

RESOLUTION NO. _____

A resolution authorizing Urban Cowboy Arcade to construct and install an aerial encroachment at 230 Rep. John Lewis Way North (Proposal No. 2025M-002EN-001).

WHEREAS, Urban Cowboy Arcade plans to construct, install and maintain a proposed double-faced, LED illuminated blade sign, encroaching into the public right-of-way at 230 Rep. John Lewis Way North; and,

WHEREAS, as set forth in the License Agreement for Private Encroachments Into the Public Right of Way, attached hereto as “Exhibit A”, and incorporated by reference herein, Urban Cowboy Arcade has agreed to indemnify and hold the Metropolitan Government of Nashville and Davidson County harmless of any and all claims for damages of every nature and kind resulting from or arising from the installation of said aerial encroachment; and,

WHEREAS, Metropolitan Code of Laws §13.16.030(A) allows the Council of the Metropolitan Government of Nashville and Davidson County to grant encroachments, permits, or privileges to construct, maintain and/or operate aerial cables, canopies, etc., over and/or across sidewalks and public rights-of-way by resolution adopted by twenty-one (21) affirmative votes.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY:

Section 1. That subject to the requirements, limitations and conditions contained herein, Urban Cowboy Arcade is hereby granted the privilege to construct and maintain an aerial encroachment as described in Proposal No. 2025M-002EN-001, in accordance with the plans on file in the office of the Director of the Nashville Department of Transportation and Multimodal Infrastructure (“NDOT”), and attached hereto as Exhibit B.

Section 2. That the authority granted hereby for the construction, installation, operation, and maintenance of said aerial encroachment under Proposal No. 2025M-002EN-001 shall not be construed as a surrender by the Metropolitan Government of its rights or power to pass resolutions or ordinances regulating the use of its streets, or the right of the Metropolitan Government through its legislative body, in the interest of public necessity and convenience to order the relocation of said facilities at the expense of Urban Cowboy Arcade.

Section 3. That construction and maintenance of said aerial encroachment under Proposal No. 2025M-002EN-001 shall be under the direction, supervision, and control of the Director of NDOT, and its installation, when completed, must be approved by said Director.

Section 4. That this Resolution confers upon Urban Cowboy Arcade a privilege and not a franchise, and the Mayor and the Metropolitan Council herein expressly reserve the right to repeal this Resolution, whenever, in their judgment, a repeal may be demanded by public welfare, and such repeal shall confer no liability on the Metropolitan Government of Nashville and Davidson County, its successors and assigns, by reason of said repeal. In the event of such repeal by said Metropolitan Government, Urban Cowboy Arcade, its successors and assigns, shall remove said aerial encroachment at their own expense.

Section 5. Urban Cowboy Arcade shall pay all costs incident to the construction, installation, operation and maintenance of said aerial encroachment under Proposal No. 2025M-002EN-001, and shall save and hold the Metropolitan Government of Nashville and Davidson County harmless from all suits, costs, claims, damages or judgments in any way connected with said construction, installation, operation and maintenance of said aerial encroachment and shall not claim, set up or plead, as a defense, in the event of joint liability, with or without suit, that it and the Metropolitan Government were joint wrongdoers. Urban Cowboy Arcade shall be responsible for the expense, if any, of repairing and returning the right-of-way to the condition which it was in prior to the installation of said aerial encroachment, and for any street closure.

Section 6. That the authority granted to Urban Cowboy Arcade , as herein described, shall not in any way interfere with the rights of the Metropolitan Government, its agents, servants, and/or contractors and utility companies, operating under franchise from the Metropolitan Government to enter, construct, operate, maintain, repair, rebuild, enlarge, and patrol its now existing or future utilities, including drainage facilities, together with their appurtenances, and to do any and all things necessary and incidental thereto.

Section 7. Urban Cowboy Arcade shall and is hereby required to furnish the Metropolitan Government of Nashville and Davidson County a certificate of public liability insurance, naming the Metropolitan Government as an insured party, of at least two million (\$2,000,000) dollars aggregate, for the payment of any judgment had on any claim, of whatever nature, made for actions or causes of action arising out of, or connected with, the construction or installation of said aerial encroachment. Said certificate of insurance shall be filed with the Metropolitan Clerk and NDOT prior to the granting of a permit, and the insurance required herein shall not be canceled without the insurance company or companies first giving thirty (30) days written notice to the Metropolitan Government of Nashville and Davidson County.

Section 8. That said construction shall be carefully guarded and protected, and shall be completed promptly, so as to cause the least inconvenience to the public. The acceptance by Urban Cowboy Arcade of all provisions of this Resolution shall be determined by the beginning of work.

Section 9. The authority granted pursuant to this Resolution shall not become effective until the certificate of insurance, as required in Section 7, has been posted with the Metropolitan Clerk and NDOT.

Section 10. This Resolution shall take effect from and after its adoption, the welfare of the Metropolitan Government of Nashville and Davidson County requiring it.

