

McFleshman's Brewing Co.

Renovation Scope of Work

Appleton, WI



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1 General conditions

1.1 Administrative

1.2 Plans and permits

- Obtain state and local building permits for the following:
 - Groundwork / footings
 - Building permit
 - HVAC
 - Plumbing
 - Lighting
 - Fire suppression
- Provide the Owner with a set of:
 - as built drawings
 - list of subcontractors used on the project
 - manufacturer’s warranties
 - operation and maintenance manuals for the major pieces of equipment
 - instruction manuals where appropriate for building systems
- Prepare a weekly job report for the project, including:
 - photographs and a schedule for the project
 - dates for tentative dates of starting, completion of the various stages of construction, and will be updated on a regular basis to reflect the actual progress of the work

1.3 Cleaning

- Owner will provide electrical power during construction. Waste and construction debris clean-up.
- A dumpster will be located on site during construction.
- Upon completion, the building will be turned over in a "clean" condition

1.4 Dumpster

- Waste and construction debris clean-up responsibility of contractor.

1.5 Materials and equipment

- Allowance to cover necessary miscellaneous materials and equipment during the course of construction.

1.6 Material testing

- Material testing of subsoils and concrete cylinders as required for the areas of proposed foundations and interior flatwork.

2 Demolition

2.1 Concrete removal

- Provide labor and furnish material to perform and install the following:
 - Saw, cut, remove, load, haul and dispose of concrete 2400SF slab on grade
 - Demolish, load, and haul existing 10” brick wall.
 - Saw, cut, remove, load and haul away five (5) - 2’6 x 2’6” concrete footing areas.
 - Saw, cut, remove, load and haul away back apron 15’ x 28’ x up to 6” thick.
 - Support and shore second floor 8’ x 8’ area x 7” thick structural slab.
 - Saw, cut, and remove concrete.
 - Remove the shoring.
 - Cut and remove concrete beam.

2.2 Wood demolition

- Provide labor and furnish material to perform and install the following:
 - Demo of walls, floors, ceilings as necessary per plans.
 - Removal of existing windows.

3 Concrete

3.1 Foundations

- 3000 PSI
- form, and pour
 - footings 24” x 10” x 40’
 - (5) pads 3’ x 3’ x 12”
 - (6) pads 4’ x 4’ x 12”
 - (1) pad 6’ x 6’ x 16”
 - (2) pads 4’ x 3’ x 12”
- Form and pour walls: 8” x 4” x 40’.
- Install anchor bolts, anchor bolts and setting plates.
- Furnish and install reinforcing steel per plan.

3.2 Flatwork

- 3500 PSI interior slab and 4000 PSI for exterior
- furnish 4” compacted stone under slab, form and pour floors approximately 726 SF 4” thick reinforced with #10/10 wire mesh and 10mil visqueen.
- Furnish 4” compacted stone under slab, form and pour floors approximately 1,680 square feet 6” thick reinforced with #8/8 wire mesh and 10mil visqueen.
- Form and pour back apron 15’ x 28’ x 6”
- Form and pour slab under stair well 5’ x 35’ x 5”
- apron around stairwell 275 square feet 5” thick
- all reinforced with #4 rebar 24” on center each way and one coat concrete sealer.

3.3 Production area concrete specs

- FINISHED SPECS:
 - Concrete sloped 1/8" per foot to drain, entire production area
 - Concrete MAXIMUM offset from plane: 1/8" in 10' 0"
 - Provide 3/4" recess at all drains and adjoining surfaces
 - Surface shall be wood-float finish, or single-pass steel trowel
- CONTROL JOINTS: Use control joints through the slab and the tile.
- PROTECTION: The floor area shall be kept free from traffic, liquids and dirt while the work is in progress. No work shall be permitted overhead during the installation of the flooring and before the joints are cured.
- PLUMBING: Select drains constructed of corrosion resistant materials and designed with an integral seepage pan. Set tops of drains at an elevation level to the finish surface of the tile. Square or rectangular drains must be set with their sides parallel with the walls or joint line of the finished floor.
- ABRASIVE BLASTING: The surface of the concrete that is to receive the chemical resistant flooring shall be vacuum abrasive blasted. In addition the surface of the concrete must be free of lumps, oil, ridges, depressions, and laitance. This may mean further chemical or mechanical surface preparation may be needed to remove the outstanding surface laitance or to provide a bondable surface on concrete that has not been finished and cured properly.

3.4 Wall openings

- Cut (4) 4'x9' openings in south wall.
 - Wall to cut is 12 thick.
 - One opening leads to south staircase from level 2. Other three on level 1.

