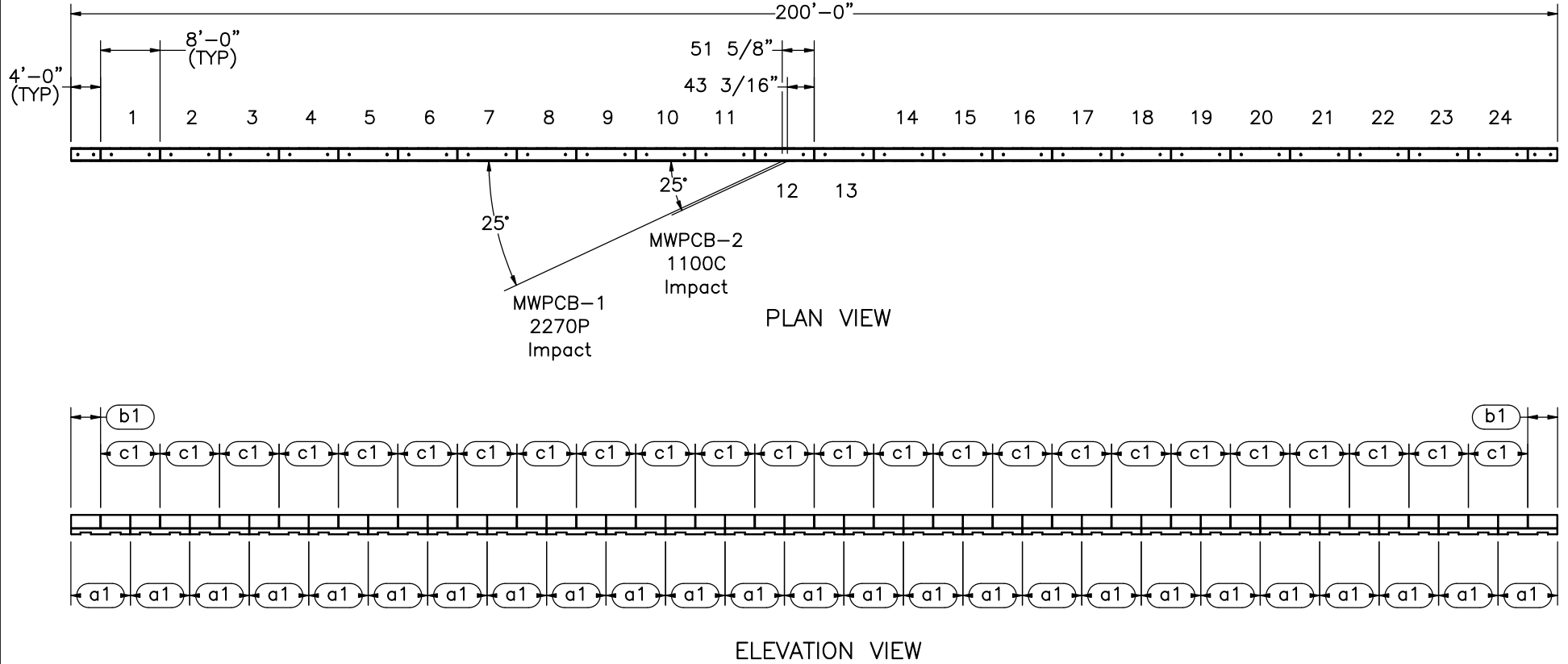




- Notes: (1) Test no. MWPCB-1 shall be performed according to test designation no. 3-11 using MASH 2016 criteria. Impact location for test no. MWPCB-1 is 51 5/8" upstream from the joint 12-13 of upper PCB segments.
- (2) Test no. MWPCB-2 shall be performed according to test designation no. 3-10 using MASH 2016 criteria. Impact location for test no. MWPCB-2 is 43 3/16" upstream from the joint 12-13 of upper PCB segments.



Midwest Roadside
Safety Facility

Interlocking Portable
Concrete Barrier
Test Series MWPCB

System Layout

DWG. NAME.
MWPCB_R10

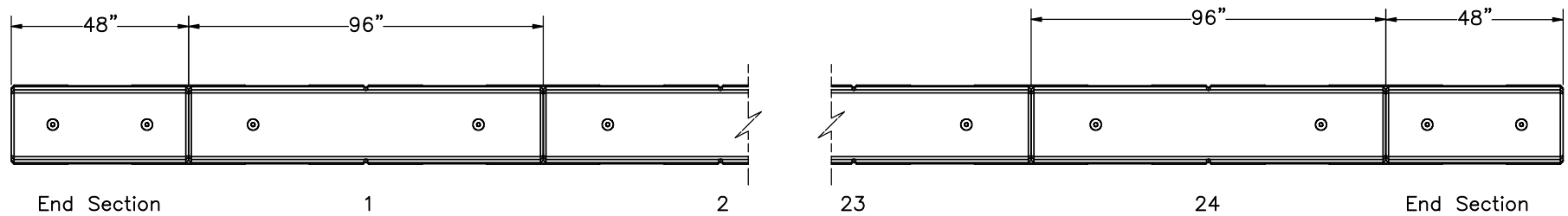
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SHEET:
1 of 16

