
CITY OF PORT LAVACA

COUNCIL MEETING: DECEMBER 12, 2022

AGENDA ITEM __

DATE: 12.07.2022

TO: HONORABLE MAYOR AND CITY COUNCIL MEMBERS

FROM: JODY WEAVER, INTERIM CITY MANAGER

SUBJECT: Animal Shelter renovations

BACKGROUND:

As you recall in November, we were considering a Job Order Contract with Brown & Root to renovate and make various required improvements to the Animal Shelter. The cost for the proposed scope of work was \$440,142.00.

Taking into account discussions during the Council meeting, we asked Brown & Root to revisit the project design and remove the roll up doors in the CMU walls and install louvers in their place. With this design, the CMU block is reduced from 12” to 8” and all the new steel work needed to bird proof the building is removed since the building would now be fully enclosed. The revised cost is \$306,672.00.

The State did come inspect the shelter a couple weeks ago and held off on taking any action against the shelter since this project was projected to begin after the first of the year. We are to notify the inspector once the work begins so he can come inspect and verify that the work is in fact underway.

FINANCIAL IMPACT:

We have budgeted \$250,197.00, so we would now need \$56,475 from general fund reserves.

RECOMMENDATION: It is staff’s recommendation to award Buy Board contract #581-19 to Brown & Root for the Base Bid amount of \$306,672.00.

ATTACHMENTS:

- Brown & Root’s proposal dated 12.7.2022
- Red-lined renovation plans



Brown & Root

December 7, 2022

Susan Lang
Finance Director
City of Port Lavaca
Port Lavaca, TX 77979

Subject: B&R RFP-353-008 – Revision 1
Project Location: Port Lavaca Animal Control Center
Project Title: Renovations and Conversion of Kennel from Open Air to Enclosed Facility

Dear Ms. Lang

Enclosed is our firm fixed Pre-Priced proposal for the above subject RFP.

Work to be performed under the terms and conditions of BuyBoard Contract 581-19. Pricing is based on 2022 RS Means Line-item values with CCI and contract Coefficient multipliers per the contract. Any additional items of work requested by the City, not included in this scope, will be handled as a change order.

Base Bid – Renovation of the building and constructing new walls to enclose the structure
\$ 306,672.00

The work will take 120 calendar days to complete from NTP.

NOTE: Mobilization and work activities will start once required materials are received and fabrications performed to minimize disruption and down time to the facility. The work will require 9 weeks to complete once materials are received and fabrication is complete, based on good weather.
The proposal is valid for 30 days.

Please direct any questions to Dan Croasmun at (832) 503-6292.

Sincerely,

Daniel Croasmun
Project General Manager

Attachments: Proposed Scope of Work
UPB Line Item Take Off

RE: Port Lavaca – Animal Control – Renovation – Revision 1 – Convert to Enclosed Facility

RFP NO: 1000353-008

Scope of work

Perform the renovations of the animal control building to convert it from open air to an enclosed facility as detailed below:

Expanded scope of work

- **A&E Services:**
 - Revise the Architectural drawings to reflect changes made to convert project design from open air to an enclosed facility based on the 11/28/22 marked up red line drawings.
 - Run calculations and revise the structural drawings to change new CMU walls from 12" x 8" CMU block based on louvers being installed in lieu of original overhead doors.
 - Revise MEP's to be reflective and deleted scope items and to size the louvers going into the new CMU wall for ventilation of the kennels
- **Masonry:**
 - Remove the 3-2'x2' hollow metal windows located on the exterior CMU walls of the office area. Remove the CMU block and saw cut joints as needed to create a full block infill repair without using any cut or segments of blocks. No partial block repairs will be allowed.
 - Remove the 4'x4' exhaust fan located on the rear wall of the building. Remove the CMU block and saw cut joints as needed to create a full block infill repair without using any cut or segments of blocks. No partial block repairs will be allowed.
 - Remove the 2'3" x 4' louver located on the exterior front wall. Remove the CMU block and saw cut joints as needed to create a full block infill repair without using any cut or segments of blocks. No partial block repairs will be allowed.
 - Fill all holes from old and/or previous fasteners in the CMU walls with mortar and fill voids in the mortar along the tops of the wall where metal roof flashing intersects.
 - Remove six of the existing hollow metal doors and frames at door locations 101A, 101B, 104, 105A, 106A, and 107. Replace the doors and frames with new 16 gauge knock down frames and 20 gauge hollow metal doors. Install new LCN door closures, zinc coated hinges with bearings and weather stripping and thresholds to match current hardware set up on each door. Reinstall the locksets from the old doors onto the new doors.
 - Construct the new 8" CMU wall along with all associated wood bucks, angle iron connectors and metal flashing. Install 6-4'x5' louvers with ¼" galvanized wire screen in the new walls. Remove and reinstall down spouts due to new CMU wall construction. Install 2-new ped doors in new CMU wall with matching hardware and push button lockset. Construct new 8" CMU return wall on southwest corner in lieu of wood and siding wall.
- **Fencing / Metals:**

- Install new fence post, gate post, top rail, bottom rail, and chain link give gates on southwest corner as shown on sheet A1.0. Install new chain link meshing on repair area and 3 strands of barb wire. All materials to be galvanized and matching in size gauge and thickness.
- Install ¼" galvanized wire mesh on interior of the building's roof vent to prevent entry of birds and other vermin.
- Fabricate new frame for the existing cat quarantine door. Reinstall the door and new frame to the CMU wall using galvanized anchors.
- Remove the chain link walk gate along with a total of 16' of exiting fence next to the propone tank to allow for access to work site in rear of property. Once the work is complete on the rear of the property, replace the removed fence section and walk gate
- Demolish and remove the existing wooden fencing on northwest side of building.
- Demolish and the existing chain link fence, gates and woven 1" mesh that runs along the roof line of the kennels where the new CMU walls will be built
- Remove the existing anchors for the 40 kennel grates and install stainless steel anchors. Re-attach the grates.
- Relocate and modify the 20-guillotine door pull handles so that they do not interfere with the kennel doors
- **Painting**
 - Remove flaking and peeling paint from CMU walls. Pressure wash all exterior CMU surfaces using Trisodium Phosphate and 3,000 psi pressure washer. All CMU mortar joints that are currently cracked are to be caulked with acrylic latex sealant once walls are cleaned
 - Prep and paint all galvanized gutters, galvanized downspout, and galvanized fascia.
 - Prime all new CMU and paint all exterior CMU wall surfaces. Where CMU wall infills occur, ensure interior side of wall is block filled and painted as well. Prep procedures and material usage per the paint manufacture, Sherwin Williams project procedure manual attached.
 - Prep all kennel floors, CMU walls, and wire cages to receive new epoxy coating material. Preparation to include grinding, sanding, etching, stripping, and pressure washing the concrete, CMU and metal components to ensure proper epoxy adhesion. Follow all protocol by Sherwin Williams as to preparation of the materials and have Sherwin Williams perform site visit during perpetration to ensure proper guidelines are being followed. All epoxy coatings per Sherwin Williams Protocol and material specification, per the mill thicknesses they call out for
 - Contact Lee Pullen (361)-484-4138, 1301 N. Virginia St, Port Lavaca TX. For specific material and protocol for new coatings and site visits during project to ensure proper compliance with Sherwin Williams procedures and protocols.
 -
- **Electrical**
 - Remove, clean and reinstall the 9 existing ceiling mounted fans.
 - Install 6-new 8' enclosed LED lights in the kennel and tie to existing lighting in the room.
- **Concrete**

- Clear area of all vegetation where the new CMU wall foundation is to be poured. Preform subgrade preparation and compaction per engineer's design. Drill piers as designed and pour spread footing per engineer's design drawings
- Level and grade off area around new CMU wall. Place Bermuda sod over disturbed grounds as needed.

BRIS General Clarifications:

- A red line set of as built drawings, copies of all shop drawings and submittals, warranties, paint codes, MSDS sheets, a statement that no asbestos containing materials were used, Lien release and Consent of Surety will be submitted in the close out package upon completion.
- The price is accepted as a lump sum fixed firm price and this scope of work and the construction drawings become the controlling documents.
- Brown & Root will require complete access to the work during normal hours to perform operations.
- Unless otherwise identified by owner during preproposal discussions; no other contractors or vendors will be able to work in Brown & Root's work area(s) while our work is underway for safety reasons
- Any owner employees and/or contractors will be required to wear proper PPE in Brown & Root work areas.
- Pricing assumes normal working hours of 8:00 AM to 5:00 PM Monday – Friday.
- Brown & Root pricing assumes continuous access to the "work" without interruption or any work stoppages for any reason. Direct costs incurred by the need for additional demobilization and remobilization or work stoppages will be handled as a change order.
- Payment and Performance Bonds are included in this proposal.
- Any required building & trade permits are included in this proposal.
- Owner will verify no hazardous material will be encountered by Brown & Root and provide UpToDate/most current ACM surveys.
- All work shall be in accordance with all OSHA Standards, applicable federal, state, and local codes, and regulations and good construction practices.
- Includes all materials, equipment, and labor to complete the above scope of work. Means and methods are best estimate at the time of this proposal, owned by Brown & Root and subject to change without price modifications except for unforeseen/hidden conditions.
- Brown & Root shall remove from site all spoils, equipment and materials during the project progress and after completion of this project.
- If owner takes possession of any part of the Work before final acceptance, the correction period shall continue for a period of one (1) year from date possession is taken.
- Approval of this proposal designates acceptance of the scope of work statement and line-item estimate which has been used only to develop a mutually agreed price. The price is accepted as a lump sum fixed firm price and the incorporated scope of work becomes the controlling document taking precedence over line-item estimate detail.

BRIS Exclusions

- Sales and/or use tax.
- Existing code violations are excluded.
- Handling or removal of any hazardous materials including, but not limited to Mold, Asbestos Containing Materials., Lead, PCB's, Chemicals and/or Contaminated Soils.

- No data/communications work is included in this proposal.
- Hidden or unforeseen conditions
- Any items of work or repairs beyond this scope of work
- Underground existing obstructions
- Warranty of or replacement of Owner supplied materials and equipment.
- Owner and/or 3rd party testing.

Drawings: November 28th red lined drawings of sheets A1.0, A2.0, A3.0, A4.0, E1.0, E1.1, E2.0, E3.0, ESP1.0, P1.0 and P2.0 by Swarts Architects dated 9/14/2022

Specifications: Sherwin Williams Product Submittal – Animal Shelter – Pages 1-86 - Dated August 17, 2022

Labor Rate Table	2022 RS Means Facilities Construction with O&P
Equipment Rate Table	2022 RS Means Equipment with O&P

Client	City of Port Lavaca
Project	Convert open air kennel to enclosed structure
Location	Animal Control Center
B&R RFP Number	RFP #008
Contractor	Brown & Root Industrial Services, LLC / On Call Construction
Date	12/7/2022

Master Format Code	Item Code	Division Code	Item Description	Takeoff Qty	Unit	Locs	Labor Unit Price	Labor Total	Mat Unit Price	Mat Total	Equip Unit Price	Grand Total	Equip Total	Subs Total	Other Total	User Total	w/CCI & Coef Applied	Total
01			General Conditions					18,801.42		3,851.40		49,654.54	11,461.71		15,540.02		33,919	
01113110		0100 01	Architectural fees, for alteration work, to \$500,000, minimum		175,000.00	%Projec						12,862.50					8,786	
			redesign of A&E groups to take design from open air to closed facility based on marked up drawings															
01311390		0020 01	Performance Bond, for buildings, minimum bonding of project. Based on raw number as coefficient is calculated deducted from number.		446,253.00	%Job						2,677.52			2,677.52			1,829
01540950		0020 01	Respirator mask only, full face, silicone		4.00	EA			205.00	820.00		820.00						560
			PPE to prep kennel area for coatings															
01540950		0050 01	Respirator cartridges, chemical vapor, 2 req'd per mask		4.00	EA			5.30	21.20		21.20						14
01540950		0060 01	Respirator cartridges, combination vapor and dust, 2 req'd per mask		16.00	EA			13.40	214.40		214.40						146
			PPE to prep kennel area for coatings - 2 per day per mask for 2 days															
01540950		0320 01	Over boots, neoprene		4.00	pair			38.00	152.00		152.00						104
			PPE to prep kennel area for coatings															
01540950		0400 01	Gloves, nitrile/PVC		4.00	pair			119.00	476.00		476.00						325
			PPE to prep kennel area for coatings															
01541650		0100 01	Forklift crew, all-terrain forklift, 45' lift, 35' reach, 9000 lb. capacity, weekly use		1.00	week		3,544.21	3,544.21		3,465.00	7,009.21	3,465.00					4,788
			Equipment to move and stage block for new wall															
01542370		0090 01	Scaffolding, steel tubular, regular, labor only to erect & dismantle, building exterior, wall face, 6'-4" x 5' frames, 1 to 5 stories, excludes planks		20.00	Csf		268.51	5,370.18			5,370.18						3,668
			scaffold items for new wall construction															
01542370		0906 01	Scaffolding, steel tubular, regular, rent/month only for complete system for face of walls, 6' -4" x 5' frames, excludes planks		20.00	Csf			83.00	1,660.00		1,660.00						1,134
01542370		2850 01	Scaffolding, steel tubular, regular, accessory, plank, rent/mo, 2" x 10" x 16' long		36.00	EA			10.05	361.80		361.80						247
01542370		5700 01	Scaffolding, planks, labor only to install & remove, 2"x10"x16", up to 50' high		36.00	EA	29.79	1,072.45				1,072.45						733
01543340		0020A 01	Rent aerial lift, scissor type, to 20' high, 1200 lb. capacity, electric - Hourly operating cost		160.00	hour					3.59	574.40	574.40					392
			access high areas of walls for conduits and paint															
01543340		0020C 01	Rent aerial lift, scissor type, to 20' high, 1200 lb. capacity, electric - Rent per week		6.00	week					375.56	2,253.36	2,253.36					1,539
			access high areas of walls for conduits and paint															
01543340		0020E 01	Rent aerial lift, scissor type, to 20' high, 1200 lb. capacity, electric - Crew daily cost		30.00	days					103.86	3,115.80	3,115.80					2,128
			access high areas of walls for conduits and paint															
01543650		1200 01	Mobilization or demobilization, delivery charge for small equipment, placed in rear of, or towed by pickup truck		6.00	EA		177.60	1,065.60		49.50	1,362.60	297.00					931
			mob and demob small equipment and crews for painters, electrician and metals portin of project															
01543650		1200 01	Mobilization or demobilization, delivery charge for small equipment, placed in rear of, or towed by pickup truck		4.00	EA		177.60	710.40		49.50	908.40	198.00					621
			mob and demob small equipment and crews for CMU and concrete work															
01543650		1400 01	Mobilization or demobilization, delivery charge for equipment, hauled on 20-ton capacity towed trailer		2.00	EA		693.08	1,386.17		253.00	1,892.17	506.00					1,293
			mob and demob aerial lift															
01543650		1400 01	Mobilization or demobilization, delivery charge for equipment, hauled on 20-ton capacity towed trailer		4.00	EA		693.08	2,772.34		253.00	3,784.34	1,012.00					2,585
			mob and demob large equipment for concrete and CMU work															
01712313		1200 01	Boundary & survey markers, crew for building layout, 3 person crew		1.00	days		2,313.03	2,313.03		40.15	2,353.18	40.15					1,607
			lay out new wall piers and beam															
01712319		0020 01	Surveyor stakes, hardwood, 1" x 1" x 48" long		1.00	C			90.00	90.00		90.00						61
01931304		0120 01	Caulking masonry, cutout and recaulk, polysulfide, excl. staging		100.00	LF		5.67	567.04	0.56	56.00	623.04						426
			prep CMU walls for paint															
02			Existing Conditions					8,338.40		6,358.00		15,069.73	373.33				10,294	
02411360		0700 02	Fencing demolition, remove snow fence, 4' high		200.00	LF		1.88	375.31		0.36	447.91	72.60					306
			remove 2-layers of 1"mesh wrapped on fence															
02411360		1700 02	Fencing demolition, remove chain link posts & fabric, 8' to 10' high		100.00	LF		4.19	419.46		0.81	500.86	81.40					342
			demo chain link fabric where wall installs															
02411362		0200 02	Selective demolition, chain link fences & gates, gates, 10'-12' width		2.00	EA		116.69	233.38		22.55	278.48	45.10					190
			repair fence gates in front and remove fence in back for access to new work area															
02411362		1000 02	Selective demolition, chain link fences & gates, fence, posts, steel in concrete		7.00	EA		23.34	163.37		4.52	195.02	31.65					133
			repair fence posts in front and remove fence in back for access to new work area															
02411362		1000 02	Selective demolition, chain link fences & gates, fence, posts, steel in concrete		12.00	EA		23.34	280.06		4.52	334.31	54.25					228
			remove fence posts at new wall															
02411362		1100 02	Selective demolition, chain link fences & gates, fence, fabric & accessories, fabric, to 8' high		30.00	LF		2.33	70.02		0.45	83.55	13.53					57
			repair fence fabric in front and remove fence in back for access to new work area															
02411362		1400 02	Selective demolition, chain link fences & gates, fence, fabric & accessories, fence rails		30.00	LF		0.93	27.91		0.18	33.19	5.28					23
			repair fence rails in front and remove fence in back for access to new work area															
02411362		1400 02	Selective demolition, chain link fences & gates, fence, fabric & accessories, fence rails		100.00	LF		0.93	93.04		0.18	110.64	17.60					76
			remove fence top rail at new wall															
02411362		1500 02	Selective demolition, chain link fences & gates, fence, fabric & accessories, reinforcing wire		100.00	LF		0.38	37.85		0.08	45.55	7.70					31
			remove wire along bottom of fence run															
02411368		0300 02	Selective demolition, wood fences & gates, fence, to 8' high		52.00	LF		3.15	163.58			163.58						112
			remove wood screen wall															
02411368		0400 02	Selective demolition, wood fences & gates, post in concrete		8.00	EA		23.20	185.57			185.57						127
			remove wood screen wall posts															
02411919		0800 02	Selective demolition, rubbish handling, dumpster, 30 C.Y., 7 ton capacity, weekly rental, includes one dump per week, cost to be added to demolition cost		8.00	week			730.00	5,840.00		5,840.00						3,989
			dumpster on site for debris collection															
02411919		2040 02	Selective demolition, rubbish handling, 0'-100' haul, load, haul, dump and return, hand carried, cost to be added to demolition cost		55.00	CY		69.91	3,844.93			3,844.93						2,626
			haul trash to dumpster															
02411920		0100 02	Selective demolition, dump charges, typical urban city, building construction materials, includes tipping fees only		7.00	ton			74.00	518.00		518.00						354
			disposal fee of construction debris															
02411927		1090 02	Selective demolition, torch cutting, steel, minimum labor/equipment charge		6.00	Job		407.32	2,443.91		7.37	2,488.13	44.22					1,700
			torch old steel frames to remove from walls															
03			Concrete					18,949.69		7,391.89		27,925.58	1,584.00				19,076	
03111345		5000 03	C.I.P. concrete forms, footing, spread, plywood, 1 use, includes erecting, bracing, stripping and cleaning		250.00	sfca		8.98	2,244.20	3.13	782.50	3,026.70						2,068
			forms set on 1-side for grade/slab extension beams															
03150512		2200 03	Chamber strip, polyvinyl chloride, 3/4" wide with leg		105.00	LF		1.37	143.47	0.89	93.45	236.92						162
			strip set in forming for CMU brick pocket															
03150530		8600 03	Tie wire, for reinforcing steel, 16 gauge, black annealed		1.00	Cwt			167.00	167.00		167.00						114
			tie wire for rebar															
03211160		0602 03	Reinforcing steel, in place, slab on grade, #3 to #7, A615, grade 60, incl labor for accessories, excl material for accessories		2,855.00	lb		0.72	2,053.25	0.73	2,084.15	4,137.40						2,826
			rebar and stirrups for grade beams															
03211160		1000 03	Reinforcing steel, in place, under 10 ton job, #3 to #7, add		3,557.00	%		0.10	355.70	0.25	889.25	1,244.95						850
			adder for under 10 tons of rebar															
03211160		2000 03	Reinforcing steel, unload and sort, add to base		3.00	ton		53.01	159.04		23.10	228.34	69.30					156
			shake out rebar															
03211160		2400 03	Reinforcing steel, in place, dowels, deformed, 2' long, #3, A615, grade 60		69.00	EA		2.92	201.73	0.60	41.40	243.13						166
			dowel new concrete into existing foundation every 18"															
03211160		2615 03	Dowel sleeve, plastic, 12" long for 5/8" smooth dowel, snap onto plastic base		18.00	EA		1.89	34.05	1.41	25.38	59.43						41
			placing sleeves onto dowels															
03211160		2750 03	Dowel cap, impalement protective, plastic, #4 to #9		70.00	EA		1.89	132.42	1.60	112.00	244.42						167
			caps placed on rebar stabbed out of the foundation for CMU wall															
03311335		0200 03	Structural concrete, ready mix, heavyweight, 3500 psi, includes local aggregate, sand, Portland cement (Type I) and water, delivered, excludes all additives and treatments		18.00	CY			161.00	2,898.00		2,898.00						1,980
			concrete for spread footing and pier caps															
03311335		1410 03</																