4 Masonry

4.1 Tuck point

- Tuck pointing existing masonry.

4.2 Split-face block

- 4' high wall in production area:
 - wall encasing stairs
 - boiler room
 - approx 50' in length total
- Infill at west wall for new OH door.
 - 2'x10' block work in space between West entrance and overhead door. The intention is to reduce current overhead door by 2' in width.

5 Metals

5.1 Production area

- install steel work per plan
 - columns with base plates
 - beams coped to form deck support
 - 20 ga deck steel
 - beams inserted into wall where stated on plan
- walls backfilled with concrete for diaphragm strength
 - every 4', full-height of wall, where feasible
- Metal Surface Preparation
 - all surfaces shall be cleaned with 60 grit soft pad (Tiger Paw or equivalent) hand grinder to remove all factory particles, rust, and mill scale
 - All surfaces shall be thoroughly wiped with Acetone or Xylol liquid cleaner until a 'clean' rag showing no remaining contaminants has been achieved
- Initial Painting
 - all non-weld area surfaces shall be painted with 1 coat of Sherwin Williams DTM # within 4 hours of Metal Surface Preparation. If this is not accomplished, all surfaces must be re-prepared. First coat of paint will require XXX of dry time.
 - A second coat shall be applied after initial dry time. Application of paint with good quality foam brushes is an acceptable method of applying paint if evenly applied.
- Structural Erection
 - Erection of all structural members will be accomplished in a manner of utmost craftsmanship.
 - All beam cuts and copes will result in member-to-member fit up of no more than 1/8" gap.
 - All members shall be installed perfectly plumb and level.
 - Where W Beam flanges are not perfectly parallel to each other, the top flange shall be installed level.
- Welding
 - All welds shall be of the SAW (E6010 first pass, E7018 subsequent passes), or FCAW process.
 - All welds will be performed by a certified structural welder. Welder Certification documents will be required.
 - All W Beam to W Beam intersections will be completely welded with 3/8" fillet.
 - In addition, a 3/8" x 3" x 3" x 9" long angle will be welded to each side of the web of the intersecting W Beam (see Details #2 and #5).
 - All W Beam to 6" x 6" vertical square tube column intersections will be completely welded with 3/8" fillet.
 - In addition, a 3/8" x 3" x 3" x 5" long angle will be welded to the bottom of the intersecting W Beam at the square tube attachment point (see Detail #1).
 - All 6" x 6" vertical square tube columns shall be capped at the top with 1/4" x 6" x 6" plate steel and contour cut to evenly match the profile of the outside of the 6" x 6" tube.
 - Welds shall be completely welded with 1/4" fillet.

-
- All 6”x 6” vertical square tube columns shall be capped at the bottom with a 8”x8” stainless steel base plate (see Detail #3)
 - Weld Zone Surface Cleaning
 - All weld zones will be thoroughly cleaned of weld scale, slag, and spatter by means of a pneumatic ‘needle gun’.
 - All affected areas will be wiped clean of weld smoke.
 - Final Paint -
 - All weld zones shall be painted with 2 coats Sherwin Williams DTM # (see Initial Painting section).