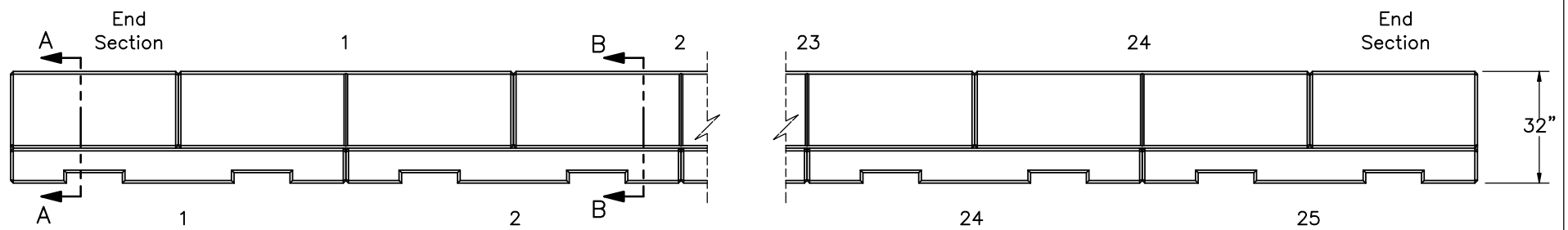
DATE:
6/10/2025

DRAWN BY:
RWB

REV. BY:
JJQ/KAL/RWB

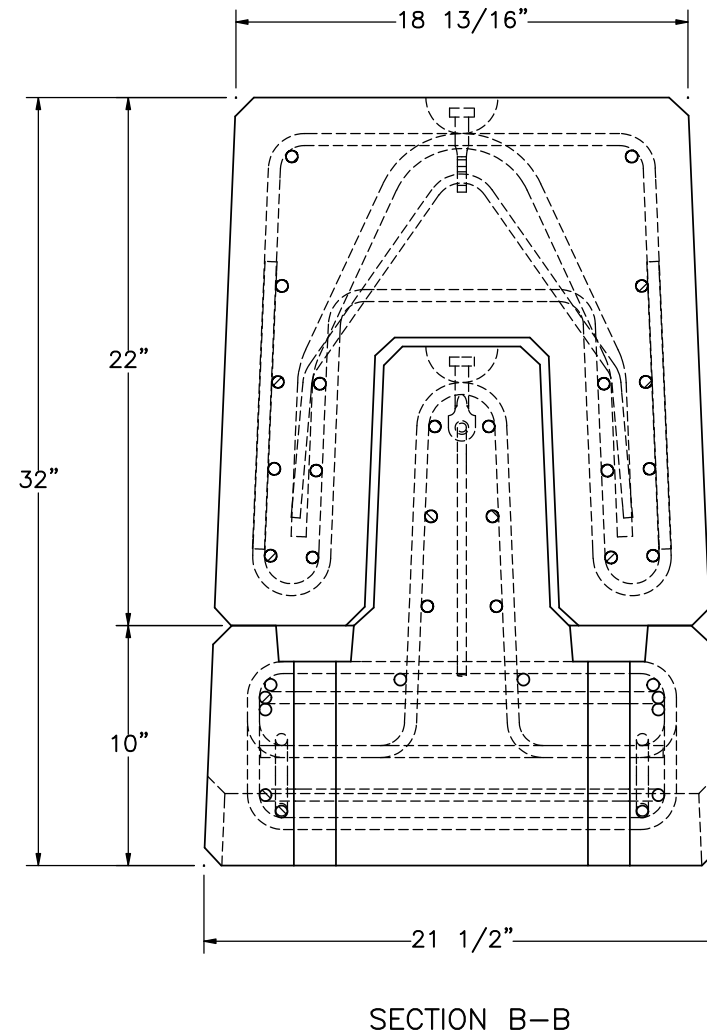
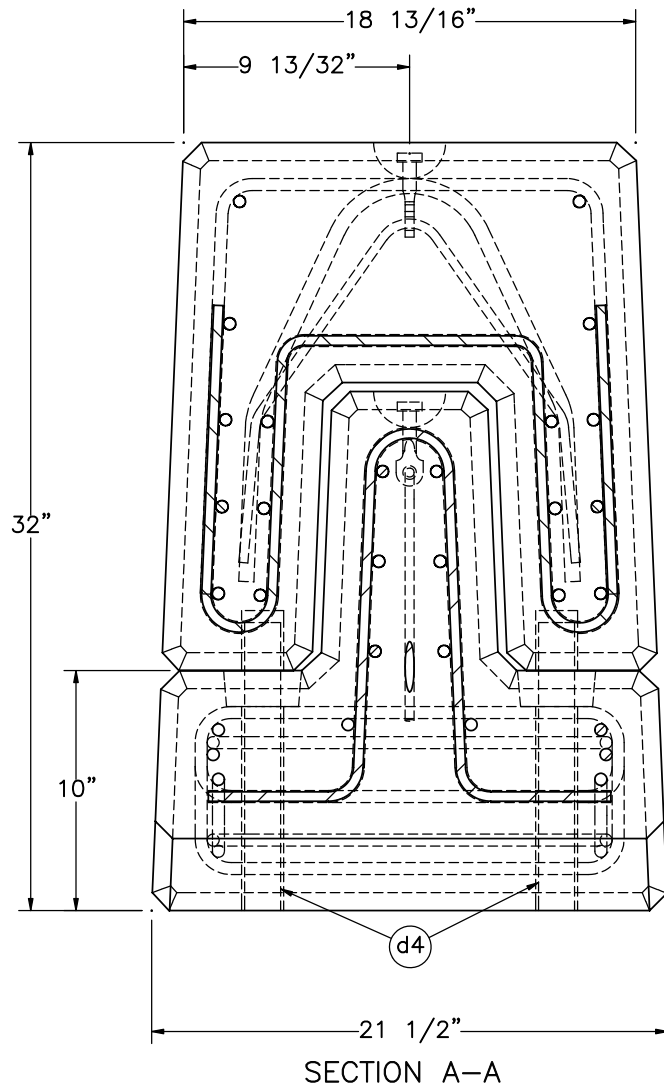


PLAN VIEW



ELEVATION VIEW

	Interlocking Portable Concrete Barrier Test Series MWPCB		SHEET: 2 of 16
	Section Upstream End Detail		DATE: 6/10/2025
Midwest Roadside Safety Facility	DWG. NAME: MWPCB_R10		DRAWN BY: RWB
	SCALE: 1:45 UNITS: in.		REV. BY: JJQ/KAL/RWB



Notes: (1) Part no. a2 will only be pinned into part nos. a1 and b1, end segments.



Midwest Roadside
Safety Facility

Interlocking Portable
Concrete Barrier
Test Series MWPCB

Pin Section Details

DWG. NAME.
MWPCB_R10

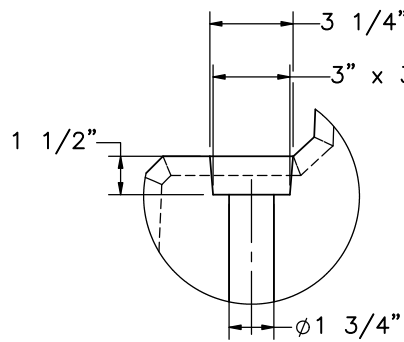
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SHEET:
3 of 16

