Staff Report

Downtown Design Review

File Number: 6-B-25-DT

Meeting: 6/18/2025
Applicant: Brittany Greene Excel Signs LLC
Owner: Jennifer Utesch
Project: Bank of America signs

Property Information

Location: 550 Main St.
Parcel ID: 94 M D 010
Zoning: DK-B (Downtown Knoxville, Boulevard)
Description:

Signs

Description of Work

Level II Sign

Installation of three new illuminated, channel-letter wall signs and one new illuminated monument sign. The two existing 25’ wide by 2’ tall (50 sq. ft.) wall signs on the top concrete band of the building (approximately 290’ from the ground) will be removed, and two 40’-7” wide by 4’-0.75” tall (165 sq. ft.) signs will be installed in their place. The existing wall sign above the lower storefront windows (48’ from the ground) will be removed, and one new, illuminated 15’-6.75” wide by 1’-6.75” tall (24.3 sq. ft.) wall sign will be installed in its place. The illuminated monument sign will be installed in the place of the existing one in the front of the building. The sign face itself is 7’ wide and 2’-10” tall (19.8 sq. ft.) and is internally lit, and it rests on a base that makes it 6’ tall. All signs feature a similar design to the existing but are larger.

Applicable Design Guidelines

Downtown Design Guidelines

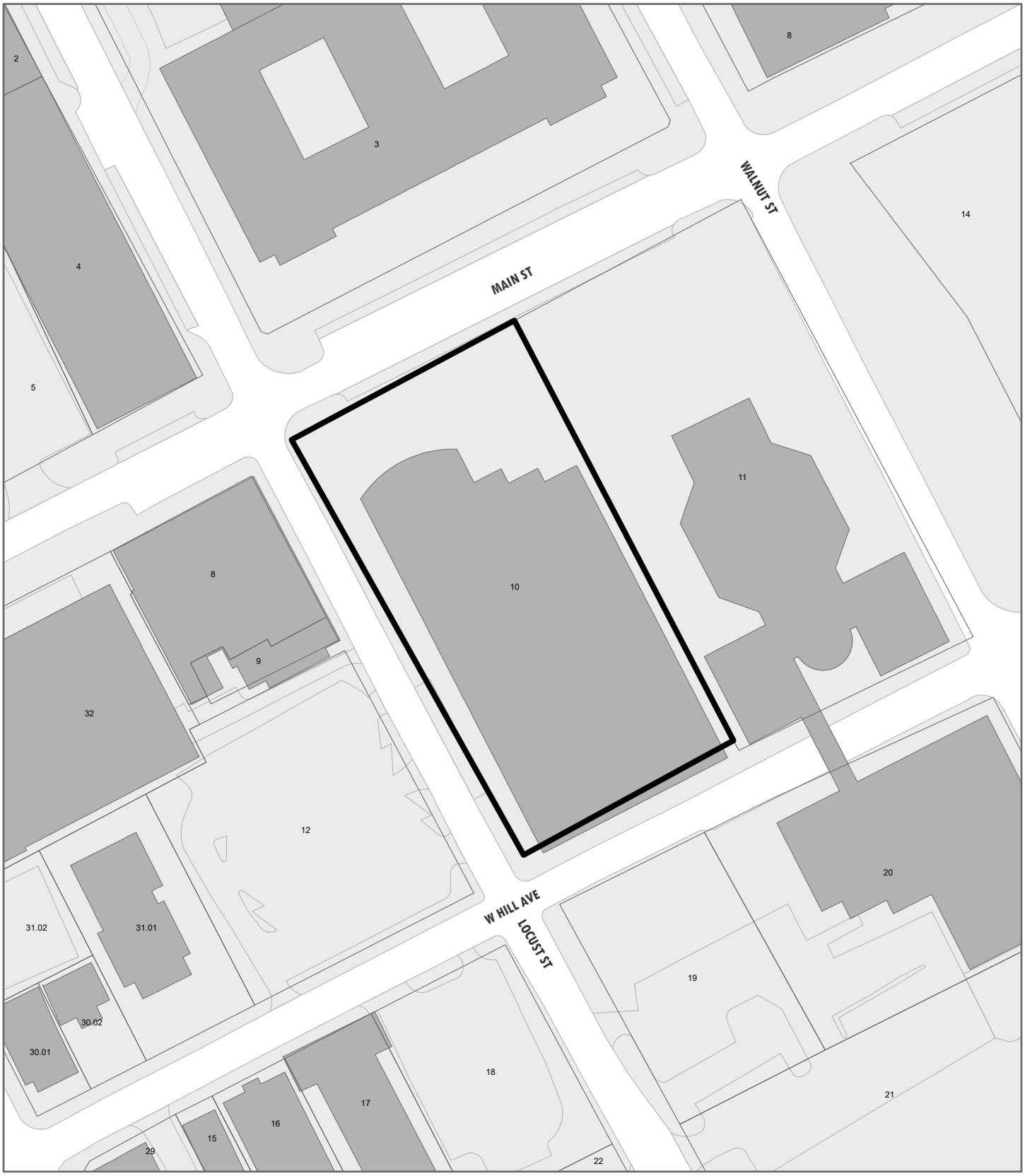
A. The Boulevard District
3. Recommended Signs
3a. Wall signs, mounted flush to the building facade or on the building’s sign board
3b. Monument signs

Comments

As the proposed signs are illuminated, Board review and approval is required. The proposed illuminated wall signs and monument sign reflect the recommended types for the Boulevard district. The sign designs and forms are consistent with the existing signs and the contemporary building. The visual scale of the large wall signs will be minimized due to the building’s height.

Recommendation

Staff recommends approval of Certificate 6-B-25-DT as submitted.



DESIGN REVIEW BOARD

6-B-25-DT

APPLICATION FOR CERTIFICATE OF APPROPRIATENESS

550 Main St.

Level 1: Sign

Original Print Date: 6/9/2025 Revised:

Knoxville/Knox County Planning · Design Review Board

Petitioner: Brittany Greene Excel Signs LLC

N

0 160

Feet

Planning
KNOXVILLE | KNOX COUNTY

DESIGN REVIEW REQUEST

- [x] DOWNTOWN DESIGN (DK)
- [ ] HISTORIC ZONING (H)
- [ ] INFILL HOUSING (IH)

Brittany Greene — Applicant
Excel Signs LLC

5-21-2025 — Date Filed
6-18-2025 — Meeting Date (if applicable)
6-B-25-DT — File Number(s)

CORRESPONDENCE

All correspondence related to this application should be directed to the approved contact listed below.

- [ ] Owner
- [x] Contractor
- [ ] Engineer
- [ ] Architect/Landscape Architect

Brittany Greene — Name
Excel Signs LLC — Company

912 Forsythe st — Address
Knoxville — City
TN — State
37917 — Zip

865-371-5253 — Phone
b.greene@excelsignsllc.com — Email

CURRENT PROPERTY INFO

Jennifer Utesch — Owner Name (if different from applicant)
900 South Gay st — Owner Address
865-549-7440 — Owner Phone

550 Main st Knoxville, TN 37902 — Property Address
094MD010 — Parcel ID

Main Ave office — Neighborhood
Cityblock: 02122 — Zoning

AUTHORIZATION

Lindsay Lanois — Staff Signature
Please Print
Date

Brittany Greene — Applicant Signature
Brittany Greene — Please Print
5-21-2025 — Date

REQUEST

DOWNTOWN DESIGN

Level 1:

☒ Signs ☐ Alteration of an existing building/structure

Level 2:

☐ Addition to an existing building/structure

Level 3:

☐ Construction of new building/structure ☐ Site design, parking, plazas, landscape

See required Downtown Design attachment for more details.

☐ Brief description of work: Removal of existing signage, repair fascia, installation of EXT-001 on primary elevation. Installation of EXT-002 and EXT-003 on side elevations. Installation of new monument sign

HISTORIC ZONING

Level 1:

☐ Signs ☐ Routine repair of siding, windows, roof, or other features, in-kind; Installation of gutters, storm windows/doors

Level 2:

☐ Major repair, removal, or replacement of architectural elements or materials ☐ Additions and accessory structures

Level 3:

☐ Construction of a new primary building

Level 4:

☐ Relocation of a contributing structure ☐ Demolition of a contributing structure

See required Historic Zoning attachment for more details.

☐ Brief description of work:

INFILL HOUSING

Level 1:

☐ Driveways, parking pads, access point, garages or similar facilities ☐ Subdivisions

Level 2:

☐ Additions visible from the primary street ☐ Changes to porches visible from the primary street

Level 3:

☐ New primary structure

☐ Site built ☐ Modular ☐ Multi-Sectional

See required Infill Housing attachment for more details.

☐ Brief description of work:

STAFF USE ONLY

ATTACHMENTS

☐ Downtown Design Checklist

☐ Historic Zoning Design Checklist

☐ Infill Housing Design Checklist

ADDITIONAL REQUIREMENTS

☐ Property Owners / Option Holders

Level 1: $50 • **Level 2:** $100 • **Level 3:** $250 • **Level 4:** $500

FEE 1:

FEE 2:

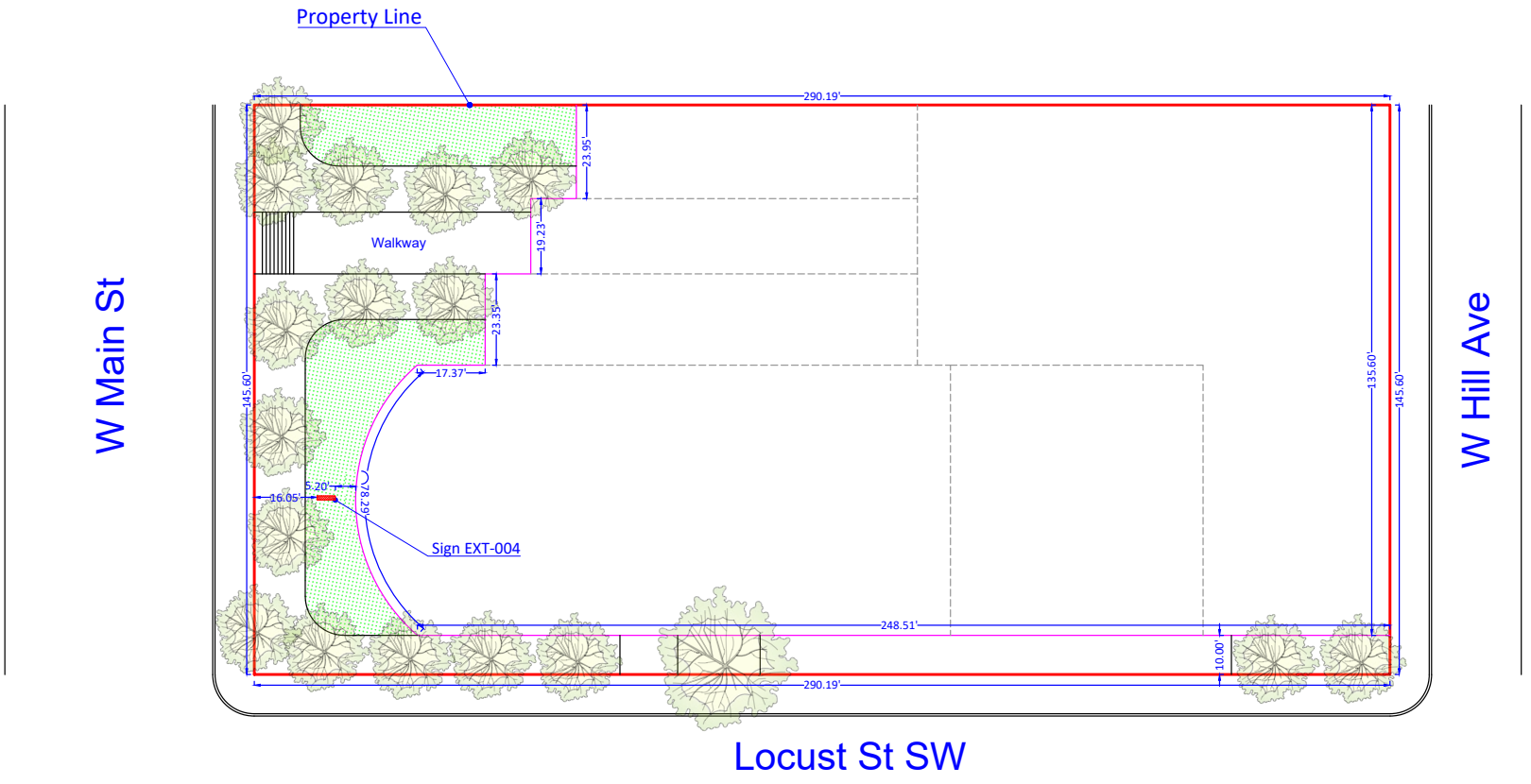
FEE 3:

TOTAL:

Pd. 05/27/2025, SG

SITE PLAN

0 15 30 UNIT: FEET 90



Parcel No. (APN)	094MD010
Land Use	MISCELLANEOUS GOVERNMENTAL, PUBLIC
Lot Area	43,984 SF (1.01 ACRES)

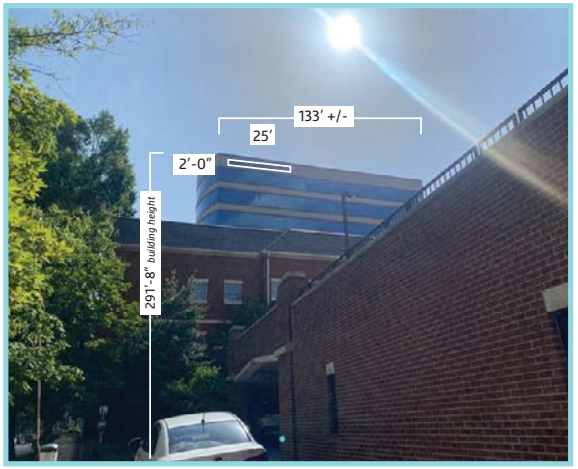
ADDRESS: 550 W Main St
Knoxville, TN 37902
Scale: 1"=30'

THIS IS NOT A LEGAL SURVEY, NOR IS IT INTENDED TO BE OR REPLACE ONE

This work product represents only generalized locations of features, objects or boundaries and should not be relied upon as being legally authoritative for the precise location of any feature, object or boundary.

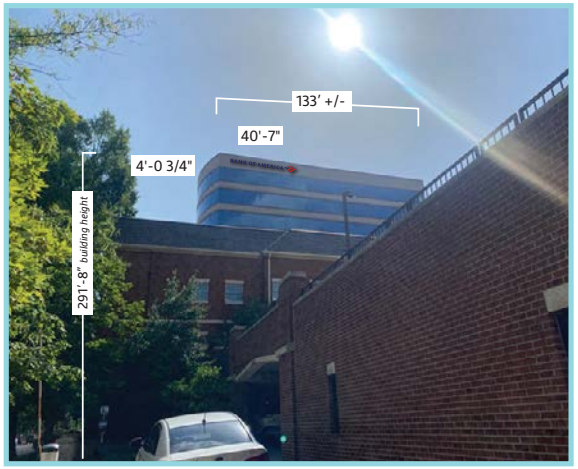
Date: May 8, 2025

EXT-002



Before

Scale: 1" = 50'

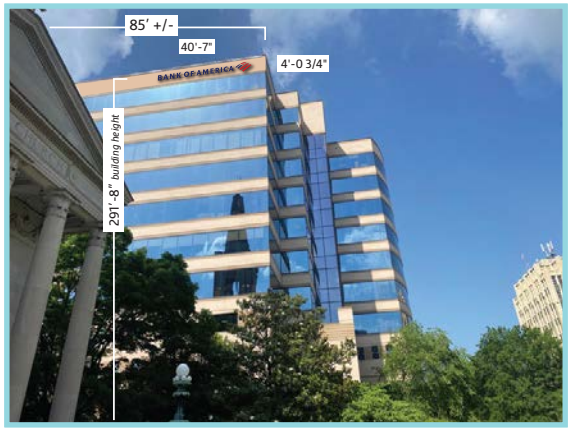


After

EXT-003

Before

Scale: 1" = 35'



After

ANALYSIS

Velocity pressure

$q_h = 0.00256\ K_h K_{zt} K_d V^2 I$ = **36.71** psf

where: q_h = velocity pressure at mean roof height, h. (Eq. 29.3-1 page 307 & Eq. 30.3-1 page 316)

K_h = velocity pressure exposure coefficient evaluated at height, h, (Tab. 29.3-1., pg 310 = **1.53**

K_d = wind directionality factor. (Tab. 26.6-1, for building, page 250) = **0.85**

h = height of top = **291.00** ft

Wind Force Case A: resultant force though the geometric center (Sec. 29.4.1 & Fig. 29.1-1)

$p = q_h G C_{f+,-} =$	=	**35**	psf
$F = p A_s$	=	**0.74**	kips
M = F (h - 0.5s) for sign, F (0.55h) for wall	=	**214.09**	ft-kips
T =	=	**0.00**	ft-kips

where: G = gust effect factor. (Sec. 6.5.8, page 26). = **0.85**

C_f = net force coefficient. (Fig. 6-20, page 73) **1.85**

A_s = B s = **21.3** ft^2

DESIGN SPECIFICATIONS			
IBC	2024	with TN	amendments
	Including Modifications By State of TN		
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures	
ACI	318-19(22)	Building Code Requirements for Structural Concrete	
ANSI/AISC	360-16	Specification for Structural Steel Buildings	

DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf

JERE KELL MURDOCH
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 115559
STATE OF TENNESSEE

2399 NW 43rd St
MANASQUAN, NJ 08736
(973) 570-8215 x0

MURDOCH ENGINEERING

5/19/2025

Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902	
Interior/Exterior:	EXTERIOR	
Sign Type:	LETTERS, CHANNEL	
Engineer:	Matt Smith	
Windspeed:		
Illumination:	ILLUMINATED	
Voltage:	120v	**SCALE:1/2" = 1'-0"**

AGI

Description: RW LINEAR CHANNEL LETTERS

Part Number: BOA-KCWS-Rnx

ANSI B-SIZE DRAWING-AUTOCAD.10.20.23

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NOTES:
1. RACEWAYS TO BE PAINTED PER PM.
2. ART LOCATION: C:\AGI PDM\Customers\Bank of America\AGI Art
3. LED LOCATION: \\agivbfs4\drawings\Bank of America\Retail\2024 NX_Retail LED Layout\Channel Letter White LED\Remote Linear

REVISIONS				
REV	DR NUMBER	REV CHANGE	DATE	DRAFTER
A	93591	INITIAL RELEASE	4/01/2025	JAM

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DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
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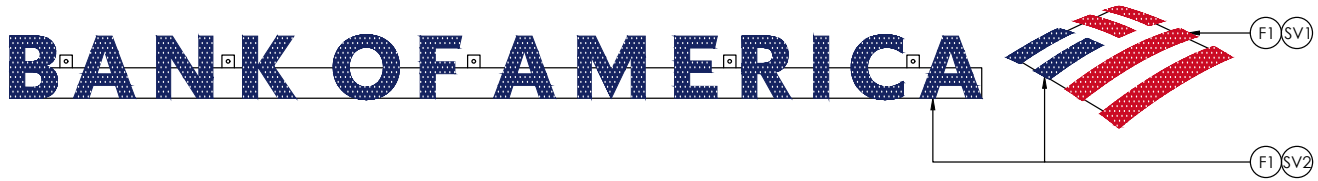

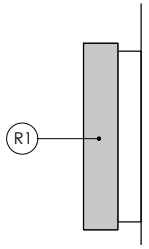

SPECIALTY VINYL		
SV1		3M DN00507 (MATCH 186 RED)
SV2		3M DN00502 (MATCH 280 BLUE)
SV3		3M #680-75 BLUE

LETTER AND CAB RETURNS		
R1		COLOR 109 LT. GRAY
R2		COLOR 119 DARK GRAY

LETTER/CAB FACE		
F1	CL FACES	PLASKOLITE #2406 LD
F2	WHITE TRANSLUCENT	PLASKOLITE #7328 LD
F3	PUSH THRU (RED)	PLASKOLITE RED FUSION
F4	PUSH THRU (BLUE)	PLASKOLITE BLUE FUSION

2399 NJ-34, A-2
MANASQUAN, NJ 08736
(973) 570-8215 x0
MURDOCH ENGINEERING
5/19/2025
Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902	
Interior/Exterior:	EXTERIOR	
Sign Type:	LETTERS, CHANNEL	
Engineer:	Matt Smith	
Windspeed:		
Illumination:	ILLUMINATED	
Voltage:	120v	SCALE:1/2" = 1'-0"

AGI

Description: RW LINEAR CHANNEL LETTERS

Part Number: BOA-KCWS-Rnx

ANSI B-SIZE DRAWING-AUTOCAD 10.20.23

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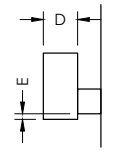
NOTE:
1. LETTER SETS 15" AND LARGER TO USE LARGER RACEWAY (PAGE 5)
2. LETTER SETS BELOW 15" TO USE SMALLER RACEWAY (PAGE 5)
3. CLIP DETAIL PAGE 5

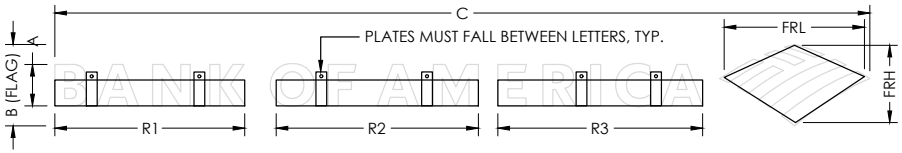
REVISIONS				
REV	DR NUMBER	REV CHANGE	DATE	DRAFTER
A	93591	INITIAL RELEASE	4/01/2025	JAM

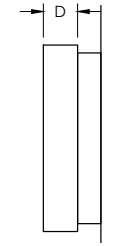
DESIGN SPECIFICATIONS			
IBC	2024	with TN	amendments
		Including Modifications By State of TN	
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures	
ACI	318-19(22)	Building Code Requirements for Structural Concrete	
ANSI/AISC	360-16	Specification for Structural Steel Buildings	

DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf



LETTER SIDE ELEVATION





LOGO SIDE ELEVATION

DISTANCES BETWEEN MOUNTING PLATES:
MIN 30" C/C
MAX 48" C/C

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DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf

KXXXnx Sizing Chart

PART #	A (CAP HEIGHT)	B	C	D	E	R1	R2	R3	R4	FRH	FRL	UPPER CLIPS
KXXX-R-1.2nx	5 1/2"	10 7/8"	9'-0 1/4"	2"	-	7'-2 1/16"				0'-10 5/16"	1'-6 3/4"	
KXXX-R-1.1nx	6 1/4"	1'-0 1/4"	10'-3"	2"	-	8'-1 3/4"				0'-11 5/8"	1'-9 1/8"	
KXXX-R-1nx	8 1/4"	1'-4 1/4"	13'-6 3/8"	3"	-	10'-9 1/16"				1'-3 7/16"	2'-4"	
KXXX-R-2.1nx	9 1/2"	1'-6 3/4"	15'-6 7/8"	3"	1	12'-4 5/8"				1'-5 13/16"	2'-8 5/16"	
KXXX-R-2nx	10 1/2'	1'-8 5/8"	17'-2 5/8'	3"	1 1/2"	5'-11 7/8"	6'-10 1/2"			1'-7 5/8"	1'-10 7/16"	
KXXX-R-3nx	12"	1'-11 5/8"	19'-8 1/8"	3"	1 1/2"	6'-10 3/16"	7'-10 1/2"			1'-10 7/16"	4'-1 1/8"	
KXXX-R-4.1nx	14 1/2"	2'-4 1/2"	23'-9 3/8"	3"	3"	8'-3 1/4"	9'-5 15/16"			2'-3 1/16"	4'-1 1/8"	
KXXX-R-4nx	16 1/2"	2'-8 1/2"	27'-0 5/8"	3"	3"	9'-5"	10'-9 11/16"			2'-6 7/8"	4'-8"	
KXXX-R-5nx	20 3/4"	3'-4 7/8"	34'-0 1/4"	3"	3"	7'-11 1/2"	8'-7 1/8"	8'-6 5/8"		3'-2 13/16"	5'-10 7/16"	
KXXX-R-6nx	24 3/4'	4'-0 3/4'	40'-7"	3"	5"	9'-5 15/16"	10'-2 3/8"	10'-2 3/8"		3'-10 5/16"	7'-0"	YES
KXXX-R-7x	29"	4'-9 1/8"	47'-6 5/8"	3"	5"	11'-1 1/2"	11'-11 3/8"	11'-11 3/8"		4'-6 13/16"	8'-2 7/16"	YES
KXXX-R-8nx	33"	5'-4 7/8"	54'-1 3/8"	3"	5"	8'-11 13/16"	8'-6 3/8"	9'-10 3/4"	10'-7 5/16"	5'-1 5/8"	9'-3 13/16"	YES

JERE KELL MURDOCH
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 115559
STATE OF TENNESSEE

2399 NJ-34, A-2
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(973) 570-8215 x0
MURDOCH ENGINEERING
5/19/2025
Jere Murdoch, PE
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TN PE Lic. #115559
Exp: 10/31/2026

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902
Interior/Exterior:	EXTERIOR
Sign Type:	LETTERS, CHANNEL
Engineer:	Matt Smith
Windspeed:	
Illumination:	ILLUMINATED
Voltage:	120v

SCALE:1/2" = 1'-0"

AGI

Description: RW LINEAR CHANNEL LETTERS
Part Number: BOA-KCWS-Rnx

ANSI B-SIZE DRAWING-AUTOCAD.10.20.23

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NOTES:
1. CHANNEL LETTER FILE NAME: **BOA-KCWSnx**

REVISIONS				
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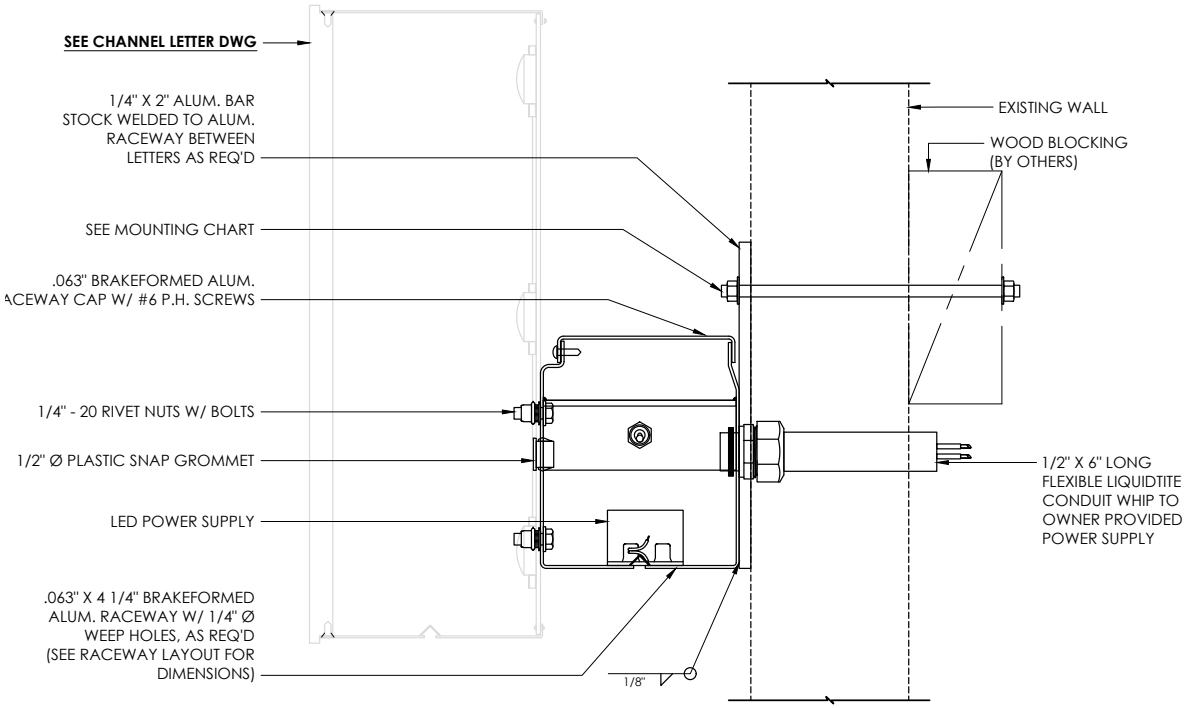
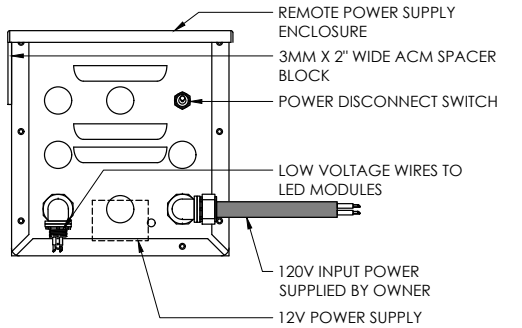
A	93591	INITIAL RELEASE	4/01/2025	JAM



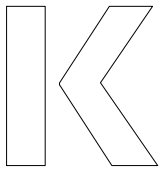
RACEWAY @ CHANNEL LETTER SECTION



POWER SUPPLY HOUSING DETAIL
SCALE: 6" = 1'-0"

FASTENER SCHEDULE (RACEWAY SIGN)			WALL CONSTRUCTION			
HARDWARE	DIAM.	O.C. Spacing Max.	MASONRY (CMU-Block)	EFIS/DRYVIT OVER min. 1/2" PLYWOOD	EFIS/DRYVIT OVER GYPSUM/ DENSGLASS	METAL PANEL OVER METAL STUD
THRU-BOLT	3/8"	30in.	YES	YES	ONLY WITH BACKER (MIN. 3/4" PLYWOOD)	YES
DeWALT DBL. EXPANSION or SCREW-BOLT+ ANCHOR	3/8"	36in.	YES[2]	NO	NO	NO
LAG BOLT	3/8"	30in.	NO	1" SOLID WOOD PENETRATION REQ'D	NO	NO

1.) Fasteners shall be evenly spaced Top and Bottom w/12" Side end clearance. Mounting Tab/Thru-Box Framing with washer.
2.) Expansion anchors require a minimum 5" solid masonry embedment installed per/tec-guide for wall construction type.
3.) Engineering liability is limited to building connections.
4.) Thru-Bolts (All-Threaded Rods) into L2x2x3/16" Stl. Angle, P1000 Uni-Strut or 2x6 lumber spanning two(2) wall studs per/Bolt - Rod
5.) EIFS/ Dryvit wall provide 1/2" ID Sch40 Pipe Alum. Pipe spacer at all building connections.



THE LETTER 'K' IS TO BE FACBRICATED IN 2 SEPARATE ELEMENTS AND KISSED TOGETHER @ POINT

Engineers Connection Note:
Provide Fasteners with washer using the fastener schedule for existing wall construction type to determine the fastener type and maximum O.C. bolt spacing to install along the top of raceway box through mounting plate with a 12" Maximum side end clearance and one clip per/letter.

DESIGN SPECIFICATIONS		
IBC	2024	with TN amendments
		Including Modifications By State of TN
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures
ACI	318-19(22)	Building Code Requirements for Structural Concrete
ANSI/AISC	360-16	Specification for Structural Steel Buildings

DESIGN LOADS		
Wind	V=	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg=	25 psf

JERE KELL MURDOCH — REGISTERED ENGINEER — AGRICULTURE — COMMERCE — No. 115559 — STATE OF TENNESSEE

2399 NJ-34, A-2
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MURDOCH ENGINEERING
5/19/2025
Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902
Interior/Exterior:	EXTERIOR
Sign Type:	LETTERS, CHANNEL
Engineer:	Matt Smith
Windspeed:	150 MPH
Illumination:	ILLUMINATED
Voltage:	120v

SCALE:1/2" = 1'-0"

AGI

Description: RW LINEAR CHANNEL LETTERS
Part Number: BOA-KCWS-Rnx

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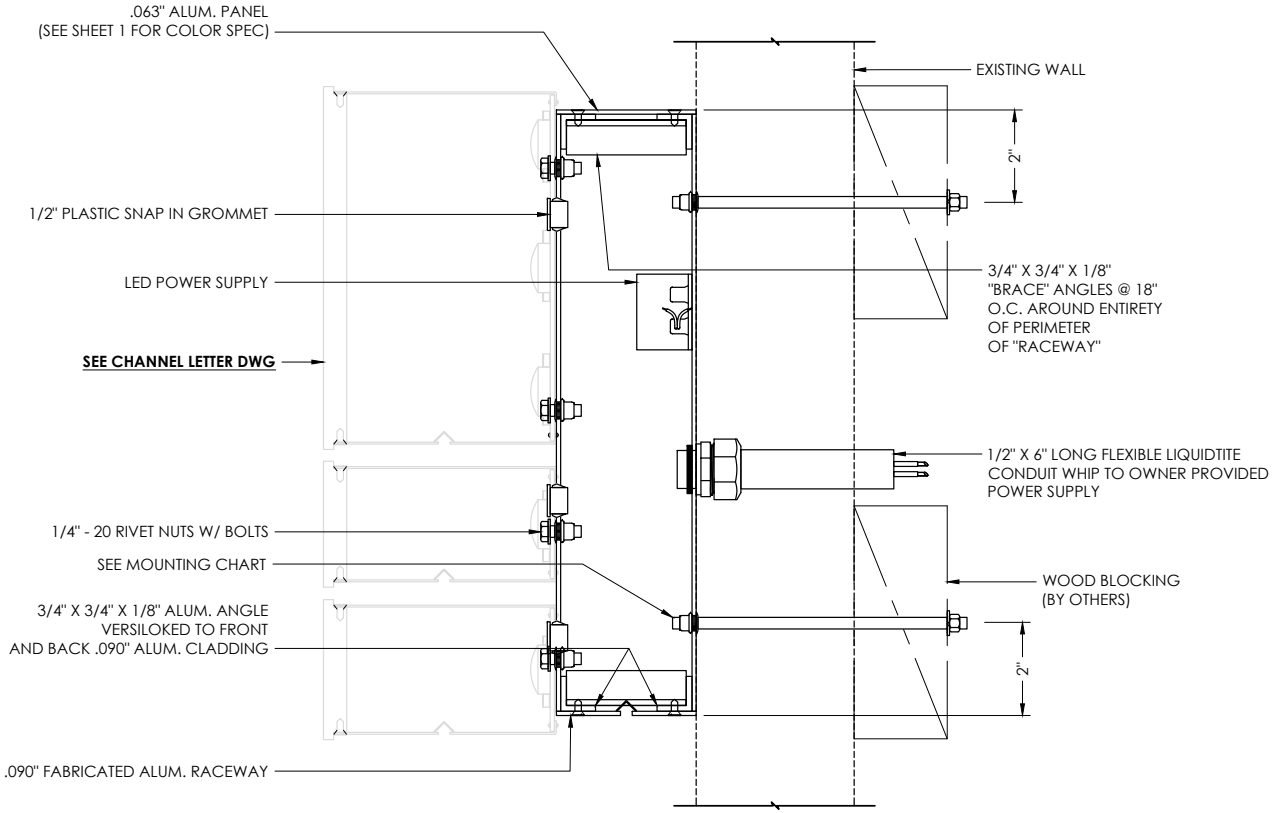
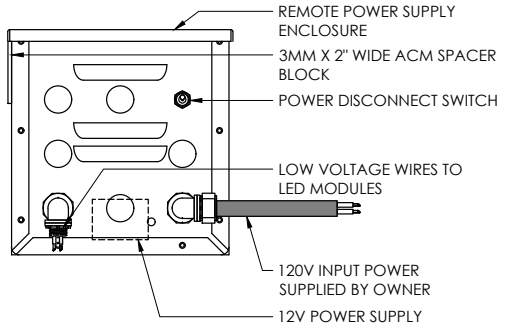


RACEWAY @ FLAG SECTION



POWER SUPPLY HOUSING DETAIL
SCALE: 6" = 1'-0"

Engineers Connection Note:
Install Logo with Six(6) Fasteners with washer, Three(3) Top and bottom evenly spaced with a 12" max. side clearance using the fastener schedule on page 4 of 7 to determine the fastener type to install.

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IBC	2024	with TN amendments
		Including Modifications By State of TN
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures
ACI	318-19(22)	Building Code Requirements for Structural Concrete
ANSI/AISC	360-16	Specification for Structural Steel Buildings

DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf

JERE KELL MURDOCH
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 115559
STATE OF TENNESSEE

2399 NJ-34, A-2
MANASQUAN, NJ 08736
(973) 570-8215 x0

MURDOCH ENGINEERING

5/19/2025
Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902
Interior/Exterior:	EXTERIOR
Sign Type:	LETTERS, CHANNEL
Engineer:	Matt Smith
Windspeed:	150 MPH
Illumination:	ILLUMINATED
Voltage:	120v **SCALE:1/2" = 1'-0"**

AGI

Description:
RW LINEAR CHANNEL LETTERS
Part Number:
BOA-KCWS-Rnx

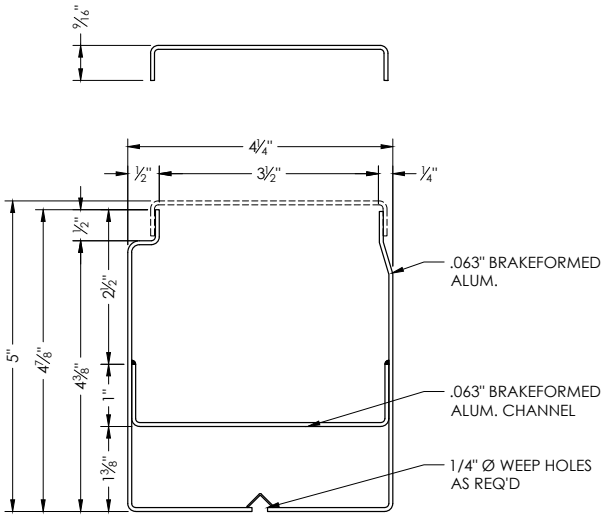
ANSI B-SIZE DRAWING-AUTOCAD.10.20.23

C:\AGI PDM\Customers\Bank of America\Retail\2024 NX\CHANNEL LETTERS\RACEWAY MOUNTED CHANNEL LETTERS\RACEWAY LINEAR CHANNEL LETTERS\BOA-KCWS-Rnx.dwg

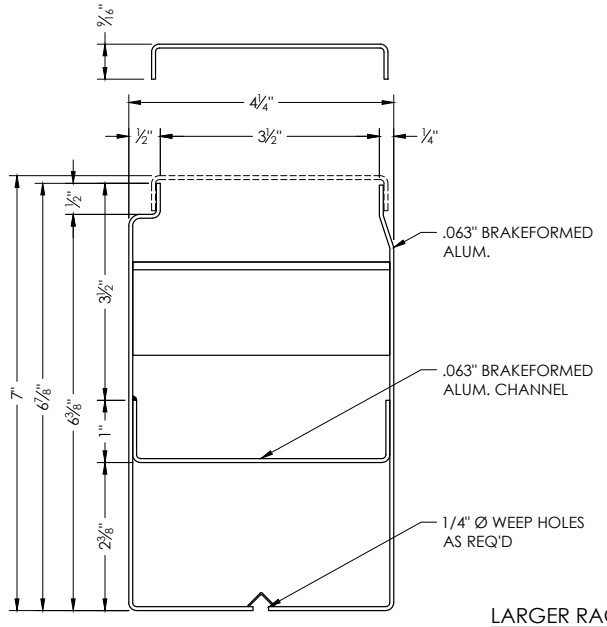
REVISIONS				
REV	DR NUMBER	REV CHANGE	DATE	DRAFTER
A	93591	INITIAL RELEASE	4/01/2025	JAM

DESIGN SPECIFICATIONS		
IBC	2024	with TN amendments
		Including Modifications By State of TN
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures
ACI	318-19(22)	Building Code Requirements for Structural Concrete
ANSI/AISC	360-16	Specification for Structural Steel Buildings

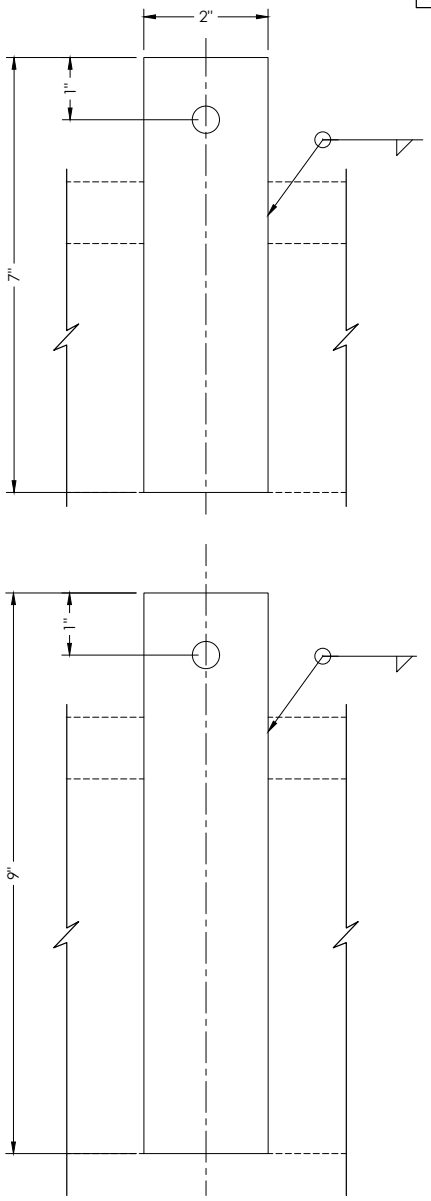
DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf

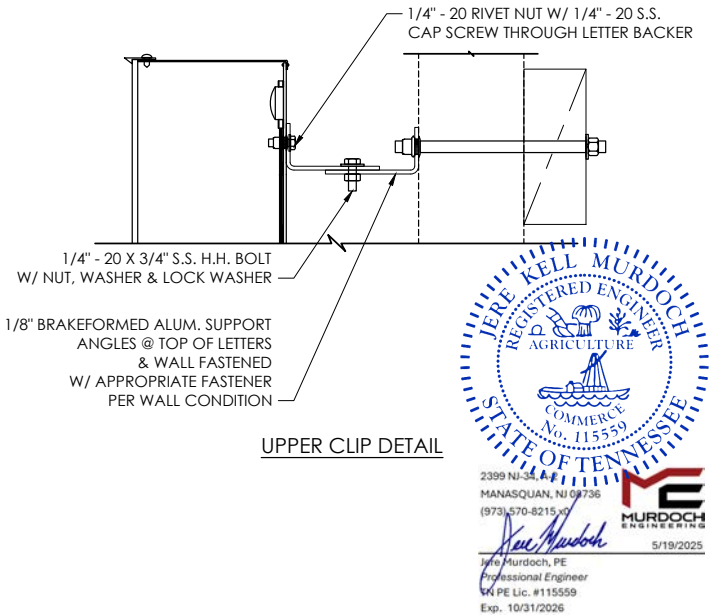


SMALLER RACEWAY DETAIL



LARGER RACEWAY DETAIL





UPPER CLIP DETAIL

2399 NJ-34 A-F
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(973) 570-8215 x0
MURDOCH ENGINEERING
5/19/2025
Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902	
Interior/Exterior:	EXTERIOR	
Sign Type:	LETTERS, CHANNEL	
Engineer:	Matt Smith	
Windspeed:		
Illumination:	ILLUMINATED	
Voltage:	120v	**SCALE:1/2" = 1'-0"**

AGI

Description: RW LINEAR CHANNEL LETTERS

Part Number: BOA-KCWS-Rnx

ANSI B-SIZE DRAWING-AUTOCAD.10.20.23

C:\AGI PDM\Customers\Bank of America\Retail\2024 NX\CHANNEL LETTERS\RACEWAY MOUNTED CHANNEL LETTERS\RACEWAY LINEAR CHANNEL LETTERS\BOA-KCWS-Rnx.dwg

GENERAL:

1. ALL MATERIALS AND WORK SHALL CONFORM TO THE REQUIREMENTS OF THE APPLICABLE LOCAL BUILDING CODE.
2. CONSTRUCTION METHODS AND PROJECT SAFETY: DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE METHODS, PROCEDURES, OR SEQUENCE OF CONSTRUCTION. TAKE NECESSARY PRECAUTIONS TO MAINTAIN AND ENSURE THE INTEGRITY OF THE STRUCTURE DURING CONSTRUCTION. THE EOR WILL NOT ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS, AND REGULATIONS.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS PRIOR TO THE START OF CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES OR INCONSISTENCIES THAT ARE FOUND. NOTED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE DRAWINGS.
4. ALL OMISSIONS AND/OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND FIELD INSPECTOR. THE ENGINEER SHALL PROVIDE A SOLUTION PRIOR TO PROCEEDING WITH ANY WORK AFFECTED BY THE CONFLICT OR OMISSION.
5. WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF THE WORK, CONSTRUCT IN ACCORDANCE WITH THE STEEL CONSTRUCTION MANUAL, 14TH EDITION OR 2010 ALUMINUM DESIGN MANUAL .
6. WHEN A DETAIL IS IDENTIFIED AS TYPICAL, THE CONTRACTOR IS TO APPLY THIS DETAIL IN ESTIMATING AND CONSTRUCTION TO EVERY LIKE CONDITION WHETHER OR NOT THE REFERENCE IS REPEATED IN EVERY INSTANCE.
7. ANY CHANGE TO THE DESIGN AS SHOWN ON THE DRAWINGS REQUIRES PRIOR WRITTEN APPROVAL FROM DESIGN ENGINEER OF RECORD BEFORE CONSTRUCTION.
8. WORK PERFORMED IN CONFLICT WITH THE STRUCTURAL DRAWINGS OR APPLICABLE BUILDING CODE REQUIREMENTS SHALL BE CORRECTED AT THE EXPENSE OF THE CONTRACTOR.
9. VERIFICATION: VERIFY ALL DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS BEFORE STARTING WORK. NOTIFY THE EOR IMMEDIATELY OF ANY DISCREPANCIES.