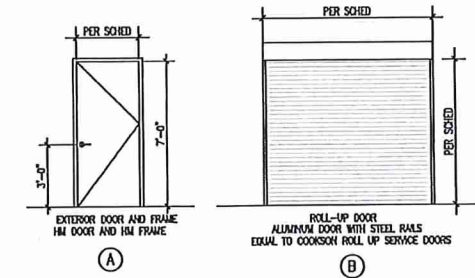
Faster Format Code	Item Code	Division Code	Item Description	Takeoff Qty	Unit	Locs	Labor Unit Price	Labor Total	Mat Unit Price	Mat Total	Equip Unit Price	Grand Total	Equip Total	Subs Total	Other Total	User Total	Total w/CCI & Coef Applied
03354310		0210 03	Polished concrete floors, processing of interior floors, grinding and edging with diamond/metal matrix, 40-grit, includes wet grinding, wet vac pick-up, auto scrubbing between grit changes	3.00	Msf	Kennel wall encl door	1,558.94	4,676.81	37.50	112.50	289.30	5,657.21	867.90				3,864
grind floor of kennel area and walls as needed to receive new coatings																	
03821310		0100 03	Concrete core drilling, core, reinforced concrete slab, 1" diameter, up to 6" thick slab, includes bit cost, layout and set up time	80.00	EA		77.67	6,213.86	0.22	17.60	7.70	6,847.46	616.00				4,677
drill holes for new kennel grate anchoring and angle iron installation																	
04 Masonry							53,314.56		30,089.66		85,890.22	2,486.00					58,672
04012020		0320 04	Pointing masonry, tuck, cut and re-point, hard mortar, common bond	114.00	SF		9.21	1,049.99	0.83	94.62		1,144.61					782
to perform a proper ans clean infill of CMU patches																	
04012040		0050 04	Sawing masonry, brick or block, by hand, per inch depth	34.00	LF		4.64	157.74	0.05	1.70	0.97	192.35	32.91				131
cutting out blocks for full brick patches																	
04012050		0720 04	Toothing masonry, blockwork, hard mortar	30.00	vft		11.60	347.95				347.95					238
tooth in patches of new to old block																	
04012050		9000 04	Toothing masonry, minimum labor/equipment charge	5.00	Job		144.58	722.91				722.91					494
tooth in 5-small infills in the walls																	
04012052		0240 04	Cleaning masonry, new construction, heavy construction dust, drips or stains, by chemical, brush and rinse, excludes scaffolding	1,100.00	SF		2.15	2,361.34	0.12	132.00		2,493.34					1,703
Wash block walls after construction																	
04012052		1240 04	Cleaning masonry, sandblast, wet system, heavy soil, biological and mineral staining, paint, excludes scaffolding	4,400.00	SF		3.58	15,745.46	0.76	3,344.00	0.48	21,219.06	2,129.60				14,495
pressure wash walls, floors, ceiling and wire cages in kennels for new coating= 12.868 sq ft total surface																	
04050510		0200 04	Selective demolition, masonry, bond beam, 8" block with #4 bar	14.00	LF		36.54	511.60				511.60					349
demo head of old openings for clean infill																	
04050510		9000 04	Selective demolition, masonry, minimum labor/equipment charge	11.00	Job		289.16	3,180.81				3,180.81					2,173
remove CMU at 3-windows, 1-fan and 1-louver and 6-door frames to allow for proper full block infill and new frame installation																	
04051330		2100 04	Mortar, portland cement and lime, 1:1/4:3 mix, type M	4.00	CF		4.04	16.15	14.35	57.40		73.55					50
mortar for wall in fills																	
04051330		2100 04	Mortar, portland cement and lime, 1:1/4:3 mix, type M	976.00	CF		4.04	3,940.70	14.35	14,005.60		17,946.30					12,259
mortar for wall in fills																	
04051630		0350 04	Grout, concrete masonry unit (CMU) cores, 12" thick, 0.422 C.F./S.F., pumped, excludes blockwork	976.00	SF		4.02	3,925.21	2.24	2,186.24	0.24	6,347.64	236.19				4,336
grouting of block cells																	
04051630		0850 04	Grout, door frames, 6" x 7" opening, 3.5 C.F. per opening	6.00	Opng		57.23	343.36	18.60	111.60	3.39	475.29	20.33				325
grout hollow metal ped door openings after old frame removed																	
04051630		2000 04	Grout, for bond beams, lintels and concrete masonry unit (CMU) cores, C476, includes material only	100.00	CF		7.34	734.40	5.30	530.00	0.44	1,308.40	44.00				894
bond beam along top of walls																	
04051630		9000 04	Grout, minimum labor/equipment charge	6.00	Job		354.00	2,124.00				2,124.00					1,451
grout new door frames																	
04051926		0050 04	Masonry reinforcing bars, #3 and #4 reinforcing steel bars, placed vertically, ASTM A615	2,021.00	lb		2.02	4,078.94	0.73	1,475.33		5,554.27					3,794
rebar called out for connection to beam, bond beam and verticle ties																	
04221010		2650 04	Concrete block, hollow, normal weight, 3500 psi, 8" x 8" x 16", includes material only	1,211.00	EA				1.97	2,385.67		2,385.67					1,630
1077 sq ft blocks = 1211 blocks - material only - no labor or equipment in line item																	
04221016		0130 04	Concrete block, bond beam, normal weight, 2000 psi, 8" x 8" x 16", includes mortar, excludes scaffolding, horizontal reinforcing, vertical reinforcing and grout.	112.00	LF		5.80	649.50	4.72	528.64		1,178.14					805
bond beam along the top of the new walls																	
04221024		0200 04	Concrete block, exterior, tooled joints both sides, normal weight, 2000 psi, 8" x 8" x 16", includes mortar and horizontal joint reinforcing every other course, excludes scaffolding, grout and vertical reinforcing	1,077.00	SF		9.13	9,834.24	4.58	4,932.66		14,766.90					10,087
laying block and tooing block joints each side of walls																	
04221024		9000 04	Concrete block, exterior, minimum labor and equipment charge	5.00	Job		640.80	3,203.99				3,203.99					2,189
labor only to infill 3-windows, 1-fan and 1-louver																	
04221032		1700 04	Concrete block, intel, 2000 psi, 8" x 16" x 12", includes mortar, grout and 2-#5 horizontal reinforcing bars, excludes scaffolding and vertical reinforcing	36.00	LF		10.73	386.28	8.45	304.20	0.64	713.44	22.97				487
lintels at louver openings																	
05 Metals							29,616.45		6,065.90		38,415.88	2,733.53					26,242
05011051		6270 05	Metals cleaning, steel surface treatment, 12.0 lb sand per S.F., near white blast, existing coat badly pitted, nodules (SSPC-SP10)	125.00	SF		17.47	2,183.45	2.14	267.50	2.28	2,735.57	284.63				1,869
prep metals for galvanizing																	
05050510		0030 05	Selective metals demolition, nuts, 7/8" to 1-1/4" diameter, remove nut only, excl shoring, bracing, cutting, loading, hauling, dumping	80.00	EA		3.32	265.39				265.39					181
demo the nuts holding kennel floor grates for rehabilitation																	
05050510		2840 05	Selective metals demolition, demolish steel bar grating, excl shoring, bracing, cutting, loading, hauling, dumping	160.00	SF		6.65	1,063.44			0.52	1,146.16	82.72				783
removal of the kennel grates																	
05051350		5900 05	Paints and protective coatings, galvanizing structural steel in shop, under 1 ton, hot dip	1.00	ton				695.00	695.00		695.00					475
hot dip galvanizing angle irons																	
05051910		1430 05	Chemical anchor, 3/4" diameter x 9-1/2" L, in concrete, brick or stone, incl layout, drilling, threaded rod & epoxy cartridge	50.00	EA		49.14	2,457.01	7.70	385.00	4.85	3,084.56	242.55				2,107
anchors to secure buck to top of wall																	
05051910		1435 05	Chemical anchor, 1" diameter x 11-3/4" L, in concrete, brick or stone, incl layout, drilling, threaded rod & epoxy cartridge	80.00	EA		55.48	4,438.47	15.10	1,208.00	5.47	6,083.83	437.36				4,156
stainless steel anchors for kennel grate rehab. 2 per kennel																	
05051920		1100 05	Arched expansion shield, zinc, 3/4" dia x 3-15/16" L, double, in concrete, brick or stone, excl layout & drilling	140.00	EA		11.04	1,545.91	6.45	903.00		2,448.91					1,673
secure 2 1/2x2 1/2 angle to wall and 3x3 angle																	
05052110		9000 05	Cutting, steel, incl prep, torch cutting & grinding, excl staging, minimum labor/equipment charge	1.00	Job		407.32	407.32			7.37	414.69	7.37				283
cutting steel angle for louver openings																	
05052115		1945 05	Drilling holes in steel for anchors, 1/2" diameter, incl bit & layout, excludes anchor, for each additional 1/4" depth, add	140.00	EA		2.77	387.77	0.08	11.20		398.97					273
drill out 2 1/2x2 1/2 angle to bolt it in to CMU wall and 3x3 angle																	
05052190		0300 05	Welding structural steel in field, cost per welder, 1/8" dia, type 8011, incl 1 operating engineer	48.00	hour		190.63	9,150.18	6.40	307.20	20.24	10,428.90	971.52				7,124
2-man welder crew on site 3- days to replace bolts and hinge system on grates in 40 kennels to stainless steel hardware and reloacte guillotine door pulls																	
05052387		0500 05	Weld stud, 1/2" dia x 3-1/8" L	124.00	EA		1.57	194.49	0.83	102.92	0.56	366.97	69.56				251
studs on 4" cleat to secure to wall and angle on door slab openings																	
05122340		0468 05	Angle framing, structural steel, 1-1/2"x1-1/2"x3/16", field fabricated, incl cutting & welding	24.00	LF		24.06	577.36	1.77	42.48	1.62	658.65	38.81				450
angle iron frame for cat gate																	
05122340		0472 05	Angle framing, structural steel, 2-1/2"x2-1/2"x1/4", field fabricated, incl cutting & welding	40.00	LF		33.68	1,347.18	4.03	161.20	2.25	1,598.58	90.20				1,092
2 1/2 x 2 1/2 angle baraces along ends of new wall																	
05122340		0476 05	Angle framing, structural steel, 3"x3"x3/8", field fabricated, incl cutting & welding	112.00	LF		42.50	4,760.03	7.05	789.60	2.85	5,868.72	319.09				4,009
angle on bucks along top of wall as called out on detail drawing																	
05122365		2210 05	Steel plate, 1/4" T, warehouse price, no shop fabrication, welded in place	112.00	SF		7.49	838.45	10.65	1,192.80	1.69	2,220.98	189.73				1,517
4" x 1/4" thick galv cleat																	
06 Wood, Plastics, And Composites							2,370.03		631.40		3,001.43						2,050
06111024		5000 06	Wood framing, miscellaneous, nailers, treated, wood construction, 2" x 4"	90.00	LF		1.80	161.58	0.86	77.40		238.98					163
treated 2x4 framing of wall																	
06111024		8100 06	Wood framing, miscellaneous, stair stringers, 2" x 12"	200.00	LF		11.04	2,208.45	2.77	554.00		2,762.45					1,887
2x12 presure treated blocking on top of wall																	
07 Thermal and Moisture Protection							2,927.24		1,055.40		3,982.64						2,721
07464610		0045 07	Fiber cement siding, lap siding, rough sawn texture, 5/16" thick x 8" wide, 6-3/4" exposure	160.00	SF		3.37	538.92	1.90	304.00		842.92					576
siding on new end wall																	
07611610		9000 07	Batten seam sheet metal roofing, minimum labor/equipment charge	2.00	Job		420.29	840.58				840.58					574
dismantle and reassemble ridge for screen installation																	
07651010		0100 07	Sheet metal flashing, aluminum, flexible, mill finish, .032" thick, including up to 4 bends	150.00	SF		4.71	707.23	4.24	636.00		1,343.23					918
cap flashing on top of new walls																	
07712310		0400 07	Aluminum downspouts, enameled, 3" x 4", .024" thick	30.00	LF		6.01	180.26	2.90	87.00		267.26					183
remove and reinstall 3-10' downspouts																	
07722310		9000 07	Roof vents, minimum labor/equipment charge	2.00	Job		247.79	495.58				495.58					339
open up ridge vent to install screen and re-attach it																	
07912310		0052 07	Pre-formed joint seals, backer rod, polyethylene, 1/2" dia	40.00	LF		1.54	61.51	0.16	6.40		67.91					46
rod for joint sealant on verticle angle iron braces																	