RECOMMENDED BY:

Signed by:

Diana W. Alarcon/RS

Diana W. Alarcon, Director
Nashville Department of Transportation
And Multimodal Infrastructure

INTRODUCED BY:

Jacob Kupin

Jenny Earle

[Signature]

Member(s) of Council

APPROVED AS TO INSURANCE:

DocuSigned by:

Balogun Cobb

Insurance and Claims Manager

APPROVED AS TO FORM
AND LEGALITY:

DocuSigned by:

Erica Haber

Assistant Metropolitan Attorney

Proposal No. 2025M-002EN-001

CERTIFICATE OF LIABILITY INSURANCE		DATE (MM/DD/YYYY) 01/07/2025																				
THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.																						
IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).																						
PRODUCER Robins Insurance Agency, Inc 11 Music Circle S Nashville TN 37203 INSURED Urban Cowboy Arcade 65 Arcade Alley Nashville TN 37219	CONTACT NAME: Maggie Ethridge PHONE (A/C, Mo, Ext): (615) 665-9200 FAX (A/C, No): (615) 665-9207 E-MAIL ADDRESS: methridge@robinsins.com <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: left;">INSURER(S) AFFORDING COVERAGE</th> <th style="text-align: left;">NAIC #</th> </tr> <tr> <td>INSURER A:</td> <td>Society Insurance Company</td> <td>15261</td> </tr> <tr> <td>INSURER B:</td> <td></td> <td></td> </tr> <tr> <td>INSURER C:</td> <td></td> <td></td> </tr> <tr> <td>INSURER D:</td> <td></td> <td></td> </tr> <tr> <td>INSURER E:</td> <td></td> <td></td> </tr> <tr> <td>INSURER F:</td> <td></td> <td></td> </tr> </table>	INSURER(S) AFFORDING COVERAGE		NAIC #	INSURER A:	Society Insurance Company	15261	INSURER B:			INSURER C:			INSURER D:			INSURER E:			INSURER F:		
INSURER(S) AFFORDING COVERAGE		NAIC #																				
INSURER A:	Society Insurance Company	15261																				
INSURER B:																						
INSURER C:																						
INSURER D:																						
INSURER E:																						
INSURER F:																						
COVERAGES CERTIFICATE NUMBER: 25-26 Master Liability REVISION NUMBER:																						
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PND CLAIMS.																						
INSUR LTR	TYPE OF INSURANCE	ADDITIONAL INSURED	SUBROGATION WAIVED	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS															
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input checked="" type="checkbox"/> LOC OTHER:			BP10054682	01/31/2025	01/31/2026	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Per occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 1,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$															
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			BP10054682	01/31/2025	01/31/2026	COMBINED SINGLE LIMIT (Per accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$															
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> RETENTION \$		OCCUR CLAIMS-MADE	CU10054686	01/31/2025	01/31/2026	EACH OCCURRENCE \$ 1,000,000 AGGREGATE \$ 1,000,000 \$															
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		Y/N N/A	WC10054685	01/31/2025	01/31/2026	PER STATUTE <input type="checkbox"/> OTHER <input type="checkbox"/> E.L. EACH ACCIDENT \$ 500,000 E.L. DISEASE - EA EMPLOYEE \$ 500,000 E.L. DISEASE - POLICY LIMIT \$ 500,000															
A	Liquor Liability			LL10054684	01/31/2025	01/31/2026	Each Common Cause \$1,000,000 Aggregate Limit \$1,000,000															
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) The Commercial General Liability policy is endorsed naming the Certificate Holder as an Additional Insured.																						
FULL NAME: The Metropolitan Government of Nashville and Davidson County Metro Legal & Claims c/o Insurance and Safety Division 222 3rd Avenue North, Ste #501 Nashville, TN 37201																						
CERTIFICATE HOLDER				CANCELLATION																		
The Metropolitan Government of Nashville and Davidson County 222 3rd Avenue North, Ste #501 Nashville TN 37201				SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE																		

ACORD 25 (2016/03)

The ACORD name and logo are registered marks of ACORD

© 1988-2015 ACORD CORPORATION. All rights reserved.

{N0676709.1}

LICENSE AGREEMENT FOR PRIVATE ENCROACHMENTS
INTO THE PUBLIC RIGHT OF WAY

Urban Cowboy Arcade

I/We, _____, in consideration of the Resolution No. _____, to construct, maintain, install and/or operate an encroachment into, onto, over, or under the public right of way located at in Nashville, Davidson County, Tennessee, do hereby, for myself, my agents, customers, and assigns, waive and release and hold harmless The Metropolitan Government of Nashville and Davidson County, its agents, employees, and assigns from any and all claims, rights, or demands for damages that may arise from my/our use, construction and/or maintenance of the encroachment, to wit: (SEE ATTACHED DESCRIPTION OF ENCROACHMENT). I/We hereby certify to the Metropolitan Government of Nashville and Davidson County that I/We have executed a bond or liability insurance policy in such amount as agreed upon by the Director of NDOT and the Metropolitan Attorney, and in the form approved by the Metropolitan Attorney (per Metropolitan Code Section 38-1-1), which operates to indemnify and save The Metropolitan Government of Nashville and Davidson County harmless from all claims or demands that may result to persons or property by reason of the construction, operations or maintenance of the encroachment. I/We further agree that my/our obligations hereunder may not be assigned except upon approval of the Director of NDOT and the Metropolitan Attorney. I/We further acknowledge that any action that results in a failure to maintain said bond or liability insurance for the protection of The Metropolitan Government of Nashville and Davidson County shall operate to the granting of a lien to The Metropolitan Government of Nashville and Davidson County in the amount of the last effective bond/insurance policy. Said insurance or bond may not be cancelable or expirable except on 30 days' notice to the Director of NDOT.

I/We further recognize that the license granted hereby is revocable by The Metropolitan Government upon recommendation of the Director of NDOT and approval by resolution of the Metropolitan County Council if it is determined to be necessary to the public welfare and convenience. In the event the Metropolitan Government revokes this license as contemplated by this paragraph, licensee will not be entitled to any compensation of any kind. This license shall also be strictly subject to the right of way easement owned by The Metropolitan Government. I/We agree to maintain, construct and use the encroachment in such a way as will not interfere with the rights and duties of the Metropolitan Government

as owner of the right of way. Said interference shall be additional grounds for revocation of the license for encroachment. I/We agree to pay the cost of construction, maintenance, use, as well as relocations cost of said encroachment. Licensee's failure to complete construction of the contemplated encroachment within 36 months of the date of approval by the Metropolitan Council will cause this license to terminate automatically. In the event the encroachment contemplated by this license is substantially destroyed, this license shall terminate unless fully restored by licensee within 36 months from the date of such destruction. In the event this license is revoked or terminated for any reason, licensee shall restore all public property to the condition obtaining at the time the license became effective at licensee's sole cost and expense.

