			41 sqft Flush (Letters)	28 sqft Flush (Letters)	23 ft² Flush (Letters)		I. Verify (ft²) (flush, raceway, or pin) (solid area of 2. Select fastener for wall structure. 3. Evenly space fasteners over whole sign area.						
						sign may require more f fasteners to avoid bendi	asteners. Example: "I" ing. Follow sign manut	may ne	NLY ATTACH TO STRUCTURAL WALL MATERIAL (UNO). Shape and strength or ed 2 fasteners, "J" - 3, "H" - 4, "W" - 5; and 1/8" thick plastic may need more instructions and code requirements for placement of fasteners. At least put one iturer's instructions and code requirements for installation.				
			ckup	¥	mart				: Minimum Number of Fasteners Spaced Over Whole Sign				
	Sy Ye E E E E E E E E E					,			on Whole Sign Area / Fastener Allowable Tension)				
Mini		4				(rasteners = wind	Force	on whole Sign Area / Fastener Allowable Tension)				
Wiinii					sign	Fastener	Wall Structure	Pull	Fastener Installation				
			4	12	4	3/8" or 1/2" ThruBolt	Structural Wall	200	3/8" or 1/2" bolt, nut, washer thru wall; CMU, brick, concrete, 2x4 or unistrut backer				
			6		5	3/8" or 1/2" ThruBolt	Wood Sheathing	100	3/8" or 1/2" bolt, nut, and washer thru 1/2" OSB or plywood sheathing				
						3/8" Lag Shield	Concrete	200	3/8" - 16 screw in hole, tap anchor flush.				
			11			3/8" Lag Shield	Grout Filled CMU	50	3/8" - 16 screw in hole, tap anchor flush.				
						Concrete	171	1/4" Tapcon, min 1.5" embedment, protect from moisture.					
						1/4" Tapcon	Grout Filled CMU	21	1/4" Tapcon, min 1.25" embedment, protect from moisture.				
						#12 Metal Screw	20ga CFS Frame	_	#12-14 Self-drilling screws 3 threads thru 20ga steel frame.				
							5/8" Plywood		#12-14 wood screw or SMS into 5/8" OSB or plywood.				
						Timber Screw	Wood Framing		FastenMaster TimberLOK, 1/4" thread wood screw 1.25" in wood				
	6 12 5 3/8" Toggle Bolt Hollow CMU 100 3/8" Toggler - Snap				3/8" Toggler - Snaptoggle BC, toggle anchor - into hollow CMU								
							5/8" plywood	50	3/8" Toggler - Snaptoggle BC, toggle anchor - into 5/8" plywood				
							5/8" plywood	50	1/4" Toggler - Snaptoggle BB - into 5/8" plywood				
	4 12 4					1/2"Sleeve Anchor	Concrete	_	1/2" HILTI HLC-H or HLC-HX304SS3/8 Sleeve Anchor, 1.5" embed				
			4 12 4			1/2"Sleeve Anchor	Grout Filled CMU	190	1/2" HILTI HLC-H or HLC-HX304SS3/8 Sleeve Anchor, 1.5" embed				
			11	15	10	3/8" Stud Epoxy	Hollow CMU	50	3/8" thd rod stud in HIT-SC 16x50 screen tube, in Hollow CMU, Hilti epoxy HIT-HY-270, or equal.				
			11	15	10	3/8" Stud Epoxy	Concrete	50	3/8" thd rod stud in Concrete, Hilti epoxy HIT-HY-270, or equal. 2" embed.				
						Stud Thru	1/2" Plywood Sheathing	60	3/16"pin-stud, nut, and washer thru 1/2" plywood sheathing or 20ga. metal building				
						Stud Glued	Wall (test)	25	3/16"pin-stud glued in wall, LIQUID NAILS FUZE-IT, LN-2000				
	KNOW W								one have code approval for structural applications. Sign installer must test thes e Tension. Use tripod, game scale, and hooks.				
MOUNT	LESS THA FED FLAT T FASCIA OR	O A NOF	RMAL VER	TICAL WA	LL,				10'-10"				

signengineering@gmail.com

Florida, FBC 7th Ed (2020), Sect 1609 wind

II	Risk Category	I, Normal hazard to human life; III, Substantial hazard to human life; IV, Essential, emergency, critical							
120	Wind Speed	Basic Wind Speed, Ultimate, mph, from ASCE 7-16, Fig 26.5-1A, Risk II; or Fig.26.5-1B, Risk III & IV							
С	Exposure	Wind Exposure; C, House size obstructions for > 600 ft; D, no obstructions > 5000'							
30	Sign Height	Sign Height Above Ground, ft, H; Sign cannot be higher than top of wall or 60'. For multiple signs use worst case.							
See Table	Sign Area	Gross Sign Area, ft², means the overall area surrounding and including all sign letters and logos.							