Master Format Code	Item Code	Division Code	Item Description	Takeoff Qty	Unit	Locs	Labor Unit Price	Labor Total	Mat Unit Price	Mat Total	Equip Unit Price	Grand Total	Equip Total	Subs Total	Other Total	User Total	w/CCI & Coef Applied	Total
07921320	1800	07	Joint sealants, caulking and sealants, butyl based, bulk, 1/2" x 1/2", in place	40.00	LF		2.58	103.16	0.55	22.00		125.16						85
sealing verticle angles to walls																		
08																		
Openings																		
08011110	0012	08	Door & window maintenance, remove weatherstripping, door or window	6.00	EA		15.89	95.33				95.33						65
removal of doors and frames to be replaced																		
08011110	0060	08	Door & window maintenance, remove lockset	12.00	EA		35.75	428.98				428.98						293
remove 6 locksets on old doors, save and then reinstall on 6 new doors																		
08011110	1140	08	Door & window maintenance, remove deadbolt	6.00	EA		51.64	309.82				309.82						212
removal of doors and frames to be replaced																		
08050510	0202	08	Door demolition, exterior door, single, 3' - 6" x 7" high, 1-3/4" thick, remove	6.00	EA		48.46	290.75				290.75						199
removal of doors and frames to be replaced																		
08050510	2000	08	Door demolition, door frames, metal, remove	6.00	EA		89.77	538.61				538.61						368
removal of doors and frames to be replaced																		
08050520	1000	08	Window demolition, steel, to 12 S.F., includes aluminum frame	3.00	EA		44.49	133.46				133.46						91
remove 3- hollow metal windows																		
08121313	0100	08	Frames, steel, knock down, hollow metal, single, 16 ga., up to 5-3/4" deep, 3'-0" x 7'-0"	8.00	EA		89.77	718.14	175.00	1,400.00		2,118.14						1,447
new hollow metal frames																		
08121313	4900	08	Frames, steel, knock down, hollow metal, for welded frames, add	8.00	EA				124.00	992.00		992.00						678
add for welded frames																		
08131325	0560	08	Doors, exterior, steel, commercial, flush, 20 ga., 1-3/4" x 7'-0" x 3'-0" wide	8.00	EA		102.48	819.83	560.00	4,480.00		5,299.83						3,620
new metal doors																		
08712030	8150	08	Door hardware, door closer, surface mounted, heavy duty, parallel arm, modern	8.00	EA		119.16	953.29	355.00	2,840.00		3,793.29						2,591
new ped door items																		
08712040	3800	08	Door hardware, cipher lockset, with key pad	2.00	EA		54.81	109.63	1,075.00	2,150.00		2,259.63						1,544
lockset for 2- new ped doors going into new CMU wall																		
08712090	1480	08	Door hardware, hinges, full mortise, high frequency, brass base, US10B, 4-1/2" x 4-1/2"	12.00	pair				126.00	1,512.00		1,512.00						1,033
new ped door items																		
08712510	2700	08	Weatherstripping, doors, metal frame, extruded sections, aluminum, for 3' x 7' door	8.00	Opng		238.32	1,906.57	33.50	268.00		2,174.57						1,485
new ped door items																		
08712510	3650	08	Weatherstripping, for thresholds, door sweep, flush mounted, aluminum	8.00	EA		28.60	228.79	22.00	176.00		404.79						277
new ped door items																		
08911910	3180	08	Wall louvers, aluminum, fixed blades, commercial grade, 60" x 48"	6.00	EA		105.07	630.43	1,175.00	7,050.00		7,680.43						5,247
louvers on new CMU wall for ventilation																		
09																		
Finishes																		
09019092	0510	09	Paint preparation, surface protection, placement & removal, basic drop cloths	1,000.00	SF		0.09	94.90				94.90						65
protect ground and slab when painting																		
09019093	0080	09	Surface preparation, exterior, doors, per side, wire brush, metal, flush, excl. frames or trim	336.00	SF		0.95	318.85				318.85						218
prep new ped doors for paint																		
09019093	1320	09	Surface preparation, exterior, chain link fence, two sides, wire brush	2,880.00	SF		2.42	6,969.12				6,969.12						4,761
clean kennel wire walls and kennel wire ceiling																		
09019093	1400	09	Surface preparation, exterior, existing galvanized surface, prep for painting, clean and prime	3,344.00	SF		1.60	5,341.73	0.13	434.72		5,776.45						3,946
prep galvanized wire on kennels, metal flashing, steel columns and gutters for paint																		
09911360	0800	09	Paints & coatings, siding, exterior, alkyd (oil base), paint 2 coats, brushwork	1,230.00	SF		0.93	1,147.76	0.32	393.60		1,541.36						1,053
cut in primer and top coat of paint on CMU walls																		
09911360	1400	09	Paints & coatings, siding, exterior, stucco, rough, oil base, paint 2 coats, roller	3,036.00	SF		0.74	2,256.80	0.34	1,032.24		3,289.04						2,247
roll filler and top coats on CMU walls																		
09911370	0140	09	Paints & coatings, exterior door frames & trim only, brushwork, primer + 2 coats, exterior latex	136.00	LF		2.28	309.74	0.39	53.04		362.78						248
paint 8 new door frames at 17L ea x 8 = 136'																		
09911370	0190	09	Paints & coatings, exterior doors, flush, both sides, roll & brush, primer + 2 coats, exterior latex incl. frame & trim	8.00	EA		120.99	967.93	29.50	236.00		1,203.93						822
paint 6 new metal door slabs																		
09911380	0220	09	Paints & coatings, trim, exterior, gutters, metal, zinc chromate paint, first coat, brushwork, 5"	192.00	LF		0.95	182.20	0.81	155.52		337.72						231
primer galv flashing, gutter and downspouts																		
09911380	0320	09	Paints & coatings, trim, exterior, gutters, wood, primer + 2 coats exterior latex, brushwork, 5"	192.00	LF		1.87	358.33	0.39	74.88		433.21						296
paint galv mertal fascia, gutter & downspouts																		
09911390	0500	09	Paints & coatings, walls, concrete masonry units (CMU), porous, first coat, latex, brushwork	924.00	SF		0.95	876.83	0.12	110.88		987.71						675
cut in base/block fill coat on both sides of CMU walls																		
09911390	0510	09	Paints & coatings, walls, concrete masonry units (CMU), porous, second coat, latex, brushwork	462.00	SF		0.63	292.26	0.06	27.72		320.00						219
cut in base/primer coat on CMU exterior side of walls																		
09911390	0540	09	Paints & coatings, walls, concrete masonry units (CMU), porous, first coat, latex, roller	1,044.00	SF		0.41	429.31	0.09	93.96		523.27						357
prime both sides of new CMU walls																		
09911390	0550	09	Paints & coatings, walls, concrete masonry units (CMU), porous, second coat, latex, roller	522.00	SF		0.33	173.37	0.06	31.32		204.69						140
paint exterior side of new CMU walls																		
09965620	1900	09	Wall coating, high build epoxy, water based, 50 ml	12,868.00	SF		6.37	82,018.16	1.46	18,787.28		100,805.44						68,860
epoxy coat kennel floors CMU walls and kennel wire frame system - total 12,868 sq ft surface to coat																		
09965620	1900	09	Wall coating, high build epoxy, water based, 50 ml	522.00	SF		6.37	3,327.13	1.46	762.12		4,089.25						2,793
2-coats epoxy on kennel side of new CMU wall																		
09971323	6100	09	Paints and protective coatings, cold galvanizing in field, brush	100.00	SF		0.61	61.07	0.77	77.00		138.07						94
field prime any touch up galvanizing																		
23																		
Heating, Ventilating, and Air-Conditioning (HVAC)																		
23050510	2124	23	Fans, 1-1/2 thru 10 HP or 20,000 CFM, selective demolition	18.00	EA	Kennel wall encl door	286.40	5,155.12				5,155.12						4,752
line to remove fans in kennel area, clean them and then reinstall them. Material costs are removed. 9 fans x 2 useages =18																		
23050510	3000	23	HVAC, mechanical equipment, light items; unit is weight, not cooling, selective demolition	1.00	ton		1,733.20	1,733.20				1,733.20						1,184
Remove 4'x4' wall fan unit																		
23050510	7450	23	Relief vent, up thru 24" x 96", selective demolition	1.00	EA	Kennel wall encl door	68.49	68.49				68.49						47
remove louver on front wall																		
26																		
Electrical																		
26050520	6510	26	Equipment connection, to 15 to 30 HP, electrical demolition, remove	9.00	EA		45.32	407.88				407.88						279
disconnect the circulating fans																		
26051935	0045	26	Wire connector, screw type, insulated, #12 to #6	27.00	EA		4.52	121.95	0.48	12.96		134.91						92
reconnect the circulating fans																		
26051990	1200	26	Wire, copper, stranded, 600 volt, #12, type THWN-THHN, normal installation conditions in wireway, conduit, cable tray	3.00	Clf		73.74	221.22	35.00	105.00		326.22						223
remaining items for new LED lights and piping in kennel area																		
26052920	0800	26	Strap, steel, 2 holes, EMT, 3/4" diameter	21.00	EA		1.84	38.71	0.23	4.83		43.54						30
26052920	1450	26	Hanger, steel, 3/4" diameter, incl bot	12.00	EA		4.29	51.43	0.58	6.96		58.39						40
26052920	1950	26	Riser clamps, steel, conduit, 3/4" diameter	12.00	EA		22.58	271.00	5.95	71.40		342.40						234
26052920	2500	26	Threaded rod, steel, painted, 1/4" diameter	12.00	LF		3.13	37.61	1.56	18.72		56.33						38
26052920	3000	26	Nuts, galvanized steel, 1/4" diameter	1.00	C				15.95	15.95		15.95						11
26052920	3250	26	Washers, galvanized steel, 1/4" diameter	1.00	C				16.00	16.00		16.00						11
26052920	3775	26	Metal channel, aluminum, 10' length, 12GA, 1-5/8" x 1-5/8"	1.00	EA		162.84	162.84	48.00	48.00		210.84						90
26053313	6600	26	Beam clamp, large	12.00	EA		24.36	292.32	31.00	372.00		615.25						421
26052920	5900	26	Beam clamp, material only, 3/8" clamp, 3/8" threaded drop rod	12.00	EA		25.43	305.10	7.15	85.80		390.90						267
26053313	5020	26	Electric metallic tubing (EMT), 3/4" diameter, to 10' high, incl 2 terminations, 2 field bend elbows, 11 beam clamps, and 11 couplings per 100 LF	100.00	LF		6.25	625.26	1.23	123.00		748.26						511
26053313	5220	26	Electric metallic tubing (EMT), field bends, 45 Deg, to 90 Deg, 3/4" diameter	10.00	EA		10.14	101.39				101.39						69
26053313	5340	26	EMT offsets, 3/4" diameter, to 15' H	10.00	EA		13.13	131.35				131.35						90
26053313	6520	26	EMT boxes connectors, set screw, steel, 3/4" diameter, to 15' H	8.00	EA		7.39	59.12	0.96	7.68		66.80						46
26053313	8320	26	EMT 1" hole clips, 3/4" diameter, to 15' H	12.00	EA		1.74	20.83	0.20	2.40		23.23						16
26053316	0370	26	Outlet boxes, pressed steel, 4-11/16" square, 2-1/8" deep, 3/4" to 1-1/4" KO	8.00	EA		40.71	325.69	5.25	42.00		367.69						251

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26053316		0450 26	Outlet boxes, pressed steel, covers, blank, 4-11/16" square	8.00	EA		15.36	122.90	1.57	12.56		135.46					93
26562355		0300 26	Exterior LED fixture, modular, type IV, 120 V, 50 watt, incl lamps	6.00	EA		90.64	543.83	1,550.00	9,300.00		9,843.83					6,724
31 Earthwork								18,660.71		12,274.35		35,675.59	4,740.53				24,379
31066015		0520 31	Mobilization, to 36", set up and remove drill rig, for caissons, maximum	1.00	EA		7,589.22	7,589.22			1,732.50	9,321.72	1,732.50				6,368
set up for pier drilling																	
31221320		0100 31	Rough grading sites, 400 S.F. or less, hand labor	1.00	EA		877.08	877.08				877.08					599
final hand grade beams prior to steel setting																	
31221320		0130 31	Rough grading sites, 1,100-3,000 S.F., skid steer & labor	1.00	EA		1,245.77	1,245.77			192.50	1,438.27	192.50				982
rough grade after piers and beam poured with backhoe																	
31221610		9000 31	Fine grading, hand grading, includes compaction, minimum labor/equipment charge	1.00	Job	Kenr wall enck door	289.16	289.16				289.16					198
hand grading once area is graded with equipment																	
31221610		9100 31	Fine grading, machine grading, includes compaction, minimum labor/equipment charge	1.00	Job		667.77	667.77			423.50	1,091.27	423.50				745
grade back along beams with bobcat after pouring concrete																	
31231616		0100 31	Structural excavation for minor structures, bank measure, heavy soil or clay, pits to 6' deep, by hand	18.00	B.C.Y.		144.58	2,602.48				2,602.48					1,778
excavation of grade beams																	
31232313		0100 31	Backfill, heavy soil, by hand, no compaction	4.00	L.C.Y.		52.43	209.72				209.72					143
back fill after beams poured																	
31232313		0300 31	Backfill, 6" layers, compaction in layers, hand tamp, add	4.00	E.C.Y.		28.12	112.49				112.49					77
31232315		1840 31	Borrow, delivery charge, minimum 20 tons, 2 hour round trip, add	60.00	ton	Kenr wall enck door	10.44	626.36			12.98	1,405.16	778.80				960
haul off spoils from site																	
31232315		7000 31	Borrow, topsoil or loam, 1 C.Y. bucket, loading and/or spreading, from stockpile, shovel	31.00	B.C.Y.		1.63	50.64	20.50	635.50	1.62	736.26	50.13				503
load spoils excavated for foundation, on to dump truck for removal																	
31232317		0100 31	Fill, dumped material, spread, by hand, excludes compaction	4.00	L.C.Y.		48.46	193.84				193.84					132
31232323		9900 31	Compaction, minimum labor/equipment charge	1.00	Job		144.58	144.58				144.58					99
compaction of area excavated																	
31632913		1400 31	Uncased drilled concrete piers, end bearing, fluted constant diameter, steel, 4,000 psi concrete, 7 ga., 50' long, 18" diameter, priced using 200 piles, 60' long, unless specified otherwise, excludes pile caps, mobilization, or reinforcing	150.00	wft		12.48	1,871.79	47.50	7,125.00	4.82	9,719.49	722.70				6,639
10-15' deep x 18" diameter piers = 150'																	
31632920		1500 31	Cast-in place adds for drilled concrete piers, for reinforcing steel, add	2,713.00	lb				1.45	3,933.85		3,933.85					2,687
rebar in piers																	
31632920		1700 31	Cast-in place adds for drilled concrete piers, for ball or pedestal end, add	4.00	CY		544.95	2,179.81	145.00	580.00	210.10	3,600.21	840.40				2,458
drill our bells																	
32 Exterior Improvements								3,246.37		8,973.28		12,904.16	684.51				8,815
32311320		0500 32	Fence, chain link industrial, galvanized steel, 6 ga. wire, 2" posts @ 10' OC, 6' high, includes excavation, & concrete	44.00	LF	Kenr wall enck door	7.51	330.29	27.50	1,210.00	1.78	1,618.70	78.41				1,106
32311320		0920 32	Fence, chain link industrial, galvanized steel, 6 ga. wire, 2-1/2" posts @ 10' OC, 8' high, includes excavation, in concrete, excludes barbed wire	44.00	LF		10.02	440.86	38.50	1,694.00	2.38	2,239.40	104.54				1,530
replacement fence at drive gate location and at propane tank location																	
32311320		1400 32	Fence, chain link industrial, gate, galvanized steel, 6' high fence, 1-5/8" frame, 3" wide, 6' high, includes excavation, in concrete	1.00	EA		179.71	179.71	225.00	225.00	42.90	447.61	42.90				306
32311320		2100 32	Fence, chain link industrial, no barbed wire, galvanized steel, 2" line post, 10' OC, 1-5/8" top rail, 5' - 0" high, includes excavation, in concrete	44.00	LF		6.01	264.51	22.50	990.00	1.43	1,317.43	62.92				900
32311320		5060 32	Fence, chain link industrial, double swing gates, 6' high, 12' opening, includes excavation, posts & hardware in concrete	1.00	Opng	Kenr wall enck door	564.59	564.59	490.00	490.00	134.20	1,188.79	134.20				812
new gate at the front as reflected on drawings																	
32311320		7055 32	Fence, chain link industrial, braces, galvanized steel, 6 ga. wire	44.00	LF	Kenr wall enck door	1.81	79.70	3.12	137.28	0.43	235.85	18.88				161
replacement fence at drive gate and walk gate																	
32311330		6660 32	Fence, chain link, gates & posts, end posts, chain link fence, galvanized steel, 3" OD, 4', set in concrete, includes excavation	4.00	EA	Kenr wall enck door	37.02	148.08	35.50	142.00	8.74	325.06	34.98				222
new end and gate posts																	
32311330		7780 32	Chain link fence gates and posts, chain link fence gates and posts, 6' high, excludes excavation	5.00	LF	Kenr wall enck door	87.67	438.37	137.00	685.00	22.55	1,236.12	112.75				844
32311330		7925 32	Chain link fence gates and posts, auger fence post hole, medium soil, 3' deep, by machine, includes excavation	9.00	EA	Kenr wall enck door	14.41	129.72			3.41	160.41	30.69				110
drill post holes																	
32922310		1100 32	Sodding, bent grass sod, on level ground, 3 M.S.F.	4.00	Msf		167.63	670.54	850.00	3,400.00	16.06	4,134.78	64.24				2,824
repair sod from new walls																	
(Unassigned)																	
Grand Total								279,263.14		130,074.82		448,941.59	24,063.61		15,540.02		306,672

[illegible]