DATE: 03-18-2025Lyon Porter

(Owner of Property)

234 Rep John Lewis Way

(Address of Property)

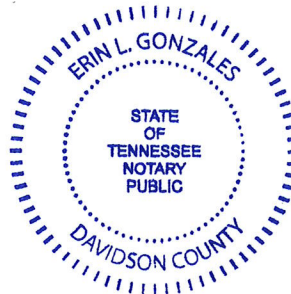
Nashville, TN 37219

(City and State)

STATE OF TENNESSEE)

COUNTY OF DAVIDSON)

Sworn to and subscribed before

Me this 18th day of March, 2025.Erin L. Gonzales
(NOTARY PUBLIC)My Commission Expires: May 9, 2026.

URBAN COWBOY SIGNAGE

URBAN COWBOY - THE ARCADE
230 REP JOHN LEWIS WAY N
NASHVILLE TN, 37219

Madeline Westfall

INFO@MADELINE WESTFALL.COM

OCTOBER 22, 2024

Section V: Sign Standards

Illumination

Illumination of signs shall be in accordance with the following requirements:

External Illumination

- External light sources shall be placed close to, and directed onto, the sign and shielded to minimize glare into the street, sidewalks or onto adjacent properties.
- Projecting light fixtures used for externally illuminated signs shall be simple and unobtrusive in appearance. They should not obscure the sign.

Internal Illumination

- Channel letters may be internally lit or back-lit.
- For cabinet signs, the background must be opaque. Only graphics, text and logos may be illuminated, and a halo of one inch around graphics, text, and logos may be non-opaque.
- Exposed neon may be used for lettering or as an accent.

Prohibited Light Sources

The following light sources are prohibited on every Street Type except Printers' Alley:

- Blinking, flashing, chasing, and sequential lighting.
- Bare bulb illumination.

Raceways and Transformers

- Within Redevelopment Districts, raceways may only be permitted by Modification.
- Visible transformers are prohibited.

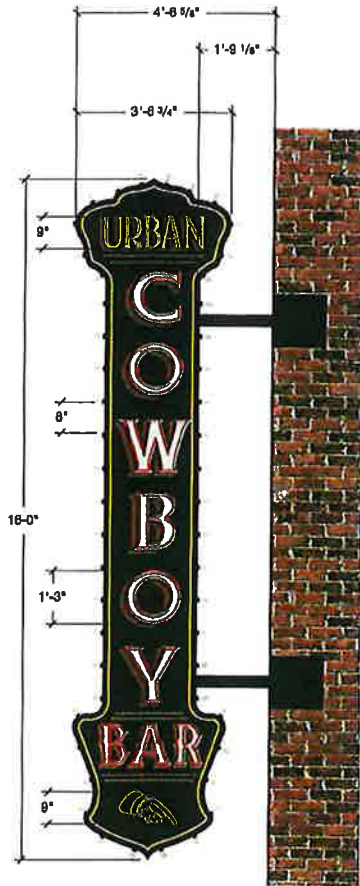


Prohibited Light Sources

The following light sources are prohibited on every Street Type except Printers' Alley:

- Blinking, flashing, chasing, and sequential lighting.
- Bare bulb illumination.

We are proposing the use of bare bulb illumination as a border around the sign cabinet and request that in this case, the design warrants an exception on the basis of being an "extraordinary design concept".



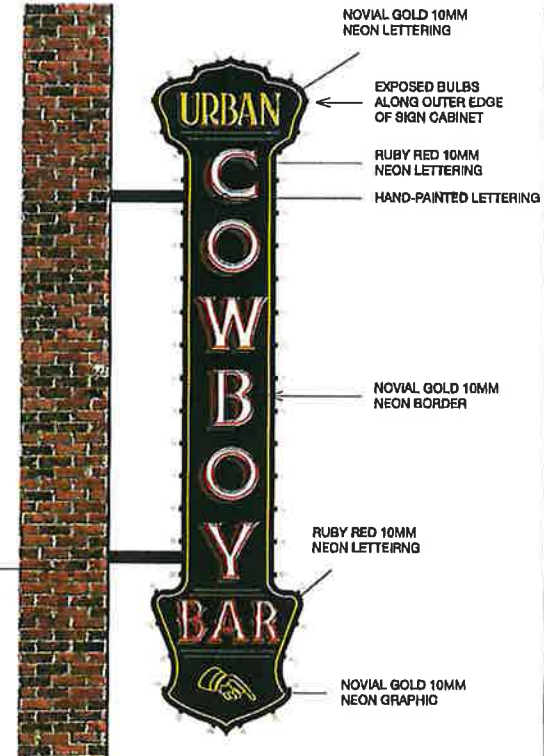
01 | BLADE SIGN - SIDE A (SOUTH)
SCALE 3/8" = 1'-0"

MOUNTING BRACKET
ENGINEERED B.O.

MOUNTING ARM
ENGINEERED B.O.