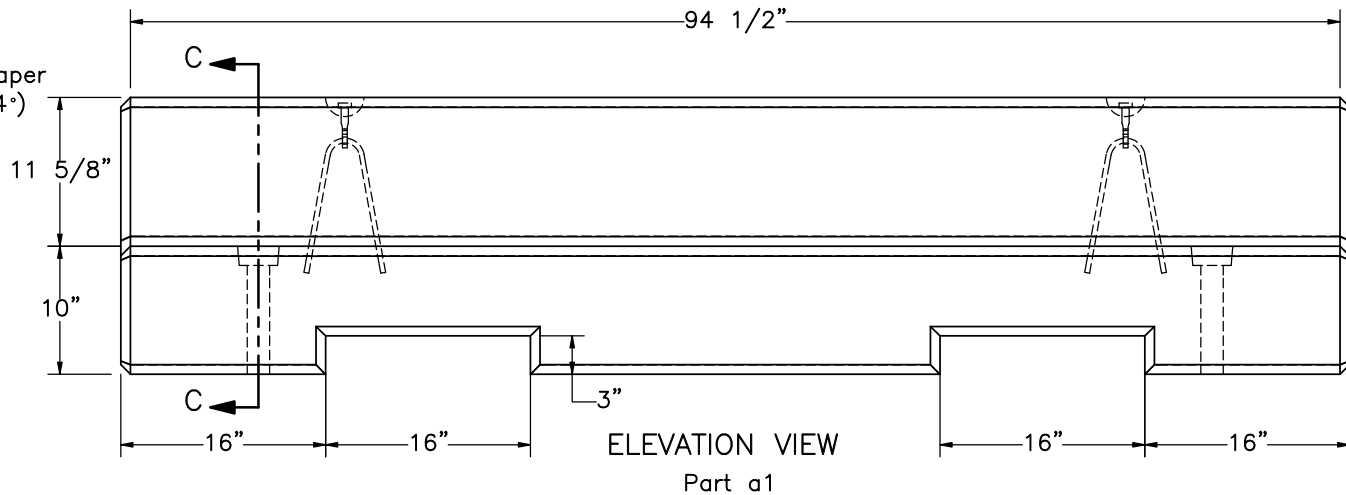
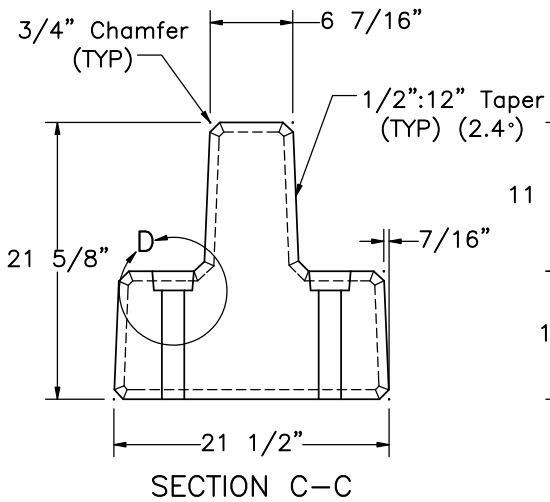
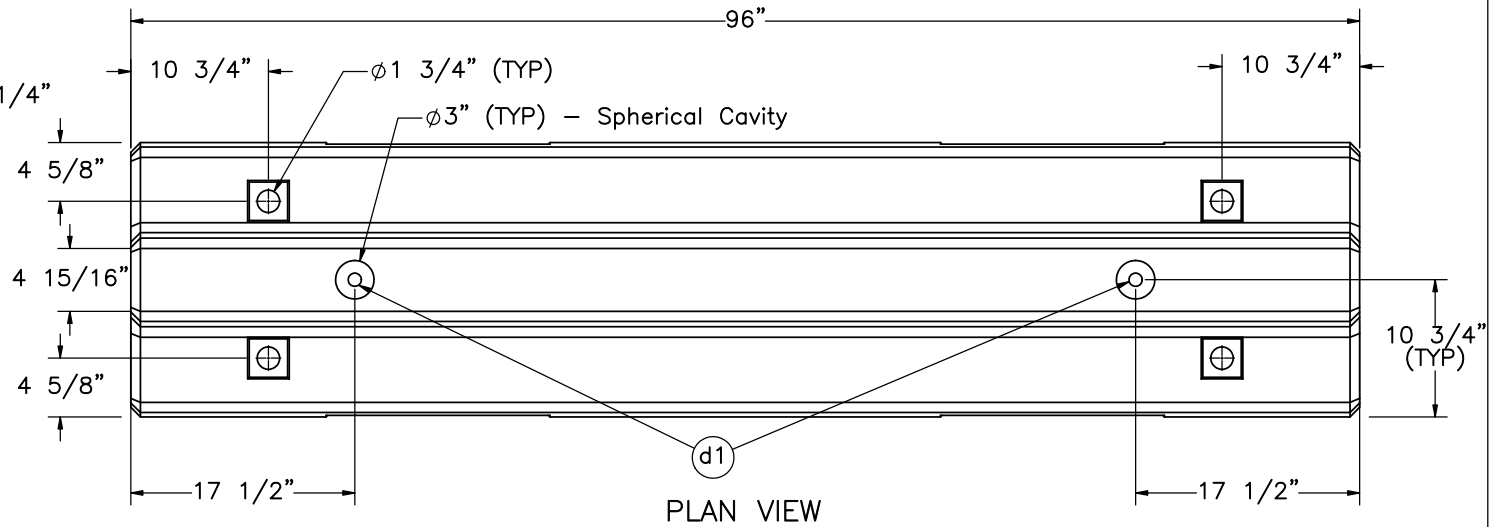
DATE:
6/10/2025