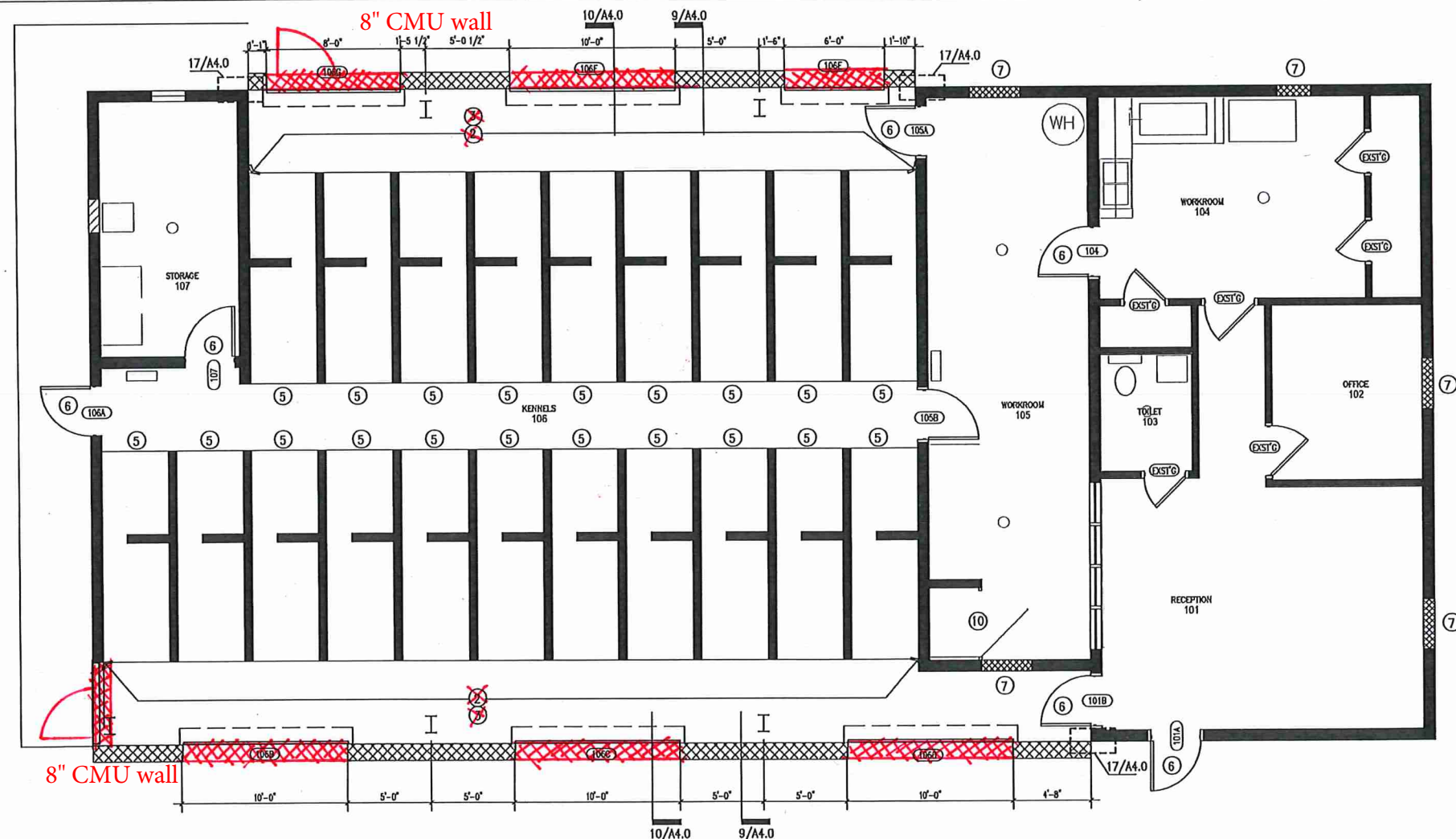
1. Delete the 6-OH doors in new wall and install 6-louvers instead for ventilation.
 2. Omit using wood framing and siding on small return wall on southwest corner and install 8" CMU block instead. Tie the block into the existing 8" CMU wall. Install a ped. door in this wall.
 3. install 1-ped door on new north CMU wall.
 4. Confirmed with Engineer that we can use 8" CMU instead of 12" since louvers are replacing the roll up ddoors..
- Note 1 edit - "install 1/4" screen on roof cvent.
- Note 2 - delete
- Note 3 - delete
- Note 9 -edit - install 6- new 8' LED lights and connect to existing light circuit.
- Remove clouding



DOOR AND INTERIOR FRAME SCHEDULE									
MARK	DOOR-SIZE	DRELEY	DEWAT	FRAMESIZE	FRELEY	FRWAT	STC	HW	REMARKS
101A	3'-0" X 7'-0"	A	1M	3'-2" X 7'-0"	A	1M	N/A	01	EXISTING OPH
101B	3'-0" X 7'-0"	A	1M	3'-2" X 7'-0"	A	1M	N/A	01	EXISTING OPH
101C	3'-0" X 7'-0"	A	1M	3'-2" X 7'-0"	A	1M	N/A	01	EXISTING OPH
105A	3'-0" X 7'-0"	A	1M	3'-2" X 7'-0"	A	1M	N/A	01	EXISTING OPH
105B	3'-0" X 7'-0"	A	1M	3'-2" X 7'-0"	A	1M	N/A	01	EXISTING OPH
105A	3'-0" X 7'-0"	A	1M	3'-2" X 7'-0"	A	1M	N/A	01	EXISTING OPH
106B	10'-0" X 6'-0"	B	ALUM	B	STEEL	N/A			ROLL-UP
106C	10'-0" X 6'-0"	B	ALUM	B	STEEL	N/A			ROLL-UP
106D	10'-0" X 6'-0"	B	ALUM	B	STEEL	N/A			ROLL-UP
106E	10'-0" X 6'-0"	B	ALUM	B	STEEL	N/A			ROLL-UP
106F	10'-0" X 6'-0"	B	ALUM	B	STEEL	N/A			ROLL-UP
106G	10'-0" X 6'-0"	B	ALUM	B	STEEL	N/A			ROLL-UP
107	3'-0" X 7'-0"	A	1M	3'-2" X 7'-0"	A	1M	N/A	01	EXISTING OPH
110A	3'-6" X 7'-0"	A	1M	3'-8" X 7'-2"	A	1M	N/A		
110B	3'-0" X 8'-0"	B	ALUM		E	STEEL	N/A		ROLL-UP

DOOR SCHEDULE AND TYPES

11



FLOOR PLAN

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

1

[illegible]

MEP ENGINEER: James E Thompson & Associates
1169 County Road 136A
Arlin, Texas 77511
832.526.0160

STRUCTURAL ENGINEER C/JG Engineers
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Renovations and Additions to
Port Lavaca Animal Shelter
 201 Stringham Port Lavaca, Texas 77979

Swart
Architects

2855 Mangum
Suite 566
Houston, Texas 77092
(713) 823-1660



SA PROJECT NO.:

2209

DATE: _____

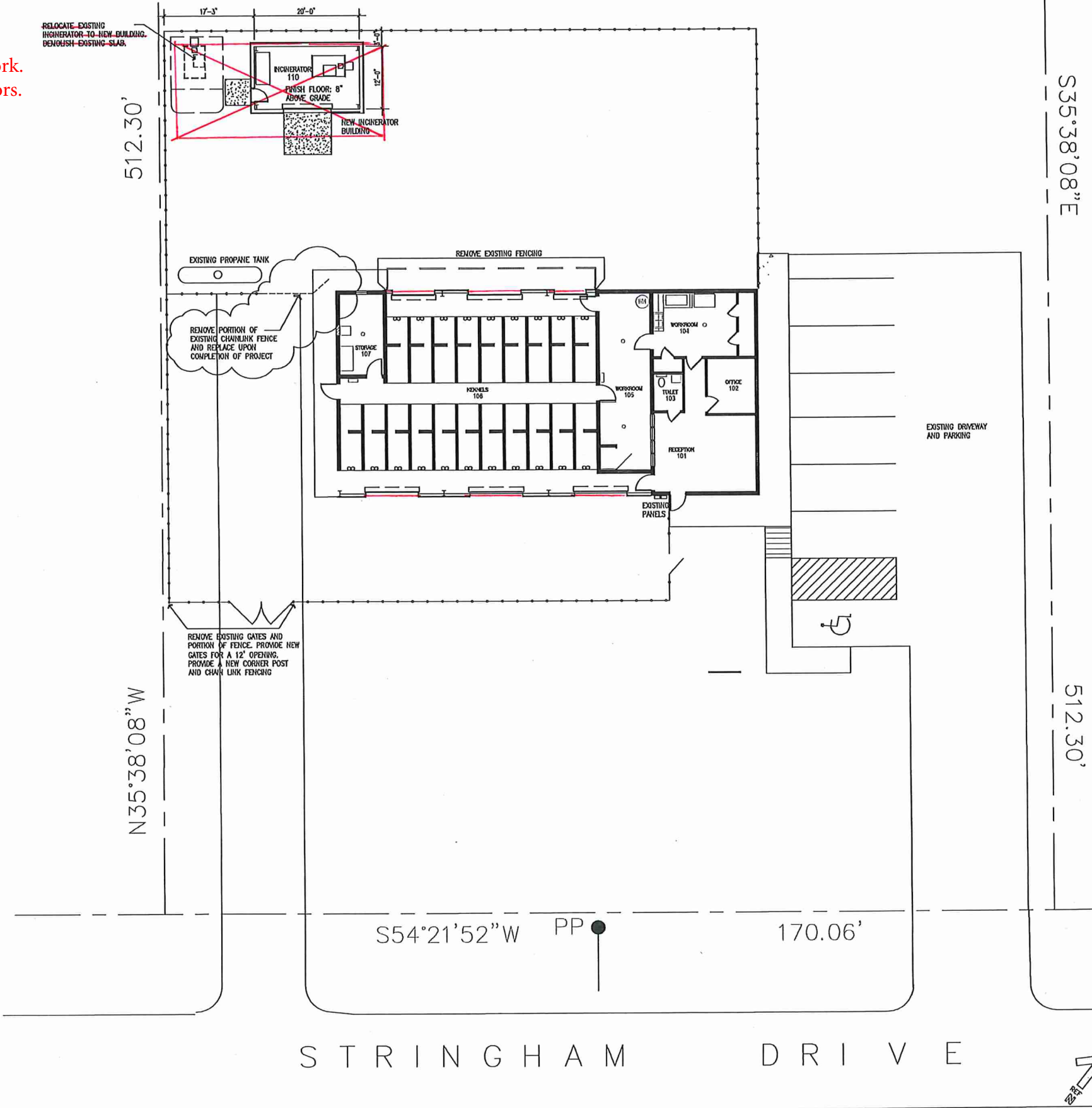
10/20/2022

SHEET TITLE:

SHEET NO.:

A 2.0

Delete incinerator building and associated work.
Reflect ne wall as solid wall with out OH doors.
reflect 2-ped doors and 6- louvers
Remove any clouding



ISSUE DATES		
DATE	DESCRIPTION	
09/14/22	ISSUED FOR PERMITTING	
10/20/22	REVISIONS	

PROJECT TEAM
MEP ENGINEER: James E Thompson & Associates
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Renovations and Additions to
Port Lavaca Animal Shelter
201 Stringham Port Lavaca, Texas 77979



2855 Mangum
Suite 508
Houston, Texas 77092
(713) 823-1660

SA PROJECT NO.:

2209

DATE:

10/20/2022

SHEET TITLE:

SHEET NO.:

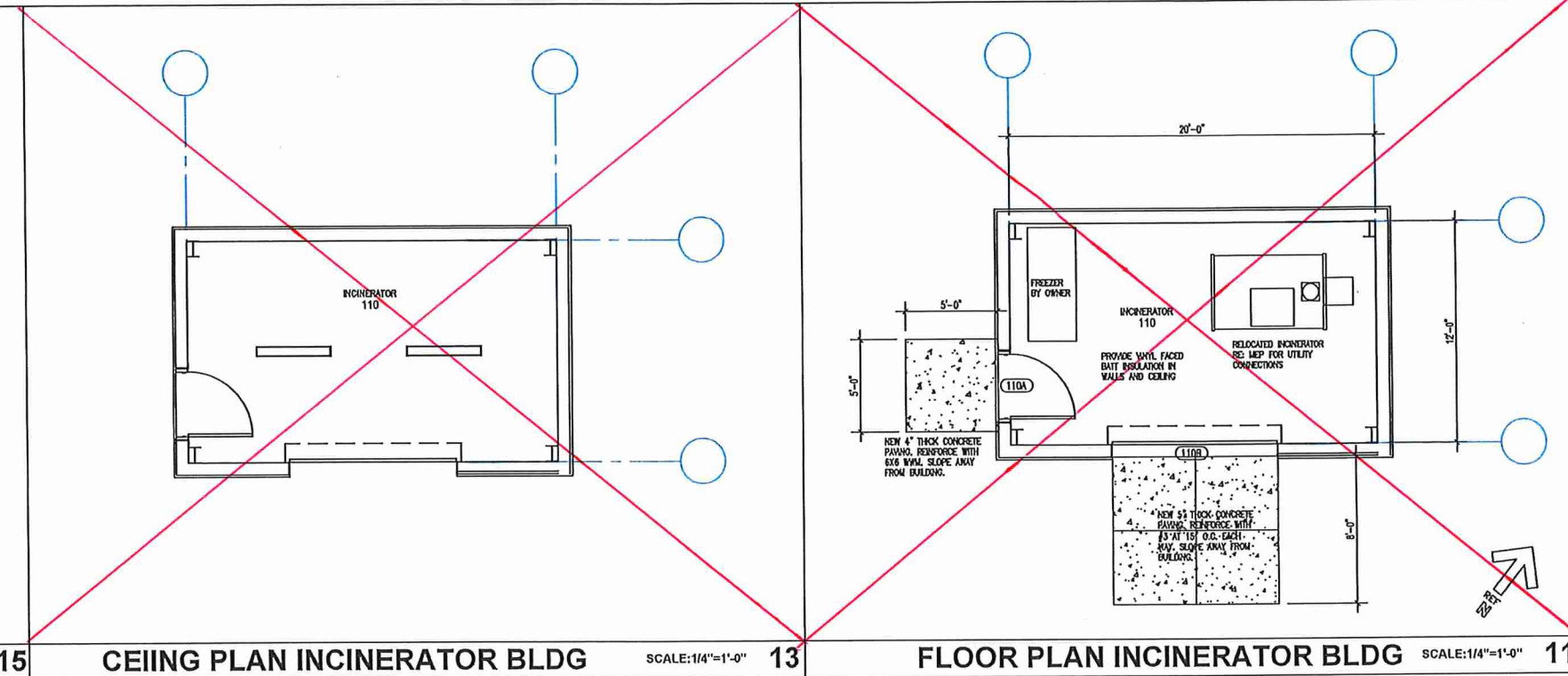
A 1.0

SITE PLAN

SCALE: 1/8"=1'-0"

1

Delete incinerator building and associated work.
note 1 edit to read 1/4" wire mesh
remove note 9 in room 107
remove note 2 in room 106.
Note 2 - delete
Note 3 - delete
Note 4 - delete
note 9 - remove cloud and words Alternate #1
Show new wall as solid with out OH doors in
them, Show 2-ped doors and louvers.
Remove large cloud



15

CEILING PLAN INCINERATOR BLDG

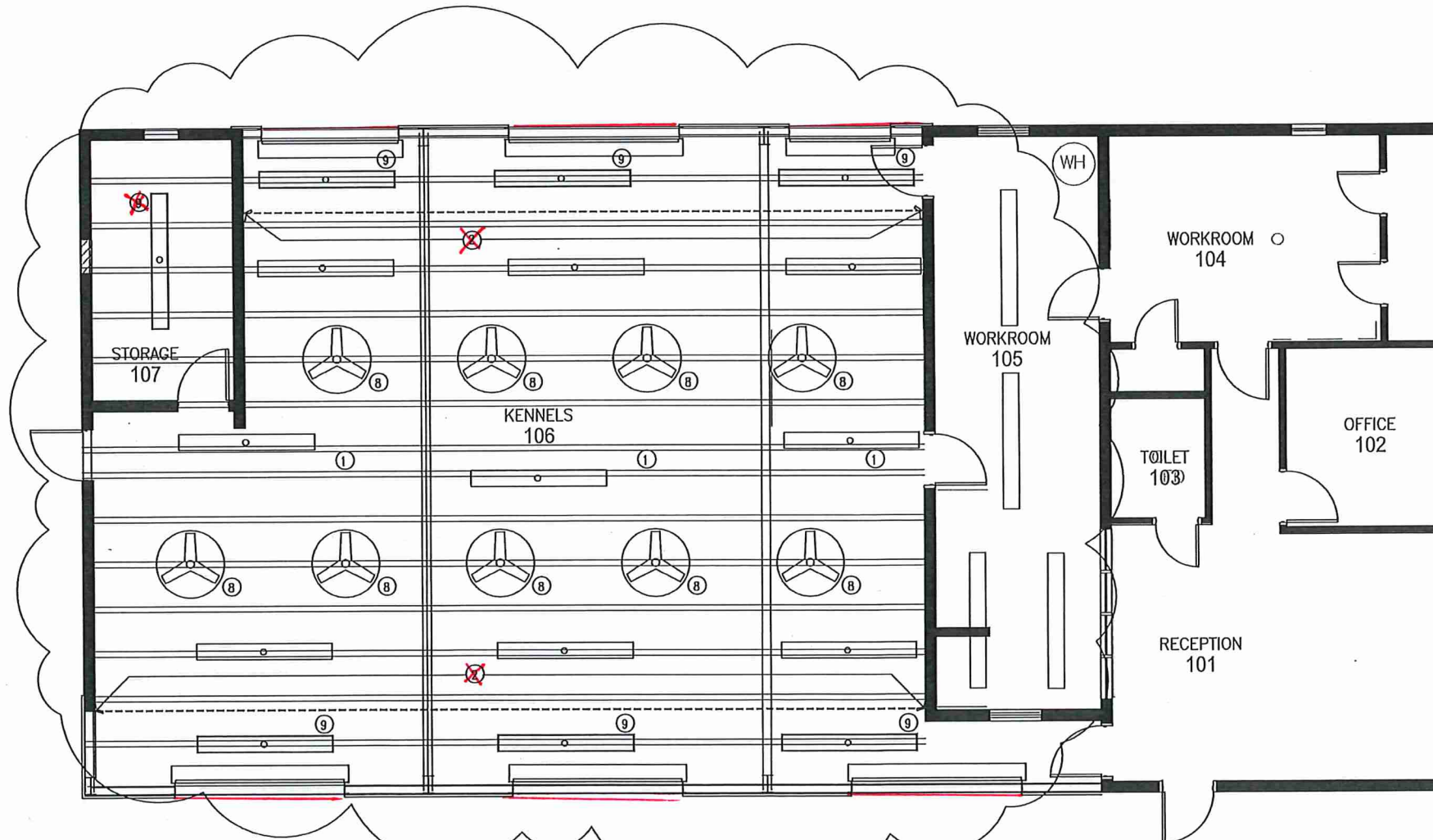
SCALE:1/4"=1'-0"