sign letters and logos. WIND LOAD CALC: ASCE 7-16, Section 29.4.2, Solid Attached Signs

Components & Cladding wind pressure on solid sign attached flat against wall or parallel to wall, < 3' from surface and > 3' from edge, equals wall wind pressure from ASCE 7-16, Section 30.4.

See Table | Wind Force on Sign; F = P_{ASD} * Net Sign Area

-26	psf	Wind Pressure; P _{ASD} = Pult * 0.6 per ASCE 7-16 sec	tion 2.4.1	
		Wind Pressure; $P_{ult} = q_{h,ult} * GC_p$; C&C, ASCE 7-16, E		
31	psf	Velocity Pressure; q _{h,ult} = 0.00256*K _z *K _z *K _d *V ² _{ult} ;	ASCE 7-16, Eq 26.10-1	
98.0		Veloc Pres Expos Coeff; K _z =2.01*(H/900)^(2/9.5)ExpC,	(700&11.5)ExpD; ASCE 7-16, Table 26.10-1	
-1.4		Ext. Pressure Coeff; GCp=-1.4(<60ft) -1.8(>60ft) Zone 5	, 1 ft ² area, ASCE 7-16, Figure 30.3-1, 30.5	5-1
0.85		Wind Direction Factor; K _d = .85 for attached signs,	ASCE 7-16, Table 26.6-1	
0		Int. Pressure Coeff; GCpi = 0, sign flat against wall,	ASCE 7-16, Sec 29.3.2	

Topographic Factor; Kzt = 1 for flat ground, no hill, ridge, or escarpment >15'; = 2 for corners or edges

Tesla Supercharger

Red Lobste

Sign Weight; must be less than 5 pounds per sg.ft, net area.

FLUSH MOUNT

Renewed Thrift Store SmartStyle Hair Salo

Murphy Express

W US Hwy 90

165 ft

Walmart Supercenter

Tire Kingdom

S TD Bank

manufacturer, and owner agree to: . Select fastener from table based on wall structure. 2. Install fasteners per fastener manufacturer instructions in locations required by sign manufacturer; this may mean more fasteners are required than shown in table. 3. Make sure sign and wall meets building code, sign code, and UL. Verify stated wind (speed, risk, exp, topo), sign (size, area, location on wall, max weight), wall (materials and construction).

> PASTED IMAGES, DETAILS, DRAWINGS, AND NOTES ON THIS SHEET ARE NOT ENGINEERED OR REVIEWED.

MARK DISOSWAY, PE

163 SW Midtown Pl. Ste 103 Lake City, Florida 32025 386-754-5419 FLPE53915

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> No 53915 STATE OF

> 5/13/2022

This seal for structural engineering per

scope of work (Fasteners only) SCOPE OF WORK ENGINEERING: Calculation of minimum fasteners, ONLY. (See equation) This seal IS NOT: architecture, electric, or structure of sign and wall.

By using this engineering sign installer,

They were pasted in at customer's request to help relate fastener engineering to the job.

Florida Sign Company

Job # 220583

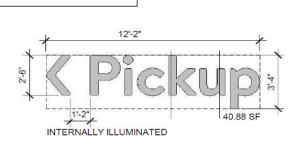
WALL SIGN

Flat on wall max 12" thick.

Walmart #0767 2767 W US Hwy 90 Lake City, FL

UNO valid for one sign each type at this location

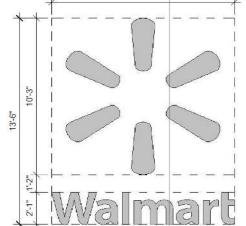
10.3" INTERNALLY ILLUMINATED



CANOPY, SOFFIT, OR END OF WALL. SEE

DRAWINGS FOR WALL DETAILS.

