



8/30/2024

Project Name: 221 Wilcox
SDP24-0026
Homegrown Tap & Dough - Castle Rock
Address: 221 Wilcox Street, Castle Rock, CO

We are proposing changes to the Third Street side of the first floor to add patio seating. In order to do this and maintain requested clearances and landscape we are proposing the following changes:

- A. Revise landscaping and tree placements.
- B. Add patio seating while maintaining City clearances requested.
- C. Add a concrete pad to support the RTI system described below.
- D. A Technical Criteria Variance has been submitted to allow the width of the tree grates along 3rd Street to be decreased from 6 feet to 4 feet, providing an unobstructed 8 foot wide sidewalk zone.

We thank you for your assistance and consideration.

RTI Narrative

It is proposed to implement an RTI system to optimize kitchen operations. The system uses innovative technological solutions specially designed for restaurants, which consists of an advanced system that eliminates the need to manually handle the oil.

This system provides reliable cooking oil management and consists of 2 autonomous external tanks, which do not produce noise or odors to the outside, which will be managed by a specialized company that will perform the following services:

- Reliable delivery of bulk cooking oil.
- Remote monitoring without intervention of oil filtration and use.
- Disposal and recycling of used oil
- Efficient all-in-one system installed directly by the supplier in the kitchen.

The RTI will be installed on a 6' x 9' concrete pad located at the southwest corner of the site adjacent to the building. Stormwater that falls on the pad will be intercepted by the existing concrete pan that runs along the west property line, conveying stormwater to the flowline of 3rd Street. The minimal increase in impervious area will result in a negligible increase in runoff and no adverse impacts will result from installation of the pad.

Equipment Spec – Outdoor Tank

Standard Capacity (1,300 lbs. capacity)



- Dimensions
 - 88" Long x 48" Wide x 50" Tall
 - NOTE: Fill box door will stick up an additional 2" when open.
- Tank Material = Food-Grade Polyethylene
- Enclosure Material = Polyethylene
- 120 VAC power required (maximum draw = 25 amp)
- Net Storage Capacity, at overfill switch trip point
 - Fresh oil tank = 1,300 lbs. (169 gallons)
 - Waste oil tank = 1,300 lbs. (169 gallons)
- Weight
 - Empty = 883 lbs.
 - Full = 2,183 lbs. (typical max weight, fresh tank full and waste tank empty)
 - Max = 3,483 lbs. (both tanks full – unlikely scenario)
- Features:
 - Overfill protection provided on both tanks.
 - Heated enclosure (500W max enclosure heater draw).
 - Fresh oil tank provided with remote level gauge, located inside kitchen, that reads in "pounds of oil".
 - Space inside enclosure for locating supporting equipment.
 - Enclosure 100% sealed. Meets SPCC requirements for secondary containment.
 - Fresh oil tank certified by NSF to ANSI/NSF Standard 4.
 - Assembly listed to UL 499.

Electrical Requirements for RT Outdoor Tank

(Restaurant Technologies to visibly post at tank location)

Listed below are the power requirements for the Restaurant Technologies outdoor tank. These requirements are for the tank heating system and supporting equipment located inside the tank enclosure.

WARNING:

DO NOT connect to
220Vac power!
Connect to 120Vac,
single phase.



Equipment to be installed:

- One (1) electrical disconnect.

Required Voltage/Amperage:

- 120Vac, 25amp, single phase

Specifications for Disconnect:

- Minimum rating = 25 amps at 120Vac, single phase.
- Number of poles = 2 plus ground
- Enclosure type = must be rated for outdoor use
- Arc shield required over terminals
- Enclosure must have knock-outs for 1/2" conduit.
- Switch type = lever (blade) type. Must be capable of being locked in the OFF position.

Location of Receptacle:

- On exterior wall, 60" (min.) above ground and within 6 ft of outdoor tank.

Wiring:

- Wire to building switchboard or panelboard, 25 amp dedicated breaker.
- Label breaker "RTI"
- All wiring must conform to the NEC.
- Permits should be pulled when required by the authority having jurisdiction.



Electrical Disconnect

Equipment Spec – Outdoor Tank

Site Prep Requirements

- 1) The 1300 lb outdoor tank must be installed on a flat, hard, level surface. The surface must be capable of handling the weight of the outdoor tank when full. The surface should not be wooden or made of any other material that can rot or degrade over time.
 - 1) Acceptable surfaces = concrete, asphalt, bricks, pavers, patio blocks, hard dirt. Surface must be level.
 - 2) Unacceptable surfaces = wood, wooden pallets, gravel, loose stone, mulch, loose dirt, or any unlevel surface.
- 2) It is the customer's responsibility to ensure that the above acceptable surface is in place prior to the installation of the RT tank.
- 3) The 1300 lb outdoor tank shall not be installed on an elevated platform or deck. The only exception would be if the customer provides in advance an approval by a Civil Engineer licensed in the state and an approval by the local Building Department or AHJ.
- 4) If the 1300 lb outdoor tank is to be installed in a seismic zone (west coast or Memphis, TN), the tank must be installed either on existing concrete (min. 4" thick) or have a concrete pad created per the specs on the next page. These conditions are required if seismic restraints are needed.
- 5) Required clearance around tank:
 - 1) Enough space to get between the tank and the wall for access to the lids. Recommended clearance = 18" to 24" minimum.
 - 2) For seismic zones, enough space to install seismic restraints (see dimensions of concrete pad on next page).
 - 3) Fill Box must be accessible to the RT Delivery Driver.

Reference photos:

Good design is priceless....bad design can cost a fortune ®

- Ken Dalton, President, MRP Design Group, Inc.