13

FLOOR PLAN INCINERATOR BLDG

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

11



KEYED NOTES

1. INSTALL NEW GALVANIZED WIRE MESH WELDED WIRE CLOTH TO EXTERIOR OPENINGS OF THE ROOF VENT. INSURE FULL ENCLOSURE TO PREVENT ENTRY BY BIRDS ON OTHER VENT.
2. PROVIDE NEW GALVANIZED 2-MESH-043-MILTED WIRE CLOTH PANELS ABOVE EXISTING KENNELS. INSURE FULL ENCLOSURE BETWEEN KENNEL AND ROOF PERLIN. RE: 8/AS.0 FOR DETAILS.
3. PROVIDE NEW GALVANIZED 4-MESH-043-MILTED WIRE CLOTH ON BACK OF EXISTING KENNEL DOORS.
4. MODIFY EXISTING KENNEL DOORS WITH NEW ROTATING FEEDING STATION. EQUAL TO EXISTING DOOR. ROTATING DOUBLE FOOD AND WATER BOWLS. MOOD-1-2.7.1.1.1.1.1.1.
5. MODIFY EXISTING MECHANISM FOR RAISING THE KENNEL SEPARATING PANEL.
6. REMOVE THE EXISTING DOOR AND FRAME. PROVIDE A NEW DOOR AND FRAME AS NOTED IN SCHEDULE. PROVIDE NEW HARDWARE TO MATCH FUNCTION OF THE EXISTING.
7. REMOVE EXISTING EXTERIOR FRAMES. PREP OPENING FOR INSTALL. PROVIDE CAU INFILL TO MATCH EXISTING.
8. REMOVE AND CLEAN THE EXISTING CEILING MOUNTED FANS. REINSTALL IN THE SAME LOCATIONS.
9. ~~INTERCHANGE~~ PROVIDE NEW 1'x3' LED LIGHT FIXTURES. RE: 1/1P.
10. PROVIDE A NEW GALVANIZED WIRE MESH SET IN AN ANGLE STEEL FRAME AND MOUNTED IN A 2'x2' STEEL FRAME WITH HINGES AND LATCH. RE: 8/AS.0

GENERAL NOTES

1. PROVIDE NEW EPOXY COATING ON EXISTING CONCRETE FLOOR. PREP FLOOR AS RECOMMENDED BY COATING MANUFACTURER INCLUDING GRINDING EXISTING CONCRETE SURFACE.
2. POWER WASH ENTIRE KENNEL AREA INCLUDING ALL KENNEL WALLS, FLOORS, AND CEILINGS.
3. PREP ALL CAU KENNEL PARTITIONS FOR NEW SPECIAL COATING. PREPARE ALL SURFACES AS RECOMMENDED BY MANUFACTURER.
4. PREP AND PAINT ALL EXTERIOR CAU WALLS. PREPARE ALL SURFACES AS RECOMMENDED BY MANUFACTURER OF PAINT.

CEILING PLAN

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

1

ISSUE DATES		
DATE	DESCRIPTION	
09/14/22	ISSUED FOR PERMITTING	
10/20/22	REVISIONS	

PROJECT TEAM
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Renovations and Additions to
Port Lavaca Animal Shelter
201 Stringham Port Lavaca, Texas 77979

Swart Architects

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Suite 568
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(713) 823-1600
REGISTERED ARCHITECT
STATE OF TEXAS
11795
10/20/2022

SA PROJECT NO.:

2209

DATE:

10/20/2022

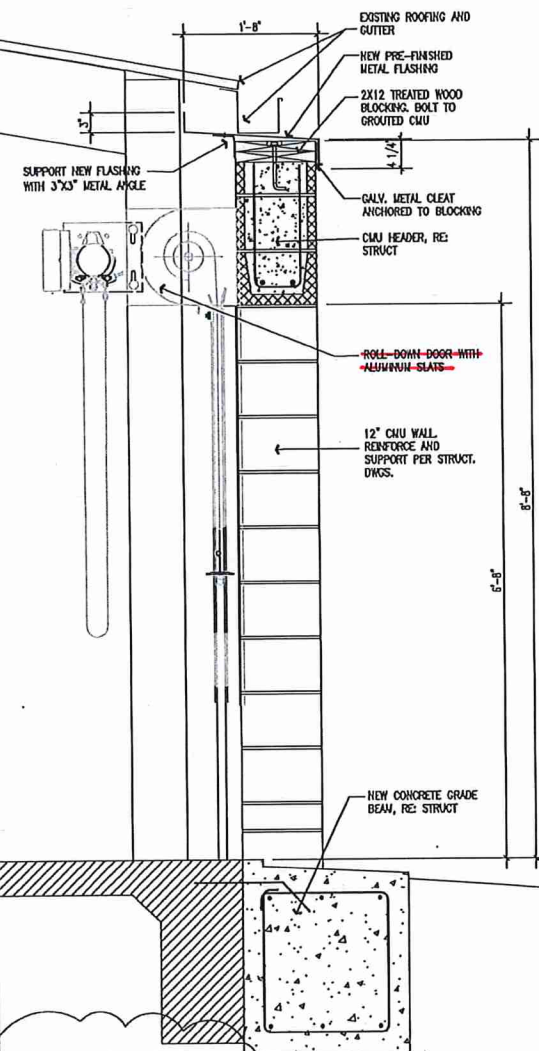
SHEET TITLE:

SHEET NO.:

A 3.0

Remove OH doors and show louvers.
remove cloud

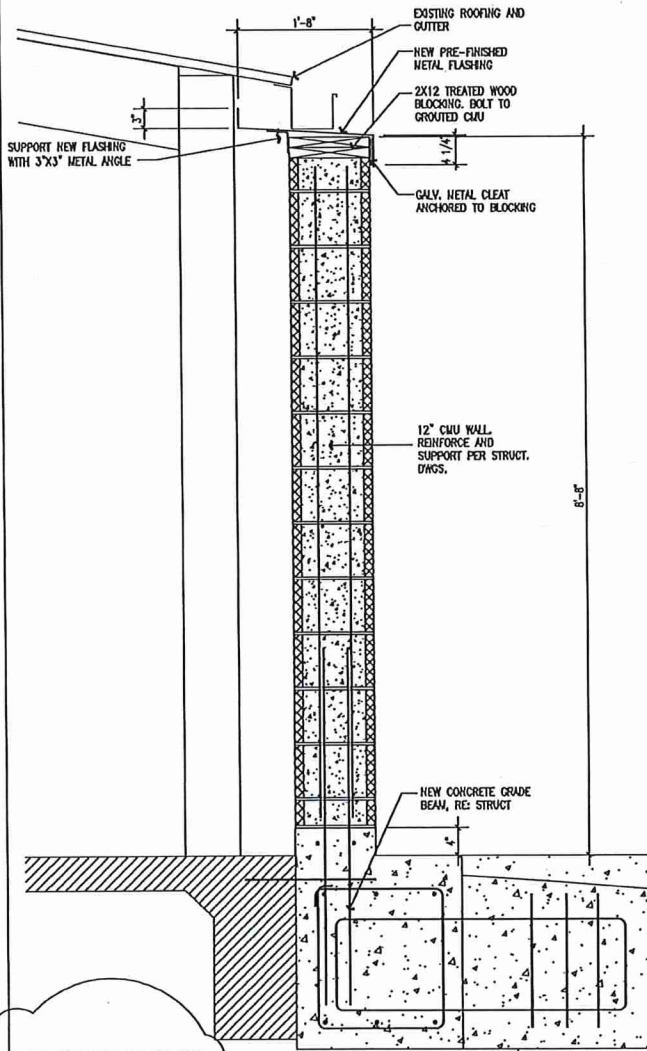
Remove cloud



ALTERNATE #1
WALL SECTION

SCALE: 1"=1'-0"

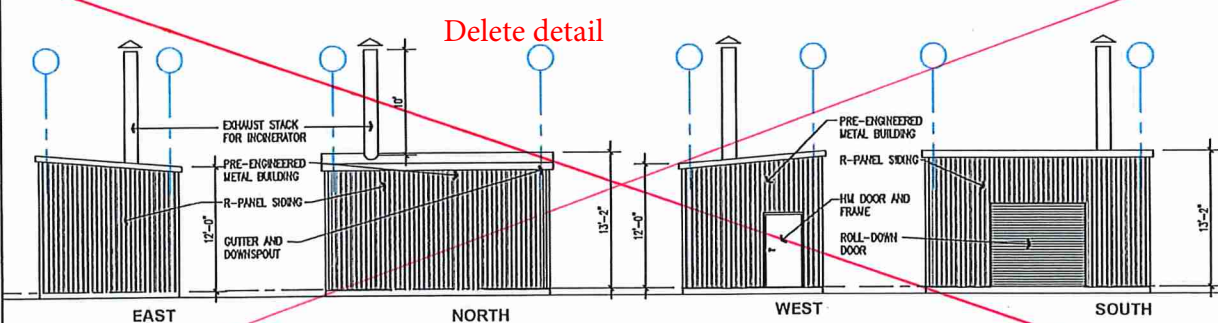
10



ALTERNATE #1
WALL SECTION

SCALE: 1"=1'-0"

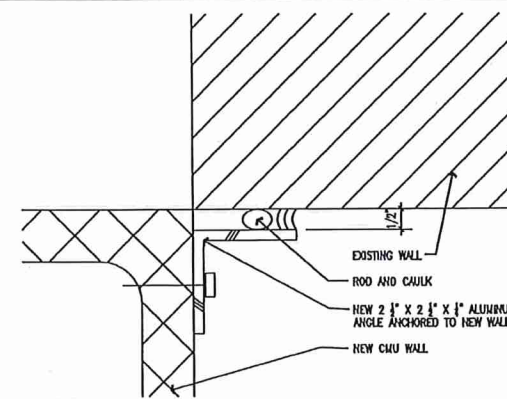
9



EXTERIOR ELEVATIONS INCINERATOR BLDG

SCALE: 1/8"=1'-0"

3

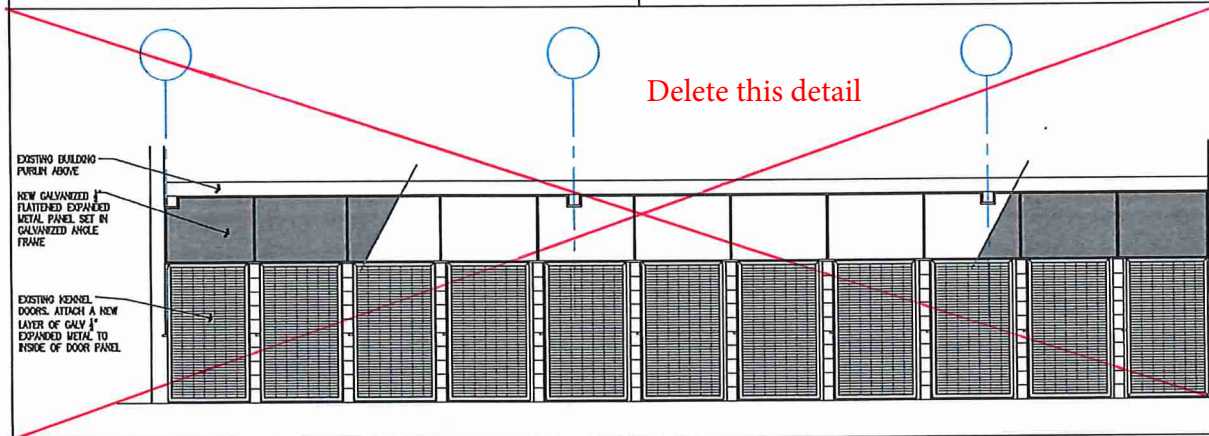


ALTERNATE #1

DTL AT NEW AND EXISTING

SCALE: HALF

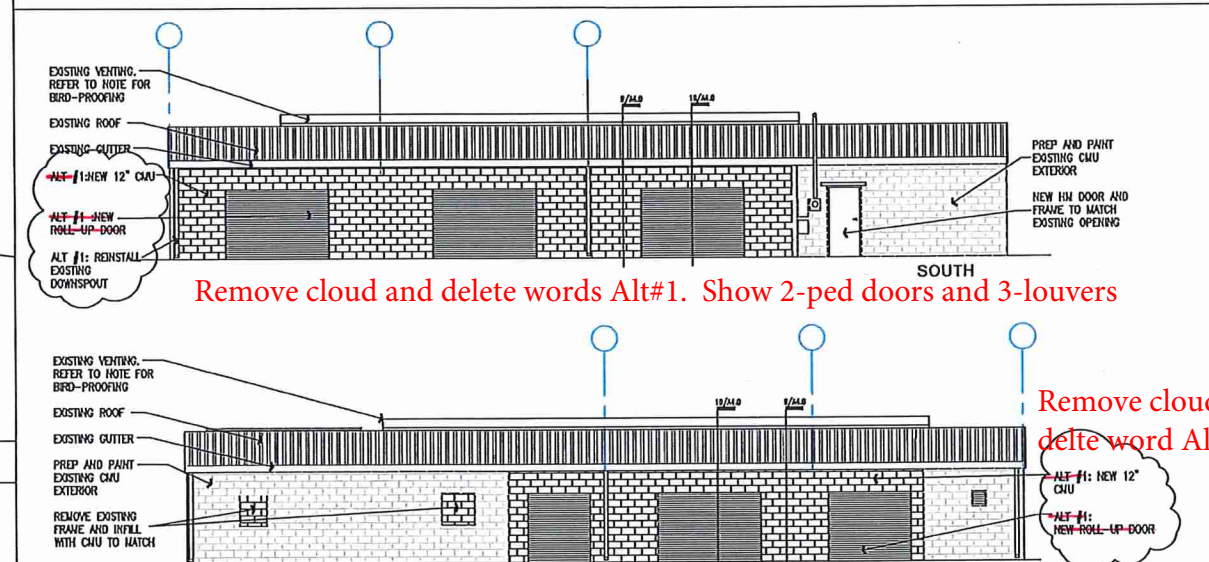
17



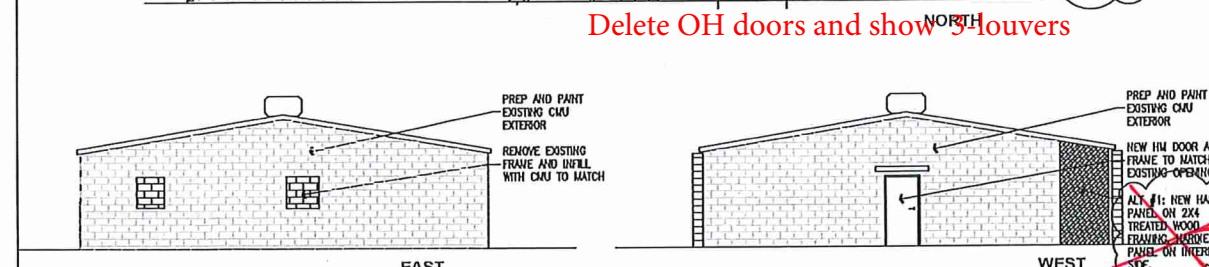
KENNEL CLOSURE PANEL

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

11



Remove cloud and delete words Alt#1. Show 2-ped doors and 3-louvers



Delete OH doors and show 3 louvers

Remove 2x4 framing and use 8" CMU

EXTERIOR ELEVATIONS

SCALE: 1/8"=1'-0"

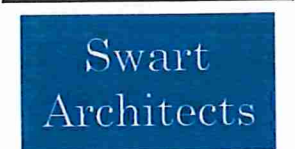
1

ISSUE DATES		
DATE	ISSUED FOR	DESCRIPTION
09/14/22	ISSUED FOR PERMITTING	
10/20/22	REVISIONS	

PROJECT TEAM
MEP ENGINEER: James E Thompson & Associates
1169 County Road 136A
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832.526.0160
STRUCTURAL ENGINEER: C/JG Engineers
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Renovations and Additions to
Port Lavaca Animal Shelter
201 Stringham Port Lavaca, Texas 77979