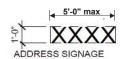
ARCHITECT'S OR SIGN INSTALLER'S ELEVATION



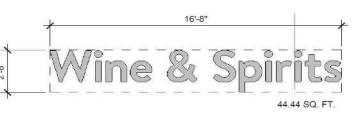
9 sqft Stud (Letters)	5 sqft Stud (Letters)	95 sqft Stud (Letters)	21 sqft Stud (Letters)	45 sqft Stud (Letters)	28 ft² Stud (Letters)	2. Select fastener for wall structure.			Ī									
	#	Pharmacy		pirits		sign may require more t fasteners to avoid bend	fasteners. Example: "I" ling. Follow sign manuf	may ne	ed 2 fasteners, "J" - 3, "H" - 4, "W" - 5; and 1/8" thick plastic may need more s instructions and code requirements for placement of fasteners. At least put one in	ŀ								
Vision	Address	Home & F	Outdoor	Wine & S	Market	each corner top and bottom. Follow fastener manufacturer's instructions and code requirements for installation. CALCULATION: Minimum Number of Fasteners Evenly Spaced Over Whole Sign (Fasteners = Wind Force on Whole Sign Area / Fastener Allowable Tension)												
Mini	mum F Use)		rs for \ Sign Need		Sign	Fastener	Wall Structure	Pull	Fastener Installation	7								
4	4	21	8	12	10	Stud Thru		60		1								
10	6	51	18	29	24	Stud Glued	Wall (test)	25	3/16"pin-stud glued in wall, LIQUID NAILS FUZE-IT, LN-2000	1								
										C								

I DON'T KNOW WHAT THIS WALL LOOKS LIKE OR HOW IT IS CONSTRUCTED BUT I ASSUMED THE SIGN IS LESS THAN 30' ABOVE GRADE, MOUNTED FLAT TO A NORMAL VERTICAL WALL, NOT A FASCIA OR PARAPET, AND NO CLOSER THAN 4' FROM ANY CORNER, ROOF, EAVE, CANOPY, SOFFIT, OR END OF WALL, SEE ARCHITECT'S OR SIGN INSTALLER'S ELEVATION DRAWINGS FOR WALL DETAILS.





14'-7" 94.90 SF









signengineering@gmail.com

Florida, FBC 7th Ed (2020), Sect 1609 wind II, Normal hazard to human life; III, Substantial hazard to human life; IV, Risk Category Essential, emergency, critical Basic Wind Speed, Ultimate, mph, from ASCE 7-16, Fig 26.5-1A, Risk II; or 120 Wind Speed Fig.26.5-1B, Risk III & IV Wind Exposure; C, House size obstructions for > 600 ft; D, no obstructions С Exposure Sign Height Above Ground, ft, H; Sign cannot be higher than top of wall or Sign Height 30 60'. For multiple signs use worst case. See Gross Sign Area, ft2, means the overall area surrounding and including all Sign Area sign letters and logos. Table

WIND LOAD CALC: ASCE 7-16, Section 29.4.2, Solid Attached Signs

Components & Cladding wind pressure on solid sign attached flat against wall or parallel to wall, < 3' from urface and > 3' from edge, equals wall wind pressure from ASCE 7-16. Section 30.4.

nuoc c	all o	o nom ougo, oqualo wali wina procouro nom 7100E 7 10, ocolion oc.4.	ш
See Ta	ible	Wind Force on Sign; F = P _{ASD} * Net Sign Area	T
-26	psf	Wind Pressure; P _{ASD} = Pult * 0.6 per ASCE 7-16 section 2.4.1	1
-44	psf	Wind Pressure; $P_{ult} = q_{h,ult} *GC_p$; C&C, ASCE 7-16, Eq 30.3-1	ŀ
31	psf	Velocity Pressure; q _{h,ult} = 0.00256*K _z *K _{zt} *K _d *V ² _{ult} ; ASCE 7-16, Eq 26.10-1	1
0.98		Veloc Pres Expos Coeff; K _z =2.01*(H/900)^(2/9.5)ExpC, (700&11.5)ExpD; ASCE 7-16, Table 26.10-1	1
-1.4		Ext. Pressure Coeff; GC _p =-1.4(<60ft) -1.8(>60ft) Zone 5, 1 ft ² area, ASCE 7-16, Figure 30.3-1, 30.5-1	1
0.85		Wind Direction Factor; K _d = .85 for attached signs, ASCE 7-16, Table 26.6-1	1
0		Int. Pressure Coeff; GCpi = 0, sign flat against wall, ASCE 7-16, Sec 29.3.2	ľ
1.0		Topographic Factor; Kzt = 1 for flat ground, no hill, ridge, or escarpment >15'; = 2 for corners or edges	ľ
5	psf	Sign Weight; must be less than 5 pounds per sq.ft. net area.	1