EXISTING CONDITIONS:

1. IF EXISTING CONDITIONS ARE NOT AS DETAILED IN THIS DESIGN, THE INSTALLER SHALL CEASE WORK AND NOTIFY MURDOCH ENGINEERING IMMEDIATELY.
2. MURDOCH ENGINEERING WILL NOT BE PERFORMING ON-SITE INSPECTIONS OR VERIFICATIONS. IT IS THE RESPONSIBILITY OF THE INSTALLER, STRUCTURE OWNER, AND PROPERTY OWNER TO IDENTIFY EXISTING CONDITIONS AND CONTACT MURDOCH ENGINEERING WITH ANY DISCREPANCIES OR CONCERNS.
3. INSTALLER SHALL CONFIRM THE DIAMETER AND THICKNESS OF EXISTING MEMBERS AND NOTIFY MURDOCH ENGINEERING OF ANY DISCREPANCIES.
4. INSTALLER SHALL INSPECT AND CONFIRM THE QUALITY OF EXISTING STRUCTURE AS "IN GOOD REPAIR". IF THERE ARE ANY INDICATIONS THAT THIS IS NOT THE CASE, INSTALLER SHALL CEASE WORK IMMEDIATELY AND NOTIFY MURDOCH ENGINEERING.
5. ANY EXISTING INFORMATION SHOWN HAS BEEN FURNISHED BY THE PERSON(S) OR COMPANY THIS DOCUMENT WAS PREPARED FOR (SEE TITLE BLOCK). MURDOCH ENGINEERING IN NO WAY CERTIFIES THIS INFORMATION AS "AS-BUILT". IF THERE IS ANY REASON TO BELIEVE THE EXISTING CONDITIONS DETAILED HEREIN ARE NOT ACCURATE, MURDOCH ENGINEERING SHALL BE NOTIFIED IMMEDIATELY.

STEEL

1. STEEL SHAPES SHALL CONFORM TO THE FOLLOWIN

ROUND HSS	ASTM A500, GR B	Fy=42 KSI MIN.
SQUARE/RECT HSS	ASTM A500, GR B	Fy=46 KSI MIN.
THREADED ROD	F1554 GR 55	Fy=55 KSI MIN.
STEEL PLATE STD.	ASTM A36 ASTM	Fy=36 KSI MIN.
PIPE	A53, GR B	Fy=35 KSI MIN.

2. BOLTS SHALL CONFORM TO ASTM A325 UNO.
3. BOLTS AND THREADED ROD SHALL BE HOT-DIP GALVANIZED PER ASTM F2329 UNO.
4. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 UNO.
5. NUTS SHALL CONFORM TO ASTM A563.
6. WASHERS SHALL CONFORM TO ASTM F844.
7. STEEL HARDWARE SHALL BE HOT-DIP GALVANIZED PER ASTM A153 UNO
8. WELDING:
   a. WELD STRUCTURAL STEEL IN COMPLIANCE WITH ANSI/AWS D1.1 AND AISC SPECIFICATION, CHAPTER J. WELDERS SHALL BE CERTIFIED AS REQUIRED BY GOVERNING CODE AUTHORITY. WELDING SHALL BE DONE BY ELECTRIC ARC PROCESS USING LOW-HYDROGEN ELECTRODES WITH SPECIFIED TENSILE STRENGTH NOT LESS THAN 70 KSI UNLESS NOTED OTHERWISE.
   b. ALL SHOP AND FIELD WELDS SHALL BE PERFORMED BY AN AWS OR ICC CERTIFIED WELDER WITH ACTIVE STATUS AT TIME OF WELDING
   c. UNLESS A LARGER WELD SIZE IS INDICATED, PROVIDE MINIMUM SIZE WELDS PER AISC SPECIFICATION, SECTION J2, TABLE J2.4
   d. BASE PLATES SHALL BE WELDED ON TOP AND BOTTOM WITH CONTINUOUS WELDS OF AT LEAST 1/4" (IF PLATE IS CUT TO FIT TUBE INTO PLATE)

ALUMINUM:

1. FABRICATE AND ERECT ALUMINUM IN COMPLIANCE WITH THE ALUMINUM ASSOCIATION (AA) 2010 ALUMINUM DESIGN MANUAL (ADM) 1, THE SPECIFICATIONS FOR ALUMINUM SHEET METAL WORK (ASM35), AND IBC CHAPTER 20.
2. PIPE AND TUBE SHALL BE 6061-T6 PER ASTM B241 OR B429 WITH Ftu=38 KSI MIN, Fty=35 KSI MIN, Ftuw=24 KSI MIN, Ftyw=15 KSI MIN.
3. STD STRUCTURAL PROFILES SHALL BE 6061-T6 PER B308 WITH Ftu=38 KSI MIN, Fty=35 KSI MIN, Ftuw=24 KSI MIN, Ftyw=15 KSI MIN.
4. SHEET AND PLATE SHALL BE 6061-T6 PER ASTM B209 WITH Ftu=42 KSI MIN, Fty=35 KSI MIN, Ftuw=24 KSI MIN, Ftyw=15 KSI MIN.
5. EXTRUSIONS SHALL BE 6061-T6 PER ASTM B241 OR B429 WITH Ftu=38 KSI MIN, Fty=35 KSI MIN, Ftuw=24 KSI MIN, Ftyw=15 KSI MIN.
6. ALL SHOP AND FIELD WELDS SHALL BE PERFORMED BY AN AWS OR ICC CERTIFIED WELDER WITH CURRENT STATUS AT TIME OF WELDING
7. UNLESS A LARGER WELD SIZE IS INDICATED, PROVIDE MINIMUM SIZE WELD PER ADM. ALL ALUMINUM WELDED JOINTS SHALL HAVE WELD SIZES OF AT LEAST $\frac{1}{4}$ INCH
8. FILLET WELDS SHALL NOT EXCEED THINNEST MEMBER WALL THICKNESS JOINED.
9. ALUMINUM WELD FILLER SHALL BE 5356 ALLOY
10. WELDING PROCESS GMAW OR GTAW SHALL BE IN ACCORDANCE WITH AWS D1.2
11. ALUMINUM CHANNEL LETTERS SHALL BE CONSTRUCTED OF 0.090" RETURNS AND 0.125" BACKS MINIMUM, UNLESS A LARGER SIZE IS INDICATED ON DRAWINGS. THIS NOTE SHALL SUPERCEDE DRAWING DETAILS.
12. PROVIDE NEOPRENE GASKET BETWEEN DISSIMILAR METALS TO PREVENT GALVANIC CORROSION
13. ALUMINUM DIRECTLY EMBEDDED INTO CONCRETE SHALL BE CAPPED AT BOTTOM AND COATED WITH BITUMINOUS COATING OR POLYURETHANE WHERE IN CONTACT WITH CONCRETE.
14. FASTENERS BETWEEN DISSIMILAR METALS SHALL BE STAINLESS STEEL 316.

SCOPE OF WORK:

1. LIMITS OF LIABILITY TO EXTEND ONLY TO THE QUANTITY INDICATED. ATTEMPTS IN PART OR IN WHOLE TO INSTALL GREATER QUANTITIES THAN THOSE SPECIFIED WITHOUT CONSULTING MURDOCH ENGINEERING SHALL VOID ALL PROFESSIONAL LIABILITY AND COVERAGE. ENGINEERING LIABILITY IS LIMITED TO BUILDING CONNECTIONS.

2399 NJ-34 A-2
Manasquan, NJ 08736
(973) 570
murdochengineering.com
projects@murdochengineering.com

PREPARED FOR:

AGI

PROJECT TITLE:

BANK OF AMERICA

PROJECT ADDRESS:

550 W Main St, Knoxville, TN 37902

DESIGN SPECIFICATIONS

IBC	2024 with TN amendments	Including Modifications By State of TN
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures
ACI	318-19(22)	Building Code Requirements for Structural Concrete
ANSI/AISC	360-16	Specification for Structural Steel Buildings

DESIGN LOADS

Wind	V=	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg=	25 psf

JERE KELL MURDOCH
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 115559
STATE OF TENNESSEE

MURDOCH ENGINEERING
MANASQUAN, NJ 08736
(973) 570-8215 x0

5/19/2025

Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

DWG TITLE:

GENERAL NOTES

SHEET:	SIZE:
S.1	B

EXT-001

KCWS-2.1nx

DESIGN SPECIFICATIONS			
IBC	2024	with TN	amendments
	Including Modifications By State of TN		
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures	
ACI	318-19(22)	Building Code Requirements for Structural Concrete	
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DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf

Before

After

Scale: 1" = 15'

JERE KELL MURDOCH
REGISTERED ENGINEER
DEPT OF AGRICULTURE
COMMERCE
No. 115559
STATE OF TENNESSEE

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MANASQUAN, NJ 08736
(973) 570-8215 x0

MURDOCH ENGINEERING

5/19/2025

Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902		
Interior/Exterior:	EXTERIOR		
Sign Type:	LETTERS, CHANNEL		
Engineer:			
Windspeed:			
Illumination:	ILLUMINATED		
Voltage:	120v	**SCALE:**	

AGI

Description: LINEAR CL W/ RW BEHIND WALL

Part Number: BOA-KCWS-R-2.1nx-TN5-907

ANSI B-SIZE DRAWING-AUTOCAD.10.20.23

C:\AGI PDM\Customers\Bank of America\SITE SPECIFIC\BOA200-TN5-907-001\BOA-KCWS-R-2.1nx-TN5-907.dwg

NOTES:
1. TRUE RED/SOLID BLUE JEWLITE TO BE USE IN SIZES THAT REQUIRE JEWLITE **AND** ANY SIGNS MOUNTED 12'-0" OR HIGHER.
2. ART LOCATION: C:\AGI PDM\Customers\Bank of America\AGI Art
3. LED LOCATION: \\agivbfs4\drawings\Bank of America\Retail\2024 NX_Retail LED Layout\Channel Letter White LED\Remote Linear

REVISIONS				
REV	DR NUMBER	REV CHANGE	DATE	DRAFTER
A	94497	INITIAL RELEASE	4/30/2025	JAM

DESIGN SPECIFICATIONS			
IBC	2024	with TN	amendments
	Including Modifications By State of TN		
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures	
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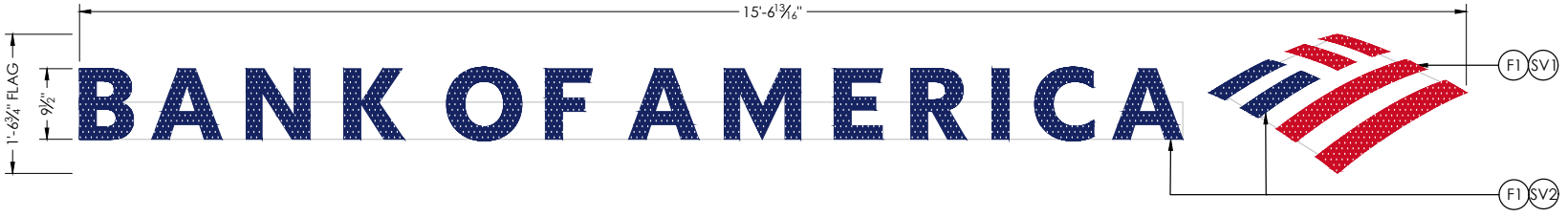
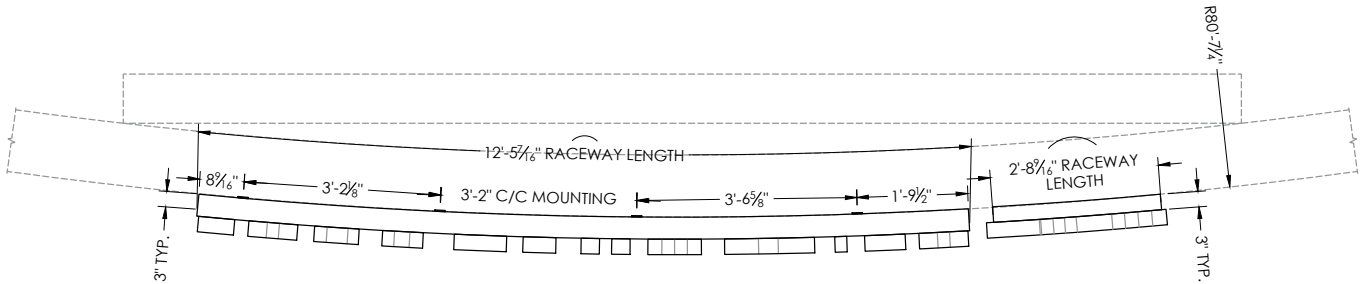
DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf





PLAN VIEW @ RACEWAY
SCALE: 1/2" = 1'-0"

JERE KELL MURDOCH
REGISTERED ENGINEER
DEPARTMENT OF AGRICULTURE
COMMERCE
No. 115559
STATE OF TENNESSEE

2399 NJ-34, Suite 5
MANASQUAN, NJ 08736
(973) 570-8215 x0
MURDOCH ENGINEERING
5/19/2025
Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

SPECIALTY VINYL		
SV1		3M DN00507 (MATCH 186 RED)
SV2		3M DN00502 (MATCH 280 BLUE)

LETTER AND CAB RETURNS		
R1		COLOR 109 LT. GRAY

LETTER/CAB FACE		
F1	CL FACES	PLASKOLITE #2406 LD

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902		
Interior/Exterior:	EXTERIOR		
Sign Type:	LETTERS, CHANNEL		
Engineer:	Matt Smith		
Windspeed:			
Illumination:	ILLUMINATED		
Voltage:	120v	SCALE: 3/4" = 1'-0"	

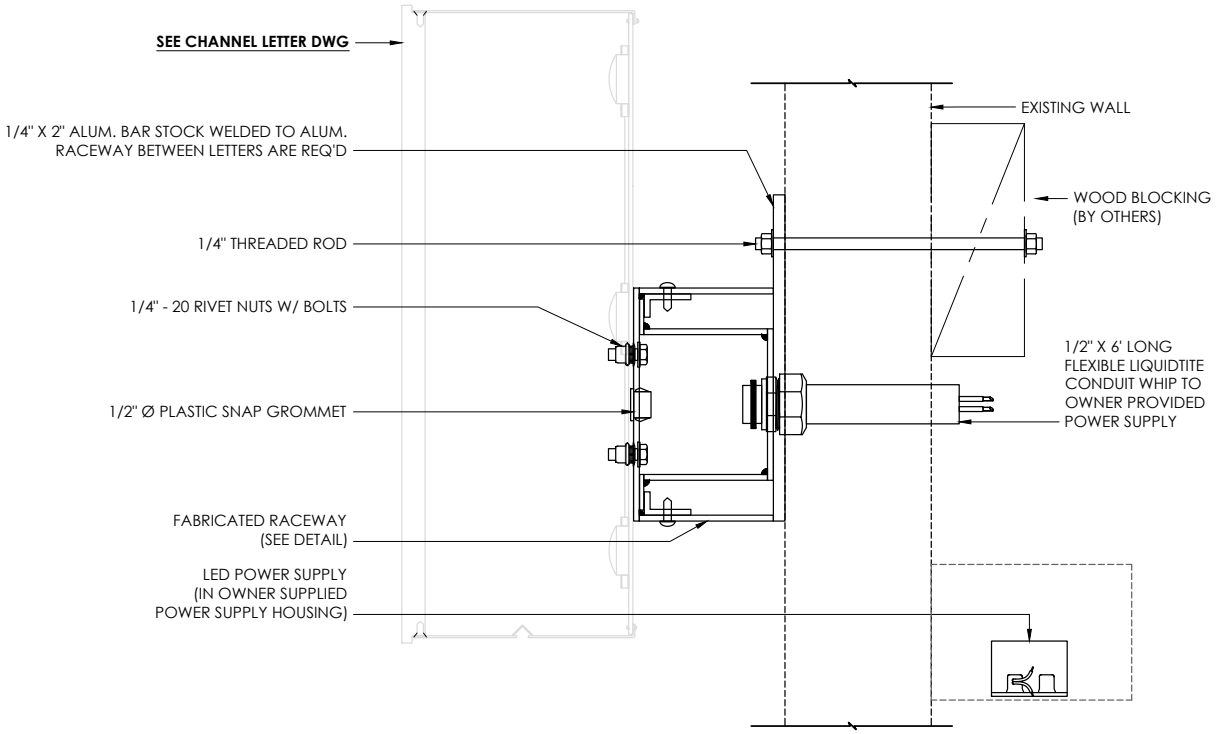
AGI

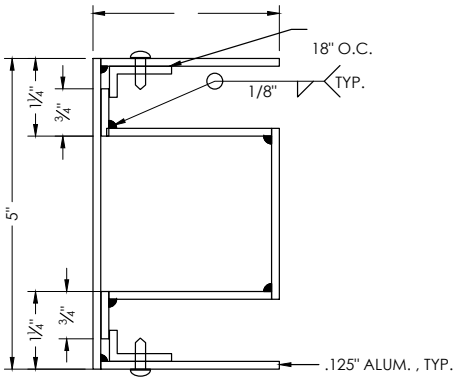
Description: LINEAR CL W/ RW BEHIND WALL
Part Number: BOA-KCWS-R-2.1nx-TN5-907

ANSI B-SIZE DRAWING-AUTOCAD 10.20.23

C:\AGI PDM\Customers\Bank of America\SITE SPECIFIC\BOA200-TN5-907-001\BOA-KCWS-R-2.1nx-TN5-907.dwg

REVISIONS				
REV	DR NUMBER	REV CHANGE	DATE	DRAFTER
A	94497	INITIAL RELEASE	4/30/2025	JAM





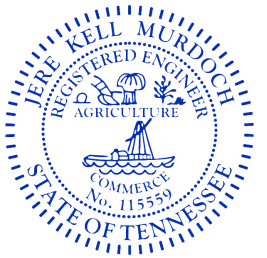
FABRICATED LETTER RACEWAY
SCALE: 6" = 1'-0"

SHOULDER ROUTED SECTION

FASTENER SCHEDULE (RACEWAY)			WALL CONSTRUCTION			
HARDWARE	DIAM.	O.C. Spacing Max.	MASONRY (CMU-Block)	EFIS/DRYVIT OVER min. 1/2" PLYWOOD	EFIS/DRYVIT OVER GYPSUM/ DENSGLASS	METAL PANEL OVER METAL STUD
THRU-BOLT	3/8"	48in.	YES	YES	ONLY WITH BACKER (MIN. 3/4" PLYWOOD)	YES
DeWALT DBL. EXPANSION ANCHOR	3/8"	48in.	YES[2]	NO	NO	NO
LAG BOLT	3/8"	41in.	NO	1" SOLID WOOD PENETRATION REQ'D	NO	NO
SNAP TOGGLE BOLT TYPE BC	3/8"	37in.	IF THROUGH BLOCK FACE	YES	ONLY WITH MIN. 3/4" PLYWOOD BACKER	YES with plywood backer
Tek-Screw	1/4"	42in.	NO	NO	NO	YES into 1/8" Alum or 1/16" Steel

1.) Fasteners shall be evenly spaced Top w/4" Side end clearance. Thru-Box Framing with washer.
2.) Expansion anchors require a minimum 5" solid masonry embedment installed per/tec-guide for wall construction type.
3.) Engineering liability is limited to building connections.
4.) Tek-Screw into Alum. Require SS Screw - Full Thread Embedment Required.
5.) Thru-Bolts (All-Threaded Rods) into L2x2x3/16" Stl. Angle or 2x6 lumber spanning two(2) wall studs per/Bolt - Rod
6.) Brake formed raceway box is unacceptable without Structural angle framing at all corners or Gussets welded in at 24" O.C.
7.) EIFS/ Dryvit wall provide 1/2" ID Sch40 Pipe Alum. Pipe spacer at all building connections.