02 | BLADE SIGN - PROFILE (WEST)
SCALE 3/8" = 1'-0"



03 | BLADE SIGN - SIDE B (NORTH)
SCALE 3/8" = 1'-0"

Design &
PRODUCTION
Madeline Westfall
SPIRIT OF PLACE

Projecting Sign

SIGN DETAILS:

Mimicking classic sign design and fabrication techniques, we are proposing a blade sign cabinet with neon lettering and line-work with an exposed bulb border.

Given the history of this building, built in the early 1900's we want to pay homage to signage during that time period as this building undergoes a modern revitalization. Nodding to classic sign styles and design elements that are relevant to the architecture and design style of Nashville's streetscapes.

Madeline Westfall Design

814.748.8254
madeline@madelinewestfall.com

Urban Cowboy
Design Drawings

page
2

Design &
PRODUCTION
Madeline Westfall
SPIRIT OF PLACE
*

Projecting Sign

MOUNTING LOCATION

The owner of urban cowboy has been given permission to mount this sign to the adjacent building for maximum visibility above the Arcade roof-line.

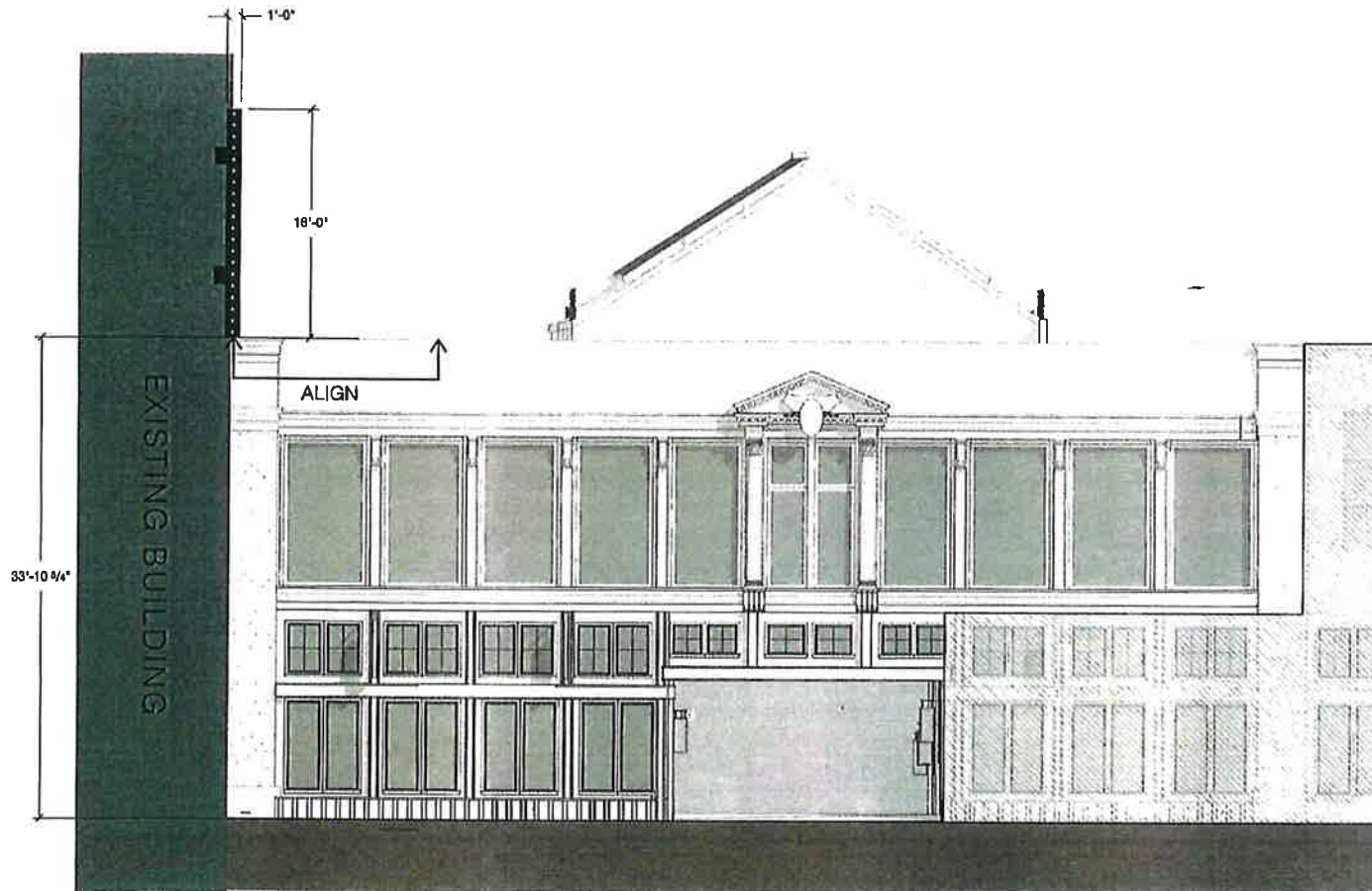
We have engaged engineers that have surveyed the building structure and structural / sealed engineering drawings of the sign mounting mechanism are forthcoming.

Madeline Westfall Design

814.746.6254
madeline@madelinewestfall.com

Urban Cowboy
Design Drawings

page
3



01 BUILDING ELEVATION - WEST
SCALE 1/8"=1'-0"



*Design &
PRODUCTION*
Madeline Westfall
SPIRIT OF PLACE
x

Projecting Sign

ILLUMINATION REFERENCE
RENDERING SHOWN ON
RIGHT SIDE OF PAGE.

