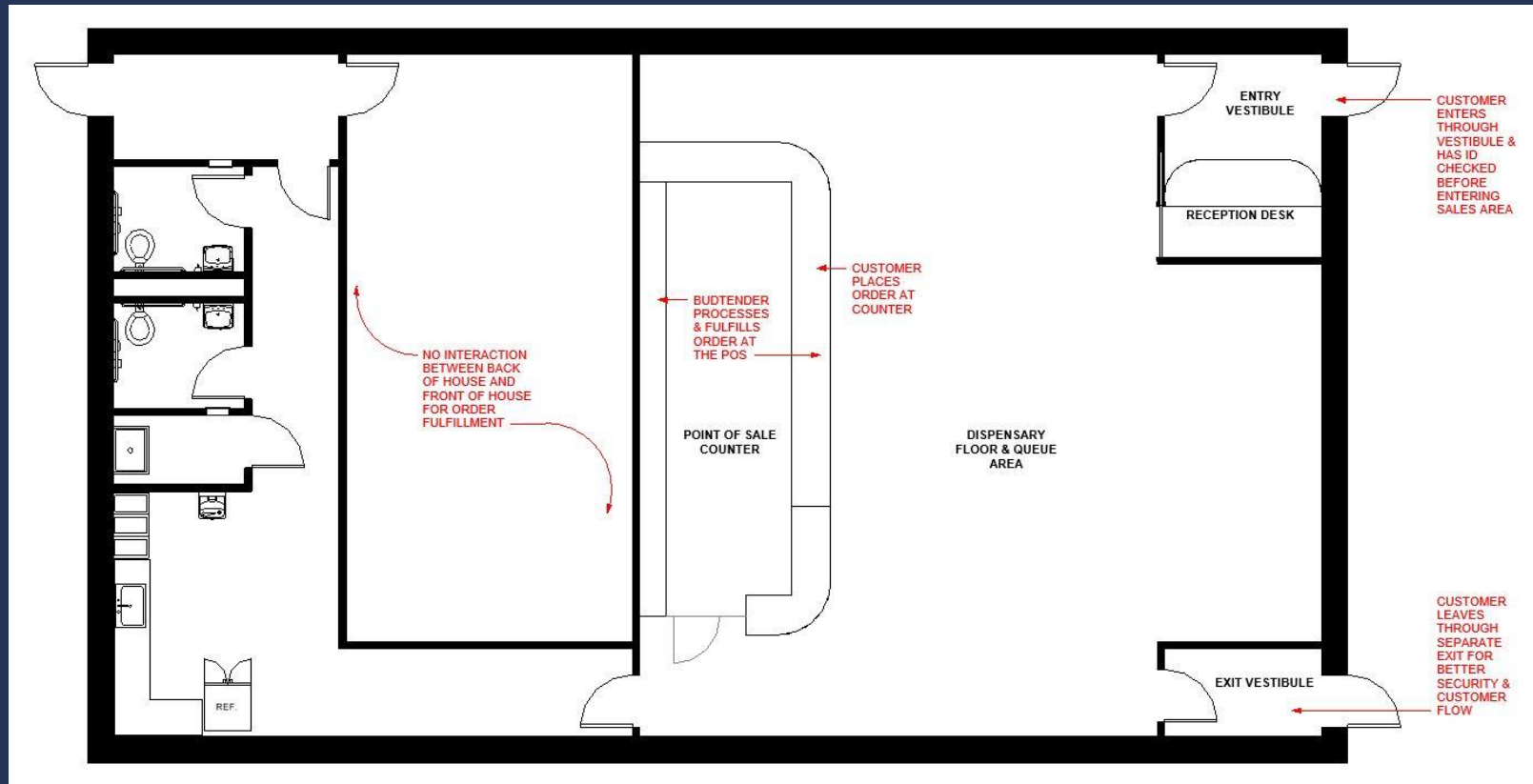
RISE CANNABIS ME
DRACUT, MA

ADAPTIVE REUSE OF FORMER MILL
BUILDING



Dispensaries can be located nearly anywhere –standalone buildings, strip malls, industrial parks, commercial corridors, etc.