Engineers Connection Note:
Provide Fasteners with washer using the fastener schedule for existing wall construction type to determine the fastener type and O.C. bolt spacing to install with a 4" Maximum side end clearance.



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MURDOCH ENGINEERING
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Exp. 10/31/2026

THE LETTER 'K' IS TO BE FACBRICATED IN 2 SEPARATE ELEMENTS AND KISSED TOGETHER @ POINT

DESIGN SPECIFICATIONS		
IBC	2024	with TN amendments
		Including Modifications By State of TN
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures
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DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902
Interior/Exterior:	EXTERIOR
Sign Type:	LETTERS, CHANNEL
Engineer:	Matt Smith
Windspeed:	
Illumination:	ILLUMINATED
Voltage:	120v

SCALE:1/2" = 1'-0"

AGI

Description: LINEAR CL W/ RW BEHIND WALL
Part Number: BOA-KCWS-R-2.1nx-TN5-907

ANSI B-SIZE DRAWING-AUTOCAD.10.20.23

C:\AGI PDM\Customers\Bank of America\SITE SPECIFIC\BOA200-TN5-907-001\BOA-KCWS-R-2.1nx-TN5-907.dwg

REVISIONS				
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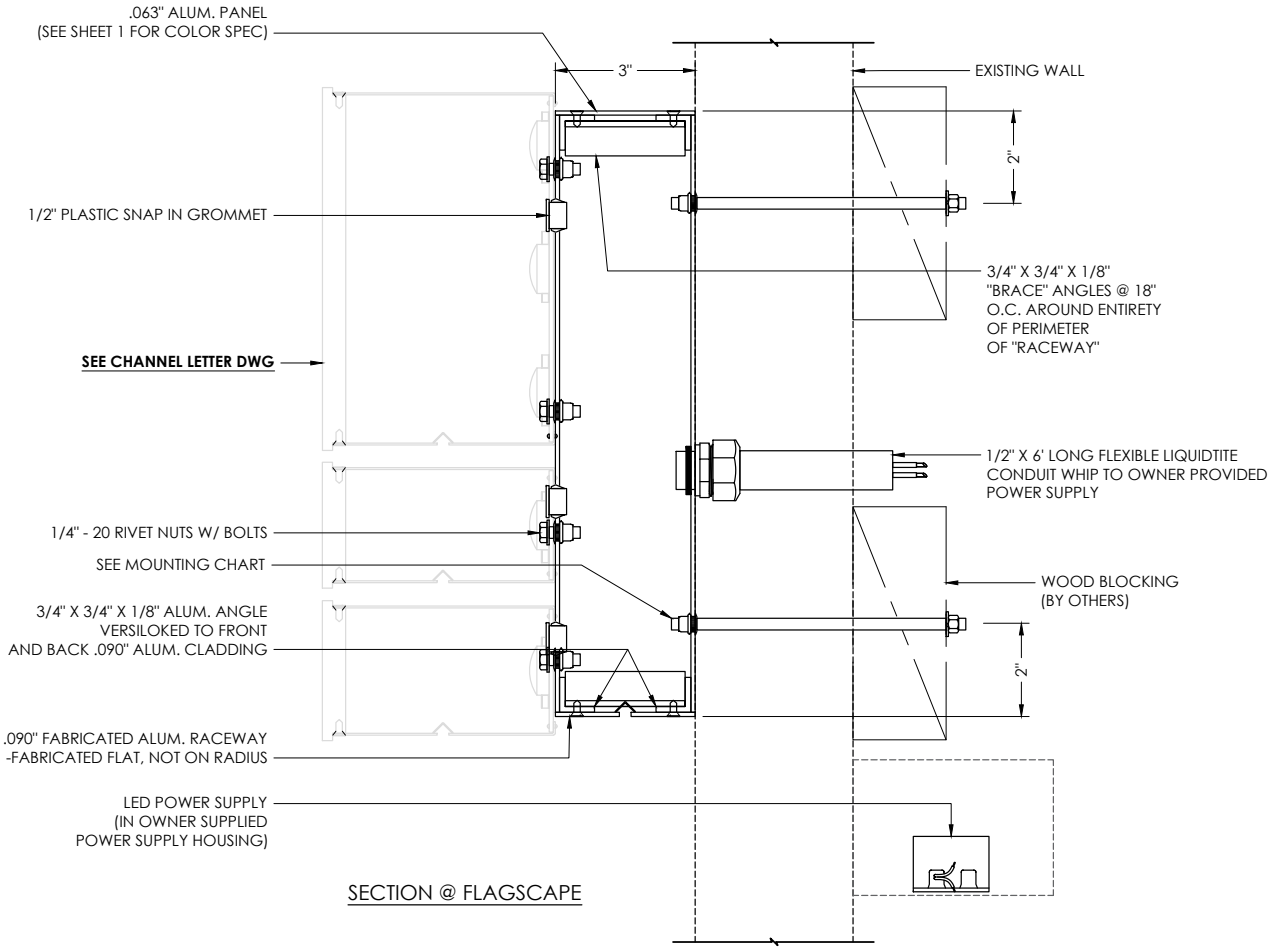
A	94497	INITIAL RELEASE	4/30/2025	JAM



SECTION @ FLAGSCAPE

Engineers Connection Note:
Provide Four(4) Fasteners, Two(2) Top and Bottom using the fastener schedule on page 3 of 5 to determine the fastener type to install.

DESIGN SPECIFICATIONS		
IBC	2024	with TN amendments
		Including Modifications By State of TN
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Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902
Interior/Exterior:	EXTERIOR
Sign Type:	LETTERS, CHANNEL
Engineer:	Matt Smith
Windspeed:	
Illumination:	ILLUMINATED
Voltage:	120v

SCALE:1/2" = 1'-0"

AGI

Description: LINEAR CL W/ RW BEHIND WALL

Part Number: BOA-KCWS-R-2.1nx-TN5-907

ANSI B-SIZE DRAWING-AUTOCAD.10.20.23

GENERAL:

1. ALL MATERIALS AND WORK SHALL CONFORM TO THE REQUIREMENTS OF THE APPLICABLE LOCAL BUILDING CODE.
2. CONSTRUCTION METHODS AND PROJECT SAFETY: DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE METHODS, PROCEDURES, OR SEQUENCE OF CONSTRUCTION. TAKE NECESSARY PRECAUTIONS TO MAINTAIN AND ENSURE THE INTEGRITY OF THE STRUCTURE DURING CONSTRUCTION. THE EOR WILL NOT ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS, AND REGULATIONS.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS PRIOR TO THE START OF CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES OR INCONSISTENCIES THAT ARE FOUND. NOTED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE DRAWINGS.
4. ALL OMISSIONS AND/OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND FIELD INSPECTOR. THE ENGINEER SHALL PROVIDE A SOLUTION PRIOR TO PROCEEDING WITH ANY WORK AFFECTED BY THE CONFLICT OR OMISSION.
5. WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF THE WORK, CONSTRUCT IN ACCORDANCE WITH THE STEEL CONSTRUCTION MANUAL, 14TH EDITION OR 2010 ALUMINUM DESIGN MANUAL .
6. WHEN A DETAIL IS IDENTIFIED AS TYPICAL, THE CONTRACTOR IS TO APPLY THIS DETAIL IN ESTIMATING AND CONSTRUCTION TO EVERY LIKE CONDITION WHETHER OR NOT THE REFERENCE IS REPEATED IN EVERY INSTANCE.
7. ANY CHANGE TO THE DESIGN AS SHOWN ON THE DRAWINGS REQUIRES PRIOR WRITTEN APPROVAL FROM DESIGN ENGINEER OF RECORD BEFORE CONSTRUCTION.
8. WORK PERFORMED IN CONFLICT WITH THE STRUCTURAL DRAWINGS OR APPLICABLE BUILDING CODE REQUIREMENTS SHALL BE CORRECTED AT THE EXPENSE OF THE CONTRACTOR.
9. VERIFICATION: VERIFY ALL DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS BEFORE STARTING WORK. NOTIFY THE EOR IMMEDIATELY OF ANY DISCREPANCIES.

EXISTING CONDITIONS:

1. IF EXISTING CONDITIONS ARE NOT AS DETAILED IN THIS DESIGN, THE INSTALLER SHALL CEASE WORK AND NOTIFY MURDOCH ENGINEERING IMMEDIATELY.
2. MURDOCH ENGINEERING WILL NOT BE PERFORMING ON-SITE INSPECTIONS OR VERIFICATIONS. IT IS THE RESPONSIBILITY OF THE INSTALLER, STRUCTURE OWNER, AND PROPERTY OWNER TO IDENTIFY EXISTING CONDITIONS AND CONTACT MURDOCH ENGINEERING WITH ANY DISCREPANCIES OR CONCERNS.
3. INSTALLER SHALL CONFIRM THE DIAMETER AND THICKNESS OF EXISTING MEMBERS AND NOTIFY MURDOCH ENGINEERING OF ANY DISCREPANCIES.
4. INSTALLER SHALL INSPECT AND CONFIRM THE QUALITY OF EXISTING STRUCTURE AS "IN GOOD REPAIR". IF THERE ARE ANY INDICATIONS THAT THIS IS NOT THE CASE, INSTALLER SHALL CEASE WORK IMMEDIATELY AND NOTIFY MURDOCH ENGINEERING.
5. ANY EXISTING INFORMATION SHOWN HAS BEEN FURNISHED BY THE PERSON(S) OR COMPANY THIS DOCUMENT WAS PREPARED FOR (SEE TITLE BLOCK). MURDOCH ENGINEERING IN NO WAY CERTIFIES THIS INFORMATION AS "AS-BUILT". IF THERE IS ANY REASON TO BELIEVE THE EXISTING CONDITIONS DETAILED HEREIN ARE NOT ACCURATE, MURDOCH ENGINEERING SHALL BE NOTIFIED IMMEDIATELY.

STEEL

1. STEEL SHAPES SHALL CONFORM TO THE FOLLOWING:

ROUND HSS	ASTM A500, GR B	Fy=42 KSI MIN.
SQUARE/RECT HSS	ASTM A500, GR B	Fy=46 KSI MIN.
THREADED ROD	F1554 GR 55	Fy=55 KSI MIN.
STEEL PLATE STD.	ASTM A36 ASTM	Fy=36 KSI MIN.
PIPE	A53, GR B	Fy=35 KSI MIN.

2. BOLTS SHALL CONFORM TO ASTM A325 UNO.
3. BOLTS AND THREADED ROD SHALL BE HOT-DIP GALVANIZED PER ASTM F2329 UNO.
4. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 UNO.
5. NUTS SHALL CONFORM TO ASTM A563.
6. WASHERS SHALL CONFORM TO ASTM F844.
7. STEEL HARDWARE SHALL BE HOT-DIP GALVANIZED PER ASTM A153 UNO
8. WELDING:
   a. WELD STRUCTURAL STEEL IN COMPLIANCE WITH ANSI/AWS D1.1 AND AISC SPECIFICATION, CHAPTER J. WELDERS SHALL BE CERTIFIED AS REQUIRED BY GOVERNING CODE AUTHORITY. WELDING SHALL BE DONE BY ELECTRIC ARC PROCESS USING LOW-HYDROGEN ELECTRODES WITH SPECIFIED TENSILE STRENGTH NOT LESS THAN 70 KSI UNLESS NOTED OTHERWISE.
   b. ALL SHOP AND FIELD WELDS SHALL BE PERFORMED BY AN AWS OR ICC CERTIFIED WELDER WITH ACTIVE STATUS AT TIME OF WELDING
   c. UNLESS A LARGER WELD SIZE IS INDICATED, PROVIDE MINIMUM SIZE WELDS PER AISC SPECIFICATION, SECTION J2, TABLE J2.4
   d. BASE PLATES SHALL BE WELDED ON TOP AND BOTTOM WITH CONTINUOUS WELDS OF AT LEAST 1/4" (IF PLATE IS CUT TO FIT TUBE INTO PLATE)

ALUMINUM:

1. FABRICATE AND ERECT ALUMINUM IN COMPLIANCE WITH THE ALUMINUM ASSOCIATION (AA) 2010 ALUMINUM DESIGN MANUAL (ADM) 1, THE SPECIFICATIONS FOR ALUMINUM SHEET METAL WORK (ASM35), AND IBC CHAPTER 20.
2. PIPE AND TUBE SHALL BE 6061-T6 PER ASTM B241 OR B429 WITH Ftu=38 KSI MIN, Fty=35 KSI MIN, Ftuw=24 KSI MIN, Ftyw=15 KSI MIN.
3. STD STRUCTURAL PROFILES SHALL BE 6061-T6 PER B308 WITH Ftu=38 KSI MIN, Fty=35 KSI MIN, Ftuw=24 KSI MIN, Ftyw=15 KSI MIN.
4. SHEET AND PLATE SHALL BE 6061-T6 PER ASTM B209 WITH Ftu=42 KSI MIN, Fty=35 KSI MIN, Ftuw=24 KSI MIN, Ftyw=15 KSI MIN.
5. EXTRUSIONS SHALL BE 6061-T6 PER ASTM B241 OR B429 WITH Ftu=38 KSI MIN, Fty=35 KSI MIN, Ftuw=24 KSI MIN, Ftyw=15 KSI MIN.
6. ALL SHOP AND FIELD WELDS SHALL BE PERFORMED BY AN AWS OR ICC CERTIFIED WELDER WITH CURRENT STATUS AT TIME OF WELDING
7. UNLESS A LARGER WELD SIZE IS INDICATED, PROVIDE MINIMUM SIZE WELD PER ADM. ALL ALUMINUM WELDED JOINTS SHALL HAVE WELD SIZES OF AT LEAST $\frac{1}{4}$ INCH
8. FILLET WELDS SHALL NOT EXCEED THINNEST MEMBER WALL THICKNESS JOINED.
9. ALUMINUM WELD FILLER SHALL BE 5356 ALLOY
10. WELDING PROCESS GMAW OR GTAW SHALL BE IN ACCORDANCE WITH AWS D1.2
11. ALUMINUM CHANNEL LETTERS SHALL BE CONSTRUCTED OF 0.090" RETURNS AND 0.125" BACKS MINIMUM, UNLESS A LARGER SIZE IS INDICATED ON DRAWINGS. THIS NOTE SHALL SUPERCEDE DRAWING DETAILS.
12. PROVIDE NEOPRENE GASKET BETWEEN DISSIMILAR METALS TO PREVENT GALVANIC CORROSION
13. ALUMINUM DIRECTLY EMBEDDED INTO CONCRETE SHALL BE CAPPED AT BOTTOM AND COATED WITH BITUMINOUS COATING OR POLYURETHANE WHERE IN CONTACT WITH CONCRETE.
14. FASTENERS BETWEEN DISSIMILAR METALS SHALL BE STAINLESS STEEL 316.

SCOPE OF WORK:

1. LIMITS OF LIABILITY TO EXTEND ONLY TO THE QUANTITY INDICATED. ATTEMPTS IN PART OR IN WHOLE TO INSTALL GREATER QUANTITIES THAN THOSE SPECIFIED WITHOUT CONSULTING MURDOCH ENGINEERING SHALL VOID ALL PROFESSIONAL LIABILITY AND COVERAGE. ENGINEERING LIABILITY IS LIMITED TO BUILDING CONNECTIONS.

2399 NJ-34 A-2
Manasquan, NJ 08736
(973) 570
murdochengineering.com
projects@murdochengineering.com

PREPARED FOR:

AGI

PROJECT TITLE:

BANK OF AMERICA

PROJECT ADDRESS:

550 W Main St, Knoxville, TN 37902

DESIGN SPECIFICATIONS

IBC	2024 with TN amendments	Including Modifications By State of TN
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures
ACI	318-19(22)	Building Code Requirements for Structural Concrete
ANSI/AISC	360-16	Specification for Structural Steel Buildings

DESIGN LOADS

Wind	V=	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg=	25 psf

JERE KELL MURDOCH
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 115559
STATE OF TENNESSEE

2399 NJ-34 A-2
MANASQUAN, NJ 08736
(973) 570-8215 x0

5/19/2025

Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

DWG TITLE:

GENERAL NOTES

SHEET:	SIZE:
S.1	B

NOTES:
1. ALL EXPOSED SURFACES & HARDWARE PAINTED TO MATCH 'BOA BLACK HORIZON' SEMI GLOSS FINISH.
2. SEE HEAD & CLAD DRAWING FOR HEAD DETAILS & SHIPPING.

REVISIONS

ZONE	REV.	ECR NUMBER	REV CHANGE	REV DATE	REV DRAFTER
	A	93595	INITIAL RELEASE	04/07/2025	MRD

DESIGN SPECIFICATIONS

IBC	2024	with TN	amendments
	Including Modifications By State of TN		
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures	
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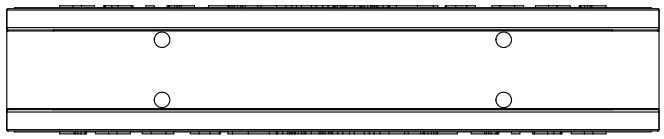
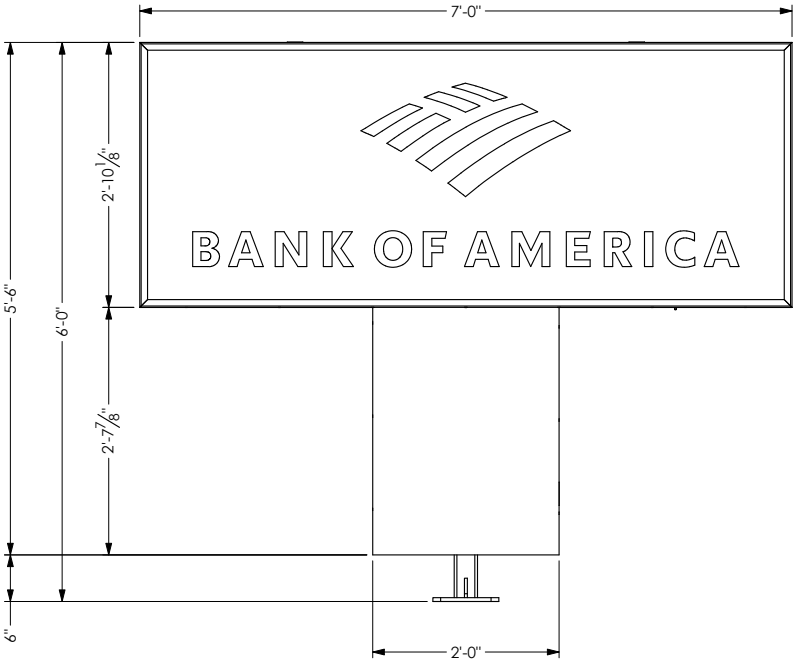
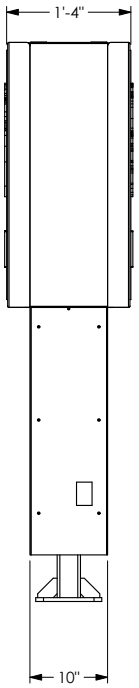
ANSI/AISC	360-16	Specification for Structural Steel Buildings	

DESIGN LOADS

Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf







JERE KELL MURDOCH
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AGRICULTURE
COMMERCE
No. 115559
STATE OF TENNESSEE

BOA-B1.1NX-150
B1.1NX
416LBS

2399 NJ-34, A-2
MANASQUAN, NJ 08736
(973) 570-8215 x0
MURDOCH ENGINEERING
5/19/2025
Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902	
Interior/Exterior:	EXTERIOR	
Sign Type:	MONUMENT	
Engineer:	MATT SMITH	
Windspeed:		
Illumination:	ILLUMINATED	
Voltage:	120V	SCALE: 1:16

AGI

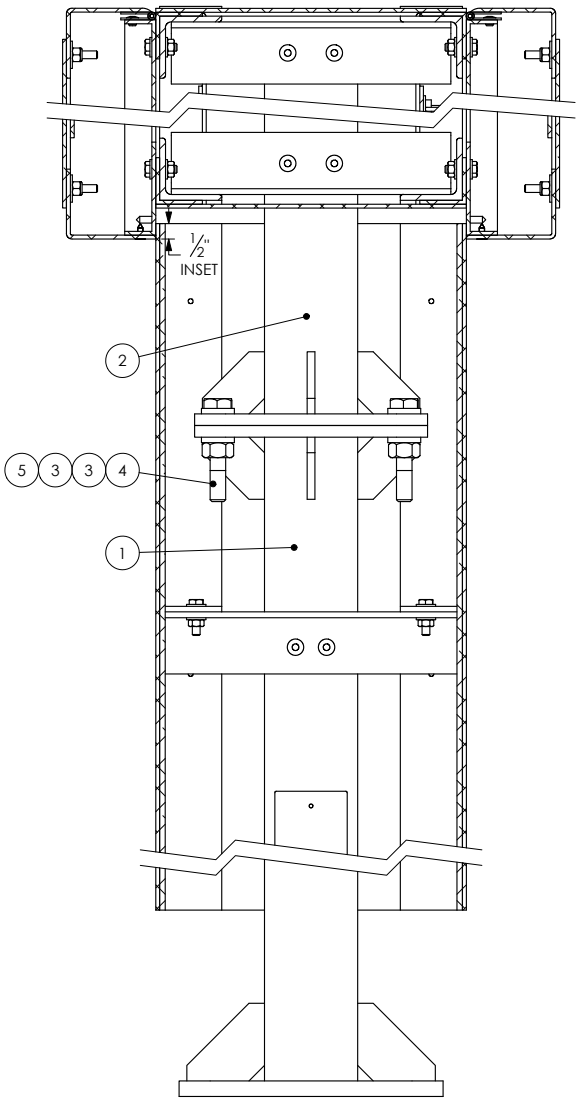
Description: B1.1NX
Part Number: BOA-B1.1NX-150