Madeline Westfall Design
814.746.6254
madeline@madelinewestfall.com

Urban Cowboy page
Design Drawings 4



*Design &
PRODUCTION*
Madeline Westfall
SPIRIT OF PLACE

Projecting Sign

**ADDITIONAL VIEWS FOR
DRC CONSIDERATION.**

Madeline Westfall Design
814.746.8254
madeline@madelinewestfall.com

Urban Cowboy
Design Drawings

page
5



Design &
PRODUCTION
Madeline Westfall
SPIRIT OF PLACE

Projecting Sign

ADDITIONAL VIEWS FOR
DRG CONSIDERATION.

Madeline Westfall Design
814.746.8254
madolino@madollnewestfall.com

Urban Cowboy pago
Design Drawings 6



C1 of 3

Design Code:	IBC 2018/ASCE 7-16	Client:	Madeline Westfall Design
Wind Speed:	115 mph	Project #:	100x6290
Risk Categ.:	II	Date:	11/8/2024
Exposure:	C	Facility Ref:	Urban Cowboy
Wind load:	33.0 PSF	Address:	40 The Arcade/236 Rep John Lewis Way N
Monument or Pylon:	P 'M' or 'P'	City, ST:	Nashville, TN 37219
'R'reinforced or 'U'nreinforced Footing	R 'R' or 'U'	Sign Type:	16'-0" Blade Sign

Area (sf)	% of Load	Load (psf)	Shape factor	Shear (k)	Centroid (ft)	Moment (k-ft)	Moment (k-ft) (Drilled)
20.04	100%	33	1	0.661	3.583	2.370	0.000
0.45	100%	33	1	0.015	0.900	0.013	0.000
0.00	100%	33	1	0.000	0.000	0.000	0.000
0.00	100%	33	1	0.000	0.000	0.000	0.000
0.00	100%	33	1	0.000	0.000	0.000	0.000
0.00	100%	33	1	0.000	0.000	0.000	0.000
0.00	100%	33	1	0.000	0.000	0.000	0.000
0.00	100%	33	1	0.000	0.000	0.000	0.000
base $V_X =$				0.68	base $M_X =$		2.38
							0.00

Gusset Check:	No	Base Weld		Tube Weld Size =	1/4" Weld
Weld Check:	Yes			Total Weld Str. (k-ft) =	5.57
Z =	2.47			Capacity % =	43.8%
$F_y =$	50				
$\phi =$	0.9				
$M_n = F_y Z =$	10.3				
$\phi M_n =$	9.28				
				Load Factor (LF) =	1
				$M_u = LF(M_n) =$	2.38
3.00" Tall x	3.00" Wide x	0.250" Wall	<	25.7%	9.28
Overtuning Direction					OK

Flange in Flexural Compression:

$$b/t = 8.9$$

$$b = 2.070$$

Compact Flange b/t Limit: $1.12(E/F_y)^{0.5} = 27.0$

Is Flange Compact? Yes, Yielding Controls (F7-1)

Non-Compact Flange b/t Limit: $1.40(E/F_y)^{0.5} = 33.7$

Is Section Non-Compact? Yes, Use Lesser of (F7-1) AND (F7-2)

Flange Is Not Slender

Yielding Check:

(F7-1) $M_n = M_p = F_y Z = 10.3$

(GOVERNING EQUATION)

Compression Flange Local Buckling

Non-Compact Flanges

(F7-2) $M_n = M_p - (M_p - F_y S_x) \left[(3.57 \left(\frac{b}{t} \right) \sqrt{\frac{F_y}{E}} - 4.0) \right] = 15.5$

Slender Walled Flanges

$$b_e = 1.92 \sqrt{\frac{E}{F_y}} \left[1 - \left(\frac{0.38}{t} \sqrt{\frac{E}{F_y}} \right) \right] = -0.300$$

$$I_n = 0.899$$

$$S_n = 0.599$$

(F7-3) $M_n = F_y S_e = 2.5$

If Compact=(F7-1) OR If Non-Compact=(F7-2) OR If Slender=(F7-3) 10.3

Yielding and Flange Local Buckling Result: $M_n = 10.3$

11/8/24

Web in Flexure:

$$h/t = 8.9$$

$$h = 2.070$$

Compact Web h/t Limit $2.42 \sqrt{\frac{E}{F_y}} = 58.3$

Is Web Compact? Yes, Web Buckling N/A. Use Yield & Flange Result

Non-Compact Web h/t Limit $5.70 \sqrt{\frac{E}{F_y}} = 137.3$

Is Web Non-Compact? Yes, Use Lesser of (F7-5) AND Yield & Flange Result

(F7-5) $M_n = M_p - (M_p - F_y S_x) \left[(0.305 \left(\frac{h}{t_w} \right) \sqrt{\frac{F_y}{E}} - 0.738) \right] = 11.5$

Overall Result $M_n = 10.3$

k-ft



Analysis of Steel Base Plate w/ Steel Anchor Bolts

(AISC Steel Construction Manual - 14th Edition - LRFD)