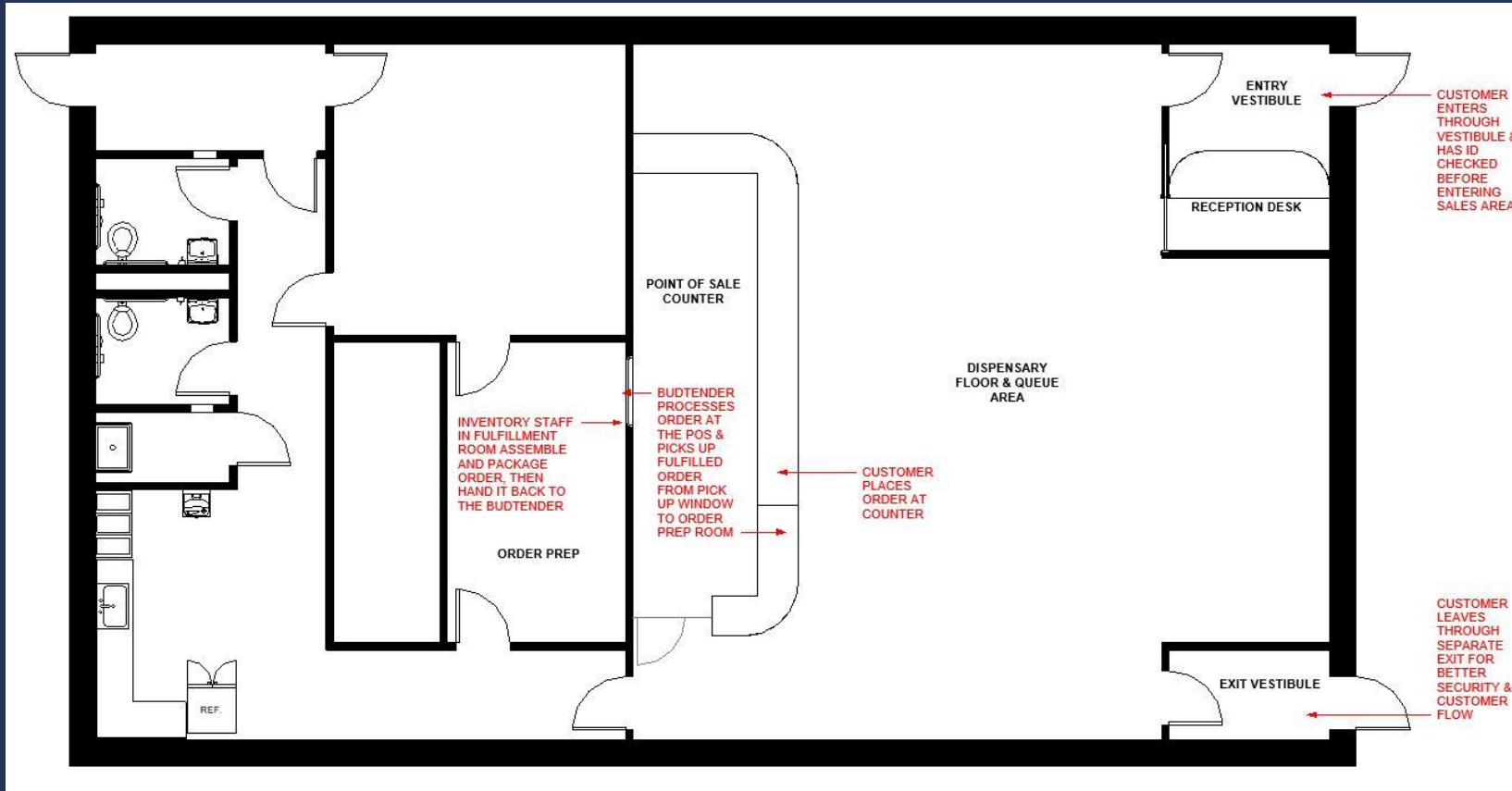
THE BAKERY APPROACH



TOP RIGHT:
PARTIOT CARE ME & MTC IN GREENFIELD, MA
PHOTO FROM DISPENSARY GENIE

BOTTOM RIGHT:
THE GREEN JOINT DISPENSARY IN RIFLE, CO
PHOTO FROM THEGREENJOINT.COM

THE CAFE APPROACH



TOP RIGHT:

GREENSTAR HERBALS IN DRACUT, MA

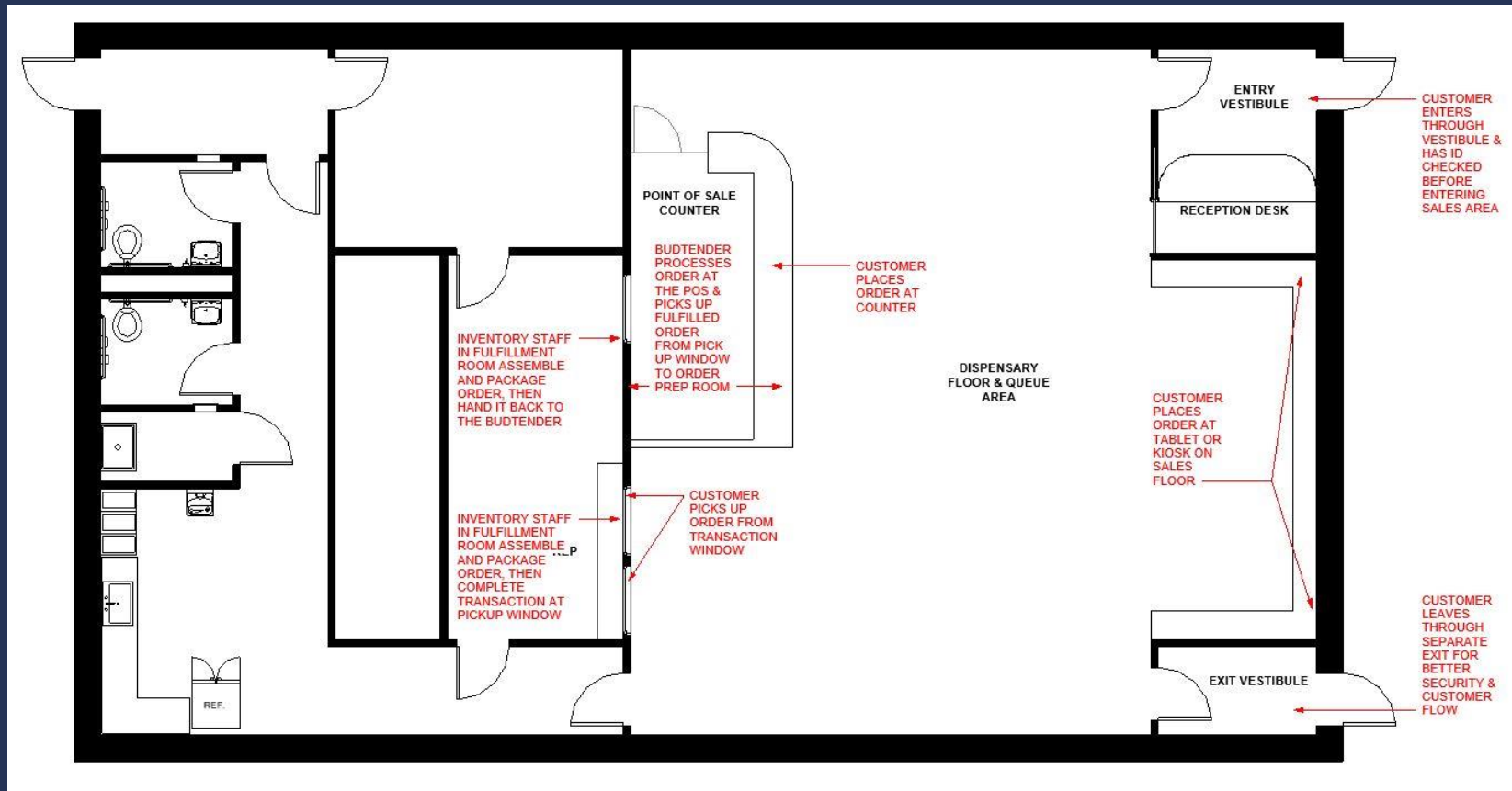
PHOTO FROM NEREJ MAGAZINE ONLINE

BOTTOM RIGHT:

SIRA NATURALS DISPENSARY IN SOMERVILLE, MA

PHOTO FROM SIRA NATURALS WEBSITE

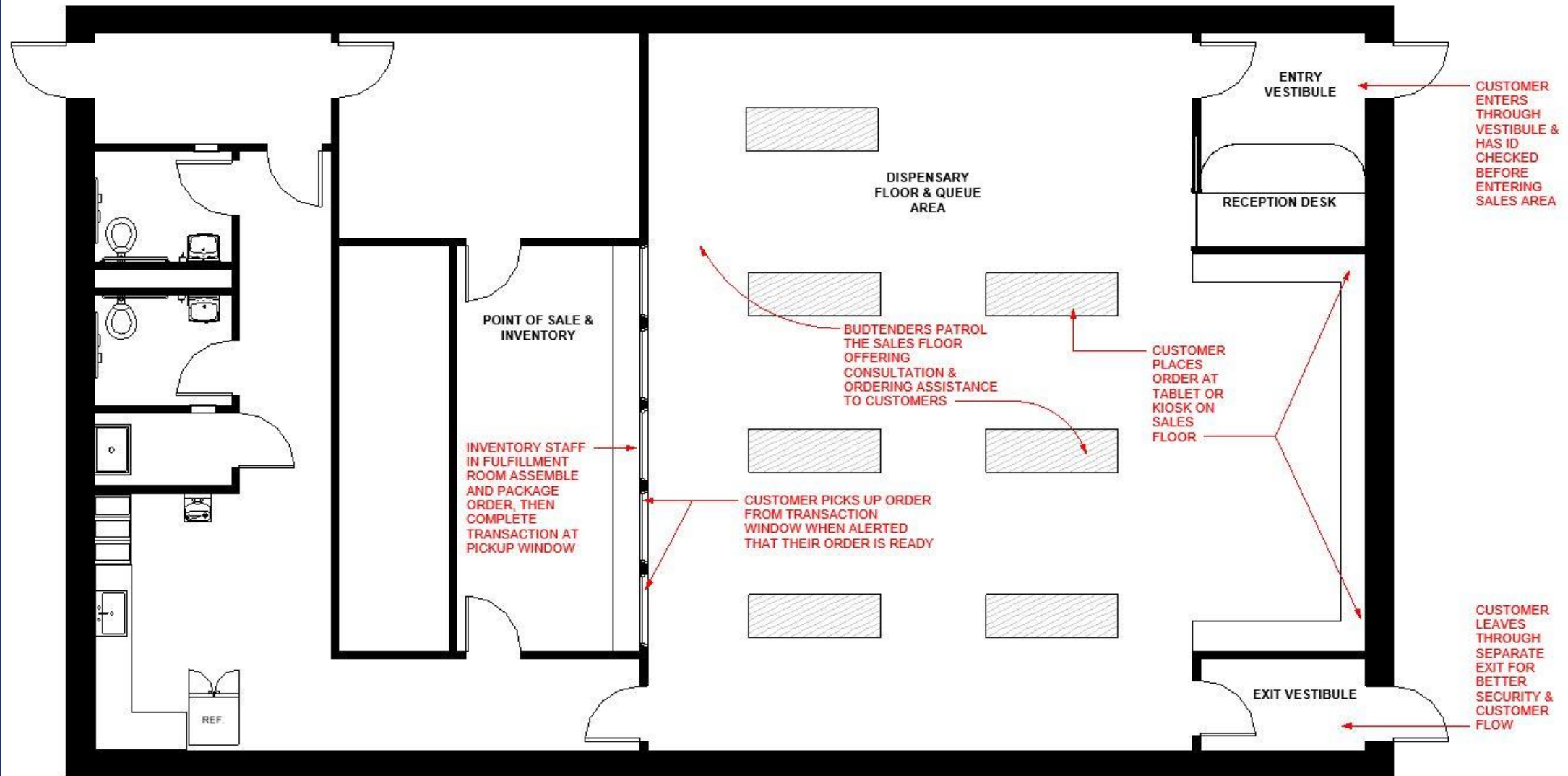
THE PHARMACY APPROACH



TOP RIGHT:
REVOLUTIONARY CLINICS IN SOMERVILLE, MA
PHOTO FROM LEAFLY

BOTTOM RIGHT:
SOCIETY CANNABIS IN CLINTON, MA
PHOTO FROM SOCIETY CANNABIS WEBSITE

THE 5TH AVENUE APPROACH



WHAT ARE SOME COMMON MISCONCEPTIONS ABOUT DISPENSARIES?