AGI'S AUTO DRAWING - VERSION 1.07.23.0

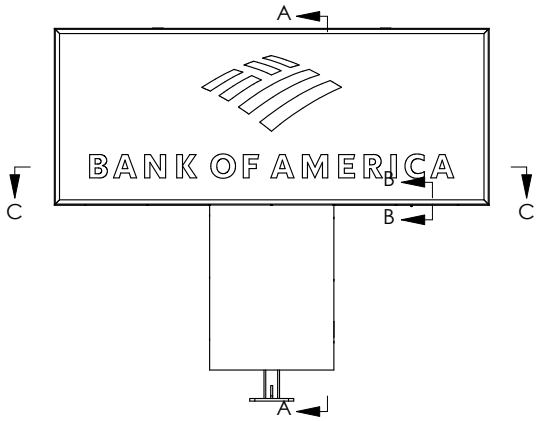
REVISIONS					
ZONE	REV.	ECR NUMBER	REV CHANGE	REV DATE	REV DRAFTER
	A	93595	INITIAL RELEASE	04/07/2025	MRD

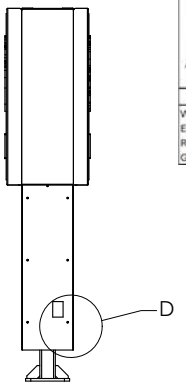
DESIGN SPECIFICATIONS			
IBC	2024	with	TN amendments
	Including Modifications By State of TN		
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures	
ACI	318-19(22)	Building Code Requirements for Structural Concrete	
ANSI/AISC	360-16	Specification for Structural Steel Buildings	

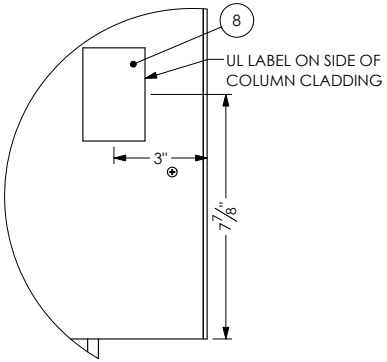
DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf



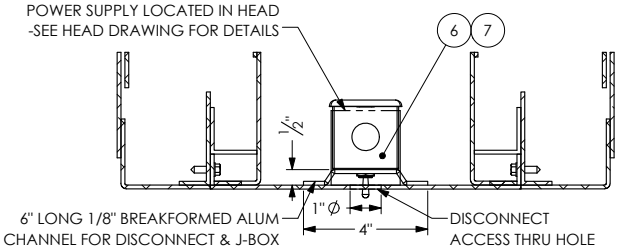
SECTION A-A
SCALE 1 : 4







DETAIL D
SCALE 1 : 4



SECTION B-B
SCALE 1 : 4

BOM TABLE: BOA-B1.1NX-150			
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	BOA-B1.1NX-150-COL	B1.1NX POLE & CLAD ASSY	1
2	BOA-1.1NX-HEAD	1.1NX HEAD ASSY	1
3	FNL# 33172	1/2" F436 FLAT WASHER	8
4	MCM# 91571A258	1/2x3 A325 BOLT	4
5	FNL# 38180	1/2-13 A563 HEX NUT	4
6	ELEC-J-BOX-2X4	2"x4" OUTLET BOX	1
7	WESTRIM #39139	DISCONNECT SWITCH	1
8	AGI-UL-TAG	AGI UL TAG	1

JERE KELL MURDOCH
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 115559
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(973) 570-8215 x0
MURDOCH ENGINEERING
5/19/2025
Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902
Interior/Exterior:	EXTERIOR
Sign Type:	MONUMENT
Engineer:	MATT SMITH
Windspeed:	
Illumination:	ILLUMINATED
Voltage:	120V

SCALE: 1:24

AGI

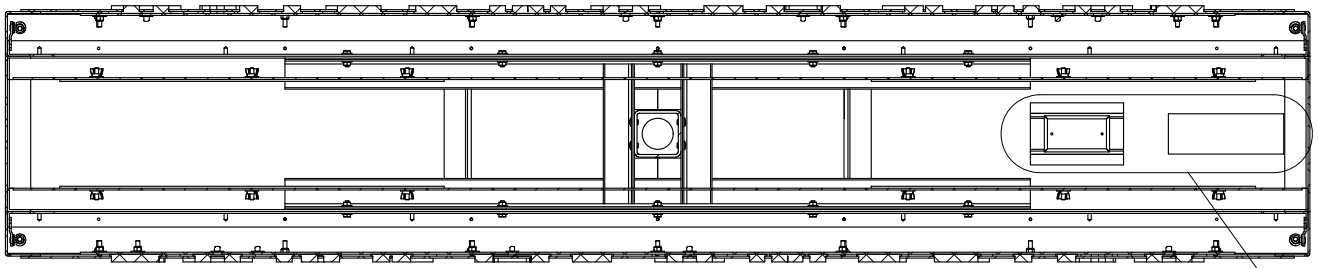
Description: B1.1NX
Part Number: BOA-B1.1NX-150

A4/B SIZE DRAWING - VERSION 1.19.02

REVISIONS					
ZONE	REV.	ECR NUMBER	REV CHANGE	REV DATE	REV DRAFTER
	A	93595	INITIAL RELEASE	04/07/2025	MRD

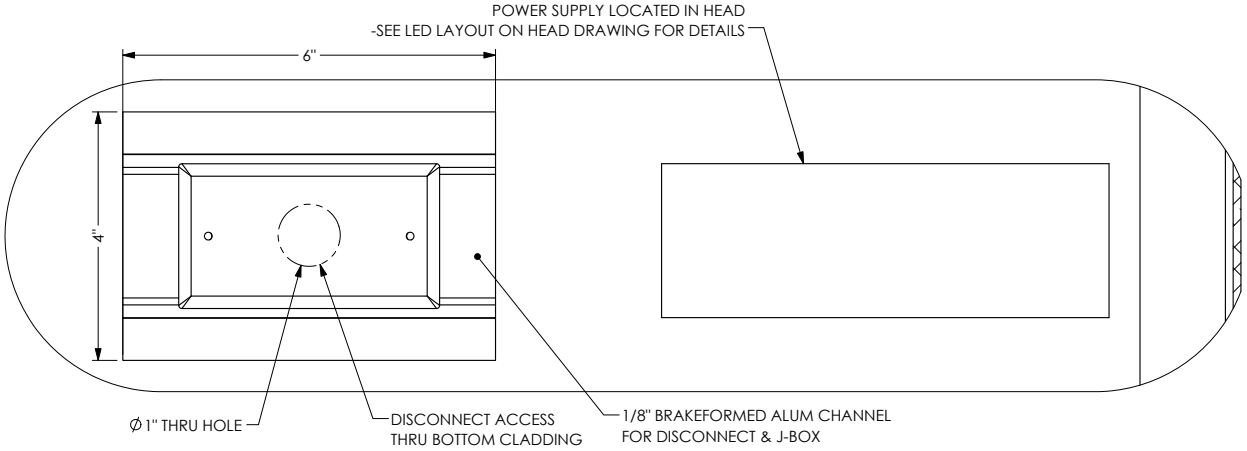
DESIGN SPECIFICATIONS				
IBC	2024	with	TN	amendments
	Including Modifications By State of TN			
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures		
ACI	318-19(22)	Building Code Requirements for Structural Concrete		
ANSI/AISC	360-16	Specification for Structural Steel Buildings		

DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	P_g =	25 psf



SECTION C-C

E



DETAIL E
SCALE 1 : 2

JERE KELL MURDOCH
REGISTERED ENGINEER
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No. 115559
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(973) 570-8215 x0
MURDOCH ENGINEERING
5/19/2025
Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902
Interior/Exterior:	EXTERIOR
Sign Type:	MONUMENT
Engineer:	MATT SMITH
Windspeed:	
Illumination:	ILLUMINATED
Voltage:	120V

SCALE: 1:8

AGI

Description: B1.1NX

Part Number: BOA-B1.1NX-150

ANSI B SIZE DRAWING - VERSION 1.19.02

C:\AGI PDM\Customers\Bank of America\Retail\2024 NX\MONUMENT - PYLON\BXnx\B1.1NX\BOA-B1.1NX-150

REVISIONS					
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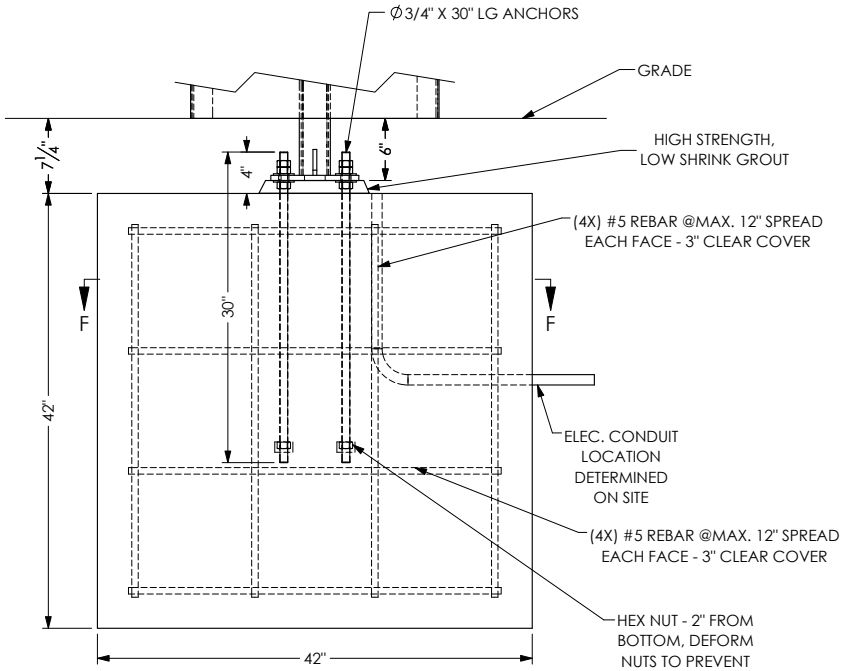
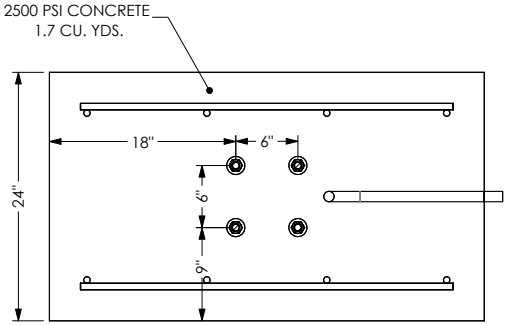
	A	93595	INITIAL RELEASE	04/07/2025	MRD



VERTICAL SLAB FOUNDATION
FRONT ELEVATION



SECTION F-F

*** NOTE ***

ALL STEEL BELOW GRADE (INCLUDING EXPOSED ANCHOR BOLTS) SHALL BE COATED WITH CARBOLINE BITUMASTIC 50 COAL TAR OR EQUAL, AFTER INSTALLATION, AND PRIOR TO LANDSCAPING.

DESIGN SPECIFICATIONS		
IBC	2024	with TN amendments
		Including Modifications By State of TN
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DESIGN LOADS		
Wind	V=	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg=	25 psf

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MURDOCH ENGINEERING

5/19/2025

Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

BOM TABLE: BOA-B1.1NX-150			
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	10127-03321	3/4"X30" GALVANIZED ANCHOR	4
2	33186	3/4" GALVANIZED WASHER	8
3	36715	3/4" HEX NUT - GALV.	16

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902		
Interior/Exterior:	EXTERIOR		
Sign Type:	MONUMENT		
Engineer:	MATT SMITH		
Windspeed:			
Illumination:	ILLUMINATED		
Voltage:	120V	SCALE: 1:12	

AGI

Description: B1.1NX
Part Number: BOA-B1.1NX-150

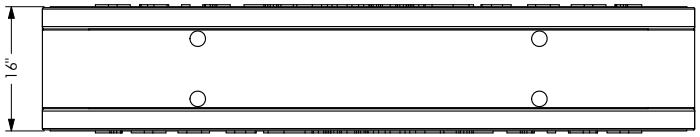
A4/B SIZE DRAWING - VERSION 1.19.02

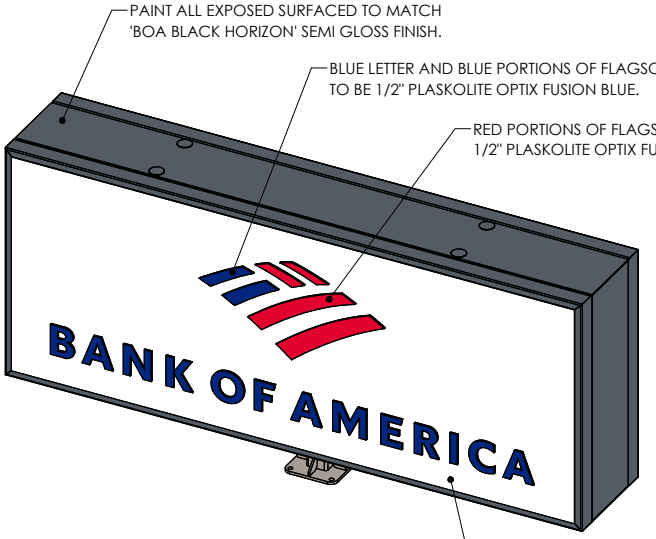
C:\AGI PDM\Customers\Bank of America\Retail\2024 NX\MONUMENT - PYLON\BXnx\B1.1NX\BOA-B1.1NX-150

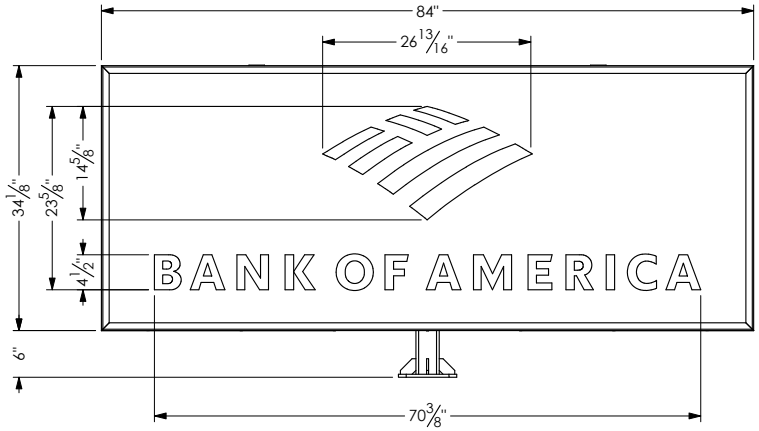
NOTES:
1. ALL EXPOSED SURFACES & HARDWARE PAINTED TO MATCH 'BOA BLACK HORIZON' SEMI GLOSS FINISH.
2. SCALED LAYOUT FOR ARTWORK FOUND HERE: "C:\AGI PDM\Customers\Bank of America\Retail\2024 NX\MONUMENT - PYLON\HEADS\BOA-NX-ART.dwg"

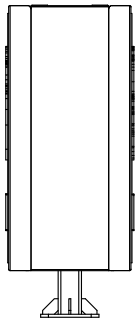
REVISIONS

ZONE	REV.	ECR NUMBER	REV CHANGE	REV DATE	REV DRAFTER
	A	93595	INITIAL RELEASE	04/02/2025	MRD









BOA-1.1NX-HEAD
1.1NX HEAD ASSY
332LBS

JERE KELL MURDOCH
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 115559
STATE OF TENNESSEE

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5/19/2025
Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

MURDOCH ENGINEERING

DESIGN SPECIFICATIONS		
IBC	2024	with TN amendments
		Including Modifications By State of TN
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures
ACI	318-19(22)	Building Code Requirements for Structural Concrete
ANSI/AISC	360-16	Specification for Structural Steel Buildings

DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902
Interior/Exterior:	EXTERIOR
Sign Type:	MONUMENT
Engineer:	MATT SMITH
Windspeed:	
Illumination:	ILLUMINATED
Voltage:	120V

SCALE: 1:16

AGI

Description: 1.1NX PYLON & MONUMENT HEAD
Part Number: BOA-1.1NX-HEAD

A4/B SIZE DRAWING - VERSION 1.0 7.2.23

C:\AGI PDM\Customers\Bank of America\Retail\2024 NX\MONUMENT - PYLON\HEADS\1.1NX\BOA-1.1NX-HEAD

REVISIONS					
ZONE	REV.	ECR NUMBER	REV CHANGE	REV DATE	REV DRAFTER
	A	93595	INITIAL RELEASE	04/02/2025	MRD

DESIGN SPECIFICATIONS			
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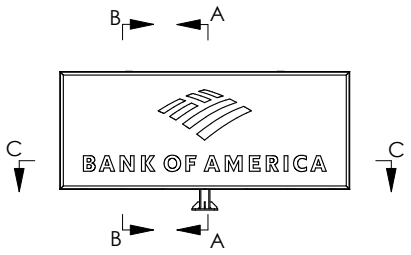
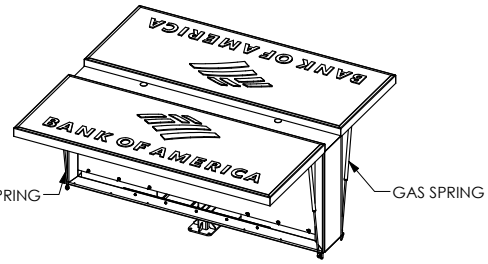
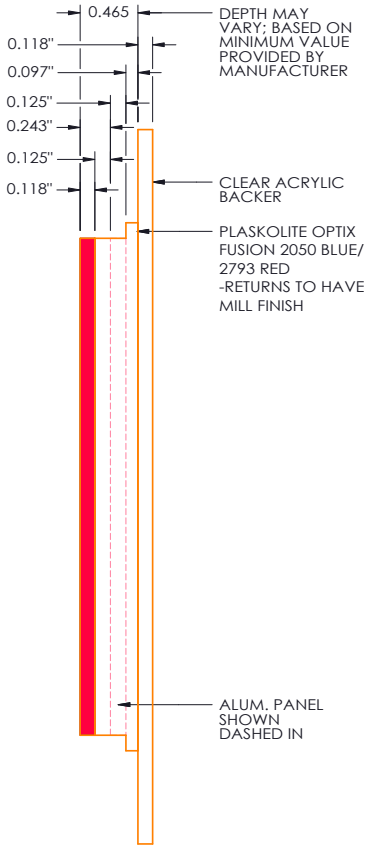
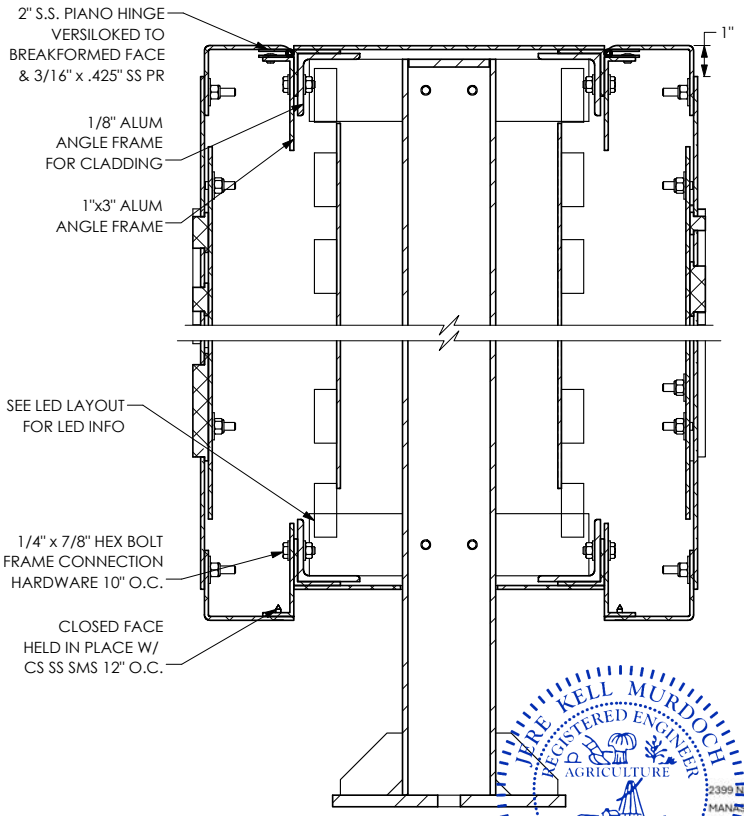
DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf



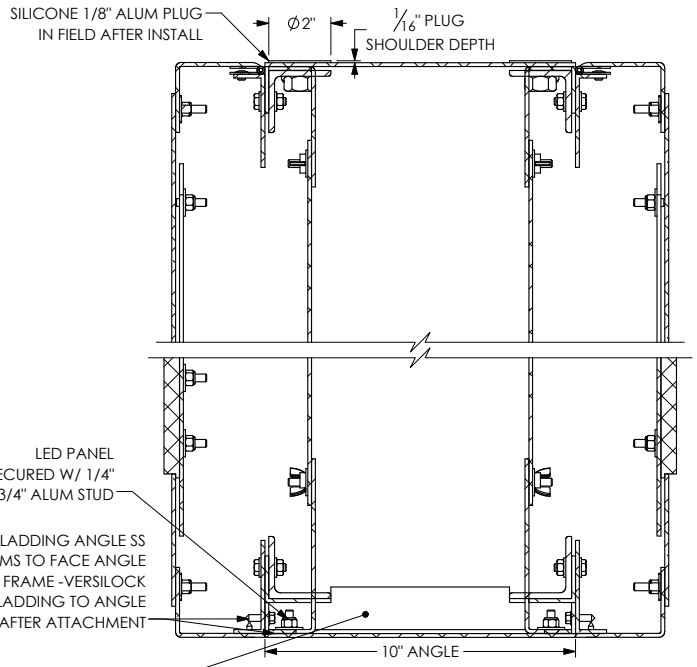




ACRYLIC SECTION
SCALE 1:1



SECTION A-A



SECTION B-B

JERE KELL MURDOCH
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 115559
STATE OF TENNESSEE

2399 NJ-34, A-2
MANASQUAN, NJ 08736
(973) 670-8215 x0

MURDOCH ENGINEERING

5/19/2025

Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902	
Interior/Exterior:	EXTERIOR	
Sign Type:	MONUMENT	
Engineer:	MATT SMITH	
Windspeed:		
Illumination:	ILLUMINATED	
Voltage:	120V	SCALE: 1:4