100x6290

16'-0" Blade Sign

ASCE 7- 16

$PL_{th} = 0.75$	(in.) Plate Thickness
$PL_{bl} = 16$	(in.) Plate Bend Line Length (See Sketches for Examples)
$L_c = 5$	(in.) Cantilever Length of Plate (See Sketches for Examples)
$PL_{fy} = 36$	(ksi) Plate Material Yield Stress $F_y = 36(A36)$
$PL_{fu} = 58$	(ksi) Plate Material Ultimate Tensile Stress $F_u = 58(A36)$
$B_{da} = 0.75$	(in.) Anchor Bolt Diameter
$n_b = 4$	(Qty) Total Number of Anchor Bolts in the Base Plate (Symmetrical)
$d = 11$	(in.) Distance Between Bolts (In Direction of Overturning)
$F_u = 58$	(ksi) Bolt Material Ultimate Tensile Stress $F_u = 58(F1554 \text{ Gr } 36), =75(Gr55), =125(Gr105), \text{ or } =60(A307)$
Threads Excluded? N	(Yes or No) Are Threads Excluded From the Shear Plane?
$M = 2.38$	(kip-ft) Bending Moment at Match Plate (Unfactored Load Effects)
$V = 0.68$	(kip) Shear Force at Match Plate (Unfactored Load Effects)
$A_b = 0.441786$	(in ²) Nominal Area of Anchor Bolt = $\pi r^2 = \pi(B_{da}/2)^2$
$F_{nv} = 26.1$	(ksi) Bolt Nominal Shear Stress $F_{nv} = 0.45F_u(\text{Threads Excluded}) \text{ or } 0.563F_u(\text{Threads Not Excluded})$
$F_{nt} = 43.5$	(ksi) Bolt Nominal Tensile Stress $F_{nt} = 0.75F_u(F1554 \text{ Gr } 36 \text{ or } A307)$

ANCHOR BOLT		
Shear		
Single Bolt Available Shear Capacity = $\Phi R_n = \Phi(F_{nv})A_b =$	8.65	kip
Single Bolt Actual Shear Force = $V_u/n_b =$	0.17	kip
Shear Check	OK	2%
Tension (Modified for Shear)		
Single Bolt Required Shear Stress = $f_{rv} = (V_u/n_b)/A_b =$	0.4	ksi
Modified Bolt Nominal Tension Stress = $F'_{nt} = 1.3F_{nt} - (F_{nv}/\Phi F_{nv})F_{rv} =$	43.5	ksi
Single Bolt Available Tension Capacity = $\Phi R_n = \Phi(F'_{nt})A_b =$	14.41	kip
Single Bolt Actual Tension Force = $T_u = (M_u/d)/(0.5n_b) =$	1.30	kip
Tension Check	OK	9%
USE: 0.75 Inch Diameter Anchor Bolts		

BASE PLATE		
Flexure		
Plate Plastic Section Modulus = $Z = PL_w(PL_{th})^2/4 =$	2.250	in ³
Plate Available Flexural Strength = $\Phi M_n = \Phi(PL_{fy})Z =$	72.9	in-kip
Cumulative Bolt Tension Force = $T_{uc} =$	2.6	kip
Plate Actual Bending Moment = $M_{pl} =$	13.0	in-kip
Flexure Check	OK	18%
Bearing		
Plate Available Bearing Strength at Bolt = $\Phi R_n = \Phi(3.0)B_{da}(PL_{th})PL_{fu} =$	73.4	kip
Plate Actual Bearing Stress = $(V_u/n_b)/(B_{da}(PL_{th})) =$	0.3	kip
Bearing Check	OK	0%
USE: 0.75 Inch Thick Base Plate		



887 Seven Oaks Blvd. Suite 1010
Smyrna, TN 37167
615.890.9405
615.890.3500
elrodllc

C3 of 3

Design Code:	ASCE 7-16	Project #:	100x6290	Sign Name:	16'-0" Blade Sign
Wind Speed:	115 mph	Date:	10/25/2024	Facility Ref:	Urban Cowboy
Risk Categ:	II	Address:	40 The Arcade/236 Rep John Lewis Way		
Exposure:	C		Nashville, TN 37219		
Sign Area:	37.00 sf (Min 10sf)				
Height [h]:	40.00 ft. - Max 60ft				
Roof Type:	Flat Roof or $\theta < 10^\circ$				
Elevation:	600.00 ft. (Default "0") (Elevation Above Sea Level)				
Parapet Height:	0.00 ft. (Parapet Height Above Roof)				

Design Wind Pressure, Sect. 30.3, For Heights [h] ≤ 60ft

$$P = qh [(GCp) - (GCpi)]$$

Zone 4		WALL PRESSURES
windward:	24.42	
leeward:	27.06	
Zone 5		
windward:	24.42	
leeward:	33.00	

Velocity Pressure 26.10.2

$$qh = 0.00256K_h K_{zt} K_d K_e V^2 = 29.33$$

$K_h = 1.0400$	Table 26.10-1
$K_{zt} = 1.00$	Sect. 26.8.2
$K_d = 0.85$	Table 26.6-1
$K_e = 0.98$	Sect. 26.9 & Table 26.9-1
$V^2 = 13225$	Wind Speed
$GCp = 0.833$	Windward Zone 4/5 - Fig. 30.3-1
$GCp = 0.923$	Leeward Zone 4 - Fig. 30.3-1
$GCp = 1.125$	Leeward Zone 5 - Fig. 30.3-1
$GCpi = 0.000$	Table 26.13-1

Parapet Pressure 30.8-1

$$P = qp [(GCp) - (GCpi)]$$

	Zone 4	Zone 5
$P_1 =$	24.92	24.92
$P_2 =$	55.57	73.62
$P_3 =$	24.92	24.92
$P_4 =$	27.61	33.67

$$qp = 0.00256K_h K_{zt} K_d V^2 = 29.93$$

$$K_p = 1.04$$

	Zone 4	Zone 5
$GCp P_2$	1.8567	2.460

	Zone 4	Zone 5
$P_1 + P_2 =$	0.00	0.00
$P_3 + P_4 =$	0.00	0.00

Load Combinations

LRFD

- 1.4D
- 1.2D + 1.6L + 0.5(Lr or S or R)
- 1.2D + 1.6(Lr or S or R) + (L or 0.5W)
- 1.2D + 1.0W + L + 0.5(Lr or S or R)
- 0.9D + 1.0W

