

**FIRE DAMAGE REPAIR**  
 792 SW GROVE AVE., PORT ST. LUCIE, FL.  
 MIKE: 772-370-3074

SHEET NUMBER  
 C-1  
 1

ENGINEER  
**PAUL WELCH INC.**  
 MECHANICAL ELECTRICAL  
 CIVIL ENGINEERING  
 1884 SW BILTMORE ST., SUITE # 114  
 PORT SAINT LUCIE, FL 34984  
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 PAUL WELCH P.E.  
 FLORIDA REGISTRATION NO. 29945

**ELECTRICAL**

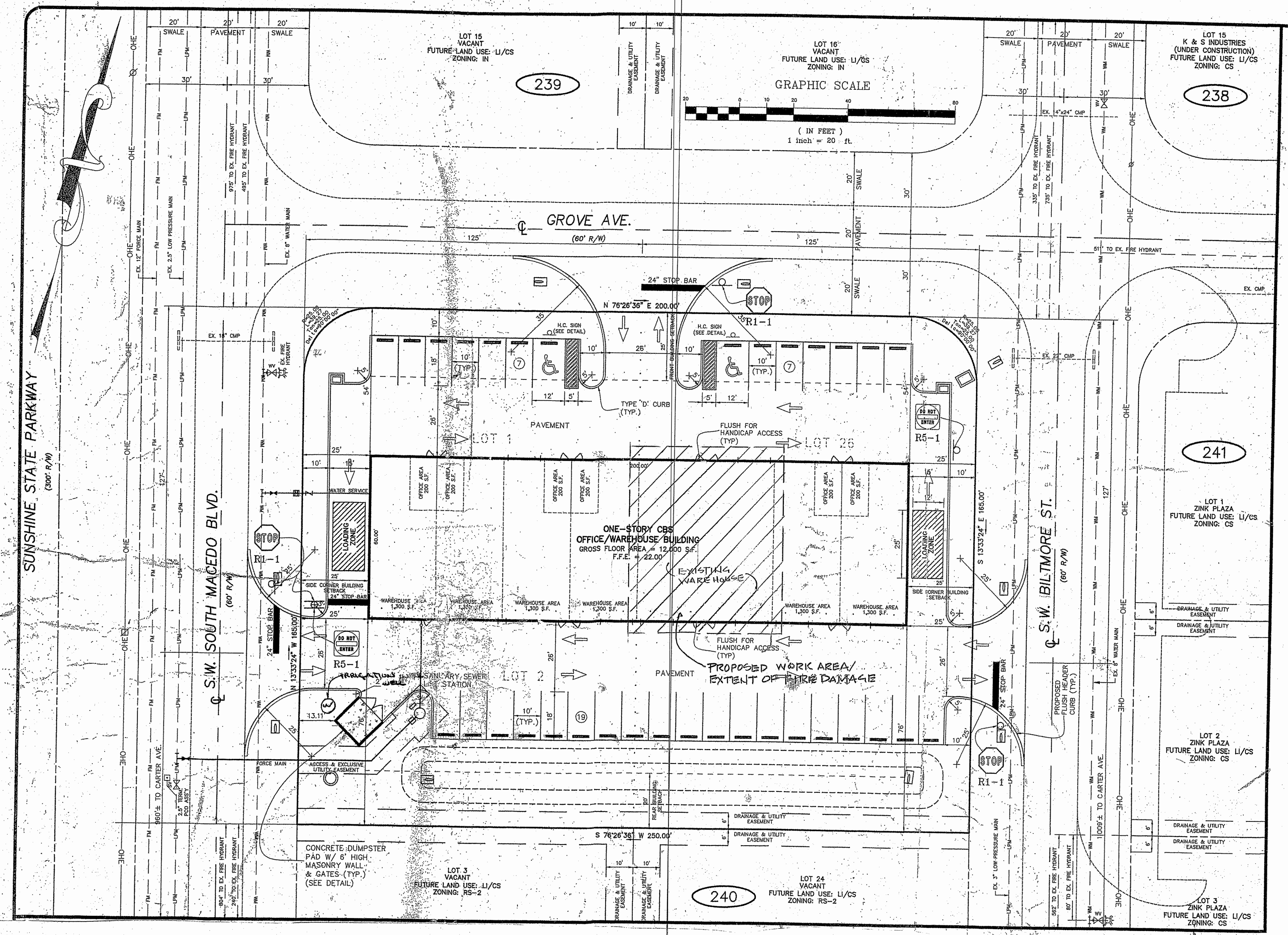


THIS ELECTRONIC SIGNATURE ALONG WITH P.E. SEAL ON EACH SHEET CERTIFIES ALL SHEETS IN THIS FILE.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PAUL WELCH, P.E. ON 01/30/2023.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED & SEALED  
 AND THE ELECTRONIC SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PLOT PLAN NTS...