AGI

Description: 1.1NX PYLON & MONUMENT HEAD
Part Number: BOA-1.1NX-HEAD

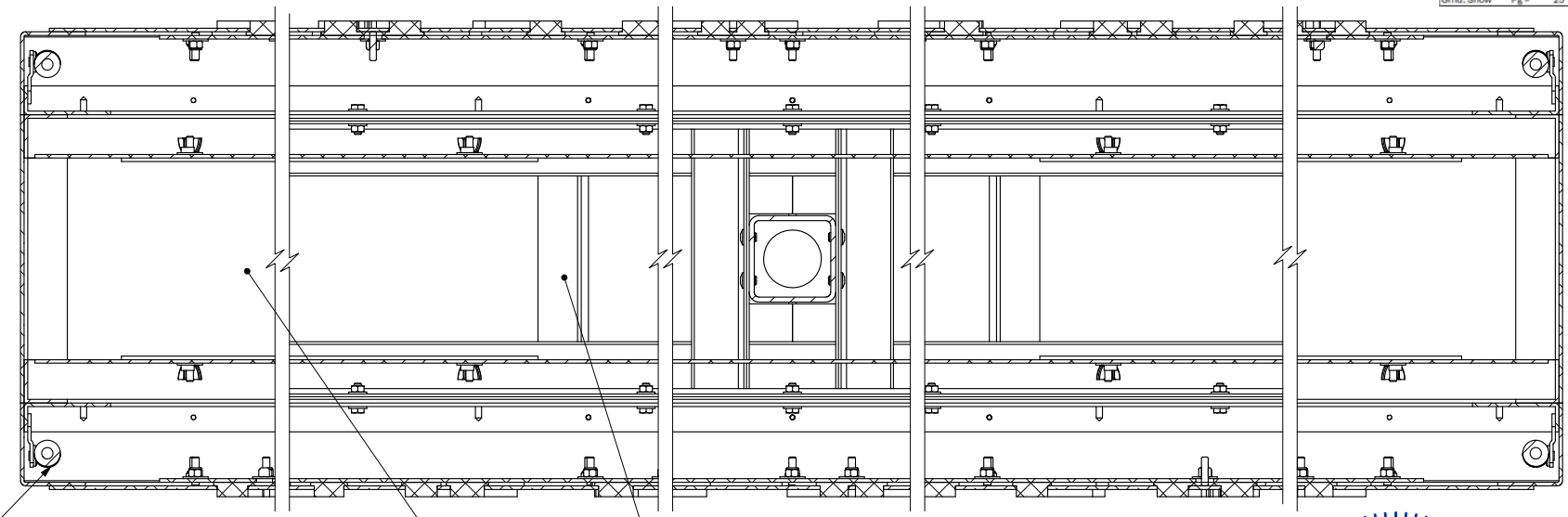
ANSI B SIZE DRAWING - VERSION 1.19.02

C:\AGI PDM\Customers\Bank of America\Retail\2024 NX\MONUMENT - PYLON\HEADS\1.1NX\BOA-1.1NX-HEAD

REVISIONS					
ZONE	REV.	ECR NUMBER	REV CHANGE	REV DATE	REV DRAFTER
	A	93595	INITIAL RELEASE	04/02/2025	MRD

DESIGN SPECIFICATIONS				
IBC	2024	with	TN	amendments
	Including Modifications By State of TN			
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures		
ACI	318-19(22)	Building Code Requirements for Structural Concrete		
ANSI/AISC	360-16	Specification for Structural Steel Buildings		

DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf



SECTION C-C

JERE KELL MURDOCH
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 115559
STATE OF TENNESSEE

2399 NJ-34, A-2
MANASQUAN, NJ 08736
(973) 570-8215 x0
MURDOCH ENGINEERING
5/19/2025
Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902
Interior/Exterior:	EXTERIOR
Sign Type:	MONUMENT
Engineer:	MATT SMITH
Windspeed:	
Illumination:	ILLUMINATED
Voltage:	120V

SCALE: 1:4

AGI

Description: 1.1NX PYLON & MONUMENT HEAD

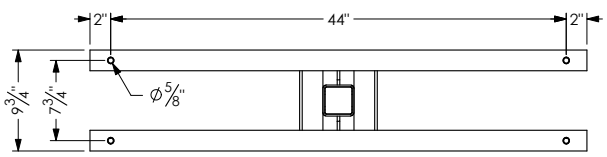
Part Number: BOA-1.1NX-HEAD

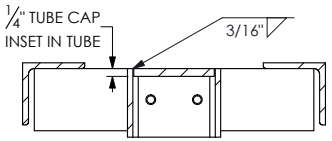
A4/B SIZE DRAWING - VERSION 1.19.22

C:\AGI PDM\Customers\Bank of America\Retail\2024 NX\MONUMENT - PYLON\HEADS\1.1NX\BOA-1.1NX-HEAD

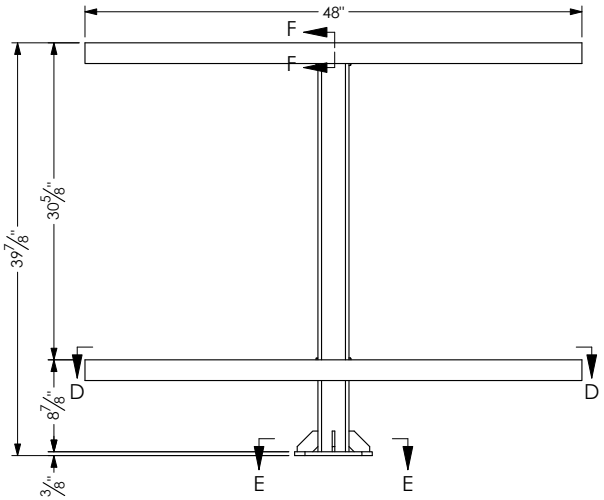
NOTES:
1. ALL WELDS TO BE FREE OF SPLATTER, SLAG, AND ARCING.
2. ALL EXPOSED SURFACES TO BE PAINTED WITH GRAY PRIMER.

REVISIONS					
ZONE	REV.	ECR NUMBER	REV CHANGE	REV DATE	REV DRAFTER
	A	93595	INITIAL RELEASE	04/02/2025	MRD

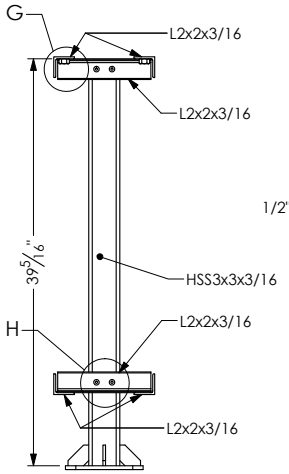


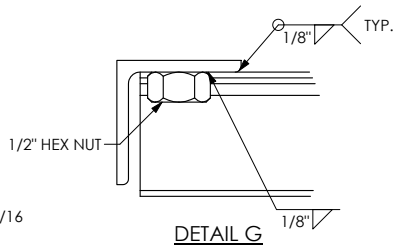


SECTION F-F
SCALE 1 : 4

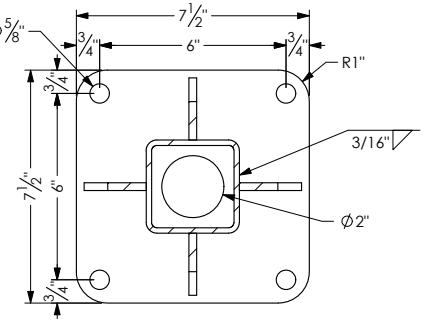


BOA-1.1NX-HEAD-ST
1.1NX HEAD STEEL
74LBS

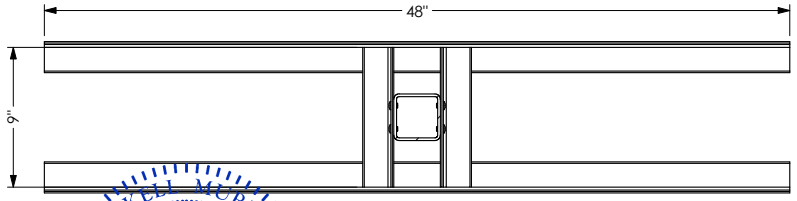




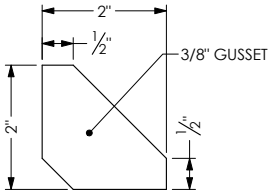
DETAIL G
SCALE 1 : 2



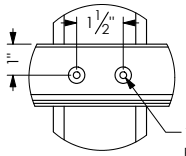
SECTION E-E
SCALE 1 : 4



SECTION D-D
SCALE 1 : 8



GUSSET(S)
SCALE 1 : 2



DETAIL H
SCALE 1 : 4

DESIGN SPECIFICATIONS		
IBC	2024	with TN amendments
		Including Modifications By State of TN
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures
ACI	318-19(22)	Building Code Requirements for Structural Concrete
ANSI/AISC	360-16	Specification for Structural Steel Buildings

DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf

JERE KELL MURDOCH
REGISTERED ENGINEER
DEPARTMENT OF AGRICULTURE
COMMERCE
No. 115559
STATE OF TENNESSEE
MURDOCH ENGINEERING
2399 NJ-34 #2
MANASQUAN, NJ 08736
(973)-570-8215 x0
5/19/2025
Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902
Interior/Exterior:	EXTERIOR
Sign Type:	MONUMENT
Engineer:	MATT SMITH
Windspeed:	
Illumination:	ILLUMINATED
Voltage:	120V

SCALE: 1:12

AGI

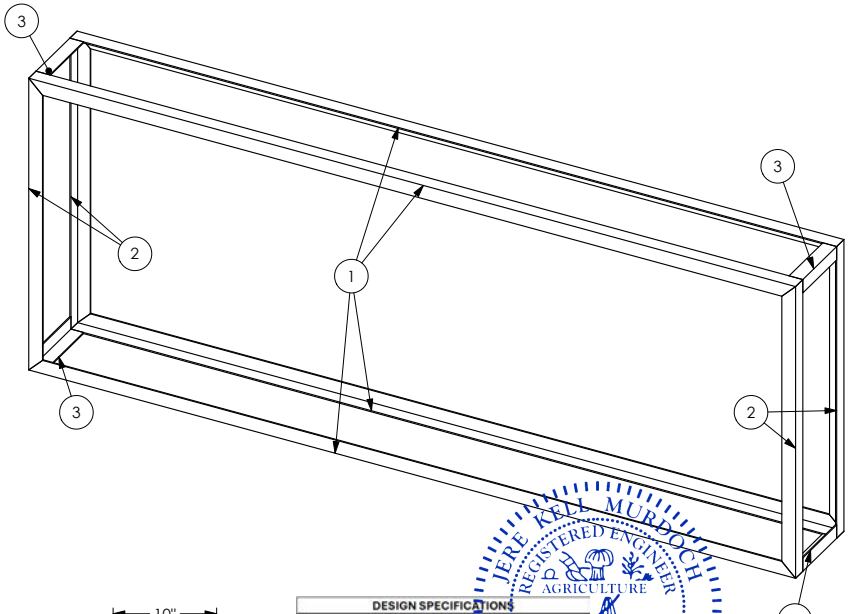
Description: 1.1NX PYLON & MONUMENT HEAD
Part Number: BOA-1.1NX-HEAD

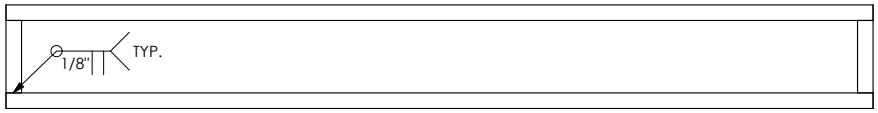
4KB BASE DRAWING - VERSION 1.19.02

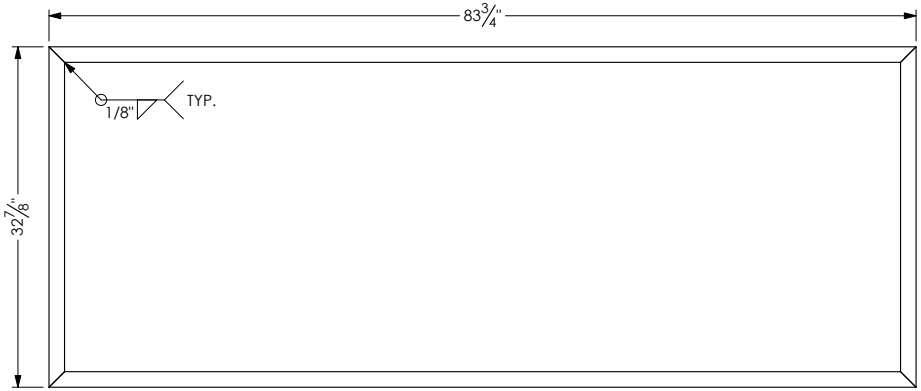
C:\AGI PDM\Customers\Bank of America\Retail\2024 NX\MONUMENT - PYLON\HEADS\1.1NX\BOA-1.1NX-HEAD

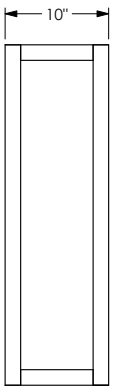
NOTES:
1. ALL WELDS TO BE FREE OF SPLATTER, SLAG, AND ARCING.

REVISIONS					
ZONE	REV.	ECR NUMBER	REV CHANGE	REV DATE	REV DRAFTER
	A	93595	INITIAL RELEASE	04/02/2025	MRD









BOA-1.1NX-HEAD-FR
1.1NX HEAD FRAME
17LBS

DESIGN SPECIFICATIONS		
IBC	2024	with TN amendments
ASCE	7-22	
ACI	318-19(22)	
ANSI/AISC	360-16	

DESIGN LOADS		
Wind	V=	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg=	25 psf

JERE KELL MURDOCH
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 115559
STATE OF TENNESSEE

MURDOCH ENGINEERING
MANALAPAN, NJ 08736
(610) 574-8215 x0

5/19/2025
Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

WELDMENT CUT LIST

ITEM	QTY.	Description	LENGTH	ANGLE1	ANGLE2
1	4	AXAN 6063-T5 1.5 X 1.5 X 0.125	83 3/4"	45°	45°
2	4	AXAN 6063-T5 1.5 X 1.5 X 0.125	32 7/8"	45°	45°
3	4	AXAN 6063-T5 1.5 X 1.5 X 0.125	7"	0°	0°

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902	
Interior/Exterior:	EXTERIOR	
Sign Type:	MONUMENT	
Engineer:	MATT SMITH	
Windspeed:		
Illumination:	ILLUMINATED	
Voltage:	120V	SCALE: 1:12

AGI

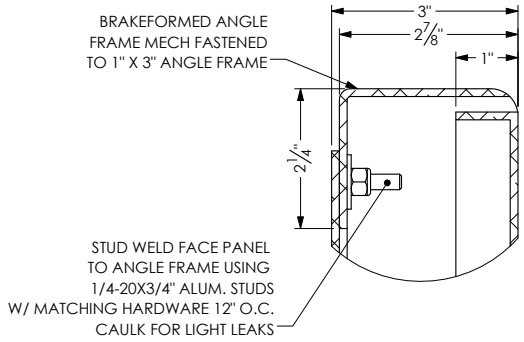
Description: 1.1NX PYLON & MONUMENT HEAD
Part Number: BOA-1.1NX-HEAD

ANSI B SIZE DRAWING - VERSION: 1.19.02

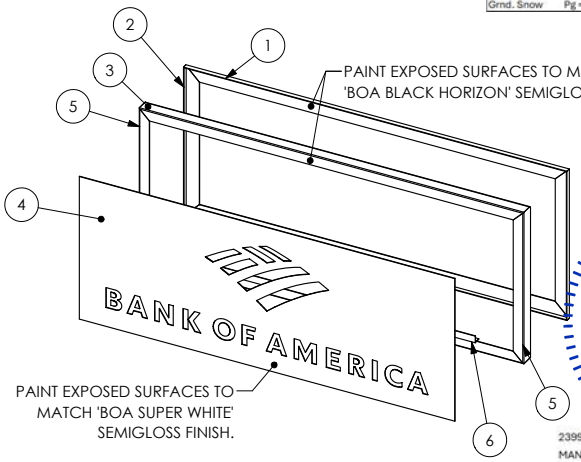
REVISIONS					
ZONE	REV.	ECR NUMBER	REV CHANGE	REV DATE	REV DRAFTER
	A	93595	INITIAL RELEASE	04/02/2025	MRD

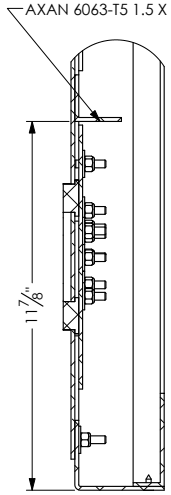
DESIGN SPECIFICATIONS			
IBC	2024	with TN	amendments
	Including Modifications By State of TN		
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures	
ACI	318-19(22)	Building Code Requirements for Structural Concrete	
ANSI/AISC	360-16	Specification for Structural Steel Buildings	

DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf

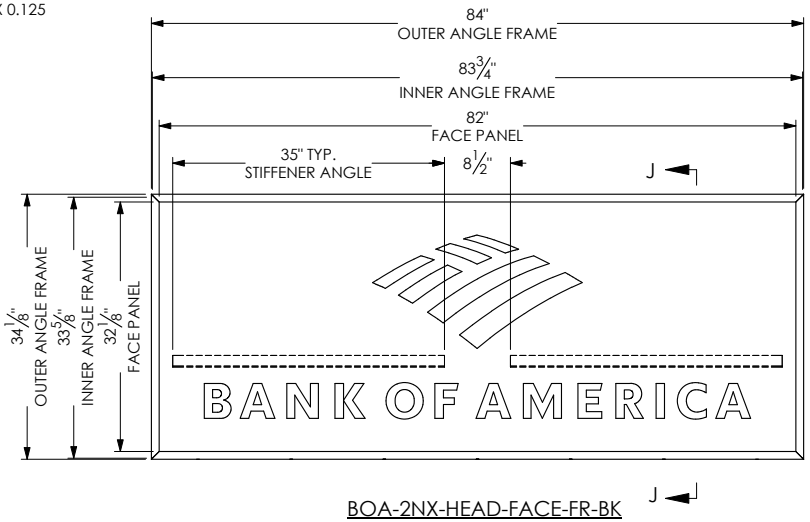


DETAIL K
SCALE 1 : 2

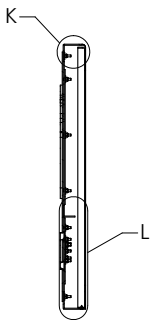




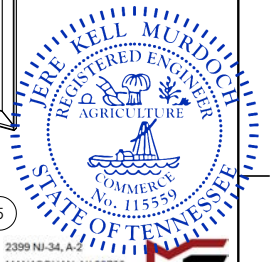
DETAIL L
SCALE 1 : 4



BOA-2NX-HEAD-FACE-FR-BK
2NX BACK FACE FRAME
73LBS



SECTION J-J



2399 NJ-34, A-2
MANASQUAN, NJ 08736
(973) 570-8215 x0
MURDOCH ENGINEERING
5/19/2025
Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

WELDMENT CUT LIST

ITEM	QTY.	Description	LENGTH	MATERIAL	ANGLE1	ANGLE2
1	2	AXAN 6063-T5 1 X 3 X 0.125	83 3/4"	6063-T5	45°	45°
2	2	AXAN 6063-T5 1 X 3 X 0.125	33 5/8"	6063-T5	45°	45°
3	2	1/8" ALUM, 4 15/16" x 84"		3003 Alloy		
4	1	1/8" ALUM, 32 1/8" x 82"		3003 Alloy		
5	2	1/8" ALUM, 4 15/16" x 41 3/4"		3003 Alloy		
6	2	AXAN 6063-T5 1.5 X 1.5 X 0.125	35"	6063-T5	0°	0°

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902
Interior/Exterior:	EXTERIOR
Sign Type:	MONUMENT
Engineer:	MATT SMITH
Windspeed:	
Illumination:	ILLUMINATED
Voltage:	120V
SCALE: 1:16	
Description:	1.1NX PYLON & MONUMENT HEAD
Part Number:	BOA-1.1NX-HEAD

AGI

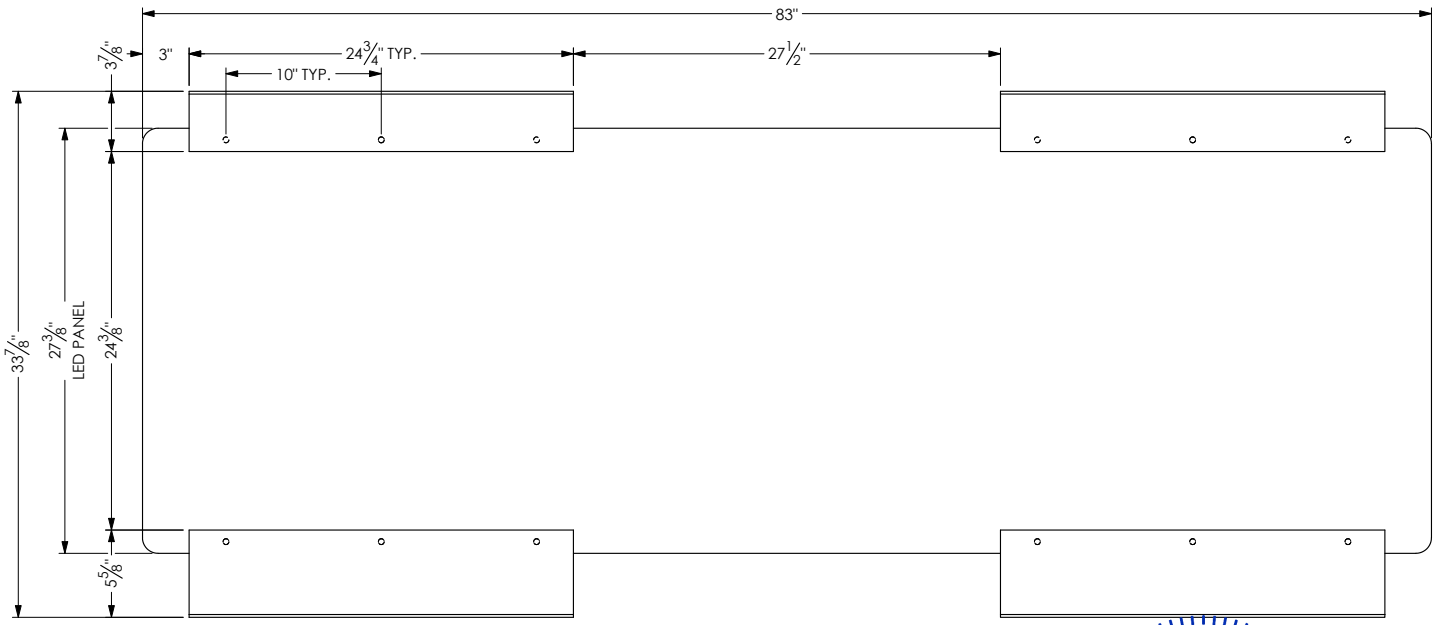
A4/B SIZE DRAWING - VERSION 1.19.02

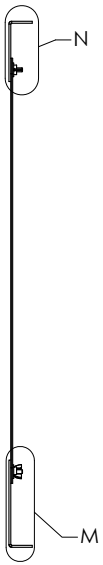
C:\AGI PDM\Customers\Bank of America\Retail\2024 NX\MONUMENT - PYLON\HEADS\1.1NX\BOA-1.1NX-HEAD