ASD

- 1.0D
- 1.0D + 1.0L
- 1.0D + 1.0(Lr or S or R)
- 1.0D + 0.75L + 0.75(Lr or S or R)
- 1.0D + 0.6W
- 1.0D + 0.75L + 0.75(0.6W) + 0.75(Lr or S or R)
- 0.6D + 0.6W

GENERAL NOTES:

- DO NOT GUESS. DIRECT ALL QUESTIONS CONCERNING THIS DRAWING TO ELROD ENGINEERING, LLC.(615-890-9405)
- DO NOT SCALE THIS DRAWING.
- GRAPHICS ARE NOT TO BE REPRODUCED FROM THIS DRAWING.
- STRUCTURAL STEEL PLATE & ANGLE SHALL CONFORM TO ASTM A36 (FY (YIELD)= 36 KSI).
- STRUCTURAL STEEL SQUARE AND RECTANGULAR TUBING SHALL CONFORM TO ASTM A500 GRADE "B" (FY (YIELD) = 45 KSI) OR ASTM A500 GRADE "C" (FY (YIELD) = 50 KSI).
- ALUMINUM STRUCTURAL SHAPES SHALL CONFORM TO THE SPECIFICATIONS FROM THE ALUMINUM ASSOCIATION'S ALUMINUM DESIGN MANUAL 2020 FOR 6061-T6;
SQUARE/RECTANGULAR TUBE & ROUND PIPE (FY:35KSI UNWELDED)
PLATE AND ANGLE (FY:35KSI UNWELDED)
ALL STRUCTURAL SHAPES (WELDED FY:15KSI $\leq 0.375"$ THICK, 11KSI $> 0.375"$ THICK)
- FOR WELDING ALUMINUM, USE 5356 ALLOY ELECTRODES FOR 6061 BASE METAL.
- ALL METAL NOT SPECIFIED AS ALUMINUM SHALL BE STEEL.
- STEEL WELDING TO CONFORM TO RECOMMENDATIONS AS PUBLISHED BY THE AMERICAN WELDING SOCIETY D1.1.
- ALUMINUM WELDING TO CONFORM TO RECOMMENDATIONS AS PUBLISHED BY THE AMERICAN WELDING SOCIETY D1.2.
- WORKMEN WHO WILL PERFORM WELDING OPERATIONS SHALL BE CERTIFIED FOR THE APPLICABLE WELDING PROCEDURE.
- FOR WELDING STEEL, USE E70 SERIES LOW HYDROGEN ELECTRODES.
- FABRICATED STEEL SHALL BE CLEANED OF MILL SCALE, OIL, & OTHER SURFACE CONTAMINATES PRIOR TO PAINTING.
- REFER TO CALLOUTS IN THE DRAWING FOR THREADED ROD MATERIAL WITH THE FOLLOWING PROPERTIES:
A36 CARBON STEEL (ALL SIZES): Fu = 58 KSI
A193 GRADE B7 ALLOY STEEL (ALL SIZES): Fu = 125 KSI
A193 GRADE B8 CLASS 1 STAINLESS STEEL (ALL SIZES): Fu = 75 KSI
A193 GRADE B8 CLASS 2 STAINLESS STEEL (UP TO $\frac{1}{4}"$ DIAMETER): Fu = 125 KSI, (OVER $\frac{1}{4}"$ TO 1" DIAMETER): Fu = 115 KSI,
(OVER 1" TO 1- $\frac{1}{4}"$ DIAMETER): Fu = 105 KSI, (OVER 1- $\frac{1}{4}"$ TO 1- $\frac{1}{2}"$ DIAMETER): Fu = 100 KSI

DESIGN CRITERIA

BUILDING CODE: IBC 2018/ASCE 7-16
ANALYSIS: LRFD-AISC 15TH
CHAPTER 16: SECTION 1609.3.1
ULTIMATE WIND SPEED V_{ult} = 115 MPH
NOMINAL WIND SPEED V_{50} = 89 MPH
RISK CATEGORY: II $V_{50} = V_{ult}\sqrt{0.8}$
EXPOSURE: C