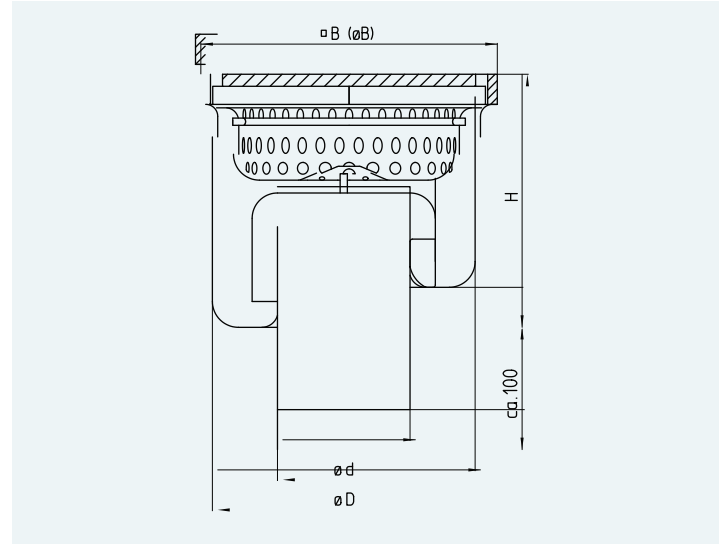
5.2 Staircases

- Production stairs per plan
- Covered south entrance per plan

5.3 Tap room mezzanine

- Tube steel per plan

5.4 Drain specs



Model	Ø d [mm]	▣ B [mm]	Ø D [mm]	H [mm]	Silt box volume [l]	Flow rate [l/s]
DRS-070-E-S	75 (3")	180 (7 1/6")	6" 153	5" 127	0.5 (.13 gal)	>1.5 (23.78 gpm)
DRS-100-E-S	110 (4")	246 (9 11/16")	8 9/16" 218	8 1/4" 210	1.5 (.396 gal)	> 2.8 (44.38 gpm)
DRS-150-E-S	160 (6")	310 (12 3/16")	11 1/8" 283	9 13/16" 250	2.75 (.75 gal)	> 8.2 (129.97 gpm)
DRS-200-E-S	200 (8")	410 (16 1/8")	14" 356	12 3/8" 315	6 (1.59 gal)	> 12.5 (198.13 gpm)

Cover variants

■ Plate cover, M125



■ Bar grate cover, M125



■ Grating, L15



- Plate 5 mm, not illustrated. L15
- Plate 3 mm, hole Ø 8 mm, not illustrated, K3

Inlet rim

- square
- round

Grade

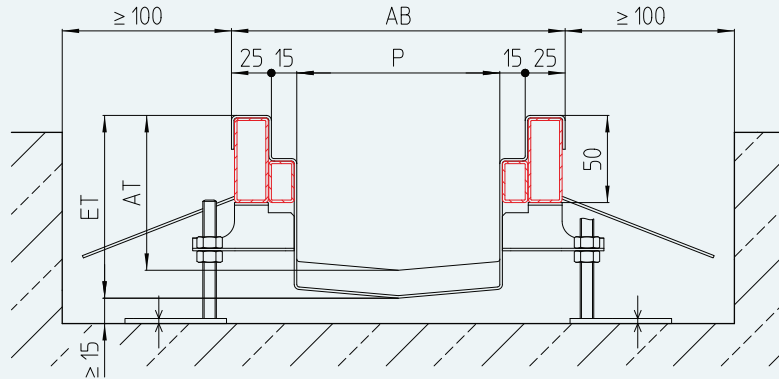
- 1.4301 (AISI 304)
- 1.4371 (AISI 316 Ti)

Square inlet rims for tiled floors

Our square inlet rims are particularly suitable for tiled floors. The inlet rims are made of solid stainless steel, providing maximum stability to withstand forklift operations. The sharp-edged transition to the adjoining jointing or grouting material eliminates the risk of the material separating from the stainless steel. This guarantees the highest level of hygiene by avoiding cracks where bacteria can accumulate.

Floor drains for tiled or resin floor coverings

The floor drains are available with square inlet rims for tiled floors or with round inlet rims for synthetic resin flooring. Whether square or round – both versions have been made of solid stainless steel to provide maximum stability to withstand forklift operations. A sharp-edged transition to the adjoining jointing, grouting of flooring material prevents separation or cracks in the material. This prevents the accumulation of bacteria in cracks or joints, and by using our floor drains you ensure the highest standard of hygiene.



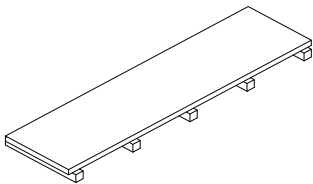
Channel model	in P [mm]	in AB [mm]	AT ⁷⁾	Fall	ET [mm]
IKR-070-150	70 (2 3/4")	150 (5 7/8")	60 (2 3/8")	0.6 %	
IKR-090-170	90 (3 9/16")	170 (6 11/16")	60 (2 3/8")	0.6 %	
IKR-120-200	120 (4 3/4")	200 (7 7/8")	60 (2 3/8")	0.6 %	
IKR-170-250	170 (6 11/16")	250 (9 13/16")	60 (2 3/8")	0.6 %	
IKR-220-300	220 (8 11/16")	300 (11 13/16")	60 (2 3/8")	0.6 %	
IKR-320-400	320 (12 5/8")	400 (15 3/4")	60 (2 3/8")	0.6 %	
IKR-420-500	420 (16 9/16")	500 (19 11/16")	60 (2 3/8")	0.6 %	

Calculation ET: $AT + L1 \times 0,006$ [AT; ET; L1 in mm]

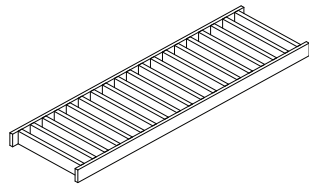
Grade

- 1.4301 (AISI 304)
- 1.4571 (AISI 316 Ti)