REVISIONS					
ZONE	REV.	ECR NUMBER	REV CHANGE	REV DATE	REV DRAFTER
	A	93595	INITIAL RELEASE	04/02/2025	MRD

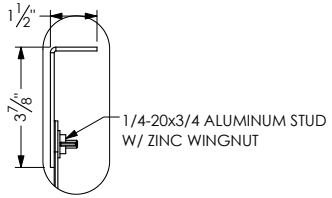
DESIGN SPECIFICATIONS				
IBC	2024	with	TN	amendments
	Including Modifications By State of TN			
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures		
ACI	318-19(22)	Building Code Requirements for Structural Concrete		
ANSI/AISC	360-16	Specification for Structural Steel Buildings		

DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf

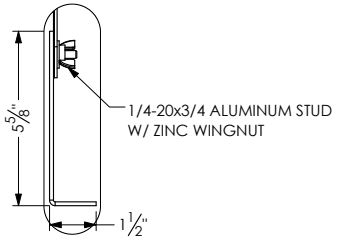




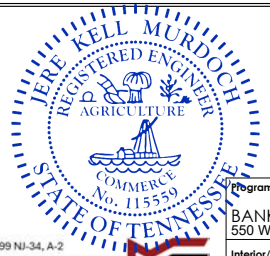
BOA-1.1NX-LED
1.1NX LED PANEL



DETAIL N
SCALE 1 : 4



DETAIL M
SCALE 1 : 4



2399 NJ-34, A-2
MANASQUAN, NJ 08736
(973) 570-8215 x0
MURDOCH ENGINEERING
5/19/2025
Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

WELDMENT CUT LIST			
ITEM	QTY.	Description	MATERIAL
1	1	ACM, 3MM x 83" x 27 3/8"	3MM
2	2	1/8" AUM, 24 3/4" x 5 3/16"	3003 Alloy
3	2	1/8" AUM, 24 3/4" x 6 15/16"	3003 Alloy

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902	
Interior/Exterior:	EXTERIOR	
Sign Type:	MONUMENT	
Engineer:	MATT SMITH	
Windspeed:		
Illumination:	ILLUMINATED	
Voltage:	120V	SCALE: 1:8

AGI

Description:
1.1NX PYLON & MONUMENT HEAD

Part Number:
BOA-1.1NX-HEAD

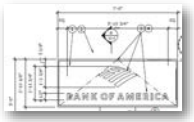
ANSI B SIZE DRAWING - VERSION 1.19.02

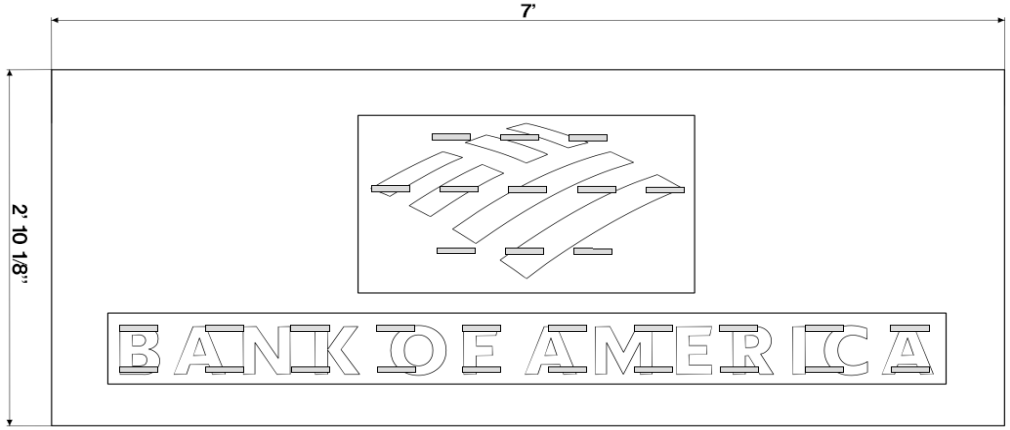
C:\AGI PDM\Customers\Bank of America\Retail\2024 NX\MONUMENT - PYLON\HEADS\1.1NX\BOA-1.1NX-HEAD

REVISIONS					
ZONE	REV.	ECR NUMBER	REV CHANGE	REV DATE	REV DRAFTER
	A	93595	INITIAL RELEASE	04/02/2025	MRD

DESIGN SPECIFICATIONS				
IBC	2024	with	TN	amendments
	Including Modifications By State of TN			
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures		
ACI	318-19(22)	Building Code Requirements for Structural Concrete		
ANSI/AISC	360-16	Specification for Structural Steel Buildings		

DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf





Material Breakdown		
Snap SS 65K (24V)	Modules	24V PS
CABINET SIDE 1		P/S 1
LOGO	11	
BOA	20	
CABINET SIDE 2		
LOGO	11	
BOA	20	

1) **THE GRAPHICS ABOVE ARE FOR REFERENCE ONLY** and should not be used for commercial quotation or bid without validation. The material estimates for Tetra® LED Systems are based upon our engineering standards and information provided pertaining to font, letter height, can depth, face material, and any special instructions provided by the customer. Missing information will cause delays in delivery of estimates as well as affect product selection, quantities, application, and illumination.
2) **LED MODULE PLACEMENT AND QUANTITY IS AN APPROXIMATION ONLY.** The sign manufacturer must verify module placement and quantity to ensure even illumination.
3) Final material quantities for estimation purposes and construction are the responsibility of the sign OEM.
4) All signs should be tested as complete units (including correct Tetra® power supply) before installation for acceptable color, illumination, intensity, & functionality.
5) For detailed information refer to the applicable Tetra® product found under Signage: https://products.gecurrent.com/led-signage-lighting

TECHNICAL SUPPORT:
888-694-3533
EMAIL: tetradrawings@gecurrent.com

Sign Type		Illumination
DOUBLE SIDED CABINET		PUSH-THRU
Can Depth	LED Distance From Face	Power Supply Location
5"	N/A	REMOTE
Special Instructions		
SNAP SS TO BE INSTALLED @ 8" OC (Standard - 1.5 modules/ft)		
ESTIMATE FOR BOTH SIDES OF SIGN		
0		
Notes		
B1.1nx		

Primary Circuit (120 VAC)	SKU	Description	Name	Quantity
1.1 Amps	93136552	GEPMH2465-W1X	Snap SS 65K (24V)	62 Modules 44 Ft
Sign Area				
14.00 Sq Ft				
Total Module Watts				
80.60 Watts	93137578	GEPS24-100U-TT	100W - 24V (TT)	1 Ea
	-	-	-	
		GEDSRL08-3	Rails (8')	9 Ea
		GEDSSE-3 / GEDSFE-3	Socket / Frame Endcap	20 Ea
		GEDSIC-3	Interconnector	0 Ea
Total Lumens		GESSPC-3 / GESSMC-3	Mounting Clips	62 Ea
12400.00 Lumens	191600041		Wire Connector	86 Ea
885.71 Lumens/Sq Ft	9409		18 AWG Supply Wire	125 Ft

Current

Drawn By: AV
Checked By: AV
Date: 2/6/25

Job Name: Boa
Customer Name:

Drwg #: 104606 - 45 Rev B
PAGE 1 of 1

JERE KELL MURDOCH — REGISTERED ENGINEER — AGRICULTURE — COMMERCE — No. 115559 — STATE OF TENNESSEE

2399 NJ-34, A-2
MANASQUAN, NJ 08736
(973) 570-8215 x0

MURDOCH ENGINEERING

5/19/2025

Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902
Interior/Exterior:	EXTERIOR
Sign Type:	MONUMENT
Engineer:	MATT SMITH
Windspeed:	
Illumination:	ILLUMINATED
Voltage:	120V

SCALE: 1:12

AGI

Description: 1.1NX PYLON & MONUMENT HEAD
Part Number: BOA-1.1NX-HEAD

ANSI B SIZE DRAWING - VERSION 1.19.22

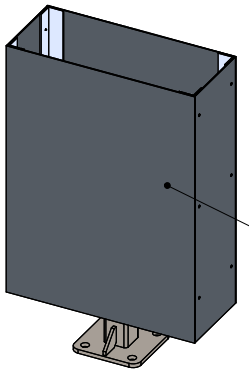
C:\AGI PDM\Customers\Bank of America\Retail\2024 NX\MONUMENT - PYLON\HEADS\1.1NX\BOA-1.1NX-HEAD

NOTES:
1. ALL EXPOSED SURFACES & HARDWARE PAINTED TO MATCH 'BOA BLACK HORIZON' SEMI GLOSS FINISH.

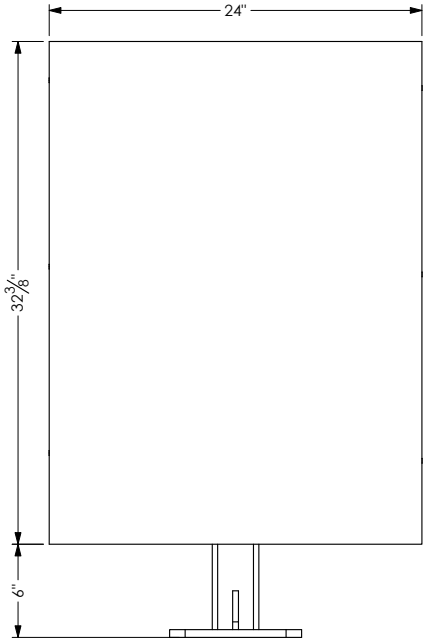
REVISIONS					
ZONE	REV.	ECR NUMBER	REV CHANGE	REV DATE	REV DRAFTER
	A	93595	INITIAL RELEASE	04/07/2025	MRD

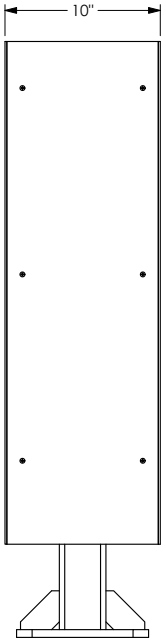
DESIGN SPECIFICATIONS				
IBC	2024	with	TN	amendments
	Including Modifications By State of TN			
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures		
ACI	318-19(22)	Building Code Requirements for Structural Concrete		
ANSI/AISC	360-16	Specification for Structural Steel Buildings		

DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	P_g =	25 psf



PAINT ALL EXPOSED SURFACED TO MATCH 'BOA BLACK HORIZON' SEMI GLOSS FINISH.





BOA-B1.1NX-150-COL
B1NX POLE & CLAD ASSY
82LBS

JERE KELL MURDOCH
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 115559
STATE OF TENNESSEE

2399 NJ-34, A-2
MANASQUAN, NJ 08736
(973) 570-8215 x0

5/19/2025

Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

MURDOCH ENGINEERING

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902
Interior/Exterior:	EXTERIOR
Sign Type:	MONUMENT
Engineer:	MATT SMITH
Windspeed:	
Illumination:	ILLUMINATED
Voltage:	120V

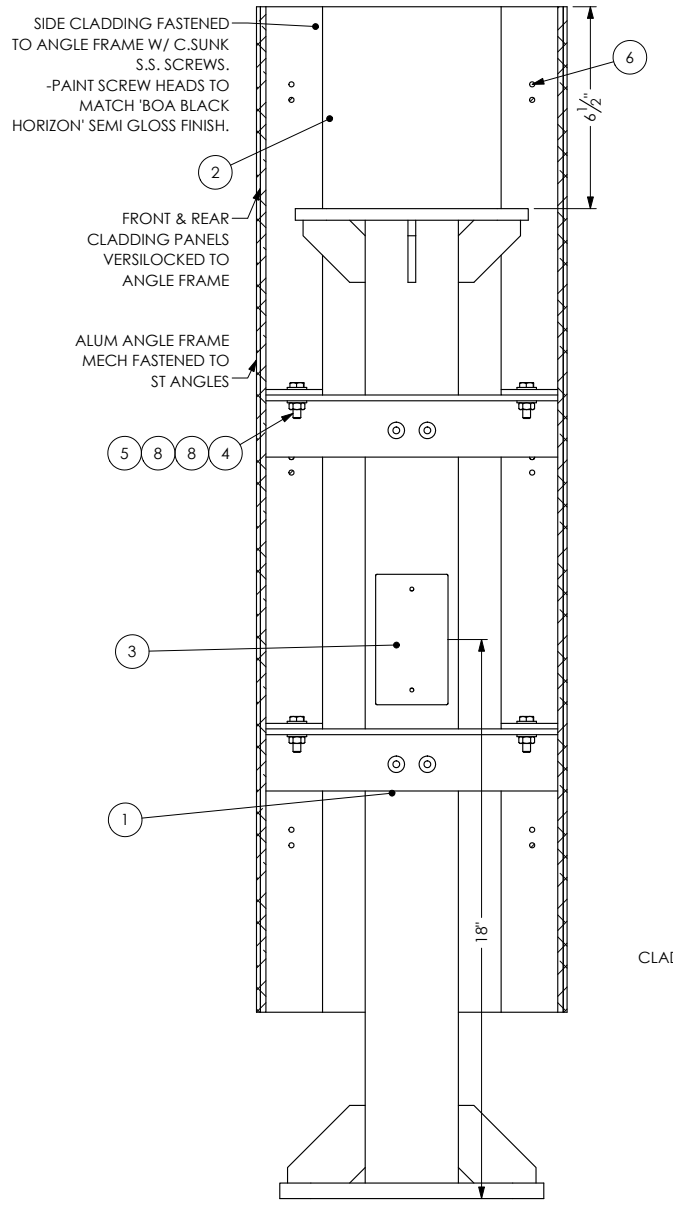
SCALE: 1:8

AGI

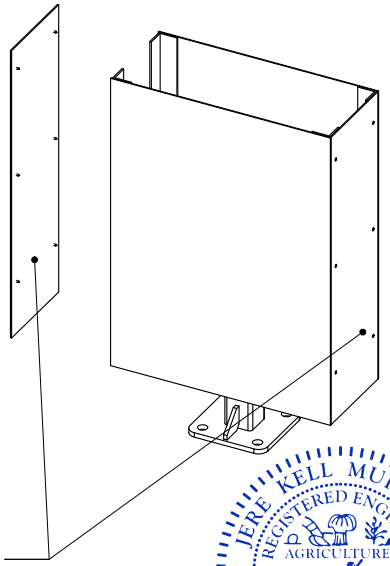
Description: B1.1NX POLE & CLAD
Part Number: BOA-B1.1NX-150-COL

ANSI B SIZE DRAWING - VERSION 07.27.23

C:\AGI PDM\Customers\Bank of America\Retail\2024 NX\MONUMENT - PYLON\BXnx\B1.1NX\BOA-B1.1NX-150-COL



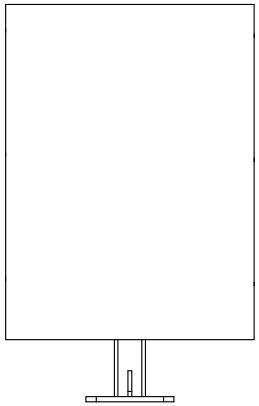
SECTION A-A
SCALE 1 : 4



REVISIONS					
ZONE	REV.	ECR NUMBER	REV CHANGE	REV DATE	REV DRAFTER
	A	93595	INITIAL RELEASE	04/07/2025	MRD

DESIGN SPECIFICATIONS			
IBC	2024	with TN	amendments
	Including Modifications By State of TN		
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures	
ACI	318-19(22)	Building Code Requirements for Structural Concrete	
ANSI/AISC	360-16	Specification for Structural Steel Buildings	

DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf



A

BOM TABLE: BOA-B1.1NX-150-COL			
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	BOA-B1.1NX-150-COL-ST	B1.1NX STEEL	1
2	BOA-B1.1NX-150-COL-CLAD	B1.1NX CLADDING	1
3	ELEC-J-BOX-2X4	2'x4" OUTLET BOX	1
4	McM# 93190A542	1/4-20x1 GD5 FT BOLT-SS	8
5	McM# 94804A029	1/4-20 STAINLESS HEX NUT	8
6	McM# 90198A216	#8x1/2" F.H.S.S.S.M. SCREW	9
7	McM# 90198A249	#8x1" F.H.S.S.S.M. SCREW	3
8	MCM# 91950A029	1/4" FLAT WASHER SAE-S.S.	16

JERE KELL MURDOCH
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 115559
STATE OF TENNESSEE

2399 NJ-34, A-2
MANASQUAN, NJ 08736
(973) 570-8215 x0
MURDOCH ENGINEERING
5/19/2025
Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902
Interior/Exterior:	EXTERIOR
Sign Type:	MONUMENT
Engineer:	MATT SMITH
Windspeed:	
Illumination:	ILLUMINATED
Voltage:	120V

SCALE: 1:12

AGI

Description: B1.1NX POLE & CLAD

Part Number: BOA-B1.1NX-150-COL

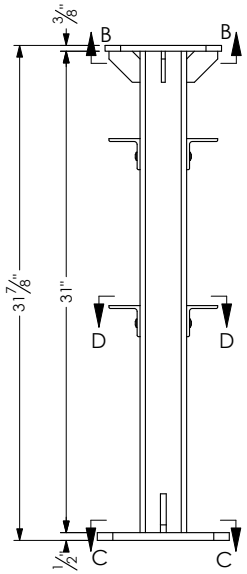
ANSI B SIZE DRAWING - VERSION 1.19.01

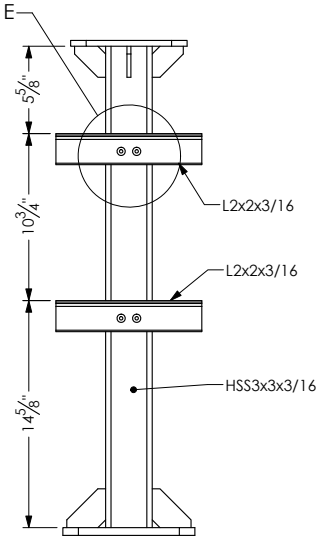
C:\AGI PDM\Customers\Bank of America\Retail\2024 NX\MONUMENT - PYLON\BXnx\B1.1NX\BOA-B1.1NX-150-COL

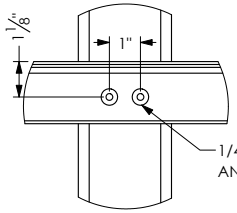
NOTES:
1. ALL WELDS TO BE FREE OF SPLATTER, SLAG, AND ARCING.
2. ALL EXPOSED SURFACES TO BE PAINTED WITH GRAY PRIMER.