STUD MOUNT



MARK DISOSWAY, PE 163 SW Midtown Pl. Ste 103 Lake City, Florida 32025 386-754-5419 FLPE53915

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5/13/2022

This seal for structural engineering per scope of work (Fasteners only)

SCOPE OF WORK

ENGINEERING: Calculation of minimum fasteners, ONLY. (See equation)

This seal IS NOT: architecture, electric, or structure of sign and wall.

By using this engineering sign installer,

manufacturer, and owner agree to: Select fastener from table based on wall structure. 2. Install fasteners per fastener manufacturer instructions in locations required by sign manufacturer; this may mean more fasteners are required than shown in table. 3. Make sure sign and wall meets building code, sign code, and UL. Verify stated wind (speed, risk, exp, topo), sign (size, area, location on wall, max weight), wall (materials and construction).

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> Florida Sign Company

Job # 220583

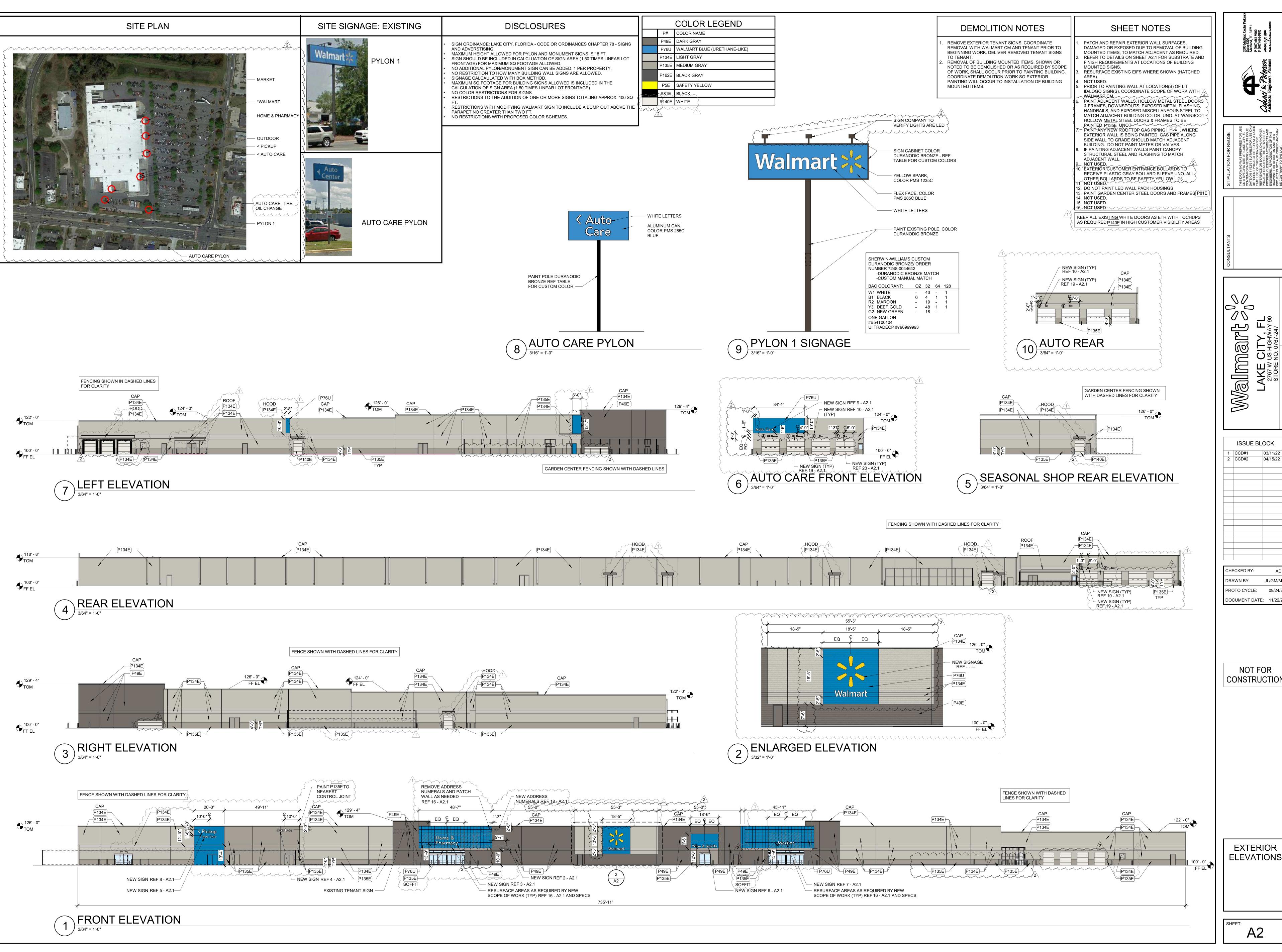
WALL SIGN

Flat on wall max 12" thick.