DRAWN BY:
RWB

REV. BY:
JJQ/KAL/R
WB



DETAIL D
SCALE 2 : 15



Midwest Roadside
Safety Facility

Interlocking Portable
Concrete Barrier
Test Series MWPCB

Base Assembly

DWG. NAME.
MWPCB_R10

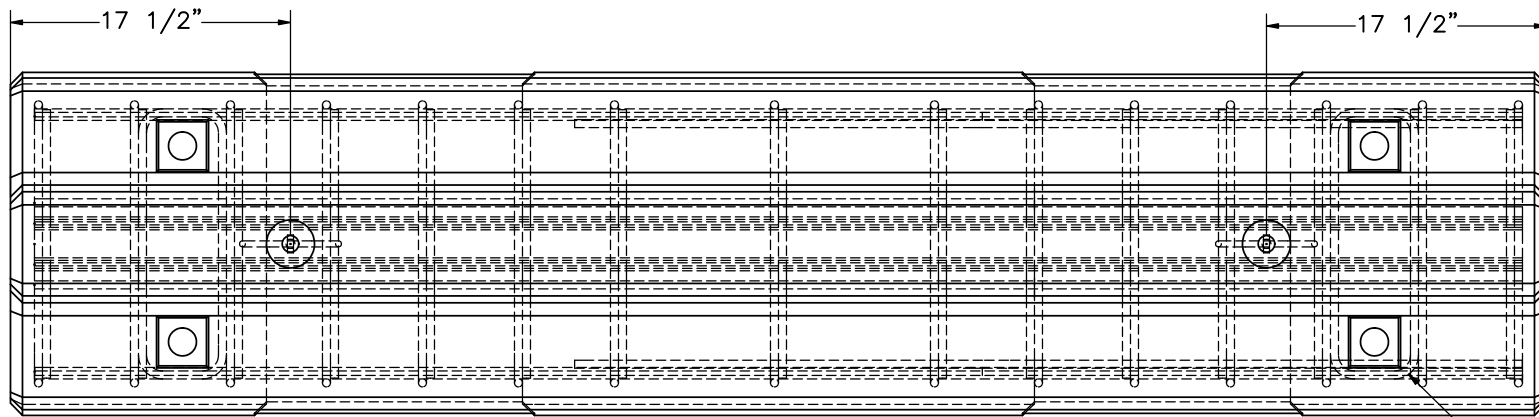
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SHEET:
4 of 16