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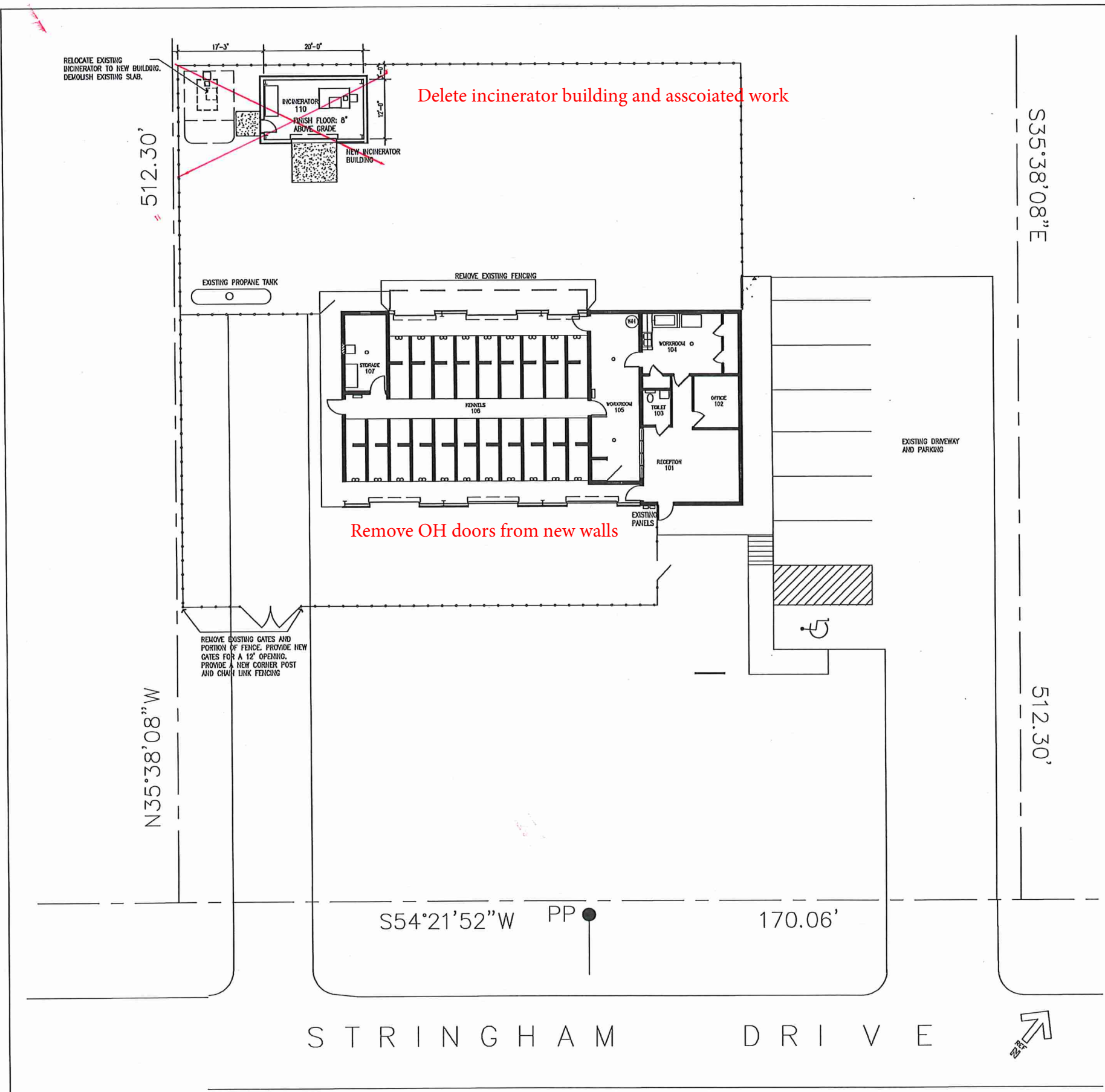


SA PROJECT NO.: 2209

DATE: 10/20/2022

SHEET TITLE:

SHEET NO.: A 4.0



SCOPE OF WORK

- ~~1. ELECTRICAL - PROVIDE ELECTRICAL LIGHTING FOR NEW INCINERATOR BUILDING. REPLACE LIGHTS IN EXISTING KENNEL. RECONNECT ELECTRICAL TO INCINERATOR. FIELD-ROUTE WIRING AND CONNECTIONS UNDERGROUND AS REQUIRED.~~
- ~~2. PLUMBING - RELOCATE PLUMBING ASSOCIATED WITH INCINERATOR TO ACCOMMODATE NEW LOCATION.~~
- ~~3. MECHANICAL - NA.~~

NOTES:

- ALL CONTRACTORS SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELVES WITH THE PROJECT PRIOR TO BID. CONTRACTORS SHALL OBTAIN ALL PERMITS AND PAY ALL FEES.
- ALL OUTSIDE ELECTRICAL EQUIPMENT INSTALLED IN THIS PROJECT SHALL BE LOCKABLE AND VANDAL RESISTANT TO THE GREATEST EXTENT POSSIBLE. COORDINATE SPECIFIC REQUIREMENTS WITH THE OWNER'S REPRESENTATIVE.
- ALL UNDERGROUND CONDUIT RUNS SHALL CONTAIN PULL BOXES NO FARTHER THAN 150' APART.
- PROVIDE 1" CONDUIT SLEEVE UNDER ANY PAVEMENT, DO NOT CUT THROUGH PAVEMENT.
- SLOPE CONDUITS RUNNING INTO BUILDING DOWN AND AWAY FROM BUILDING 2 DEGREES MINIMUM. PROVIDE WATER-TIGHT SEAL.
- UNDERGROUND CONDUIT RUNS ARE DIAGRAMMATIC ONLY. ROUTE IN MOST EXPEDITIOUS MANNER. COORDINATE CONDUIT RUNS WITH OWNER'S REPRESENTATIVE.



JAMES E. THOMPSON & ASSOCIATES ENGINEERS
First National Bank of Alvin Building
1600 East Highway 6, Suite 331
Alvin, Texas 77511
T: (832)526-0160

• Mechanical • Electrical • Plumbing Design •
• Firm Registration #F1288

ELECTRICAL SITE PLAN

SCALE: 1/8"=1'-0" 1

ISSUE DATES	
DATE	DESCRIPTION
05/03/22	REVIEW SET

PROJECT TEAM
MEP ENGINEER: James E. Thompson & Associates
921 Blume Drive
Galveston, Texas 77554
832-526-0160
STRUCTURAL ENGINEER: C/JG Engineers
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**Renovations and Additions to
Port Lavaca Animal Shelter**
201 Stringham Port Lavaca, Texas 77979

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Houston, Texas 77092
(713) 823-1650

SA PROJECT NO.: 2209
DATE: 05/03/2022
SHEET TITLE: ELECTRICAL SITE PLAN
SHEET NO.: ESP1.0

Delete all notes stricken through

SCOPE OF ELECTRICAL WORK:

1. PROVIDE AND INSTALL NEW ELECTRICAL EQUIPMENT AS REQUIRED, LIGHTS, AND POWER PER PLANS AND SPECIFICATIONS. EXISTING FIXTURES IN KENNEL AREA ARE TO REMAIN.
2. PROVIDE NEW EXTERIOR (BATTERY) EMERGENCY EGRESS LIGHTS AS REQUIRED BY CURRENT CODES.
3. FIELD VERIFY AVAILABLE FAULT CURRENT AND MARK ON PLANS, DATE AND SIGN PER CITY OF HOUSTON CODE REQUIREMENTS.

GENERAL NOTES:

1. CONTACT POWER COMPANY CONSULTANT PRIOR TO DOING ANY WORK. PURCHASE ALL PERMITS AND PAY ALL FEES.

ELECTRICAL NOTES:

1. LIGHT FIXTURES TO BE SERVED BY CONDUIT AND JUNCTION BOXES.
2. COORDINATE LIGHT FIXTURE LOCATIONS WITH MECHANICAL REQUIREMENTS. COORDINATE WITH OWNER/ARCHITECT.
3. EXACT LOCATIONS OF SWITCHES SHALL BE AS PER EXISTING OR AS DIRECTED BY THE OWNER.
4. SEE E5.0 FOR DETAILS REGARDING CONNECTION OF BATTERY AND NIGHT LIGHTING CIRCUITS. ALL BATTERY POWERED LIGHTS TO BE CONNECTED TO NORMAL POWER CIRCUIT PER NEC 700.12(F).
5. SAFETY DISCONNECTS TO BE MOUNTED ON OUTSIDE OF HVAC UNIT. (30/240/2P/3R/HD/NF) DUPLEX 6FCI CONVENIENCE RECEPTACLE OUTLET TO BE MOUNTED ON SIDE OF EACH HVAC UNIT IN CAST FD BOX WITH HINGED, GASKETED, WEATHERPROOF COVER PLATE.
6. SWITCHING IS SHOWN DIAGRAMMATICALLY. CONSULT WITH OWNER'S REPRESENTATIVE TO EXACT FUNCTIONALITY OF SWITCHING. PROVIDE ADDITIONAL SWITCHES AND/OR RECEPTACLES IF REQUIRED BY OWNER.
7. COORDINATE LOCATION OF HVAC UNIT WITH OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.

SPECIAL INSTRUCTIONS

1. EXISTING LIGHTS IN SHELTER ARE TO REMAIN. PROVIDE AND INSTALL SIX (6) ADDITIONAL LED STRIP FIXTURES AS ALTERNATE #1. FIXTURE TO BE LITHONIA MODEL #ZL1N1 4000K, 3600 LU, 25 WATTS, 1200 VOLTS.

ELECTRICAL NOTES (CONTINUED)

1. CEILING GRID NOT SHOWN FOR CIRCUIT CLARITY. FOR EXACT LOCATION OF CEILING GRIDS, REFER TO ARCHITECTURAL PLANS.
2. COORDINATE ALL HVAC SUPPLY AND RETURN REGISTER LOCATIONS WITH MECHANICAL DRAWINGS. LIGHT AND/OR HVAC DIFFUSER LOCATIONS SHOWN TO BE MODIFIED AS REQUIRED TO ACCOMMODATE HVAC DROPS.
3. ALL PANELS TO BE MARKED FOR ARC FLASH HAZARD PER NEC 110.16.
4. FAULT CURRENT SHOWN ON E3.0 IS BASED ON EXISTING PHYSICAL TRANSFORMER CONFIGURATION. EC TO VERIFY EXACT AVAILABLE SHORT CIRCUIT CURRENT AND PROVIDE FOR FULLY RATED EQUIPMENT.
5. ALL WORK TO BE IN COMPLIANCE WITH NEC 2020.

LIGHTING PLAN KEYED NOTES (FOR 1/E1.0 ONLY)

1. EXHAUST FANS, BROAN MODEL 509, 120V, 180 CFM. EXHAUST FANS ARE TO BE VENTED OUT THROUGH OUTSIDE WALL OR ROOF AS REQUIRED BY OWNER'S REPRESENTATIVE. (SEE M1.0)
2. ADJUSTMENTS TO LIGHT LOCATIONS REQUIRED FOR HVAC
3. MOUNT LIGHT SWITCHES IN ACCESSIBLE LOCATION. COORDINATE EXACT LOCATION WITH OWNER'S REPRESENTATIVE.
4. EGRESS LIGHT TO BE EQUIPPED TO OPERATE UPON LOSS OF BUILDING POWER; BE CONNECTED THROUGH EXIT LIGHT, AND HAVE 90 MINUTE BATTERY BACK-UP.

SPECIAL INSTRUCTIONS:

1. WALL OCCUPANCY SENSORS - LEVITON #00D15-IDW CEILING OCCUPANCY SENSORS - ACURTY #NGM-PDT-9 SENSORS SHALL MEET 2015 IECC 405.2.1.1.
2. THE CEILING MOUNTED MOTION DETECTOR SHALL BE EQUIPPED WITH A TIME SWITCH CONTROLLER WHICH WILL AUTOMATICALLY TURN OFF ALL THE LIGHTS IN THE SPACE WITHIN 30 MINUTES AFTER DEPARTURE OF THE LAST OCCUPANT.
3. PROVIDE CIRCUITING SO THAT LIGHTING MAY BE REDUCED BY AT LEAST 50% VIA SWITCHING.

ELECTRICAL LEGEND	
MARK	DESCRIPTION
	FLUORESCENT FIXTURE
	FLUORESCENT FIXTURE WITH BATTERY PACK
	WALL BRACKET FIXTURE
	FLUORESCENT FIXTURE
	EXIT LIGHT
	SINGLE RECEPTACLE
	DUPLEX CONVENIENCE OUTLET
	FLOOR MOUNTED DUPLEX OUTLET
	240V OUTLET
	OUTLET WITH GROUND FAULT CIRCUIT INTERRUPTER
	RECEPTACLE WITH ISOLATED GROUND
	QUAD PLEX CONVENIENCE OUTLET
	WALL SWITCH
	3-WAY SWITCH
	SWITCH W/PILLOT LIGHT
	PASSIVE INFRARED WALL SWITCH/SENSOR MANUAL ON/OFF CONTROL
	MOTOR RATED SWITCH
	MOTOR
	CIRCUIT BREAKER
	SWITCH LEG
	TELEPHONE OUTLET 1' TO 6' ABOVE CEILING WITH WIRE TO TELEPHONE TERMINAL BOARD
	DISCONNECT SWITCH
	JUNCTION BOX
	120V HARDWIRED CONNECTION
	208V/10 HARDWIRED CONNECTION
	MOTION DETECTOR, ARROW INDICATES DIRECTION
	PHOTOCELL
	208V/20 HARDWIRED CONNECTION
	ELECTRICAL PANEL

ISSUE DATES	
DATE	DESCRIPTION
05/03/22	REVIEW SET
10/15/22	OWNER REVISIONS

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Renovations and Additions to
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201 Stringham Port Lavaca, Texas 77979

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SA PROJECT NO.:

2209

DATE:

05/03/2022

SHEET TITLE:

LIGHTING PLAN

SHEET NO.:

E1.0

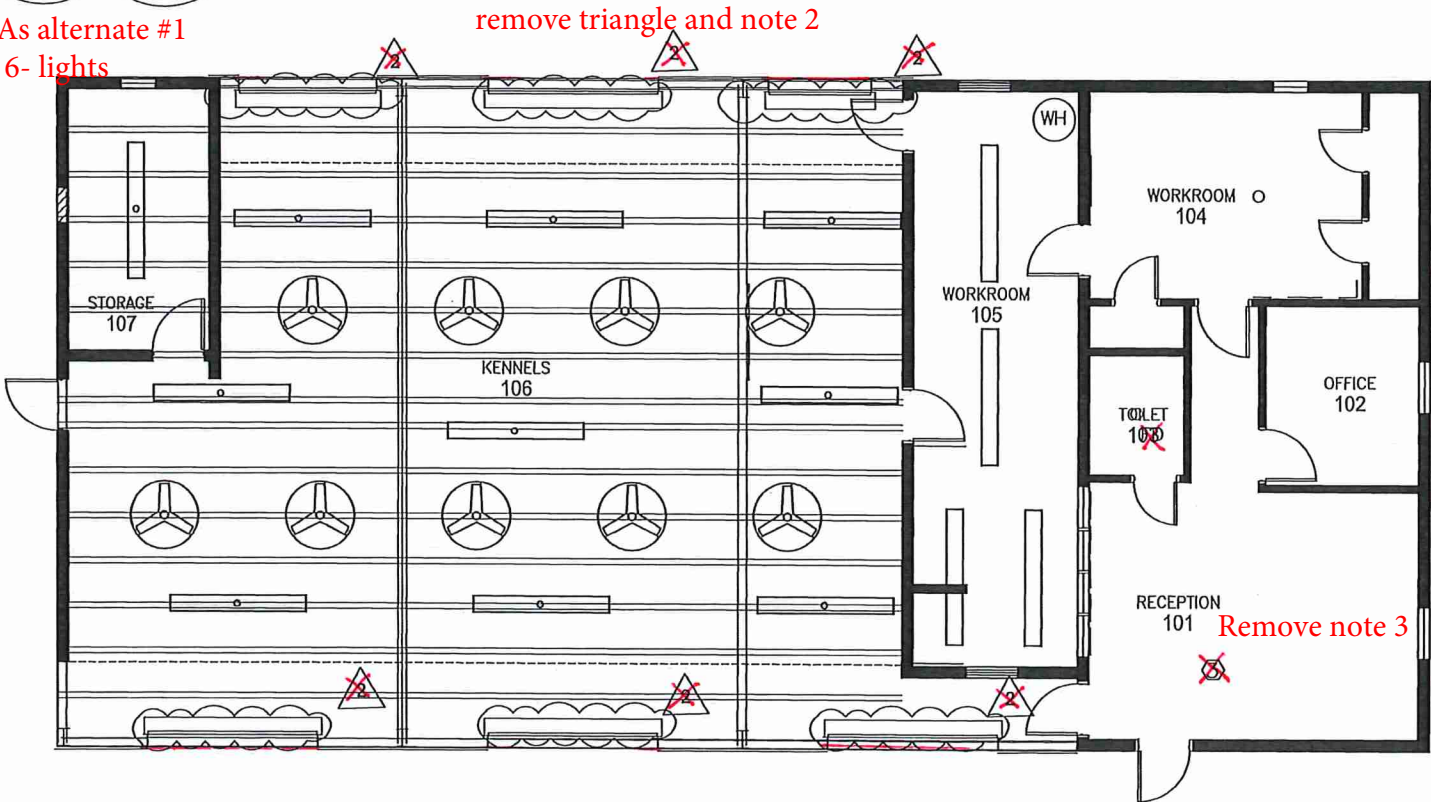


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• Mechanical • Electrical •
• Plumbing Design •
• Firm Registration #11288

1 ELECTRICAL LIGHTING PLAN
SCALE: 1/4" = 1'-0"



SCOPE OF ELECTRICAL WORK:

1. PROVIDE AND INSTALL NEW LIGHT FIXTURES IN CREMATORIA AREA AS REQUIRED, LIGHTS, AND POWER PER PLANS AND SPECIFICATIONS.
2. FIELD VERIFY AVAILABLE FAULT CURRENT AND MARK ON PLANS., DATE AND SIGN PER CITY OF HOUSTON CODE REQUIREMENTS.