Walmart #0767 2767 W US Hwy 90 Lake City, FL

UNO valid for one sign each type at this location

MARK DISOSWAY, PE 163 SW Midtown PI, Ste 103 Lake City, Florida 32025 386-754-5419	FLPESTATE FLPESTATE THIS PDF HAS DIGITAL SIGNATURE AND ELECTRONIC SEAL. PRINTED	COPIES ARE NOT CONSIDERED SIGNED OR SEALED. YOU MUST VERIFY SIGNATURE ON THIS PDF. CLICK HERE TO VERIFY.	NO DISOST	STATE OF STATE	EMANAGE	5/13/2022 This seal for structural engineering per	scope of work (Fasteners only) SCOPE OF WORK	ENGINEERING: Calculation of minimum fasteners, ONLY. (See equation)	This seal IS NOT: architecture, electric, or structure of sign and wall.	By using this engineering sign installer,	manufacturer, and owner agree to: 1 Select fastener from table based on wall	structure. 2. Install fasteners per fastener	manufacturer instructions in locations required by sign manufacturer; this may mean more fasteners are required than shown in table 3	Make sure sign and wall meets building code, sign code, and UL. Verify stated wind (speed,	risk, exp, topo), sign (size, area, location on wall, max weight), wall (materials and	construction).	PASTED IMAGES, DETAILS, DRAWINGS, AND NOTES ON THIS SHEET ARE NOT ENCINEERED OR REVIEWED.	They were pasted in at customer's request to help relate fastener engineering to the job.	Florida Sign	Job # 220583	WALL SIGN Flat on wall max 12" thick.	Walmart #0767	Z/6/ W US HWY 90 Lake City, FL
signengineering@gmail.com	Florida, FBC 7th Ed (2020), Sect 1609 ref ASCE 7-16 wind	II Risk Category Essential, mergency, critical 2007 Essential, mergency, critical Basic Wind Speed, Ullimate, mph, from ASCE 7-16, Fig 26.5-1A, Risk II; or Fig 26.5-1B, Risk III & IV		30 Sign Height Sign regim koove Ground; II, H. Sign cannot be nigner tran top of wall or Sign Height Roove Ground; II, H. Sign cannot be nigner tran top of wall or Sign Legal area surrounding and including all gross Storn Area Ft. means the overall area surrounding and including all	Sign Area	WIND LOAD CALC, ACCE 7-16, Section 23.4.2, Solid Atlactive Signs Components & Cladding wind pressure on solid sign attached flat against wall or parallel to wall, < 3' from	nd > 3 from edge, equals wall wind pressure from ASCE 7-16, Section 30.4. ble Wind Force on Sign; F = P _{sis} * Net Sign Aea	16 section 2.4.1 7-16, Eq 30.3-1	psf Velocity Pressure, q _{0,ul} = 0.0026Fk, W ₀ , W ₀ , W ₀ , W ₀ = ASCE 7-16. Eq. 26.10-1 Veloc Pres Expos Coeff, K ₂ =2.01*(H980)(Y39.5)Expc, (7008.11.5)Expc); ASCE 7-16. Table 26.10-1 Exp. Pressure Coeff CC = 1.4145(HH - 18)-26HH - 18)-26HH - 18)-26H - 18 ² -269 ASCE 7-16. Frome 313.31.315-1	Wind Direction Factor; K _d = .85 for attached signs, ASCE 7-16, Table 26.6-1	1.0 Topographic Factor: Kzt = 1 for flat ground, no hill, ridge, or escarpment >15; = 2 for corners or edges	>	STUD MOUNT		<u>+</u>			304	Renewed Thrift Store SmartStyle Hair Salo	sla Supercharger	= =0	Red Lobster	W US Hwy 90 + (0)