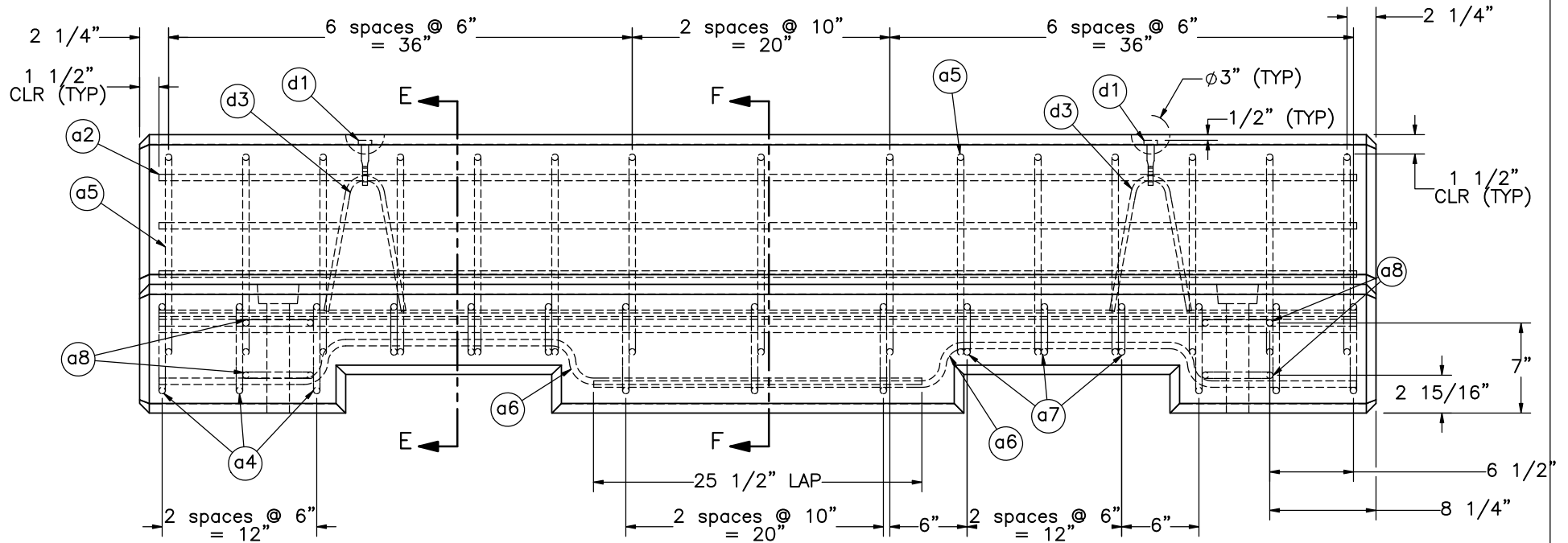
DATE:
6/10/2025

DRAWN BY:
RWB

REV. BY:
JJQ/KAL/RWB



PLAN VIEW



ELEVATION VIEW



Midwest Roadside
Safety Facility

Interlocking Portable
Concrete Barrier
Test Series MWPCB

Base Assembly Reinforcement

DWG. NAME.
MWPCB_R10

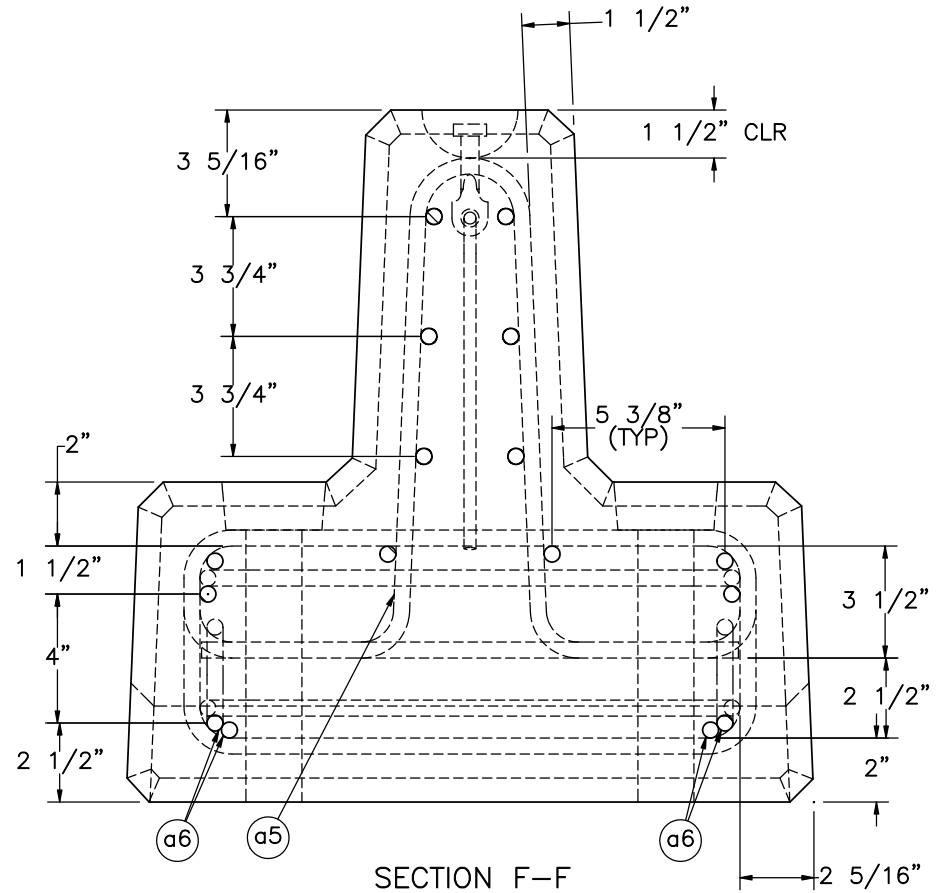
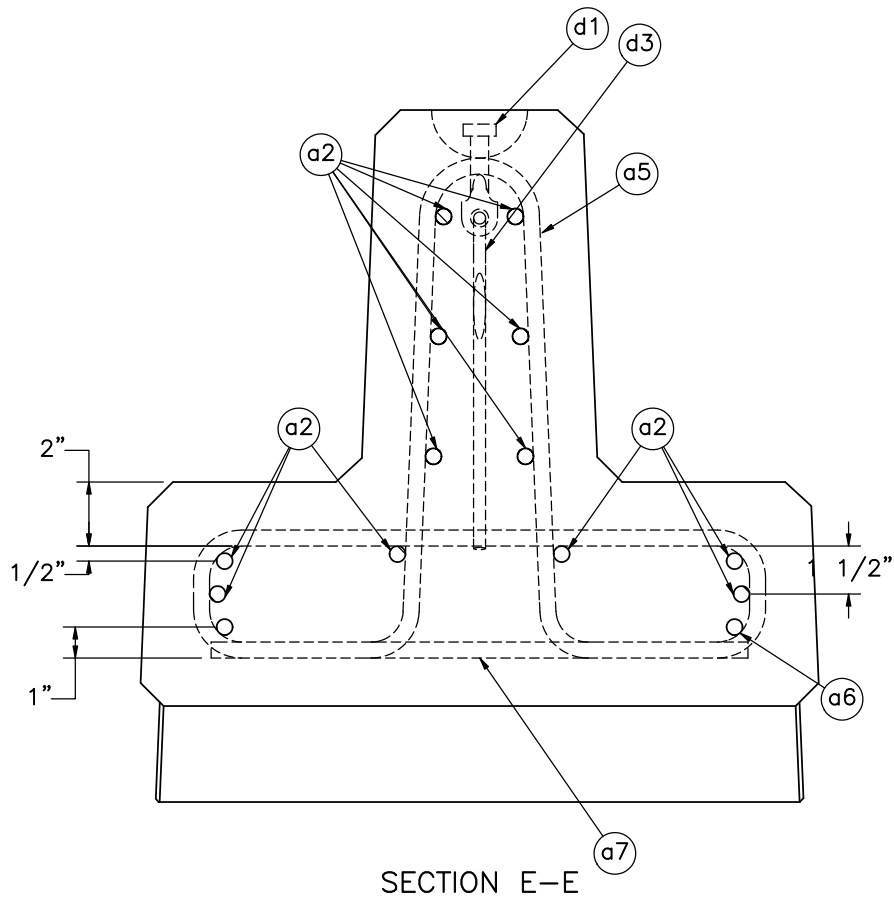
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SHEET:
5 of 16

DATE:
6/10/2025

DRAWN BY:
RWB

REV. BY:
JJQ/KAL/RWB



Midwest Roadside
Safety Facility

Interlocking Portable
Concrete Barrier
Test Series MWPCB

Base Assembly Reinforcement

DWG. NAME.
MWPCB_R10

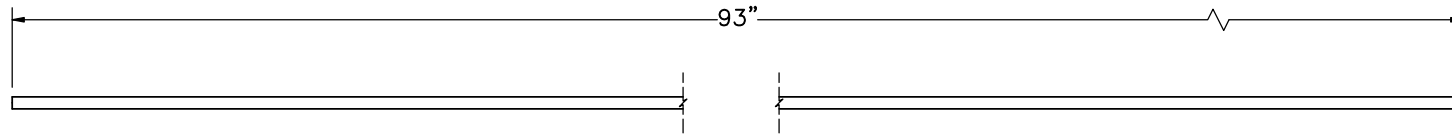
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SHEET:
6 of 16