GENERAL NOTES:

1. IF REQUIRED, CONTACT POWER COMPANY CONSULTANT PRIOR TO DOING ANY WORK. PURCHASE ALL PERMITS AND PAY ALL FEES.

ELECTRICAL NOTES:

1. LIGHT FIXTURES TO BE SERVED BY CONDUIT AND JUNCTION BOXES.
2. COORDINATE LIGHT FIXTURE LOCATIONS WITH OTHER REQUIREMENTS. COORDINATE WITH OWNER/ARCHITECT.
3. EXACT LOCATIONS OF SWITCHES SHALL BE AS PER EXISTING OR AS DIRECTED BY THE OWNER.
4. SWITCHING IS SHOWN DIAGRAMMATICALLY. CONSULT WITH OWNER'S REPRESENTATIVE TO EXACT FUNCTIONALITY OF SWITCHING. PROVIDE ADDITIONAL SWITCHES AND/OR RECEPTACLES IF REQUIRED BY OWNER.

ELECTRICAL NOTES: (CONTINUED)

5. ALL PANELS TO BE MARKED FOR ARC FLASH HAZARD PER NEC 110.16.
6. FAULT CURRENT SHOWN ON E3.0 IS BASED ON EXISTING PHYSICAL TRANSFORMER CONFIGURATION. EC TO VERIFY EXACT AVAILABLE SHORT CIRCUIT CURRENT AND PROVIDE FOR FULLY RATED EQUIPMENT.
7. ALL WORK TO BE IN COMPLIANCE WITH NEC 2020.
8. RUN 1" C., PVC SCHEDULE 80, 3/10, 1#12G UNDERGROUND FROM NEW CREMATORIUM BUILDING TO EXISTING PANEL 'M' IN KENNEL AREA. DO NOT CUT ANY EXISTING PAVEMENT, BORE UNDER.

ELECTRICAL LEGEND	
MARK	DESCRIPTION
•	FLUORESCENT FIXTURE
■	FLUORESCENT FIXTURE WITH BATTERY PACK
♀	WALL BRACKET FIXTURE
⊕	FLUORESCENT FIXTURE
⊙	EXIT LIGHT
⊕	SINGLE RECEPTACLE
⊕	DUPLEX CONVENIENCE OUTLET
⊕	FLOOR MOUNTED DUPLEX OUTLET
⊕	240V OUTLET
⊕	OUTLET WITH GROUND FAULT CIRCUIT INTERRUPTER
⊕	RECEPTACLE WITH ISOLATED GROUND
⊕	QUAD PLEX CONVENIENCE OUTLET
⊕	WALL SWITCH
⊕	3-WAY SWITCH
⊕	SWITCH W/PILOT LIGHT
⊕	PASSIVE INFRARED WALL SWITCH/SENSOR
⊕	MANUAL ON/OFF CONTROL
⊕	MOTOR RATED SWITCH
⊕	MOTOR
⊕	CIRCUIT HOME-RUN TO PANEL
⊕	SWITCHABLE
⊕	TELEPHONE OUTLET 1" TO ABOVE CEILING WITH WIRE TO TELEPHONE TERMINAL BOARD
⊕	DISCONNECT SWITCH
⊕	JUNCTION BOX
⊕	120V HARDWIRED CONNECTION
⊕	208V/1Ø HARDWIRED CONNECTION
⊕	MOTION DETECTOR, ARROW INDICATES DIRECTION
⊕	PHOTOCELL
⊕	208V/3Ø HARDWIRED CONNECTION
⊕	ELECTRICAL PANEL

ISSUE DATES	
DATE	DESCRIPTION
05/03/22	REVIEW SET

PROJECT TEAM
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Renovations and Additions to
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SA PROJECT NO.:

2209

DATE:

05/03/2022

SHEET TITLE:

LIGHTING PLAN

SHEET NO.:

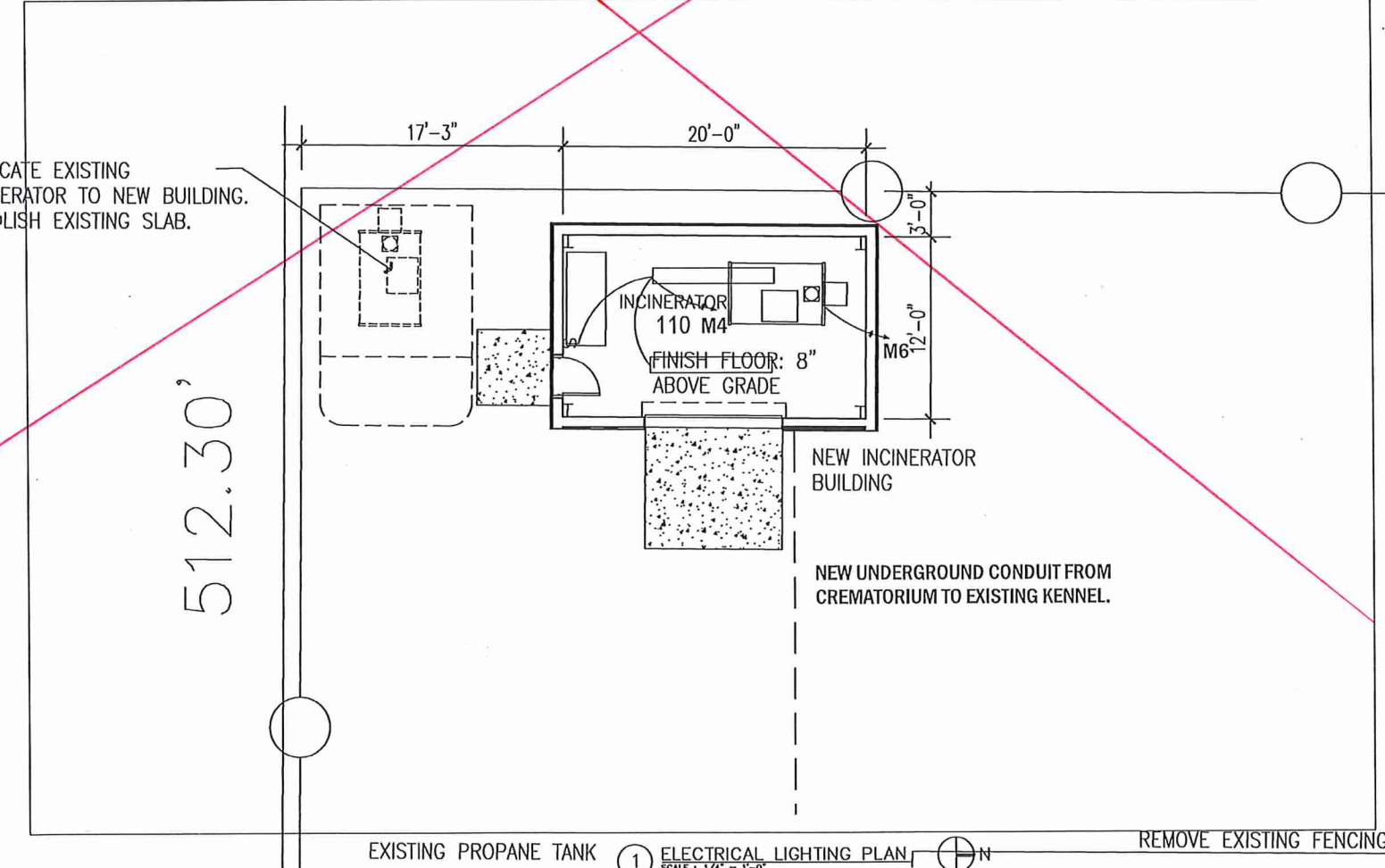
E1.1



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• Mechanical • Electrical •
• Plumbing Design •
• Firm Registration #F1228



EXISTING PROPANE TANK

1 ELECTRICAL LIGHTING PLAN

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



REMOVE EXISTING FENCING

Remove all notes stricken through.
Remove circles and all notes 2, 3 & 4 in room 106
Remove OH doors from new walls
and show 2-ped doors.
Remove cloud

SCOPE OF ELECTRICAL WORK:

1. ~~PROVIDE AND INSTALL NEW ELECTRICAL EQUIPMENT AS REQUIRED; LIGHTS, AND POWER PER PLANS AND SPECIFICATIONS.~~
2. ~~PROVIDE NEW EXTERIOR (BATTERY) EMERGENCY EGRESS LIGHTS AS REQUIRED BY CURRENT CODES.~~
3. ~~FIELD VERIFY AVAILABLE FAULT CURRENT AND MARK ON PLANS, DATE AND SIGN PER CITY OF HOUSTON CODE REQUIREMENTS.~~

GENERAL NOTES:

1. ~~CONTACT POWER COMPANY CONSULTANT PRIOR TO DOING ANY WORK. PURCHASE ALL PERMITS AND PAY ALL FEES.~~

ELECTRICAL NOTES:

1. LIGHT FIXTURES TO BE SERVED BY CONDUIT AND JUNCTION BOXES.
2. ~~COORDINATE LIGHT FIXTURE LOCATIONS WITH MECHANICAL REQUIREMENTS. COORDINATE WITH OWNER/ARCHITECT.~~
3. ~~EXACT LOCATIONS OF SWITCHES SHALL BE AS PER EXISTING OR AS DIRECTED BY THE OWNER.~~
4. ~~SEE E5.0 FOR DETAILS REGARDING CONNECTION OF BATTERY AND NIGHT LIGHTING CIRCUITS. ALL BATTERY POWERED LIGHTS TO BE CONNECTED TO NORMAL POWER CIRCUIT PER NEC 700.12(E).~~
5. ~~SAFETY DISCONNECTS TO BE MOUNTED ON OUTSIDE OF HVAC UNIT. (30/240/2P/3R/HD/NF) DUPLEX GFCI CONVENIENCE RECEPTACLE OUTLET TO BE MOUNTED ON SIDE OF EACH HVAC UNIT IN CAST FD BOX WITH HINGED, GASKETED, WEATHERPROOF COVER PLATE.~~
6. ~~SWITCHING IS SHOWN DIAGRAMMATICALLY. CONSULT WITH OWNER'S REPRESENTATIVE TO EXACT FUNCTIONALITY OF SWITCHING. PROVIDE ADDITIONAL SWITCHES AND/OR RECEPTACLES IF REQUIRED BY OWNER.~~
7. ~~COORDINATE LOCATION OF HVAC UNIT WITH OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.~~

ELECTRICAL NOTES:(CONTINUED)

1. ~~CEILING GRID NOT SHOWN FOR CIRCUIT CLARITY. FOR EXACT LOCATION OF CEILING GRIDS, REFER TO ARCHITECTURAL PLANS.~~
2. ~~COORDINATE ALL HVAC SUPPLY AND RETURN REGISTER LOCATIONS WITH MECHANICAL DRAWINGS. LIGHT AND OR HVAC DIFFUSER LOCATIONS SHOWN TO BE MODIFIED AS REQUIRED TO ACCOMMODATE HVAC DROPS.~~
3. ~~ALL PANELS TO BE MARKED FOR ARC FLASH HAZARD PER NEC 110.16.~~
4. ~~FAULT CURRENT SHOWN ON E3.0 IS BASED ON EXISTING PHYSICAL TRANSFORMER CONFIGURATION. EC TO VERIFY EXACT AVAILABLE SHORT CIRCUIT CURRENT AND PROVIDE FOR FULLY RATED EQUIPMENT.~~
5. ALL WORK TO BE IN COMPLIANCE WITH NEC 2020.

LIGHTING PLAN KEYED NOTES (FOR 1/E1.0 ONLY)

1. ~~EXHAUST FANS, BROAN MODEL 509, 120V, 180 CFM. EXHAUST FANS ARE TO BE VENTED OUT THROUGH OUTSIDE WALL OR ROOF AS REQUIRED BY OWNER'S REPRESENTATIVE. (SEE M1.0)~~
2. ~~ADJUSTMENTS TO LIGHT LOCATIONS REQUIRED FOR HVAC.~~
3. ~~MOUNT LIGHT SWITCHES IN ACCESSIBLE LOCATION. COORDINATE EXACT LOCATION WITH OWNER'S REPRESENTATIVE.~~
4. ~~EGRESS LIGHT TO BE EQUIPPED TO OPERATE UPON LOSS OF BUILDING POWER, BE CONNECTED THROUGH EXIT LIGHT, AND HAVE 90-MINUTE BATTERY BACK-UP.~~

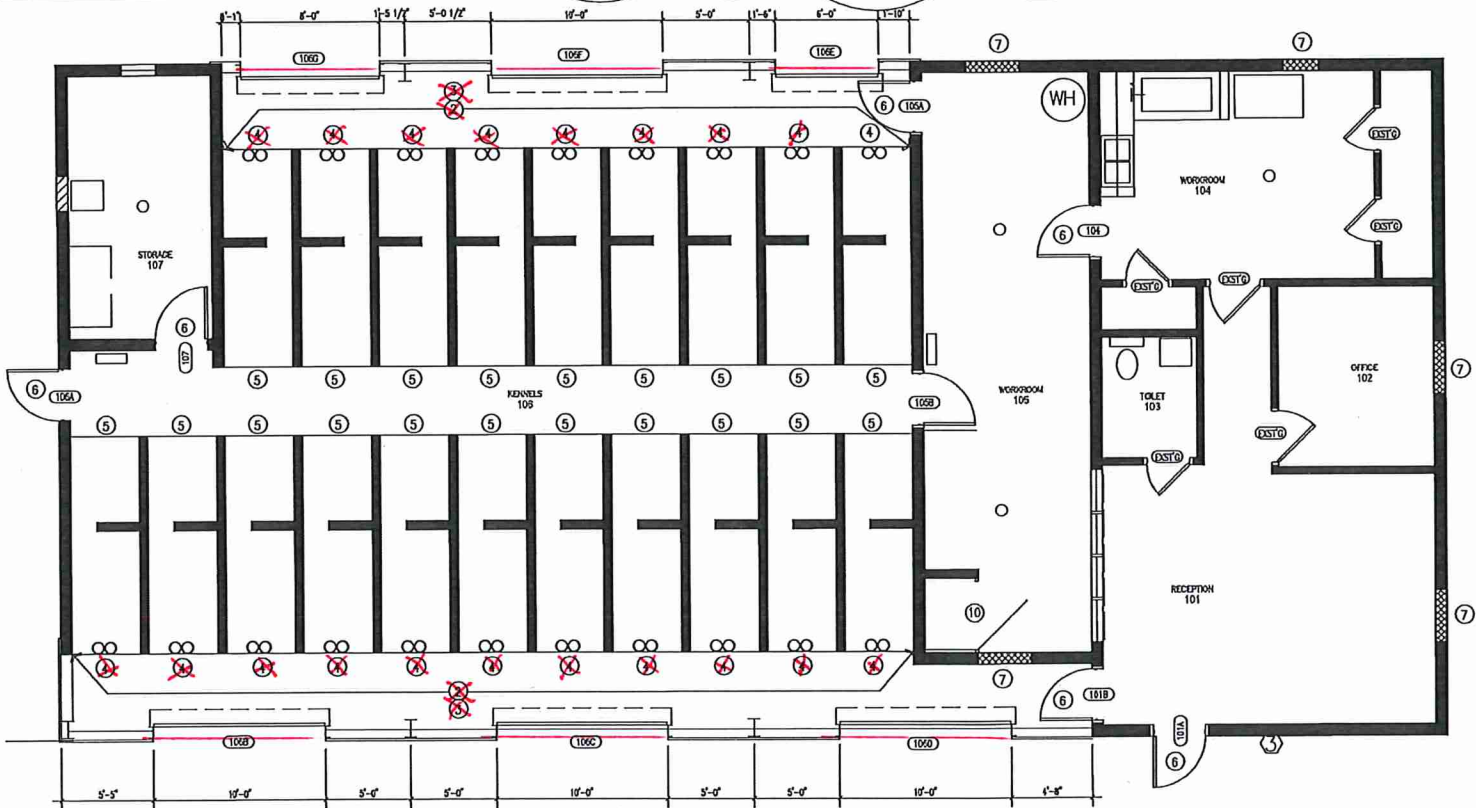
SPECIAL INSTRUCTIONS:

1. ~~WALL OCCUPANCY SENSORS - LEVITON #0CD15-IDW CEILING OCCUPANCY SENSORS - ACUTY #NOM-PDT-9 SENSORS SHALL MEET 2015 IECC 405.2.1.1.~~
2. ~~THE CEILING-MOUNTED MOTION DETECTOR SHALL BE EQUIPPED WITH A TIME SWITCH CONTROLLER WHICH WILL AUTOMATICALLY TURN OFF ALL THE LIGHTS IN THE SPACE WITHIN 30 MINUTES AFTER DEPARTURE OF THE LAST OCCUPANT.~~
3. ~~PROVIDE CIRCUITING SO THAT LIGHTING MAY BE REDUCED BY AT LEAST 50% VIA SWITCHING.~~
4. ~~PROVIDE AND INSTALL A NEW DUPLEX RECEPTACLE OUTLET IN THE INCINERATOR SHED FOR THE FREEZER CONNECTION. ROUTE 3" C-3-#12AWG THHN CONDUCTORS THROUGH THE EXISTING WIREWAY TO PANEL.~~

Delete 1 & 2 below

SPECIAL INSTRUCTIONS:

1. WALL OCCUPANCY SENSORS - LEVITON #0CD15-IDW CEILING OCCUPANCY SENSORS - ACUTY #NOM-PDT-9 SENSORS SHALL MEET 2015 IECC 405.2.1.1.
2. THE CEILING-MOUNTED MOTION DETECTOR SHALL BE EQUIPPED WITH A TIME SWITCH CONTROLLER WHICH WILL AUTOMATICALLY TURN OFF ALL THE LIGHTS IN THE SPACE WITHIN 30 MINUTES AFTER DEPARTURE OF THE LAST OCCUPANT.