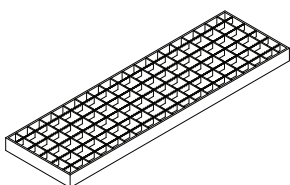
Cover variants



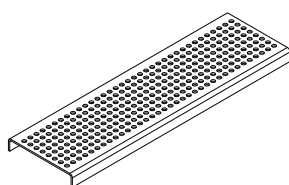
■ Plate cover M125



■ Bar grate cover M125



■ Grating L15



■ Plate cover; 3,0 mm K3

Slot channels for smaller flows

Our channels are fully visible through their slots, which means they can be examined at any time to verify their cleanliness. This ensures that they can be kept in a fully hygienic state. The slot channels are also available without spacers to facilitate cleaning and are available in various load classes.

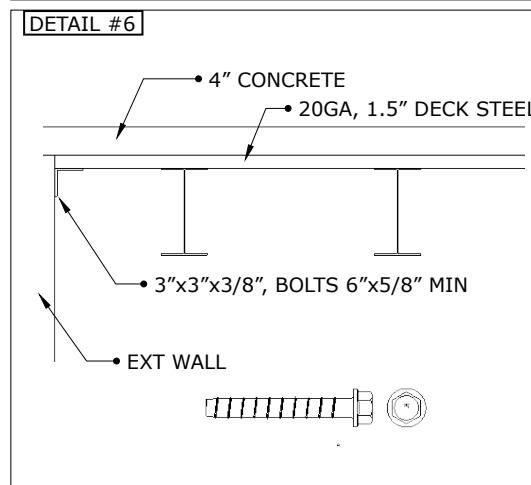
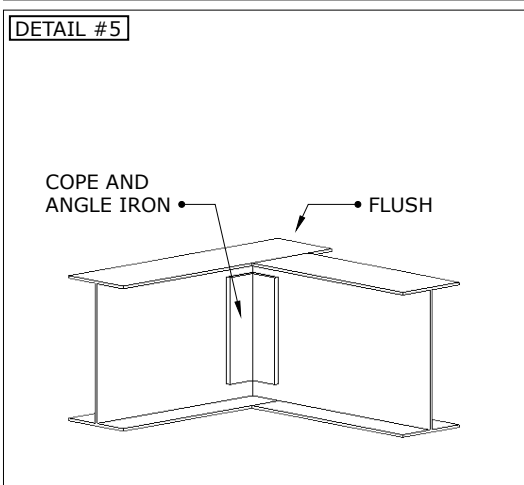
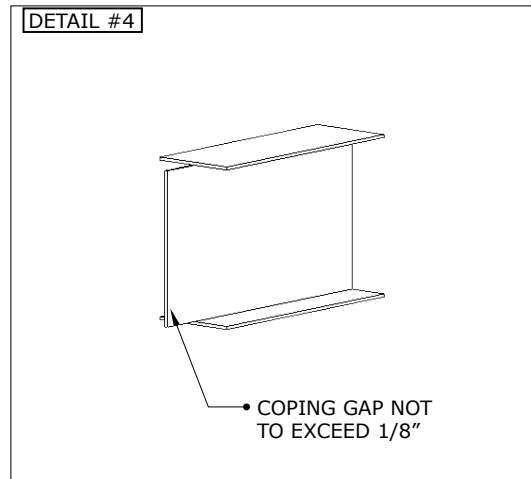
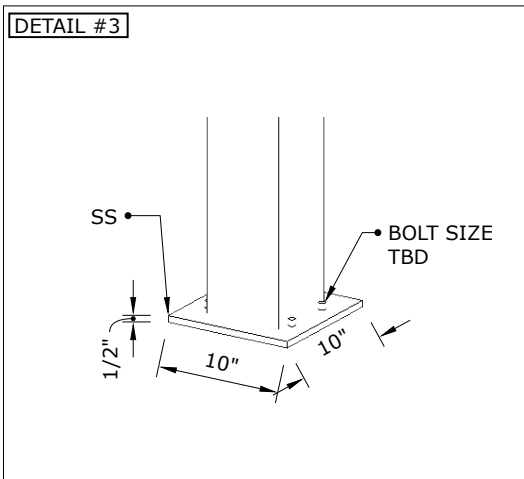
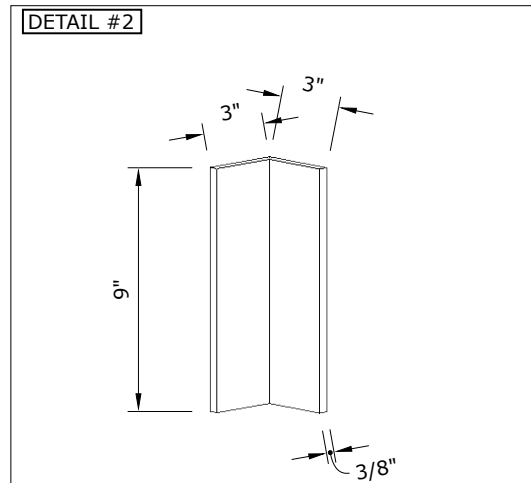
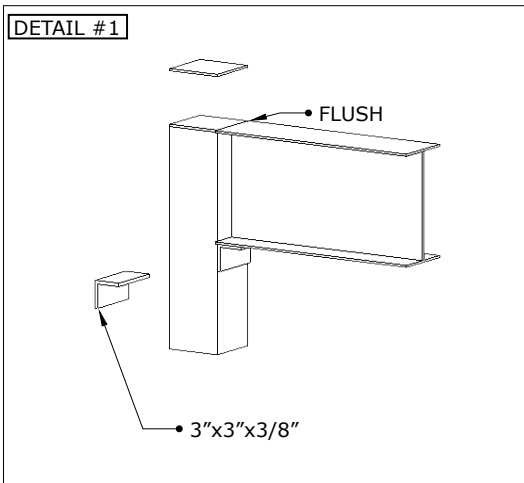
Channels for larger flows