REVISIONS

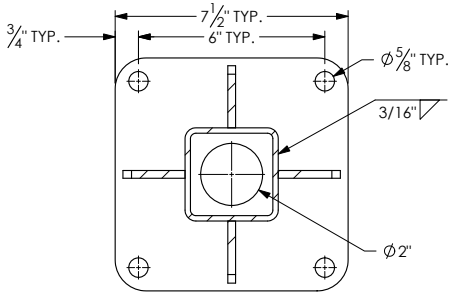
ZONE	REV.	ECR NUMBER	REV CHANGE	REV DATE	REV DRAFTER
	A	93595	INITIAL RELEASE	04/07/2025	MRD





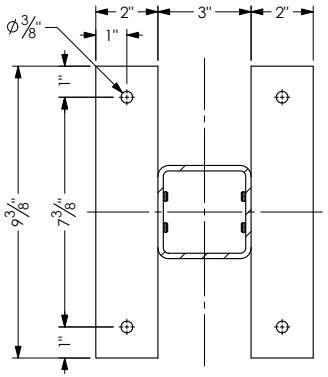


DETAIL E
SCALE 1 : 4

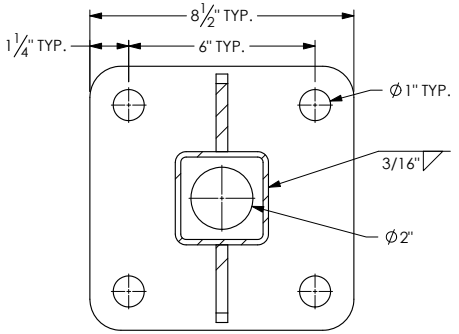


SECTION B-B
SCALE 1 : 4

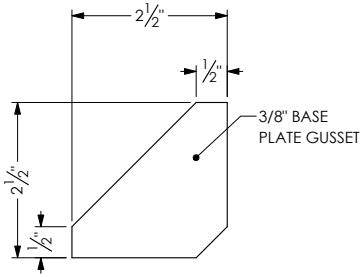
BOA-B1.1NX-150-COL-ST
B1.1NX STEEL
41LBS



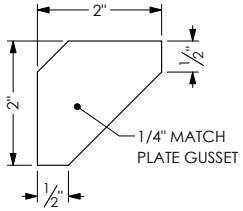
SECTION D-D
SCALE 1 : 4



SECTION C-C
SCALE 1 : 4



SCALE 1 : 2



SCALE 1 : 2

DESIGN SPECIFICATIONS		
IBC	2024	with TN amendments
ASCE	7-22	
ACI	318-19(22)	
ANSI/AISC	360-16	

DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf

JERE KELL MURDOCH REGISTERED ENGINEER AGRICULTURE COMMERCE No. 115559 STATE OF TENNESSEE

MURDOCH ENGINEERING
5/19/2025
Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902
Interior/Exterior:	EXTERIOR
Sign Type:	MONUMENT
Engineer:	MATT SMITH
Windspeed:	
Illumination:	ILLUMINATED
Voltage:	120V

SCALE: 1:8

AGI

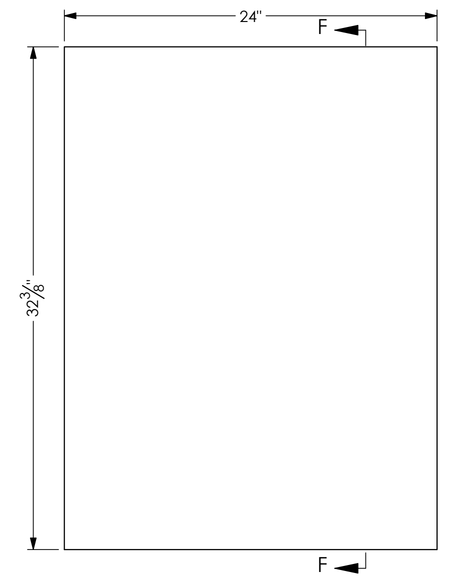
Description: B1.1NX POLE & CLAD
Part Number: BOA-B1.1NX-150-COL

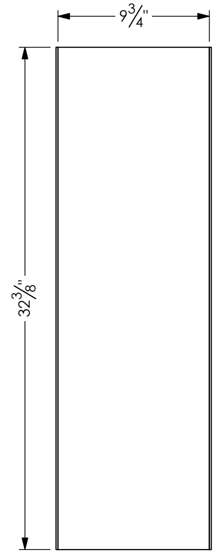
ANSI B SIZE DRAWING - VERSION 1.19.02

C:\AGI PDM\Customers\Bank of America\Retail\2024 NX\MONUMENT - PYLON\BXnx\B1.1NX\BOA-B1.1NX-150-COL

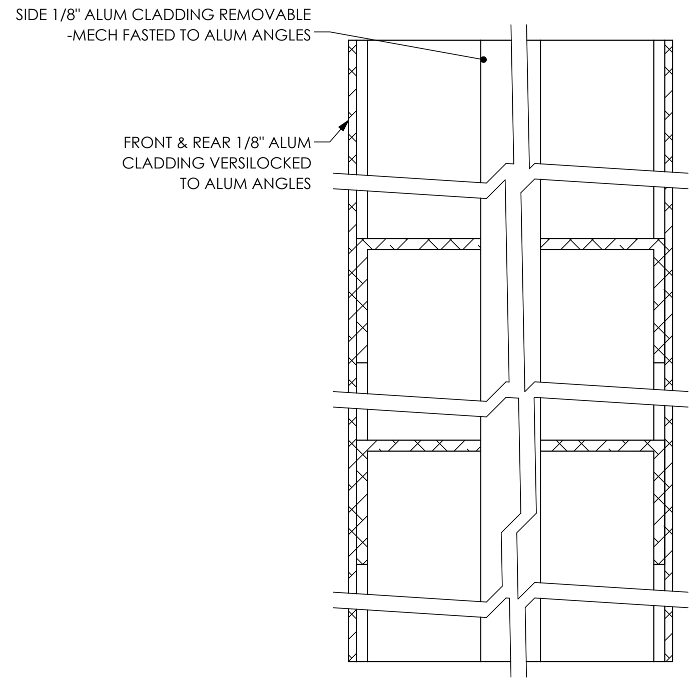
NOTES:
1. PAINT ALL EXPOSED SURFACED TO MATCH 'BOA BLACK HORIZON' SEMI GLOSS FINISH.

REVISIONS					
ZONE	REV.	ECR NUMBER	REV CHANGE	REV DATE	REV DRAFTER
	A	93595	INITIAL RELEASE	04/07/2025	MRD

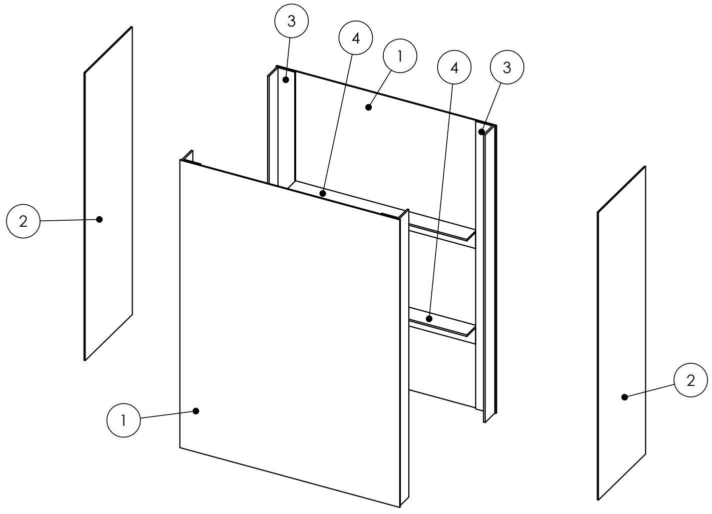




BOA-B1.1NX-150-COL-CLAD
B1.1NX CLADDING



SECTION F-F
SCALE 1 : 2



DESIGN SPECIFICATIONS			
IBC	2024	with TN amendments	Including Modifications By State of TN
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures	
ACI	318-19(22)	Building Code Requirements for Structural Concrete	
ANSI/AISC	360-16	Specification for Structural Steel Buildings	

DESIGN LOADS		
Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf

2399 NJ-34, A-2
MANASQUAN, NJ 08736
(973) 570-8215 x0

MURDOCH ENGINEERING

5/19/2025

Jere Murdoch, PE
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TN PE Lic. #115559
Exp. 10/31/2026

JERE KELL MURDOCH
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 115559
STATE OF TENNESSEE

WELDMENT CUT LIST				
ITEM	QTY.	Description	LENGTH	MATERIAL
1	2	1/8" ALUM, 32 3/8" x 24"		3003 Alloy
2	2	1/8" ALUM, 32 3/8" x 9 3/4"		3003 Alloy
3	4	AXAN 6063-T5 2 X 2 X 0.177	32 3/8"	6063-T5
4	4	AXAN 6063-T5 2 X 2 X 0.177	19 3/4"	6063-T5

Program/Customer:	BANK OF AMERICA 550 W Main St, Knoxville, TN 37902
Interior/Exterior:	EXTERIOR
Sign Type:	MONUMENT
Engineer:	MATT SMITH
Windspeed:	
Illumination:	ILLUMINATED
Voltage:	120V — SCALE: 1:8

AGI

Description: B1.1NX POLE & CLAD
Part Number: BOA-B1.1NX-150-COL

ANSI-B-SIZE DRAWING - VERSION: 19302

C:\AGI PDM\Customers\Bank of America\Retail\2024 NX\MONUMENT - PYLON\BXnx\B1.1NX\BOA-B1.1NX-150-COL

GENERAL:

1. ALL MATERIALS AND WORK SHALL CONFORM TO THE REQUIREMENTS OF THE APPLICABLE INTERNATIONAL BUILDING CODE (IBC).
2. CONSTRUCTION METHODS AND PROJECT SAFETY: DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE METHODS, PROCEDURES, OR SEQUENCE OF CONSTRUCTION. TAKE NECESSARY PRECAUTIONS TO MAINTAIN AND ENSURE THE INTEGRITY OF THE STRUCTURE DURING CONSTRUCTION. THE EOR WILL NOT ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS, AND REGULATIONS.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS PRIOR TO THE START OF CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES OR INCONSISTENCIES THAT ARE FOUND. NOTED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE DRAWINGS.
4. ALL OMISSIONS AND/OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND FIELD INSPECTOR. THE ENGINEER SHALL PROVIDE A SOLUTION PRIOR TO PROCEEDING WITH ANY WORK AFFECTED BY THE CONFLICT OR OMISSION.
5. WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF THE WORK, CONSTRUCT IN ACCORDANCE WITH THE STEEL CONSTRUCTION MANUAL, 14TH EDITION OR 2010 ALUMINUM DESIGN MANUAL .
6. WHEN A DETAIL IS IDENTIFIED AS TYPICAL, THE CONTRACTOR IS TO APPLY THIS DETAIL IN ESTIMATING AND CONSTRUCTION TO EVERY LIKE CONDITION WHETHER OR NOT THE REFERENCE IS REPEATED IN EVERY INSTANCE.
7. ANY CHANGE TO THE DESIGN AS SHOWN ON THE DRAWINGS REQUIRES PRIOR WRITTEN APPROVAL FROM DESIGN ENGINEER OF RECORD BEFORE CONSTRUCTION.
8. WORK PERFORMED IN CONFLICT WITH THE STRUCTURAL DRAWINGS OR APPLICABLE BUILDING CODE REQUIREMENTS SHALL BE CORRECTED AT THE EXPENSE OF THE CONTRACTOR.
9. VERIFICATION: VERIFY ALL DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS BEFORE STARTING WORK. NOTIFY THE EOR IMMEDIATELY OF ANY DISCREPANCIES.

EXISTING CONDITIONS:

1. IF EXISTING CONDITIONS ARE NOT AS DETAILED IN THIS DESIGN, THE INSTALLER SHALL CEASE WORK AND NOTIFY MURDOCH ENGINEERING IMMEDIATELY.
2. MURDOCH ENGINEERING WILL NOT BE PERFORMING ON-SITE INSPECTIONS OR VERIFICATIONS. IT IS THE RESPONSIBILITY OF THE INSTALLER, STRUCTURE OWNER, AND PROPERTY OWNER TO IDENTIFY EXISTING CONDITIONS AND CONTACT MURDOCH ENGINEERING WITH ANY DISCREPANCIES OR CONCERNS.
3. INSTALLER SHALL CONFIRM THE DIAMETER AND THICKNESS OF EXISTING MEMBERS AND NOTIFY MURDOCH ENGINEERING OF ANY DISCREPANCIES.
4. INSTALLER SHALL INSPECT AND CONFIRM THE QUALITY OF EXISTING STRUCTURE AS "IN GOOD REPAIR". IF THERE ARE ANY INDICATIONS THAT THIS IS NOT THE CASE, INSTALLER SHALL CEASE WORK IMMEDIATELY AND NOTIFY MURDOCH ENGINEERING.
5. ANY EXISTING INFORMATION SHOWN HAS BEEN FURNISHED BY THE PERSON(S) OR COMPANY THIS DOCUMENT WAS PREPARED FOR
(SEE TITLE BLOCK). MURDOCH ENGINEERING IN NO WAY CERTIFIES THIS INFORMATION AS "AS-BUILT". IF THERE IS ANY REASON TO BELIEVE THE EXISTING CONDITIONS DETAILED HEREIN ARE NOT ACCURATE, MURDOCH ENGINEERING SHALL BE NOTIFIED IMMEDIATELY.

STEEL

1. STEEL SHAPES SHALL CONFORM TO THE FOLLOWING:

ROUND HSS	ASTM A500, GR B	Fy=42 KSI MIN.
SQUARE/RECT HSS	ASTM A500, GR B	Fy=46 KSI MIN.
THREADED ROD	ASTM A36	Fy=46 KSI MIN.
STEEL PLATE	ASTM A36 ASTM	Fy=36 KSI MIN.
STD. PIPE	A53, GR B	Fy=35 KSI MIN.

2. BOLTS SHALL CONFORM TO ASTM A307 UNO..
3. BOLTS AND THREADED ROD SHALL BE HOT-DIP GALVANIZED PER ASTM F2329 UNO.
4. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 UNO.
5. NUTS SHALL CONFORM TO ASTM A563.
6. WASHERS SHALL CONFORM TO ASTM F844.
7. STEEL HARDWARE SHALL BE HOT-DIP GALVANIZED PER ASTM A153 UNO
8. WELDING:
   a. WELD STRUCTURAL STEEL IN COMPLIANCE WITH ANSI/AWS D1.1 AND AISC SPECIFICATION, CHAPTER J. WELDERS SHALL BE CERTIFIED AS REQUIRED BY GOVERNING CODE AUTHORITY. WELDING SHALL BE DONE BY ELECTRIC ARC PROCESS USING LOW-HYDROGEN ELECTRODES WITH SPECIFIED TENSILE STRENGTH NOT LESS THAN 70 KSI UNLESS NOTED OTHERWISE.
   b. ALL SHOP AND FIELD WELDS SHALL BE PERFORMED BY AN AWS OR ICC CERTIFIED WELDER WITH ACTIVE STATUS AT TIME OF WELDING
   c. UNLESS A LARGER WELD SIZE IS INDICATED, PROVIDE MINIMUM SIZE WELDS PER AISC SPECIFICATION, SECTION J2, TABLE J2.4
   d. BASE PLATES SHALL BE WELDED ON TOP AND BOTTOM WITH CONTINUOUS WELDS OF AT LEAST 1/4" (IF PLATE IS CUT TO FIT TUBE INTO PLATE)

ALUMINUM:

1. FABRICATE AND ERECT ALUMINUM IN COMPLIANCE WITH THE ALUMINUM ASSOCIATION (AA) 2020 ALUMINUM DESIGN MANUAL (ADM) 1, THE SPECIFICATIONS FOR ALUMINUM SHEET METAL WORK (ASM35), AND IBC CHAPTER 20.
2. PIPE AND TUBE SHALL BE 6061-T6 PER ASTM B241 OR B429 WITH Ftu=38 KSI MIN, Fty=35 KSI MIN, Ftuw=24 KSI MIN, Ftyw=15 KSI MIN.
3. STD STRUCTURAL PROFILES SHALL BE 6061-T6 PER B308 WITH Ftu=38 KSI MIN, Fty=35 KSI MIN, Ftuw=24 KSI MIN, Ftyw=15 KSI MIN.
4. SHEET AND PLATE SHALL BE 6061-T6 PER ASTM B209 WITH Ftu=42 KSI MIN, Fty=35 KSI MIN, Ftuw=24 KSI MIN, Ftyw=15 KSI MIN.
5. EXTRUSIONS SHALL BE 6061-T6 PER ASTM B241 OR B429 WITH Ftu=38 KSI MIN, Fty=35 KSI MIN, Ftuw=24 KSI MIN, Ftyw=15 KSI MIN.
6. ALL SHOP AND FIELD WELDS SHALL BE PERFORMED BY AN AWS OR ICC CERTIFIED WELDER WITH CURRENT STATUS AT TIME OF WELDING
7. UNLESS A LARGER WELD SIZE IS INDICATED, PROVIDE MINIMUM SIZE WELD PER ADM. ALL ALUMINUM WELDED JOINTS SHALL HAVE WELD SIZES OF AT LEAST $\frac{1}{4}$ INCH
8. FILLET WELDS SHALL NOT EXCEED THINNEST MEMBER WALL THICKNESS JOINED.
9. ALUMINUM WELD FILLER SHALL BE 5356 ALLOY
10. WELDING PROCESS GMAW OR GTAW SHALL BE IN ACCORDANCE WITH AWS D1.2 ¯
11. ALUMINUM CHANNEL LETTERS SHALL BE CONSTRUCTED OF 0.090" RETURNS AND 0.125" BACKS MINIMUM, UNLESS A LARGER SIZE IS INDICATED ON DRAWINGS. THIS NOTE SHALL SUPERCEDE DRAWING DETAILS.
12. PROVIDE NEOPRENE GASKET BETWEEN DISSIMILAR METALS TO PREVENT GALVANIC CORROSION
13. ALUMINUM DIRECTLY EMBEDDED INTO CONCRETE SHALL BE CAPPED AT BOTTOM AND COATED WITH BITUMINOUS COATING OR POLYURETHANE WHERE IN CONTACT WITH CONCRETE.
14. FASTENERS BETWEEN DISSIMILAR METALS SHALL BE STAINLESS STEEL 316.

CONCRETE & REINFORCEMENT

1. MINIMUM 28-DAY COMPRESSIVE STRENGTH (fc') SHALL BE 3,000 PSI. THE MAXIMUM WATER TO CEMENT RATIO SHALL BE 0.45 BY WEIGHT. A MINIMUM OF 5-3/4 BAGS OF CEMENT SHALL BE USED PER CUBIC YARD WITH A SLUMP OF 4" +/- 1.
2. REINFORCEMENT TO BE ASTM A615 GR 60, Fy=60 KSI UNO
3. CALCIUM CHLORIDE OR ADDED CHLORIDE IS NOT PERMITTED
4. VIBRATION: ALL REINFORCED CONCRETE SHALL BE CONSOLIDATED WITH MECHANICAL VIBRATORS
5. CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 318-11
6. PROVIDE A MINIMUM OF 2-1/2" COVER OF ALL EMBEDDED STEEL REBAR AND A MINIMUM OF 6 INCHES OF COVER FOR DIRECT BURIED PIPE OR TUBE MEMBERS.

FOUNDATIONS

1. CONCRETE POURED INTO CONSTRAINED EARTH EXCAVATIONS MUST CURE UNDER PROPER CONDITIONS FOR A MINIMUM OF 7 DAYS PRIOR TO SIGN BOX INSTALLATION. (EXCEPTION: IF THE OVERALL HEIGHT OF THE SIGN IS LESS THAN 20 FEET AND THE SIGN IS ADEQUATELY BRACED AGAINST WIND LOADS FOR A MINIMUM OF 4 DAYS, THE BOX MAY BE INSTALLED THE SAME DAY AS THE FOOTING IS POURED)
2. FOOTINGS MUST BE POURED AGAINST UNDISTURBED EARTH. SOIL BACKFILL IS UNACCEPTABLE. WHEN A SONOTUBE IS USED AS THE FORM, CONCRETE SHALL BE USED TO BACKFILL THE SPACE BETWEEN THE SONOTUBE AND UNDISTURBED EARTH.
3. COLD WEATHER PLACEMENT: PROTECT CONCRETE WORK FROM PHYSICAL DAMAGE OR REDUCED STRENGTH THAT COULD BE CAUSED BY FROST, FREEZING ACTIONS OR LOW TEMPERATURES. DO NOT POUR CONCRETE DURING OR WHEN FREEZING TEMPERATURES ARE ANTICIPATED WITHIN 3 DAYS OF POUR. BOTTOM OF FOOTING TO BE INSTALLED AT OR BELOW FROST LINE.
4. REINFORCEMENT IS NOT REQUIRED FOR DIRECT BURIAL TYPE SIGN FOOTINGS FOR SIGNS OF 25 FEET OVERALL HEIGHT OR LESS, DIRECT BURIED STEEL SHALL EXTEND TO 6 INCHES FROM BOTTOM OF FOOTING.
5. FOR ANCHOR BOLT/ BASE PLATE - SQUARE FOOTINGS, PROVIDE A MINIMUM OF #5 VERTICAL REBAR @ 12" O.C., 4" OFFSET FROM PERIMETER, TOP AND BOTTOM OF FOOTING. PROVIDE #3 HORIZONTAL TIES @ 12" O.C. Unless otherwise noted.
6. FOR ANCHOR BOLT/ BASE PLATE - ROUND FOOTINGS, PROVIDE A MINIMUM OF SIX (6) VERTICAL #5 REBARS, EVENLY SPACED, 4" OFFSET FROM FOOTING PERIMETER & #3 HORIZONTAL TIES, 12" O.C. Unless otherwise noted.
7. ANCHOR BOLTS SHALL BE TIED TO REBAR CAGE AT A MINIMUM OF TWO LOCATIONS PER ANCHOR BOLT
8. FOOTING DESIGN ASSUMES FOOTING SHALL BE EXCAVATED AND POURED IN UNDISTURBED NATURAL EARTH, CAPABLE OF WITHSTANDING A MINIMUM 1,500 PSF VERTICAL DESIGN BEARING PRESSURE AND 200 PSF/FT OF DEPTH OF LATERAL BEARING PRESSURE.
9. IF CLAY, SILTY - CLAY, ORGANIC OR FILL SOIL IS ENCOUNTERED UPON EXCAVATION, CONTACT MURDOCH ENGINEERING FOR FOOTING DESIGN MODIFICATION PRIOR TO CONSTRUCTION.
10. PORTION OF STEEL SUPPORT EMBEDDED INTO CONCRETE SHALL NOT BE PAINTED. IT SHALL BE CLEAN BARE METAL FOR PROPER ADHESION TO CONCRETE

SCOPE OF WORK:

1. LIMITS OF LIABILITY TO EXTEND ONLY TO THE QUANTITY INDICATED. ATTEMPTS IN PART OR IN WHOLE TO INSTALL GREATER QUANTITIES THAN THOSE SPECIFIED WITHOUT CONSULTING MURDOCH ENGINEERING SHALL VOID ALL PROFESSIONAL LIABILITY AND COVERAGE.

DESIGN SPECIFICATIONS

IBC	2024	with TN	amendments
		Including Modifications By State of TN	
ASCE	7-22	Minimum Design Loads for Buildings & Other Structures	
ACI	318-19(22)	Building Code Requirements for Structural Concrete	
ANSI/AISC	360-16	Specification for Structural Steel Buildings	

DESIGN LOADS

Wind	V =	105 mph
Exposure	C	
Risk Cat.	II	
Grnd. Snow	Pg =	25 psf

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AGI

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5/19/2025

Jere Murdoch, PE
Professional Engineer
TN PE Lic. #115559
Exp. 10/31/2026

DWG TITLE:

GENERAL NOTES

SHEET:	SIZE:
S.1	B