**PROJECT DATA:**

NAME: FIRE DAMAGE REPAIR  
ADDRESS: 792 SW GROVE AVE.  
PORT ST. LUCIE, FL  
SQUARE FOOTAGE: RESTROOMS-----125 S.F.  
WAREHOUSE-----2875 S.F.  
TOTAL-----3000 S.F.  
OCCUPANCY CLASSIFICATION: GROUP F-1  
(MODERATE HAZARD FACTORY INDUSTRIAL)  
OCCUPANCY LOAD: 2875 SF WAREHOUSE @ 500 SF/PERSON =6 PERSONS  
TYPE OF CONSTRUCTION: VB  
EXIT ... 6 x 0.2 = 1.2' ... 36" PROVIDED

**SCOPE OF WORK:**

**DEMOLITION**  
- DEMO DAMAGED MATERIALS AND DEBRIS PER DEMO PLAN

**SCOPE OF WORK:**

**STRUCTURAL**  
- INSTALL NEW TRUSSES, ROOFING ETC. PER PLAN  
- CONSTRUCT NEW FIRE RATED WALLS PER PLAN  
- CONSTRUCT NEW INTERIOR NON BEARING WALLS PER PLAN  
- CUT OUT EXISTING CONCRETE SLAB FOR INSPECTION OF EXISTING PLUMBING AND RELOCATION OF LAVS AND SERVICE SINKS  
- INSTALL NEW WINDOWS AND DOORS PER PLAN

**SCOPE OF WORK:**

**ELECTRICAL**  
- INSTALL NEW EQUIPMENT, WIRE, CONDUIT, FIXTURES ETC.... PER PLAN

**SCOPE OF WORK:**

**MECHANICAL**  
- NO MECHANICAL REPAIRS REQUIRED

**SCOPE OF WORK:**

**PLUMBING**  
- REPAIR/REPLACE EXISTING SEWER LINES AS REQUIRED UPON REMOVAL OF PORTION OF SLAB AT RESTROOM AREA  
- INSTALL NEW WATER HEATER AS REQUIRED  
- REPLACE EXISTING WATER LINES AS REQUIRED

NOTE: ALL CONSTRUCTION MUST COMPLY WITH THE FBC 2020, THE 2020 FLORIDA PLUMBING CODE, THE 2020 FLORIDA MECHANICAL, AND THE NEC (NFPA 70) 2017 EDITION.

ALL ADDITIONS, REPAIRS, AND ALTERATIONS MUST COMPLY WITH THE FBC 20 FOR EXISTING BUILDINGS.

THIS IS A REPAIR AND MUST COMPLY WITH THE FBC 2020 FOR EXISTING BUILDINGS CHAPTER 4.

**NOTES:**

- THE CONTRACTOR, SUBCONTRACTOR, SUPPLIER, ECT. SHALL VERIFY ALL DIMENSIONS, CONDITIONS AT JOB SITE, PLANS, SPECIFICATIONS, ECT.
- STRUCTURAL FEATURES NOT DETAILED ON THESE PLANS WILL BE ADDRESSED BY THE ENGINEER AS CONSTRUCTION PROGRESSES.
- ALL WRITTEN DIMENSIONS ON THESE DRAWINGS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
- ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE FBC 2020.