These channels are available in various widths, engineered for the volumes of water to be transported. They are also capable of acting as temporary storage for large amounts of water for short periods.

The highest variety of covers are available for all our channels. Gratings, bar grates, and plate covers are available with various anti-slip and load bearing characteristics.

5.5 Steel connections

McFLESHMAN' STEEL DETAILS, UPDATED 3/8/17



6 Carpentry

6.1 Rough carpentry

- Provide labor and furnish material to perform and install the following:
 - Provide and install new floor joists as shown per plans
 - Framing of new walls as shown per plan at the first floor. This includes the walls shown at the new front door and half wall at first floor seating area.
 - Exterior walls rough framed on first and second floors
 - Framing of interior walls on second floor.
 - Repair existing beadboard ceiling on second level from recovered bead board removed from level 1.

6.2 Finish carpentry

- Provide labor and furnish material to perform and install the following:
 - Installation of all new doors, frames and hardware.
 - Installation of bathroom specialties and accessories including mirrors, grab bars, paper towel dispensers, etc. at (2) first floor bathrooms.
 - Installation of backing and blocking as required for proposed cabinetry as shown per plans.
- Wainscoting+chair rail in from recovered beadboard from ceiling.
 - tasting room
 - upstairs class room and contiguous
- 6” crown molding in tasting room.
- Build front bar for tasting room.
- Douglas fir over mezzanine steel.

6.3 Roof hatch

- Install a Bilco roof hatch at new location.

6.4 Flashing

- Provide labor and furnish material to perform and install the following:
 - Flashing at (2) RTV curbs.
 - Roofing repair at old hatch location.

7 Insulation

7.1 Foam insulation

- Provide and install sound batt insulation at all new interior walls
- Attic Insulation: Zip staple Reinforced Poly for a vapor barrier to add
- R-50 15” of Blown Cellulose.
- Exterior Wall Insulation: Spray approximately 2” R-13 of Urethane Foam.

8 Doors and windows

8.1 Windows

- Furnish and install dark bronze aluminum entrance(s), vestibule, and thermally broken dark bronze aluminum windows.
 - Door(s) to be medium style with standard hardware.
 - All exterior glazed with 1" tinted low-E insulated glass, tempered where required by code.
 - 10" bottom rail on entrance doors per new code.
 - Exterior sealants.
 - Tubelite material.

8.2 Doors

- Provide labor and furnish material to install the following:
 - (1) 4-0 x 7-0 5 3/4" 16 gauge hollow metal frame w/ existing wall anchors.
 - (1) 4-0 x 7-0 1 3/4" flush 18 gauge insulated hollow metal door.
 - (3) BB NRP 4 1/2 x 4 1/2 hinges.
 - (1) Entrance lockset.
 - (1) Closer.
 - (1) Drip cap.
 - (1) Latch guard.
 - (1) Threshold.
 - (1) Sweep.
 - (1) Weatherstrip.