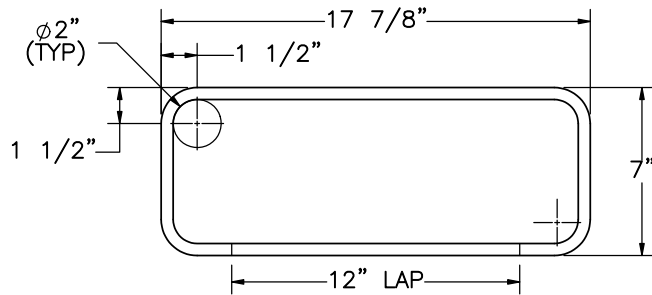
DATE:
6/10/2025

DRAWN BY:
RWB

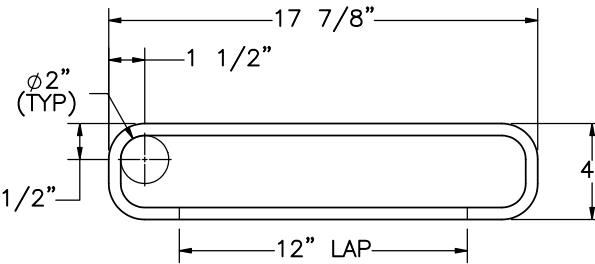
REV. BY:
JJQ/KAL/RWB



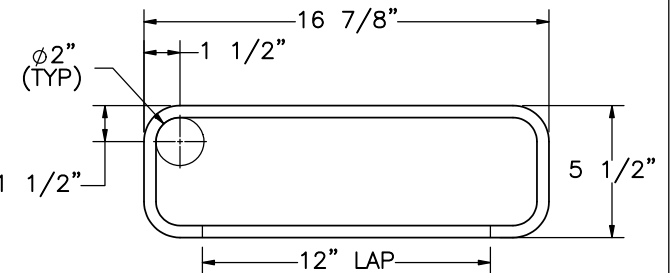
Part a2



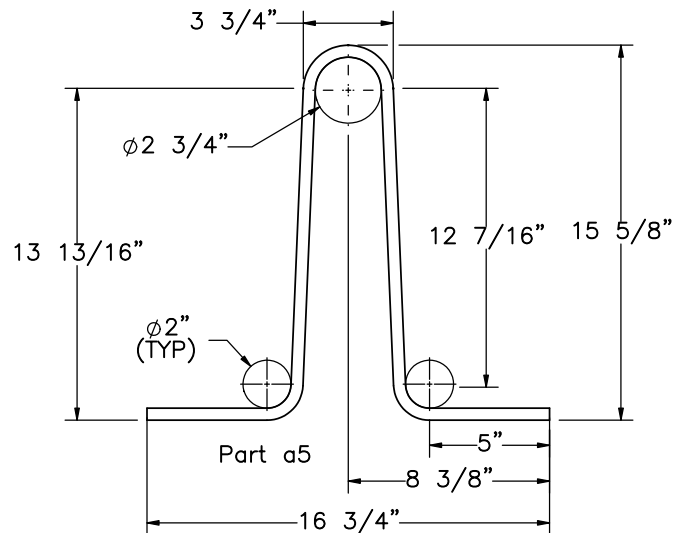
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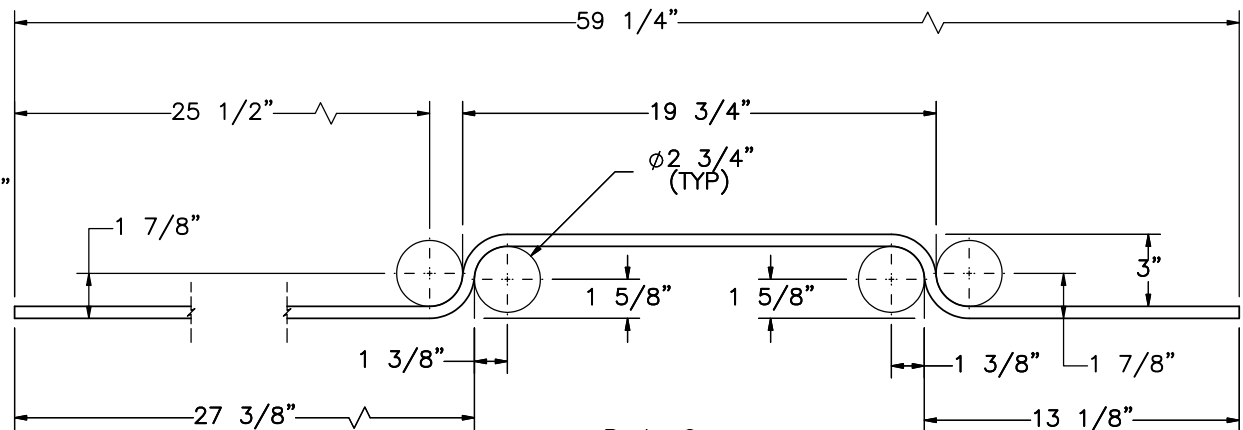
Part a7



Part a8



Part a5



Part a6

Bill of Bars

Part No.	Bar No.	QTY.	Lap Length	Unbent Length	Material Specification
a2	#4	12	—	—	ASTM A615 Gr. 80
a4	#4	9	12"	59"	ASTM A615 Gr. 80
a5	#4	15	—	43 5/8"	ASTM A615 Gr. 80
a6	#4	4	25 1/2"	62 1/2"	ASTM A615 Gr. 80
a7	#4	6	12"	53"	ASTM A615 Gr. 80
a8	#4	4	12"	55 3/8"	ASTM A615 Gr. 80

Note: (1) Quantities in Bill of Bars represents one segment.



Midwest Roadside
Safety Facility

Interlocking Portable
Concrete Barrier
Test Series MWPCB

Rebar Details

DWG. NAME.
MWPCB_R10

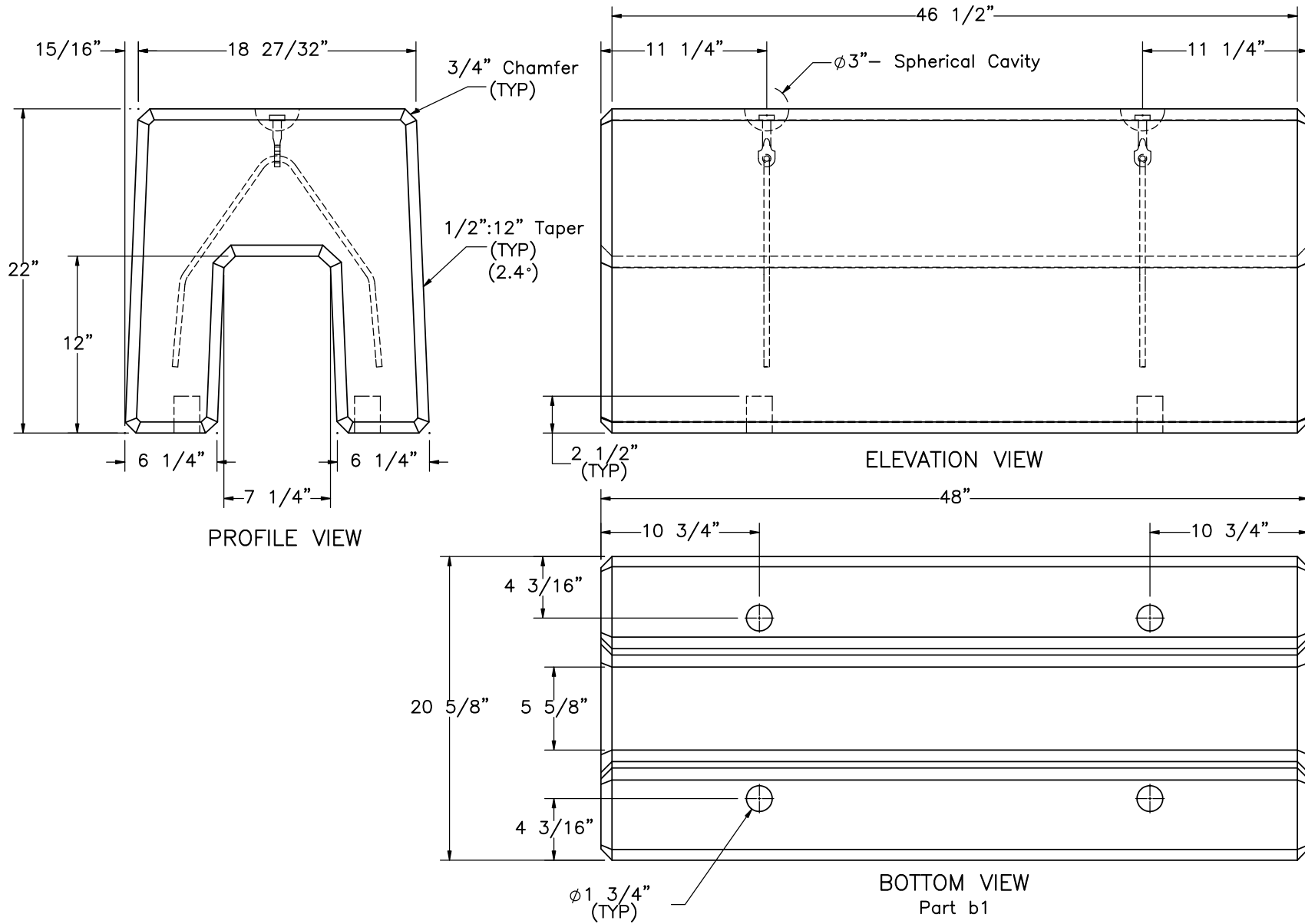
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SHEET:
7 of 16