**STRUCTURAL NOTES**

- 1) DESIGN LOADS IN ACCORDANCE WITH ASCE7-16.
- 2) SOIL BEARING CAPACITY: 3000 PSF (MIN).
- 3) SLAB / FOOTINGS TO BE CONCRETE WITH A MINIMUM 2500 PSI COMPRESSIVE STRENGTH AT 28 DAYS. SEE PLAN FOR SIZES & STEEL REQUIREMENTS.
- 4) MINIMUM CONCRETE PROTECTION FOR REINFORCING BARS: FOOTINGS: 3" BEAMS: 1 1/2" SUSPENDED SLABS: 1 1/2"
- 5) ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED.
- 6) SPLITTING OR CRACKING OF STRUCTURAL COMPONENTS DUE TO INSTALLATION OF HARDWARE IS NOT PERMITTED.
- 7) UNLESS OTHERWISE NOTED, THE INSTALLATION OF SPECIFIED HARDWARE SHALL CONFORM TO THE MANUFACTURES INSTRUCTIONS AND STANDARD PRACTICES.
- 8) UNLESS OTHERWISE NOTED, ROOF SHEATHING TO BE NAILED WITH 8d RING-SHANK NAILS AT 4" O.C. PERIMETER AND FIELD.
- 9) STUCCO SOFFIT NOTE: SOFFIT TO BE STUCCO OVER WIRELATH W/ 11GA. 2" NAILS W/ 3/8" Ø HEAD @ 6" O.C. OVER 3/8" METAL RIB LATH @ 6" O.C. W/ (2 LAYERS) OF 15# FELT. \*NOTE: PROVIDE TYVAK BUILDING WRAP BETWEEN PAPERBACKED LATH AND CDX PLYWOOD
- 10) INTERIOR TO BE 1/2" DRYWALL FINISH (@ RESTROOMS).
- 11) PROVIDE R-11 BATTS. INSULATION IN WALL FRAMING (@ RESTROOMS).

**ELECTRICAL NOTES**

- ALL ELECTRICAL INSTALLATIONS AND EQUIPMENT SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE N.E.C. (NFPA 70) AS AMENDED, AND ALL LOCAL & STATE CODES IN FORCE AT THE TIME OF CONSTRUCTION.
- GROUND SYSTEM IN ACCORDANCE WITH ARTICLE 250 N.E.C.
- SYSTEM VOLTAGE IS 120/240 VOLT, SINGLE PHASE.
- PANELBOARDS AND LOAD CENTERS SHALL BE SQUARE "D", ITE, OR APPROVED EQUAL.
- ALL CONDUCTORS AND BUS BARS SHALL BE COPPER.
- ALL MATERIAL SHALL BE U.L. APPROVED.
- PROVIDE ALL NECESSARY PERMITS REQUIRED.
- PROVIDE TEMPORARY SERVICE FOR USE BY ALL TRADES DURING CONSTRUCTION.
- PROVIDE A TYPEWRITTEN DIRECTORY FOR EACH PANELBOARD OR LOAD CENTER.
- PROVIDE ALL EMPTY CONDUIT WITH PULL STRING AS REQUIRED BY PHONE CO. -
- VERIFY ALL REQUIREMENTS PRIOR TO BIDS.
- CONTRACTOR SHALL MAKE FINAL ARRANGEMENTS FOR TELEPHONE AND ELECTRICAL SERVICE. VERIFY TRANSFORMER LOCATION AND SERVICE POINTS FOR ALL UTILITIES PRIOR TO BIDS.
- VERIFY ALL EQUIPMENT ELECTRICAL REQUIREMENTS BEFORE INSTALLATION.

Jurisdiction: City of Port St. Lucie, FL

Code: FRC/FBC 2020 (7TH EDITION)

Project Address: 792 SW GROVE AVE. Project Name: FIRE DAMAGE REPAIR

Architect/Engineer: Paul Welch P.E.

Type of Construction: CBS X Frame: \_\_\_\_\_

Building Designed: Enclosed X Open \_\_\_\_\_ Partially Enclosed \_\_\_\_\_

Wind Speed (3 second gust) Vult: 165 mph

Wind Speed (nominal) Vaud: 128 mph

Exposure: B

Internal Pressure Coefficient: 0.18

Importance Factor: 1.0 Building Risk Category 2 (1,2,3, or 4)

Mean Building Height: 30 ft

Overhang: 1 ft Roof Pitch: 5 / 12

Components & Cladding Wind Pressures: + 29.4 / -39.4 PSF

(ACTUAL BUILDING DESIGN PRESSURES FOR WINDOWS AND DOORS LISTED ON PLANS)