1 ELECTRICAL LIGHTING PLAN
SCALE: 1/4" = 1'-0"



ELECTRICAL LEGEND	
MARK	DESCRIPTION
	FLUORESCENT FIXTURE
	FLUORESCENT FIXTURE WITH BATTERY PACK
	WALL BRACKET FIXTURE
	FLUORESCENT FIXTURE
	EXIT LIGHT
	SINGLE RECEPTACLE
	DUPLEX CONVENIENCE OUTLET
	FLOOR MOUNTED DUPLEX OUTLET
	240V OUTLET
	OUTLET WITH GROUND FAULT CIRCUIT INTERRUPTER
	RECEPTACLE WITH ISOLATED GROUND
	QUAD PLEX CONVENIENCE OUTLET
	WALL SWITCH
	3-WAY SWITCH
	SWITCH W/PILOT LIGHT
	PASSIVE INFRARED WALL SWITCH/SENSOR
	MANUAL ON/OFF CONTROL
	MOTOR RATED SWITCH
	MOTOR
	CIRCUIT HOME-RUN TO PANEL
	SWITCH LEG
	TELEPHONE OUTLET 1' TO ABOVE CEILING WITH WIRE TO TELEPHONE TERMINAL BOARD
	DISCONNECT SWITCH
	JUNCTION BOX
	120V HARDWIRED CONNECTION
	208V/120V HARDWIRED CONNECTION
	MOTION DETECTOR, ARROW INDICATES DIRECTION
	PHOTOCELL
	208V/120V HARDWIRED CONNECTION
	ELECTRICAL PANEL



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ISSUE DATES	
DATE	DESCRIPTION
05/03/22	REVIEW SET
10/24/22	OWNER REVISION

PROJECT TEAM
VFP DESIGNER: James E Thompson & Associates
1169 County Road 136A
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Renovations and Additions to
Port Lavaca Animal Shelter
201 Stringham Port Lavaca, Texas 77979

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SA PROJECT NO.:

2209

DATE:

05/03/2022

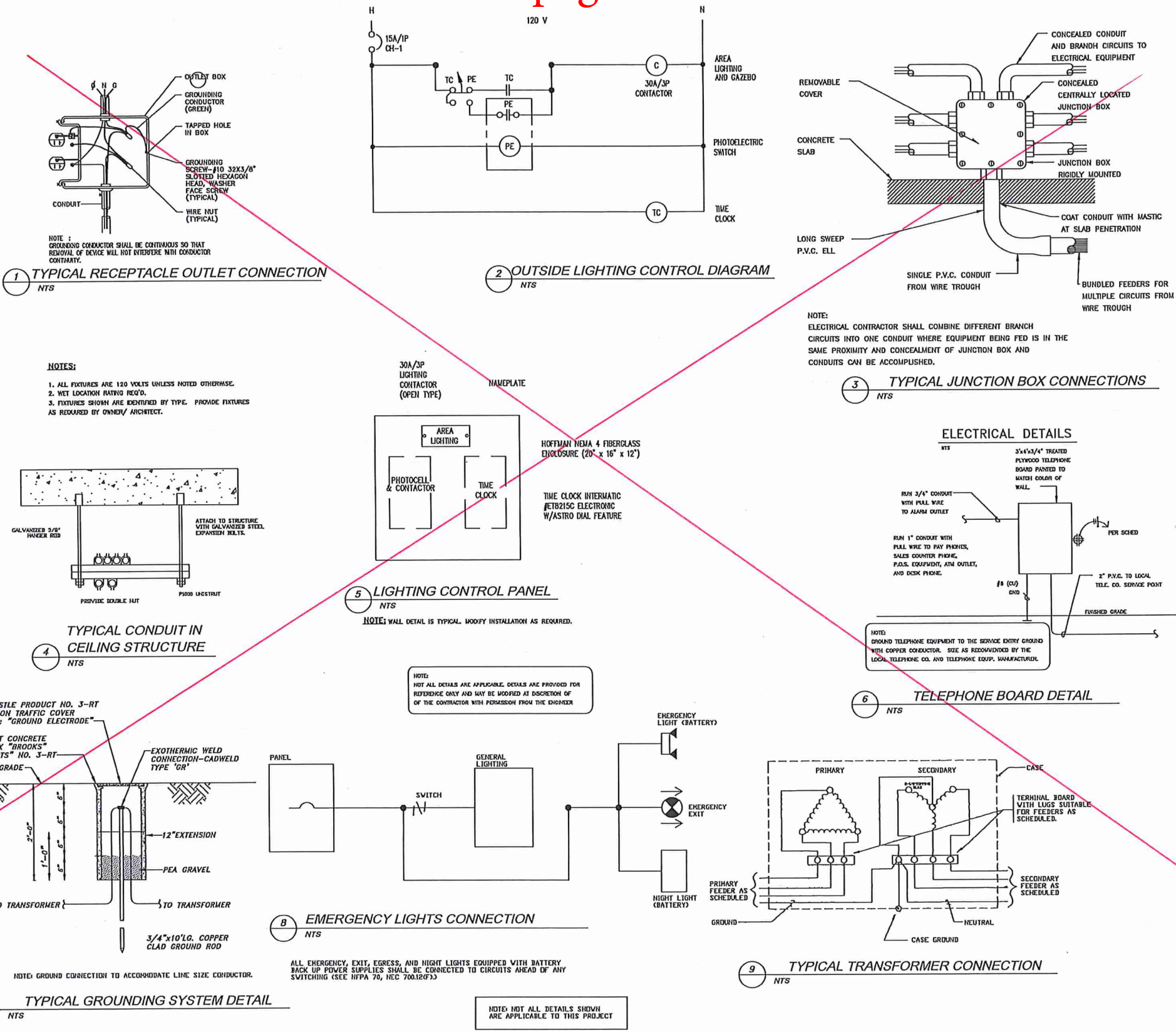
SHEET TITLE:

POWER PLAN

SHEET NO.:

E2.0

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ISSUE DATES	
DATE	DESCRIPTION
05/03/22	REVIEW SET

PROJECT TEAM
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Renovations and Additions to
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• Mechanical • Electrical •
• Plumbing Design •
• Firm Registration #F1288

SA PROJECT NO.:

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05/03/2022

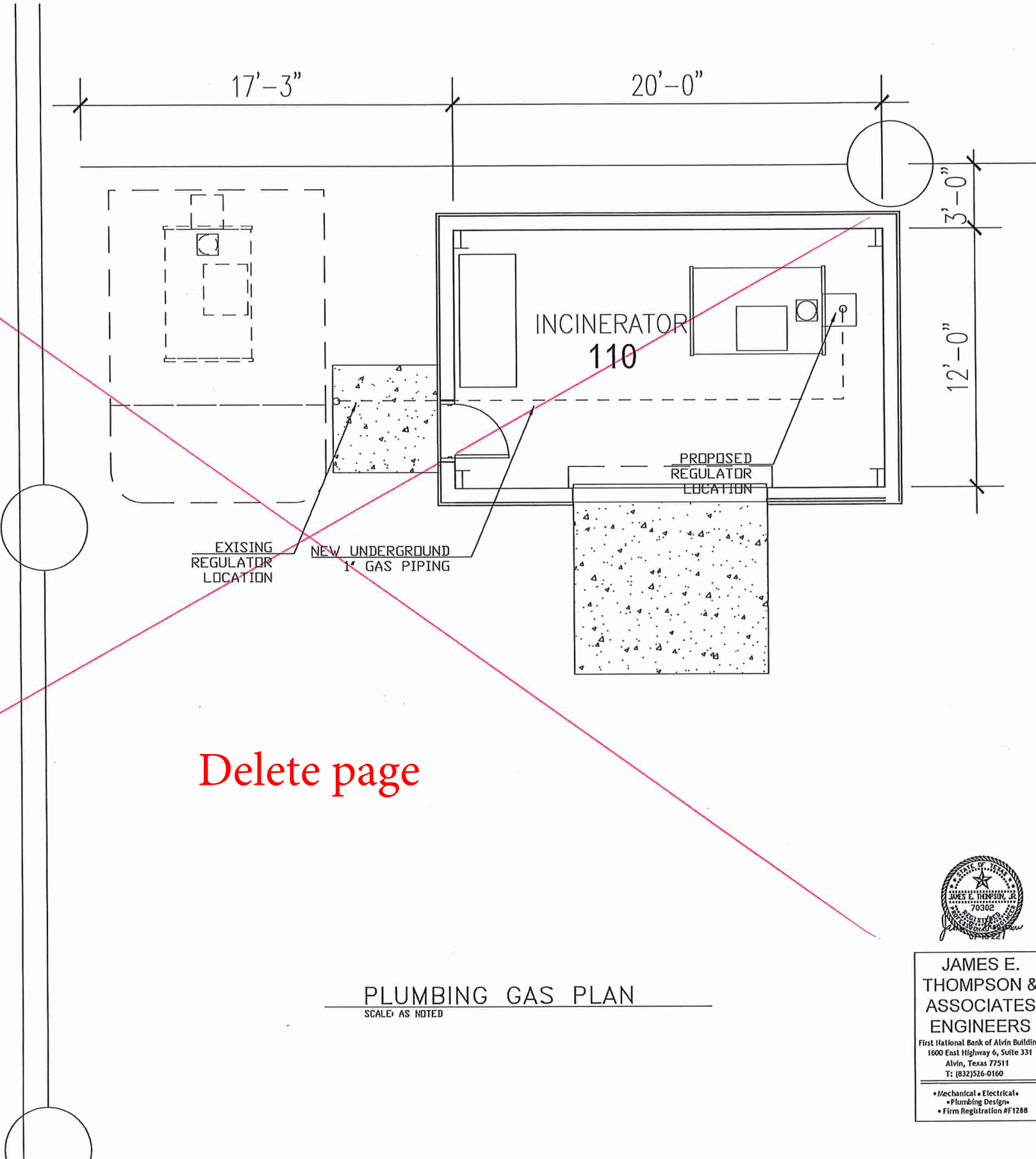
SHEET TITLE:

ELECTRICAL
DETAILS

SHEET NO.:

E3.0

- SCOPE OF PLUMBING WORK
1. EXISTING INCINERATOR TO BE RELOCATED TO NEW BUILDING LOCATED ADJACENT TO EXISTING SITE.
 2. DISCONNECT AND RELOCATE EXISTING GAS METER AS INDICATED ON PLANS.
 3. EXTEND EXISTING PIPING FROM EXISTING REGULATOR LOCATION TO NEW LOCATION AND MAKE FINAL CONNECTIONS. RELOCATE REGULATOR.
 4. COORDINATE WITH LOCAL GAS COMPANY IF REQUIRED. OBTAIN ALL PERMITS AND PAY ALL FEES.
 5. SIZE PIPING AS PER EXISTING UNLESS A LARGER SIZE IS WARRANTED BY LOCAL CODES.
 6. PIPING EXTENSION SHALL BE RUN UNDERGROUND IN ACCORDANCE WITH ALL APPLICABLE CODES. COORDINATED WITH OWNER/ARCHITECT.



LEGEND	
—	COLD WATER
- - - - -	HOT WATER
- - - - -	SANITARY SEWER
- - - - -	GREASE LINE

PLUMBING GAS PLAN

SCALE: AS NOTED



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ISSUE DATES	
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05/03/22	REVIEW SET

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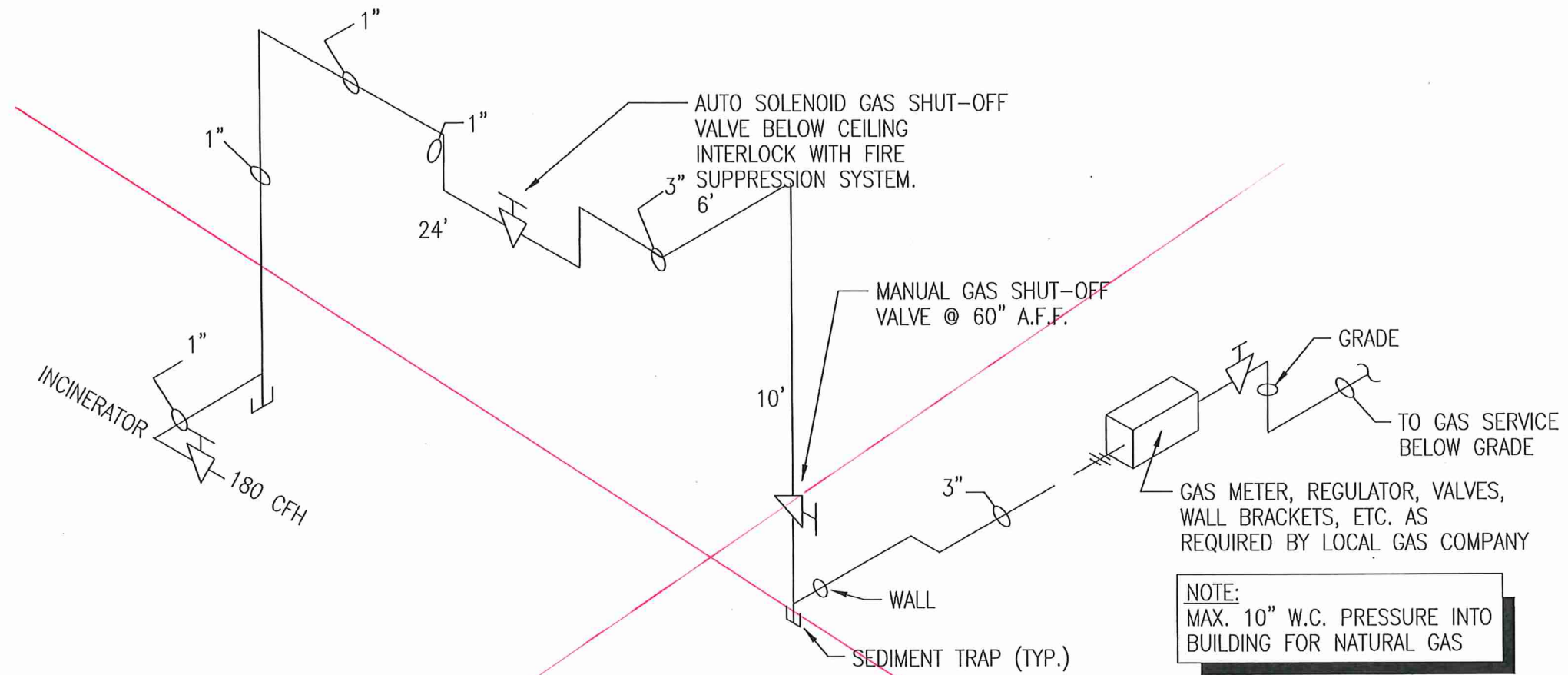
05/03/2022

SHEET TITLE:

PLUMBING
FLOOR PLANS

SHEET NO.:

P1.0



3> TOTAL GAS LOAD = 180 CFH @ 1100 CFH/BTUH GAS
2> DEVELOPED LENGTH = 65 FT, THEREFORE 1" GAS PIPE REQUIRED.
1> 4 OZ PRESSURE


GAS SCHEDULE	CFH
INCINERATOR	318
TOTAL	318

CONTRACTORS TO VERIFY ALL METERING REQUIREMENTS WITH OWNER AND LOCAL UTILITY PRIOR TO BUILD.

NOTE:
MAX. 10" W.C. PRESSURE INTO BUILDING FOR NATURAL GAS

CONTRACTOR SHALL VERIFY THE ACTUAL GAS REQUIREMENT FOR EACH FIXTURE TO BE INSTALLED AND ALSO FIELD-VERIFY THE ACTUAL LENGTH OF PIPE AS INSTALLED. IF THE EXISTING GAS METER IS NOT SUFFICIENT THE ACCOMMODATE THE REQUIREMENT, THEN CONTRACTOR SHALL HAVE GAS COMPANY INSTALL AN APPROPRIATELY-SIZED GAS METER TO HANDLE THE EXPECTED REQUIREMENT.

Delete page
GAS RISER
NTS



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DATE	DESCRIPTION
05/03/22	REVIEW SET

PROJECT TEAM
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STRUCTURAL ENGINEER: CJO Engineers
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DWG:

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SA PROJECT NO.:
2209
DATE:
05/03/2022
SHEET TITLE:
NATURAL GAS RISER
SHEET NO.:
P2.0