8.3 Overhead doors

- Provide and install (1) new OH 8'X8' insulated door and operator.
- Repair or replace 2nd level barn door (5'x6' wide)

9 Finishes

9.1 Lab

- Provide and install acoustical ceiling grid and vinyl coated gypsum board tiles at Lab and Flame/Hood rooms

9.2 LVT flooring

- Supply and install LVT flooring for the following rooms:
 - Tasting room throughout
 - Class room and contiguous
 - Lab
 - Flame hood room
 - Office
 - Secured storage

9.3 Cementitious urethane

- Provide labor and furnish material to perform and install the following:
 - Prepare substrate to a tenacious surface by grinding and or shot-blasting.
 - Key in all perimeters and drains - no feathered edges permitted.
 - Install perimeter wall base (approximately 220 lf).
 - Install Sika 22n cementitious urethane with 31 n topcoat - final floor thickness nominal 3/16”.

9.4 Sealed concrete

- Seal concrete at all locations not receiving the cementitious urethane finish or LVT flooring.
 - Mill room
 - Storage room level 2
 - (2) bathrooms level 1

9.5 Drywall

- Provide labor and furnish material to perform and install the following:
 - Provide and install 5/8” gypsum board at all new walls and as shown per plan at rated wall assemblies.
 - Drywall finishing at a class 4 smooth finish.
 - Hang and finish drywall at the ceiling of second floor office area.

9.6 Painting

- Paint all new walls, and spray existing ceiling black.
- Paint coil duct work and exposed joists in tap room.

10 Specialties

10.1 Fire extinguishers

- Provide and install wall-mounted fire extinguishers as required per code.

10.2 Toilet accessories

- Provide toilet accessories for (2) first floor bathrooms.

10.3 Knox box

- Provide and install (1) exterior wall-mounted Knox Box as required per code.

21 Sprinklers

- Provide labor and material to install a wet pipe fire sprinkler system throughout the entire building.
 - Drains: All systems to drain properly to outside grade, the floor drain by riser, or have drain connections for low points within the system.
 - Backflow Preventer: One (1) Double Check Detector valve, as required.

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- Pipe and Fittings: All pipe and fittings to be of imported/domestic manufacture. All black steel piping, and ductile iron threaded/grooved fittings.
 - Alarm Apparatus included: One (1) Waterflow alarm switch. All systems butterfly shut off valves will be supplied with built-in tamper switches. (Wiring done by electrical contractor).
 - Hanger Attachments: All hanger attachments shall be as approved by NFPA 13.
 - Fire Department Connection: One (1) 2 1/2" x 2 1/2 x 4 standard Siamese connection, to be located as shown within the fire protection bid drawings.
 - Concealed Piping: N/A.
 - Exposed Piping: Piping within areas where structure is exposed, the piping will be installed exposed.
 - Spare Sprinkler Cabinet: One (1) spare sprinkler cabinet, complete with spare sprinkler heads, and wrench, as required by NFPA.
 - Underground Water Service by others (see above). An installed flanged tee must be provided for fire sprinkler service connection within the building.

22 Plumbing

- Provide labor and furnish material to perform and install the following:
 - Women's bathroom:
 - * (3) Kohler K-4199-0/K-4468-0 toilets.
 - * (3) Bemis 1955SSC seats.
 - * (2) Kohler K20050 wall hung sinks.
 - * (2) Delta 501-HDF faucets.
 - * (2) Grid drain.
 - * (2) Trap wrap.
 - * (1) Floor Drain.
 - Men's bathroom:
 - * (1) Kohler K-4199-0/K-4468-0 toilet.
 - * (1) Bemis 1955SSC seat.
 - * (2) Kohler K-4991-ETO urinal.
 - * (2) Sloan 186 flush valves.
 - * (2) Kohler K20050 Wall hung sinks.
 - * (2) Delta 501-HDF faucets.
 - * (2) Grid Drain.
 - * (2) Trap wrap.
 - * (1) Floor drain.
 - Utility Room:
 - * (1) Mustee H63 mop sink.
 - * (1) Mop sink faucet.
 - * (1) 50 gallon electric water heater.
 - Second floor bathroom:
 - * (2) Kohler K-41990/K44680 toilets.
 - * (3) Bemis 1955SSC seats.
 - * (2) Kohler K20050 wall hung sinks.
 - * (2) Delta 501-HDF faucets.

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- * (2) Grid drain.
 - * (2) Trap wrap.
 - Beer Garden Bar:
 - * (1) Hook-up owner’s sink.
 - * (1) Hub drain.
 - Back Bar:
 - * (1) Hook-up owner’s sink.
 - * (1) Hub drain.
 - * (1) Floor Drain.
 - Keg Cooler/Open Fermenter: (1) Floor drain each.
 - Production: (2) Floor drains.
 - Packaging: (1) Floor drain.
 - Cellar:
 - * (3) Track drain hook-ups.
 - * (1) Hook up owner’s sink.
 - * Provide and install all drain, vent, and water lines as needed for
 - * complete plumbing system as per plan given.
 - * Provide and install gas piping as per plan given.
 - * State approval plans and local permits included.