Roof Dead Load: 7 Live Load: 20

Framed Floor Live Load: N/A psf Dead Load: N/A

Shutters: Yes #N/A No #N/A

Impact Resistant Assembly: Yes X No \_\_\_\_\_

**Building Department Product Approval Submittal Affidavit**

Building Address: SEE PLAN

Contor: TBD

Permit # \_\_\_\_\_

Opening Schedule : Swing doors, Overhead Doors, Sliding Doors, Fiberglass, Windows & Skylights

Opening ID FL # or NOA # Product Model # Manufacturer Glass Description

Attainment Method Type, Size, Spacing & Embeant (DISTANCE FROM CORNER / DISTICE O.C.) Building Design Pressure Product Design Pressure

FIXED WIND NOAH# 20-0401.10 FIXED WIND PW 7720A PGT IMPACT 1/41 3/4" MIN. EMBD. TC'S @ 6" / 12" O.C. ATTACHED THRU BUCK INTO MASONRY SEE ELEV'S +/- 75.6

ROLL UP DOOR FL# 742.1 ROLL UP DOOR SERIES 600 OVERHEAD DOOR CORP N/A 3/8" WERS POWER BOLT WITH 3" MIN. EMBD. AT 12" O.C. SEE ELEV'S +/- 36

STOREFRONT DOOR FL# 15956.3 SF DOOR YTD 350 TH ALUM YKK AP AMERICA IMPACT 1/41 1/4" MIN. EMBD. TC'S AT 5" / 15" O.C. SEE ELEV'S +/- 90

STEEL DOOR FL# 11136.2 STEEL DOOR CONTOURS JELD WEN N/A 1/4" 2" MINIMUM EMBD. TC'S AT 6" / 20.C. ATTACHED DIRECT TO CONC SEE ELEV'S +/- 70

Product Model # Manufacturer Attachment Method Type, Size, Spng, Embedment & Stiffener etc. Building Design Pressure Product Design Pressure