DATE:
6/10/2025

DRAWN BY:
RWB

REV. BY:
JJQ/KAL/RWB



Midwest Roadside
Safety Facility

Interlocking Portable
Concrete Barrier
Test Series MWPCB

Top End Section Assembly

DWG. NAME.
MWPCB_R10

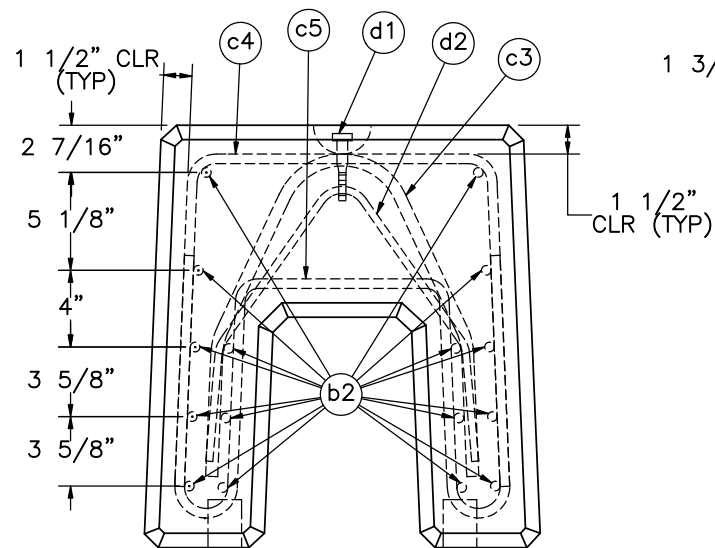
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SHEET:
8 of 16