1. Verify (ff') (flush, raceway, or pin) (solid area or letters) 2. Select fastener for wall structure. 3. Evenly space fasteners over whole sign area.	JSE MORE FASTENERS IF THE SIGN NEEDS ITI ONLY ATTACH TO STRUCTURAL WALL MATERIAL (UNO). Shape and stength of immy require new clasteriers. Example: "The syneed 2 steelerse," 1.5 " H" - 4" "H" - 5" and 16" thick plastic may need more shateness to avoid bending. Follow sign manufacturer is instructions and code requirements for placement of fasteners. At least put one in each comer top and bottom. Follow fastener manufacturer's instructions and code requirements for installation.	CALCULATION: Minimum Number of Fasteners Evenly Spaced Over Whole Sign	(rastener's = Wind rorce on Whole Sign Area / rastener Allowable lension) Wall Structure Pull Fastener Installation F	60 3/16"pin-stud, nut, and washer thru 1/2" plywood sheathing or 20ga. metal building	ΠŤ	IMPUKTAIN I - Adhesives and begges are strong but none have code approval for structural applications. Sign installer must test triese in connection strengths. Pull on fastener 2.5 * Allowable Tension. Use tripod, game scale, and hooks.	<u>01 1</u>		2 2	+			9.19 SF x2 signs		10' - 10"	8					0		
SIGN INSTALLER INSTRUCTIONS	SE MORE FASTENERS IF THE SIGN NEED yn may require more fasteners. Example: "I" steners to avoid bending. Follow sign manuf ich corner top and bottom. Follow fastener r	CALCULAT	Fasteners = Wind Fastener		Stud Glued Wall (test)	IPORTANT - Adnesives and toggles are stroi nnection strengths. Pull on fastener 2.5 * A	. 2'-4"	+		2.33 SF	x4 SIGNS			101 - 1 1/2"	7/1 -			4			t)	6.25 SF TYP	Man Faudeninn Ward croe the Away of the Land Jones Ph
3 sqft 10 sqft 25 sqft 17 sqft 5 ft 5 ft 5 ft 5 ktd 5 ktd	5 X S	ire x4 Sir ii Change iGNS uto Care Auto Care utomotive umerals	O Ø <	(Use More if Sign Needs It) 4 5 11 8 4	4 11 27 18 6	Con	I DON'T KNOW WHAT THIS WALL LOOKS LIKE OR	SIGN IS LESS THAN 30' ABOVE GRADE,	MOUNTED FLAT TO A NORMAL VERTICAL WALL, NOT A FASCIA OR PARAPET, AND NO CLOSER THAN 4' FROM ANY CORNER, ROOF, EAVE,	CANOPY, SOFFIT, OR END OF WALL. SEE ARCHITECT'S OR SIGN INSTALLER'S ELEVATION	DRAWINGS FOR WALL DETAILS.			-72	Ā	0		2'-6"				±	4 4 4 1407500 7 7 7 7 7 7 7 7 7 1 8467500 99 99 99 99 19 8467500 99 99 99 19 8467500