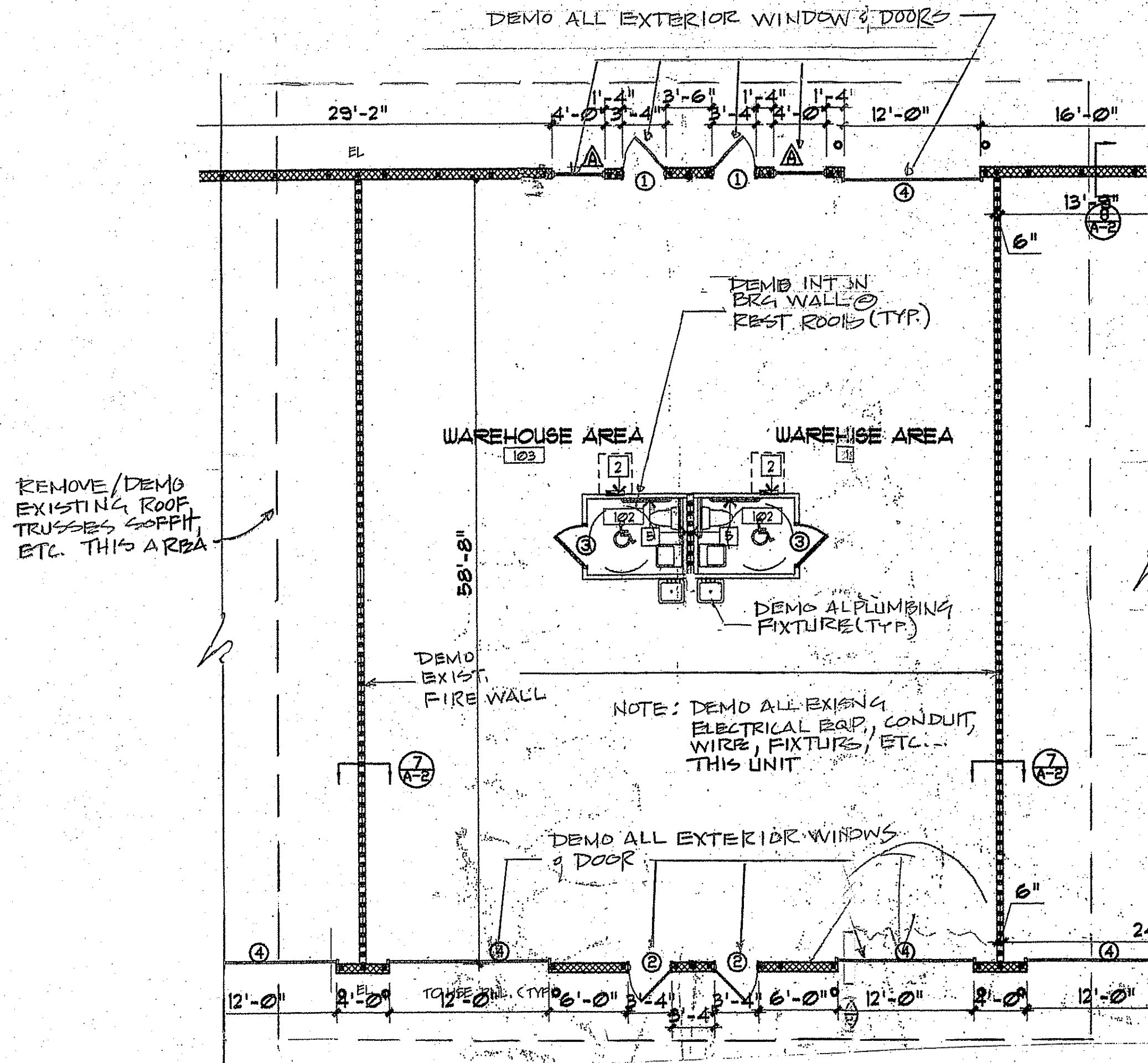
Roof SHINGLES FL#10674.1 OWENS CORNING FASTENERS FOR ASPHHNGLES SHALL BE GALVANIZED STEEL, STAINLESS STEEL, ALUMI OR COPPER ROOFING NAILS, MINIMUM 12 GAUGE (0.105 INCH) SHANK WITH A MINIMUM 3/8 INCH (10MM) DIAMETER HEAD, ASTM#1, OF A LENGTH TO PENETRATE THROUGH THE ROOFING MATERIAL TO A MINIMUM 3/4 INCH (19MM) INTO THE ROOF SHEATHING. IF THE ROOF SHEATHING IS LESS THAN 3/4 INCH (19MM) THICK, FASTENERS SHALL PENETRATE THROUGH THE SHEATHING FASTENERS SHALL COMPLY WITH ASTM F 1687 (8 PER SHINGLE) Vult: 170mph Vult: 194mph

UNDERLAYMENT WEATHER ARMOR SB-1 FL# 26482.2 APOC Apply directly to roof deck. Do not apply to shingles or other roof covgs. Start at the lowest point of the roof deck where shingles overlap seams 3" minimum N/A N/A

Hurricane Panels 9' span or less N/A

I have reviewed the above product approval information and approve it.

Name: Paul Welch P.E. Certification Number: 29945



**ELECTRICAL**



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SHEET NUMBER  
A-1  
OF  
4



PANEL: "A"							MAINS:		MLO		
TYPE: SQ, "D" OR ITE							BUS RATING:		200A, 3W, 5N		
MOUNTING: SURFACE							VOLTAGE:		120 / 240/ 1 / 60		
CKT NO.	POLES	AMPS	DESCRIPTION	WIRE	COND.	CKT NO.	POLES	AMPS	DESCRIPTION	WIRE	COND.
1	1	20	LIGHTING	#12	1/2"	2	1	20	RECPTS	#12	1/2"
3	1	20	REST ROOM	#12	1/2"	4	2	30	TANKLESS WH	#10	1/2"
5			SPACE			6			SPACE		
7			SPACE			8			SPACE		
9			SPACE			10			SPACE		
11			SPACE			12			SPACE		
13			SPACE			14			SPACE		
15			SPACE			16			SPACE		
17			SPACE			18			SPACE		
19			SPACE			20			SPACE		
21			SPACE			22			SPACE		
23			SPACE			24			SPACE		
25			SPACE			26			SPACE		
27			SPACE			28			SPACE		
29			SPACE			30			SPACE		
31			SPACE			32			SPACE		
33			SPACE			34			SPACE		
35			SPACE			36			SPACE		
37			SPACE			38			SPACE		
39			SPACE			40			SPACE		
41			SPACE			42			SPACE		