PHOTO FROM FORBES VIA GETTY IMAGES

““WHEN THE REGULATIONS WERE FIRST PUT IN PLACE AND WE WERE NEGOTIATING HOST COMMUNITY AGREEMENTS, I DON’T THINK ANYONE KNEW WHAT THE POTENTIAL IMPACTS WOULD BE,” NORTHAMPTON MAYOR DAVID NARKEWICZ TOLD THE GLOBE. “BUT NOW, GIVEN MORE EXPERIENCE, WE UNDERSTAND THAT IN MOST RESPECTS THESE BUSINESSES OPERATE LIKE ANY OTHER BUSINESS . . .”

- MJBIZDAILY INTERVIEW 2021



PHOTO FROM TRIP ADVISOR



PHOTO FROM BOSTON GLOBE



PHOTO FROM WEED MAPS



PHOTO FROM MJBIZDAILY

WHAT IS A CULTIVATION FACILITY?

- Cultivation facilities are needed for both medical and recreational cannabis
- Cultivation facilities are generally where all cannabis flower is grown and processed. These facilities can be completely indoor, hybrid indoor & greenhouses, or hybrid indoor & outdoor.
- In the northeast, most cultivation facilities are entirely indoors due to climate conditions and the specific needs for growing cannabis plants.
- Cultivation facilities are frequently built out in phases. This is for speed to market and to start making money to pay for construction in later phases.
- Every grower has a different method, so each cultivation facility is different operationally.



Cultivation facilities are usually located in industrial zones, agricultural land, or repurposed commercial/industrial buildings.