0 CITY, FI US HIGHWAY 8 NO: 0767-247 \gg

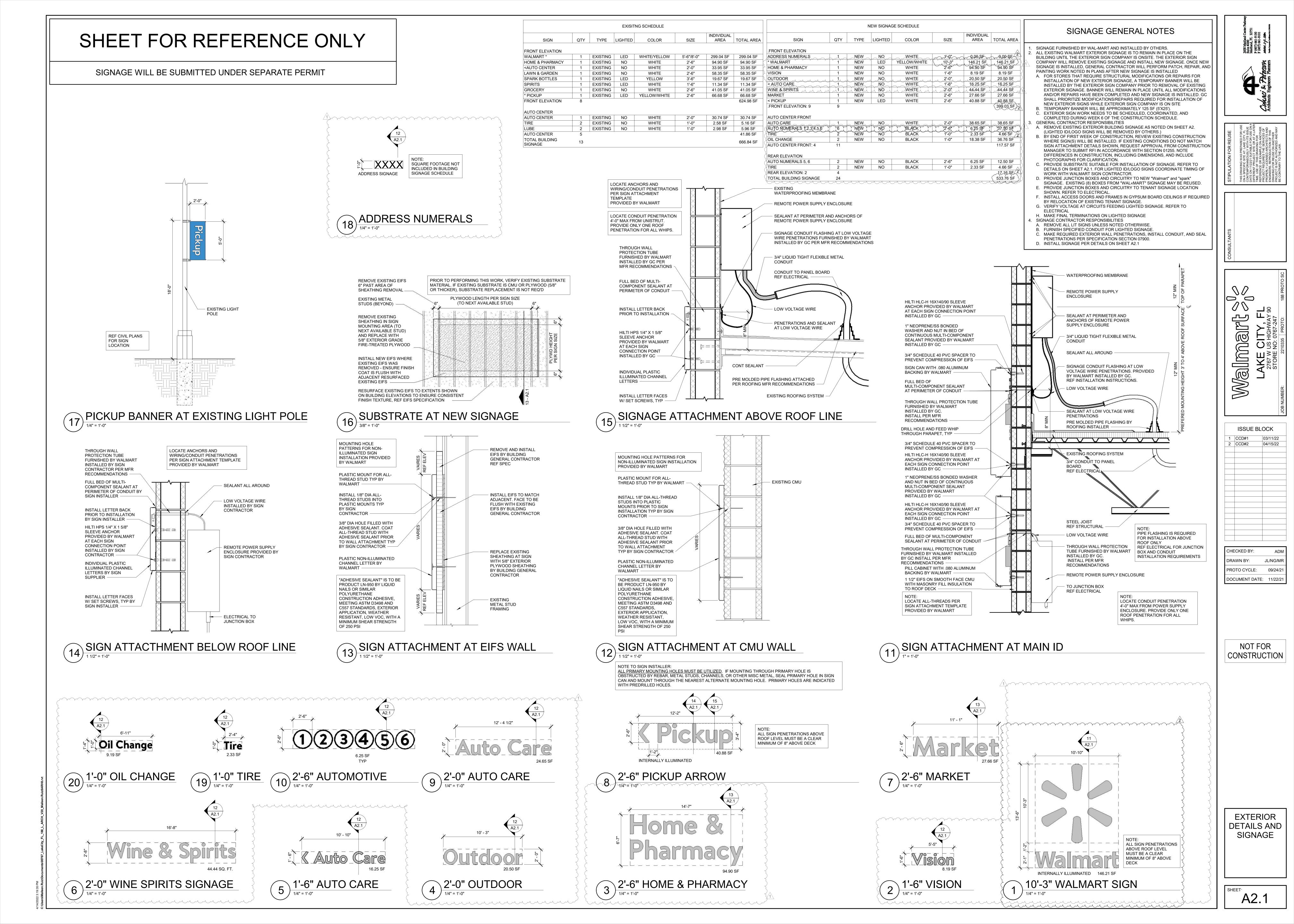
CHECKED BY: JL/GM/MR DRAWN BY: PROTO CYCLE: DOCUMENT DATE: 11/22/21

03/11/22

NOT FOR CONSTRUCTION

EXTERIOR ELEVATIONS

A2



Front-Lit Plex-Face GEMLITE ILLUMINATED LETTER FLUSH MOUNTED • **CHANNEL LETTER - TYPICAL SECTION - FRONT-LIT PLASTIC FACE** ES0000193 Charles Ogle SECONDARY WIRING PRIMARY ELECTRICAL (NEC 600-5) CONTROL BOX W/ POWER SUPPLIES (SEE DETAIL BELOW) DISCONNECT LED ILLUMINATION TOGGLE SWITCH DISCONNECT TOGGLE SWITCH FASTENERS AS REQUIRED FOUR PER LETTER **ATTIC SIDE**

120V Primary System - Low Voltage Secondary

FASCIA

N.T.S.