PANEL: "B"						MAINS:		MLO			
TYPE: SQ, "D" OR ITE						BUS RATING:		200A, 3W, 5N			
MOUNTING: SURFACE						VOLTAGE:		120 / 240/ 1 / 60			
CKT NO.	POLES	AMPS	DESCRIPTION	WIRE	COND.	CKT NO.	POLES	AMPS	DESCRIPTION	WIRE	COND.
1	1	20	LIGHTING	#12	1/2"	2	1	20	RECPTS	#12	1/2"
3	1	20	REST ROOM	#12	1/2"	4	2	30	TANKLESS WH	#10	1/2"
5			SPACE			6			SPACE		
7			SPACE			8			SPACE		
9			SPACE			10			SPACE		
11			SPACE			12			SPACE		
13			SPACE			14			SPACE		
15			SPACE			16			SPACE		
17			SPACE			18			SPACE		
19			SPACE			20			SPACE		
21			SPACE			22			SPACE		
23			SPACE			24			SPACE		
25			SPACE			26			SPACE		
27			SPACE			28			SPACE		
29			SPACE			30			SPACE		
31			SPACE			32			SPACE		
33			SPACE			34			SPACE		
35			SPACE			36			SPACE		
37			SPACE			38			SPACE		
39			SPACE			40			SPACE		
41			SPACE			42			SPACE		

PANEL "A"

1500 SF @ 2.0 VA ..... 3000 VA  
RECPTS ... 3 @ 180 VA ..... 540  
WH ..... 4500  
EWC ..... 1200  
SIGN ..... 1200  
MISC ..... 5000  
TOTAL ..... 15440 VA

15440 VA / 240V = 64 A

USE 200 A PANEL TO MATCH EXISTING

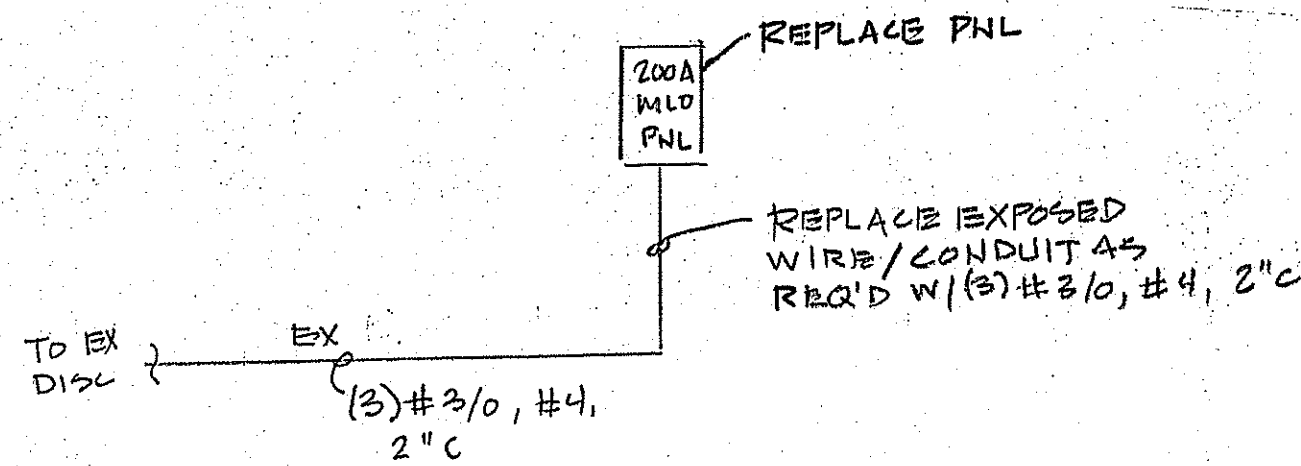
PANEL "B"

1500 SF @ 2.0 VA ..... 3000 VA  
RECPTS ... 3 @ 180 VA ..... 540  
WH ..... 4500  
EWC ..... 1200  
SIGN ..... 1200  
MISC ..... 5000  
TOTAL ..... 15440 VA