23 HVAC

- 1st Floor Includes Production
 - Trane YSC120F4RHA001G 10 Ton Heat/Cool, With Economizer 460/3
 - Curb,Smoke Detector,Thermostat
- 2nd Floor
 - Trane YSC120F4RHA001G 10 Ton With Economizer 460/3
 - Curb, Smoke Detector,Thermostat
 - Restrooms(4)
 - SDBD10 Roof Exhaust 375 CFM 1/4,Roof Curb,Damper
 - Berko SRA1012DS 208/1 Electric Wall Heater,Wall Sleeve
 - unisex/Shower Room
 - PC150X Bath Fan 110 CFM,Wall Cap
 - Berko FRA4042 Wall Heater & Wall Sleeve
 - women upper level restroom
 - Berko SRA2020 2 KW Elect Wall Heater
 - North Stairwell
 - Berke FFCH548 Electric Heater,Surface,Stat
 - Vestbule
 - Berko FRC4024 AWH4404 Wall Heater,Recess Wall Kit
 - Sheet Metal Duct Work,Spirial Exposed Ducts, RegistersOn Spirial
 - State Plans, Fees, Local Permit, Crane
- Gas piping to all equipment
- (CARPENTRY: Curb, flashing and roof structure to support)
- Gas Meter Ordered By Owner (2LB Pressure Needed)

26 Electrical

- Remove entire electrical for build-out.
- Walls to be firmed out by carpenter.
- Service:
 - Panel #5: 200-amp 3 phase sub-panel, allow 100' sub-feed.
 - (2) 2" Pipe stub to new addition.
- Lighting w/ Lamps & Control: Provide labor and materials to install the following:
 - (8) A PAR VT4-432-W-DR-UNV-EB81-WL-U VT4-432-W-DR-UNV-EB81-WL-U.
 - (2) B MET 2GR8-232A-UNV-EB81-U GR8 2 LMP, 2'X4' FL TROF, ELT BAL, T8.
 - (14) C1 MET WN-332A-UNV-EB82-U WN-332A-UNV-EB82-U.
 - (12) C2 MET WN-232A-UNV-EB81-U WN 2 LMP, 4' WRPARND, ELTRNC BAL, T8.
 - (1) D HAL H750T 6" NON-IC LED HOUSING.
 - (1) D HAL RL560WH9835 HALO RL56 WH 900LM 80CRI 3500K, C&I, COB.
 - (3) F MET SSF-232-UNV-EB81-U SSF 2 LMP, 4' WIDE STRP, ELTRNC BAL, T8.
 - (19) P1 BAS W516/41/INC/BLC.
 - (19) P1 CON LR2718D-E26-2700K-120V.
 - (9) P2 BAS W508/41/INC/BLC.
 - (9) P2 CON LG4509D-E26-2700K-120V.
 - (8) EM SUR SEL60R4BKSD LED EM, 60 FT, NICAD BAT, BLACK, SDLED EM.
 - (3) ER1 MET SRM25DGY METAL REMOTE, 25 COVER, DOUBLE HD, GY.
 - (1) ER2 SUR AEL246BK.
 - (4) EX SUR LPX7BKDH LPX COMBO UNIV SLA.
 - (3) EXH SUR LPXH7BKDH.
 - (2) XPL-LED-ALT INA HXPFL480U Line Note: LED.
 - (8) LED EXTERIOR WALLPACKS ON_WITH PHOTO/CLOCK/RELAY.
- Control Lighting: Provide labor and materials to install the following:
 - (2) S1 SWITCH ONLY.
 - (10) S1 SWITCH w/WALL OCCUPANCY SENSOR.
 - (6) S3 SWITCH.
 - (11) CEILING OCCUPANCY SENSOR w/RELAYS.
- 1st Floor Receptacles: Provide labor and materials to install the following:
 - (25) Convenience Receptacles.
 - (10) GFI Convenience Receptacles.
 - (8) 120V 20-amp Circuit Receptacles.
 - (2) 208V 20-amp Circuit Receptacles.
- 2nd Floor Receptacles: Provide labor and materials to install the following:
 - (20) Convenience Receptacles.
 - (4) GFI Convenience Receptacles.