SOLAR THERAPEUTICS
TIER 5 INDOOR
SOMERSET, MA

FORMER RECYCLING PLANT & COMMERCIAL BUILDING

PHOTO BY HERALD NEWS



REVOLUTIONARY CLINICS
TIER 8 INDOOR
FITCHBURG, MA

FORMER INDUSTRIAL MILL BUILDING

PHOTO BY REVOLUTIONARY CLINICS

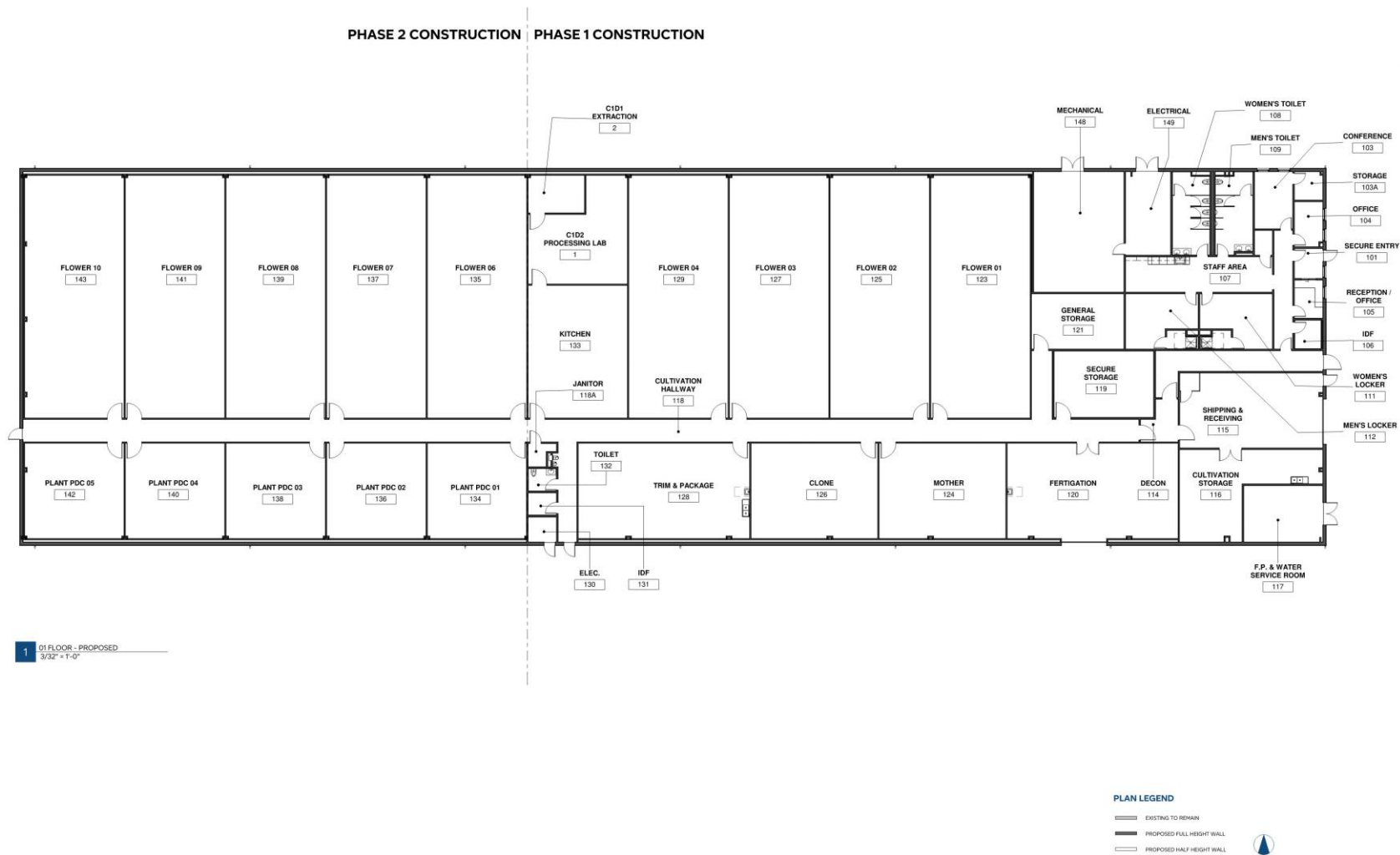


APOTHCA
TIER 5 INDOOR
FITCHBURG, MA

FORMER PHARMACEUTICAL PLANT
NEW GREENHOUSES

PHOTO BY PR NEWSWIRE

WHAT IS A CULTIVATION FACILITY?



LEFT: CULTIVATION FACILITY OVERALL FLOOR PLAN

TOP: CANNABIS FLOWER

BOTTOM: PRE-ROLLS

PHOTOS VIA WEEDMAPS

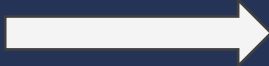


CULTIVATION PROCESS



MOTHER PLANTS

PHOTO BY HIGH TIMES



CLONE PLANTS

PHOTO BY BOSTON GLOBE



VEG PLANTS

PHOTO BY BOSTON GLOBE



FLOWER PLANTS

PHOTO BY BOSTON GLOBE



DRY ROOM

PHOTO BY NORWICH UNIVERSITY



TRIM ROOM

PHOTO BY BOSTON GLOBE

CULTIVATION FURNITURE, FIXTURES, AND EQUIPMENT



TOP LEFT: AIR HANDLER / PACKAGE UNIT INSTALLED AT COLLEGE

PHOTO BY ODELL ASSOCIATES



TOP CENTER:

CHILLER INSTALLED AT HOTEL

PHOTO BY DAIKIN



TOP RIGHT:

CO2 TANK INSTALLED AT CULTIVATION FACILITY

PHOTO BY CAC

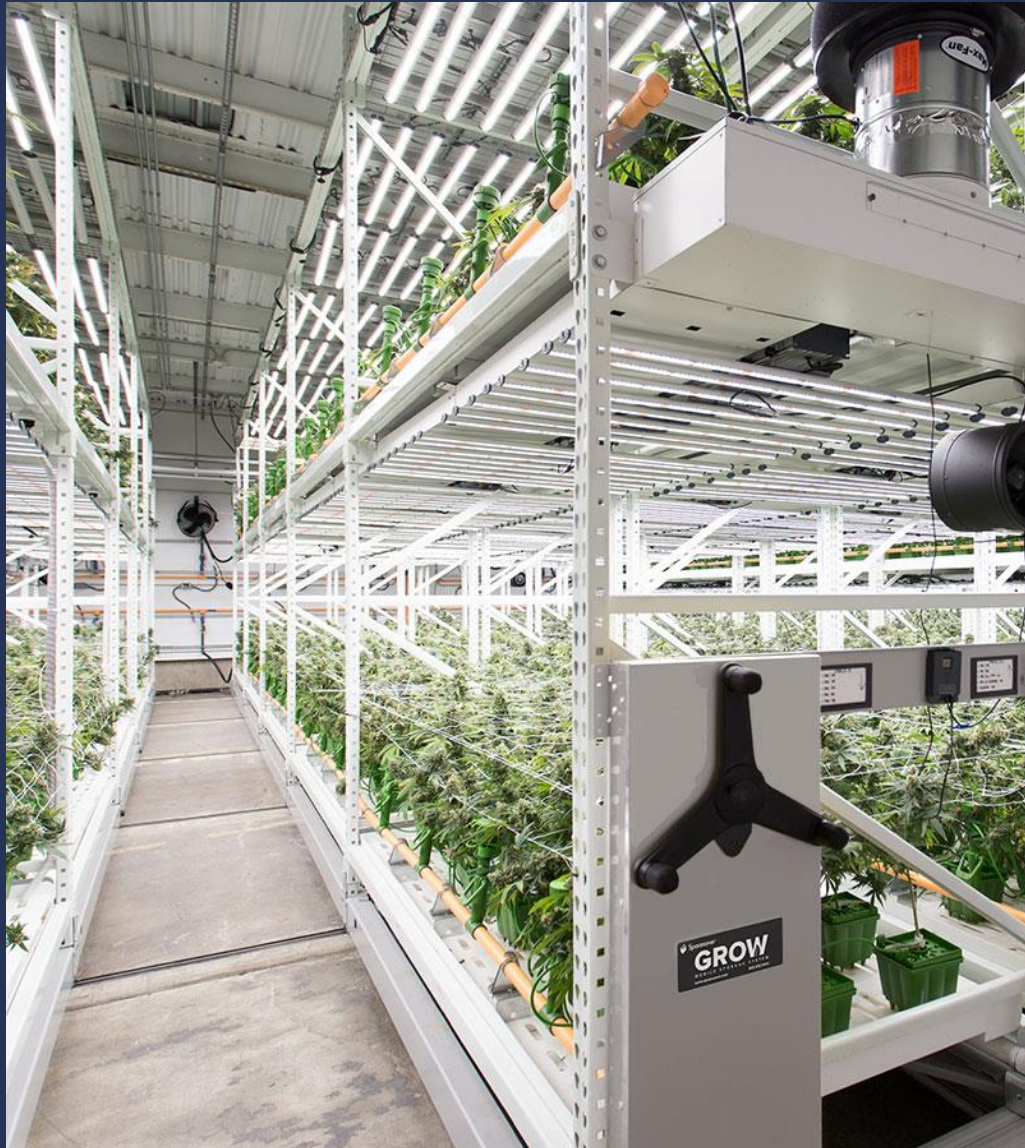


BOTTOM:

GENERATORS INSTALLED AT HOSPITAL

PHOTO BY CS DIESEL GENERATORS

CULTIVATION FURNITURE, FIXTURES, AND EQUIPMENT



LEFT:
MOVABLE VERTICAL GROW RACKING
PHOTO BY SPACE SAVER



TOP CENTER:
FERTIGATION SYSTEM & WATER TANKS
PHOTO BY RHYTHM CSS

BOTTOM CENTER:
GREEN WORK LIGHTS
PHOTO BY CAC

EXTRACTION



TOP LEFT:
EXTRACTION LAB / ROTOVAPS
PHOTO BY AROMA LABS

BOTTOM LEFT:
FULL SPECTRUM EXTRACT
PHOTO BY LEAFLY

BOTTOM CENTER:
VAPE CARTRIDGES
PHOTO BY CANNABIS BUSINESS TIMES

TOP RIGHT:
EXTRACTS
PHOTO BY KEYTOCANNABIS.COM

MANUFACTURING



TOP ROW: MINTS, TINCTURE, HONEY,
OLIVE OIL / COOKING OIL

MIDDLE ROW: TEA, BEER, CHOCOLATE,
TOPICAL (BALMS & LOTIONS)

BOTTOM ROW: DRINKS, GUMMIES,
COFFEE PODS, CHEWING GUM



WHAT OTHER TYPES OF FACILITIES ARE FACTORY F-1 USE?





THANK YOU!
ANY QUESTIONS?