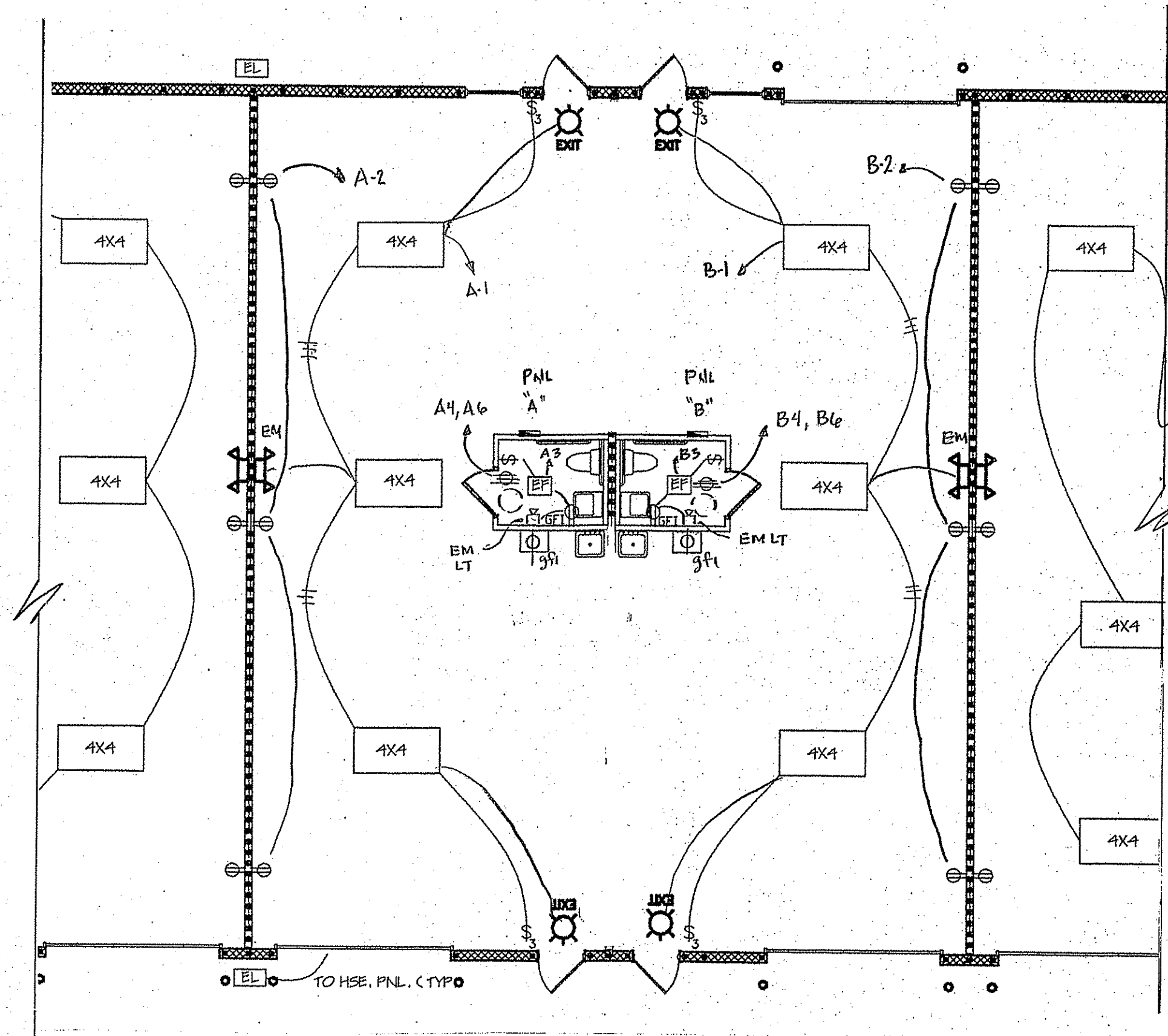
15440 VA / 240V = 64 A

USE 200 A PANEL TO MATCH EXISTING

NOTE:  
EXHAUST FANS SHALL BE GREENHECK OR EQUAL SP SERIES WITH  
CFM INDICATED AT 0.25 " SP. PROVIDE 4" EXH DUCT TO 16"x 16"  
WEATHERPROOF WALL SCUPPER WITH BUG SCREEN - SEE PLAN.



ELECTRIC REVERTS  
TYP. @ PNL "A" & "B"



ELECTRICAL PLAN 1/81

ELECTRICAL



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