11/08/2024

Drawn	TBG
Checked	ERA
EE Job #	10028290
Created	10/25/2024

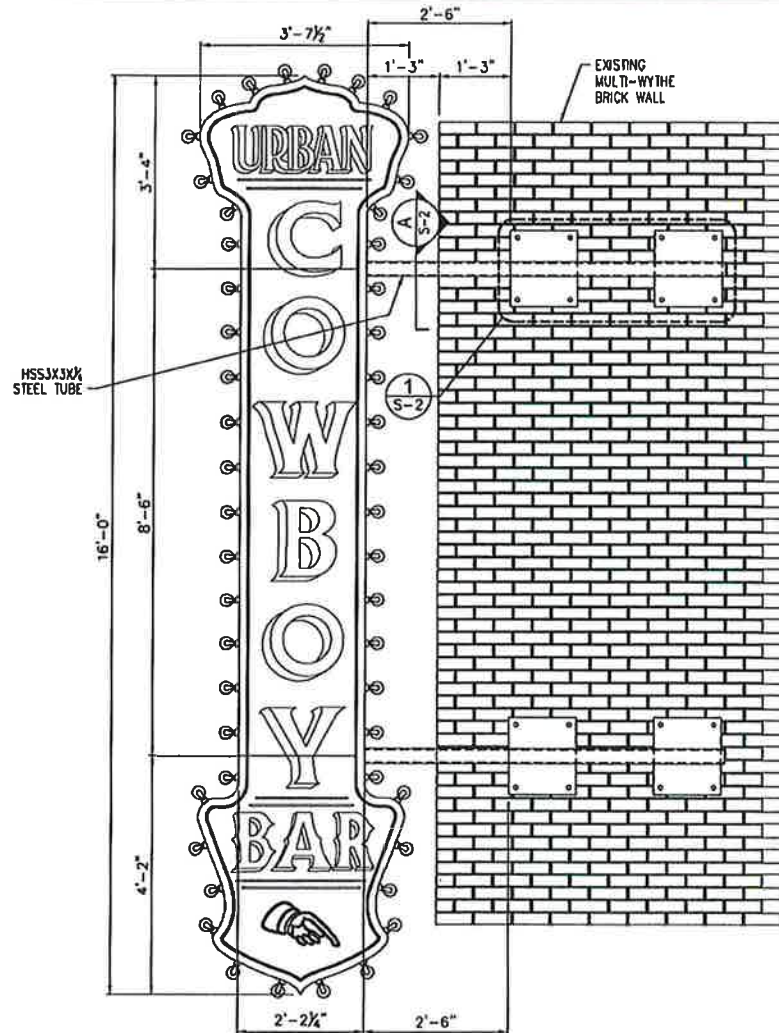


MADLINE WESTFALL DESIGN

4303 LONE OAK ROAD
NASHVILLE, TN 37215

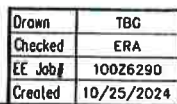
STRUCTURE ELEVATION

SCALE: $\frac{1}{2}" = 1'-0"$



No.	Date	Revision	By
01	11/08/2024	MODIFIED MOUNTING DETAILS	TBG

S-1

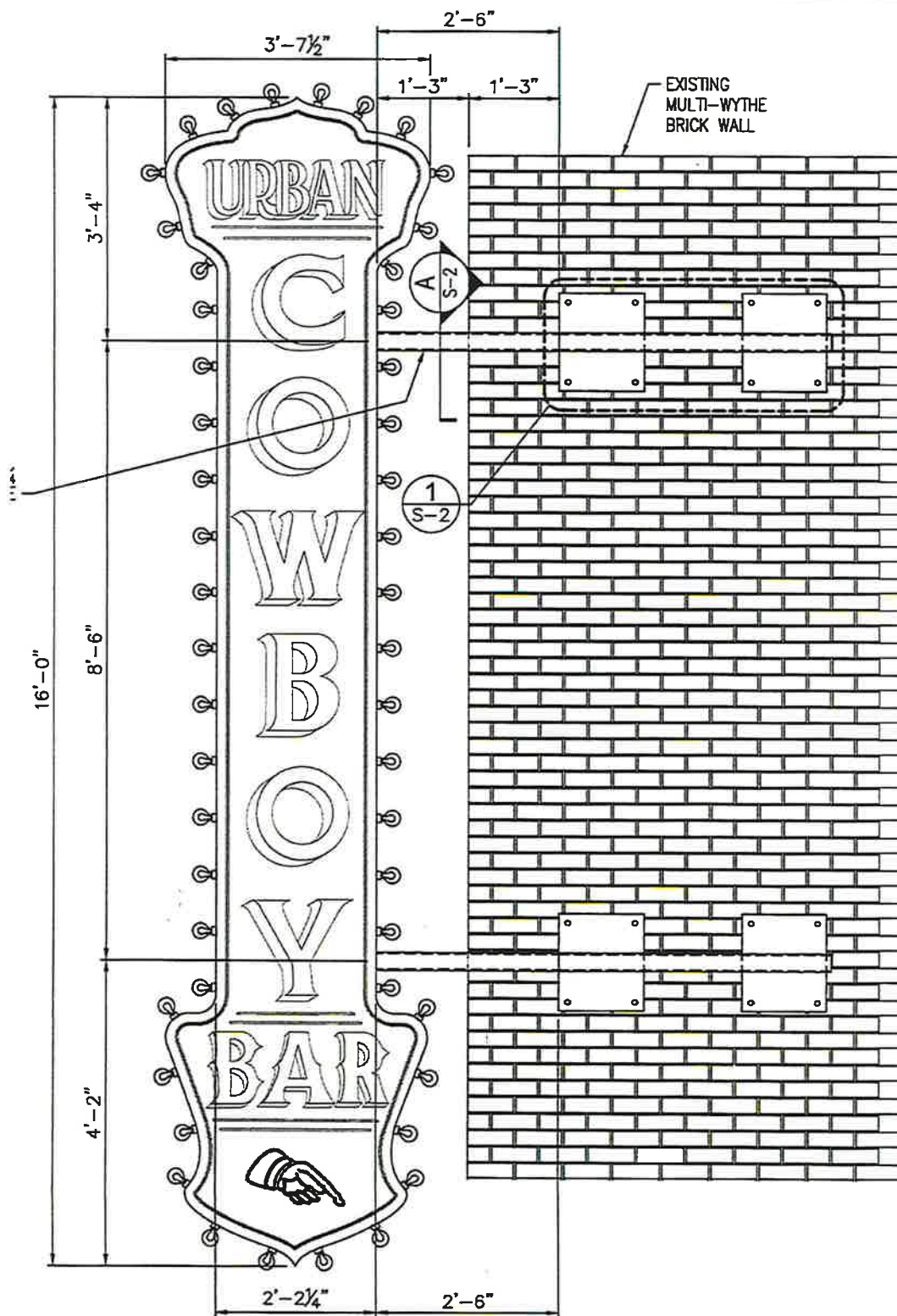


16'-0" BLADE SIGN
URBAN COWBOY
40 THE ARCADE
NASHVILLE, TN 37219

No.	Date	Revision	By
01	11/08/2024	MODIFIED MOUNTING DETAILS	TBC

S-2

Exhibit A



STRUCTURE ELEVATION

SCALE: ½" = 1'-0"