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- (10) 120V 20-amp Circuit Receptacles.
 - (2) 208V 20-amp Circuit Receptacles.
 - Production Power: Provide labor and materials to install the following:
 - EMT in wet locations.
 - Line Wire/Power connections ONLY in scope.
 - Control/Supplementary wiring/testing/commissioning are NOT in scope.
 - Line Power to motors/cabinets and from cabinets to primary motors only in scope **This includes the commissioning/bringing online step of confirming/correcting (as needed) rotation on all 3 motors.
 - Line Wire:
 - (1) Gas Boiler - 1/3 HP to factory-supplied cabinet.
 - (6) Dedicated 120V 20-amp GFI Circuits.
 - (2) Dedicated 1 208V 20-amp Circuit Receptacles.
 - (2) Dedicated 3 208V 20-amp Circuit Receptacles.
 - Line Wire:
 - Brew Equipment @ 380 Volt, 3 per spec.
 - Furnish and install transformer for above.
 - Furnish and install distribution load center for above.
 - Brew Equipment, control panel, starters, overloads, fusing are figured existing in this cabinet.
 - * Supply feeder to existing brew control cabinet disconnect.
 - * (2) Pumps and (2) agitator motors on brewhouse control cabinet.
 - * (1) Transfer pump on steam panel (in front of boiler room).
 - (2) Portable transfer pumps with 3 portable pump receptacle plug in locations. These connections/devices all be wet location rated with local disconnects.
 - * Supply feeder to main (up to 24HP) glycol chiller.
 - * Supply feeder to glycol control cabinet.
 - * Supply feeder to glycol pump control cabinet.
 - Supply feeder to (2) glycol circulation pumps.
 - * Supply feeder to grinding mill motor.
 - * Supply 220V/1PH/50A feeder to small brewhous equipment.
 - * Supply feeder to (2) chillers.
 - HVAC: Provide labor and materials to install the following:
 - Line Wire:
 - * (2) 8.5 ton, (1) 3.5 ton.
 - * (1) Roof-mount Restroom Fan, on when occupied.
 - * (3) RTU Smoke Detectors.
 - * (3) WP GFI Receptacles.
 - * (4) Restroom Exhaust Fans, on when occupied.
 - * (2) Restroom In-wall Heaters.
 - Exterior Power: Provide labor and materials to install the following:
 - * (3) WP GFI Receptacles.
 - * (1) On-Building Sign Circuit.

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- * 50-amp (208V, 1) outlet for food truck on south wall.
 - Other: Provide labor and materials to install the following:
 - * Line wire only (1) 220V 3 25-amp Fork Lift Charger.
 - * Line wire only (1) Sprinkler/Alarm/Fire Bell.
 - * Line wire (1) 120V Door Opener Receptacle.
 - * Line wire (1) 220V Water Heater 10-amp.
 - * Line wire (1) 220V Water Heater 25-amp.
 - * (6) 3/4 Data Stubs to AFC.
 - (1) Lighting Layout
 - (1) Exit/Egress Point-by-Point.
 - (1) Local Permit.

31 Excavate

- same time that concrete poured for south staircase, trench for
 - 6" water service
 - 6" sanitary
 - new storm roof to storm catch on site
- remove concrete entire building, lower by 12" throughout
- remove 15'x26' apron out west entrance
 - Excavate and haul away spoils to lower 2700 sq ft slab 12" with 4" compacted
 - Excavate for concrete footings (see concrete scope) gravel.

32 Exterior

- North, south, east sides not to be painted
- Finishes necessary to trim out new overhead door west entrance
- Paint west block wall

33 Utilities

33.1 Gas service

- increase to 2 pounds

33.2 Site sanitary

- 6" sizing to handle 350 gpm

33.3 Site storm

- relocate from existing (which currently goes to sanitary)

33.4 Site water

- Provide labor and furnish material to perform and install the following:
 - Tap 6” water main.
 - Furnish and install 80’6” water main.
 - Backfill street and sidewalk with slurry mix.
 - Haul away extra dirt.
 - Install pipe under existing building to flange above the floor.
 - Pressure and bacterial test water/fire line.

34 Contingency fund

- Percent fee applied before administrative costs and permit fees are included.

35 CM, overhead

35.1 Construction management

- Supervise contracted field construction in progress.
- Schedule and direct supervision of contracted field construction forces.
- Interface building inspection officials.
- Ensure compliance of work with drawings and specifications.

35.2 Project superintendent

- Comply with OSHA requirements during the construction phase of this project.

35.3 Profit and mark-up

- Mark up percentage.

35.4 Legal fees

- Allowance to cover legal fees as necessary for AIA contract.

35.5 Insurance

- Please detail insurance policy.
- General Liabilities
- Workman’s Compensation.

35.6 Warranties

- Please detail warranty policy.

35.7 Payment schedule

- Please detail payment policy.