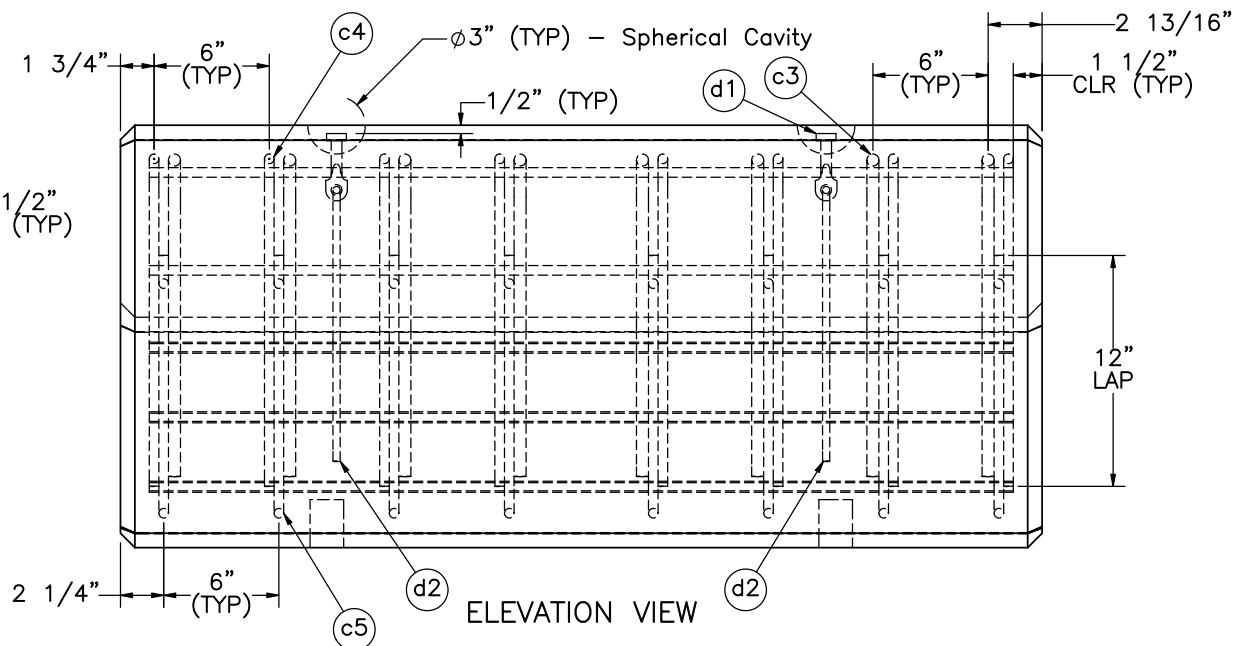
DATE:
6/10/2025

DRAWN BY:
RWB

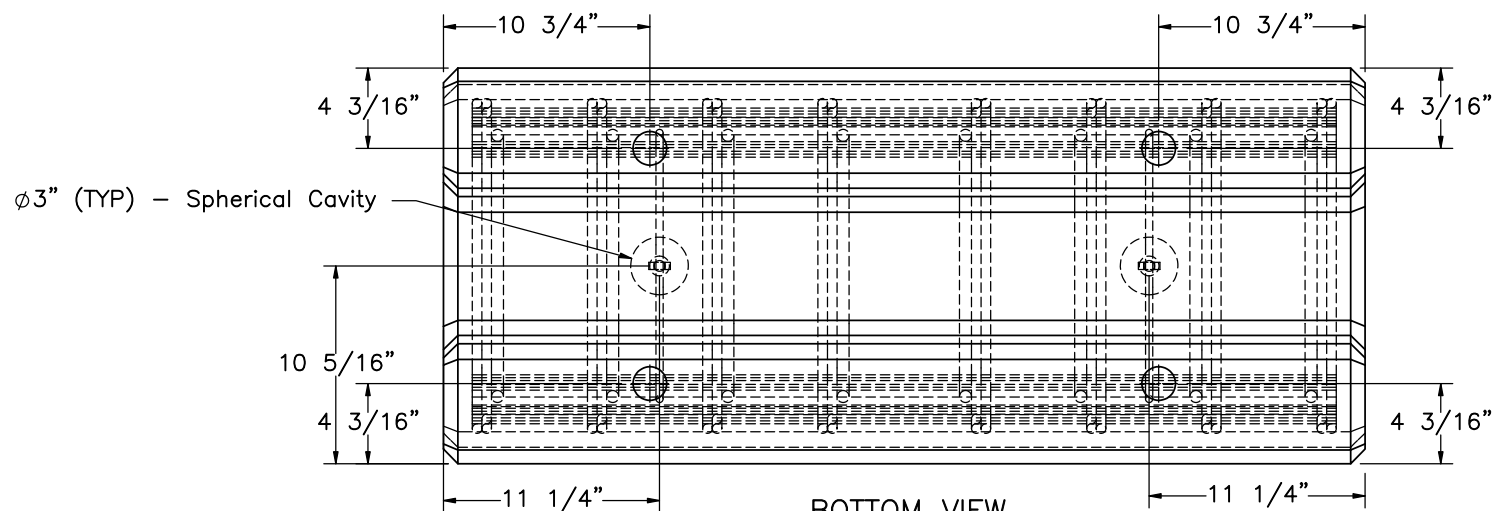
REV. BY:
JJQ/KAL/R
WB



PROFILE VIEW



ELEVATION VIEW



BOTTOM VIEW



Interlocking Portable
Concrete Barrier
Test Series MWPCB

Top End Section Reinforcement

DWG. NAME.
MWPCB_R10

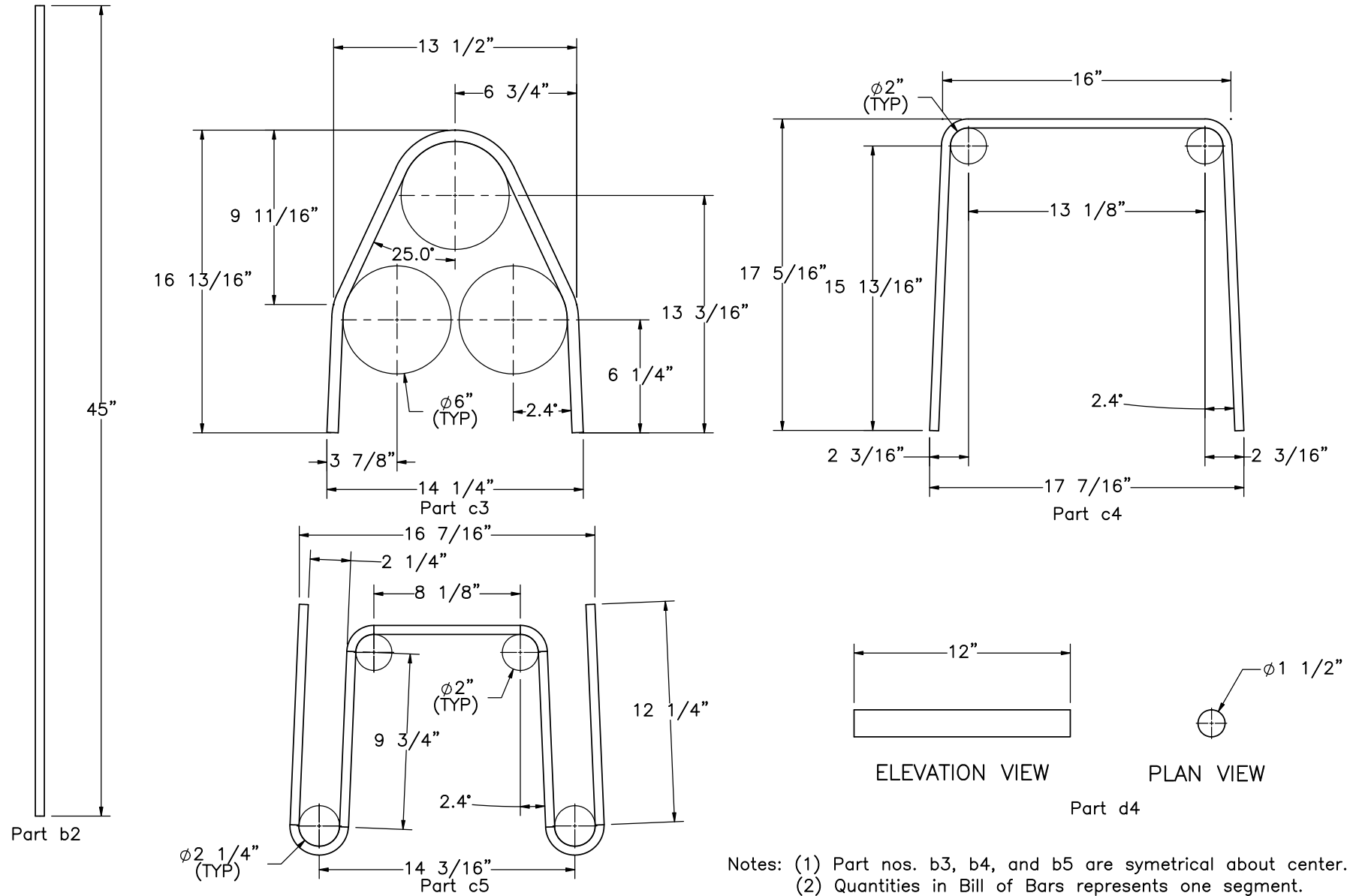
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SHEET:
9 of 16

DATE:
6/10/2025

DRAWN BY:
RWB

REV. BY:
JJQ/KAL/RWB

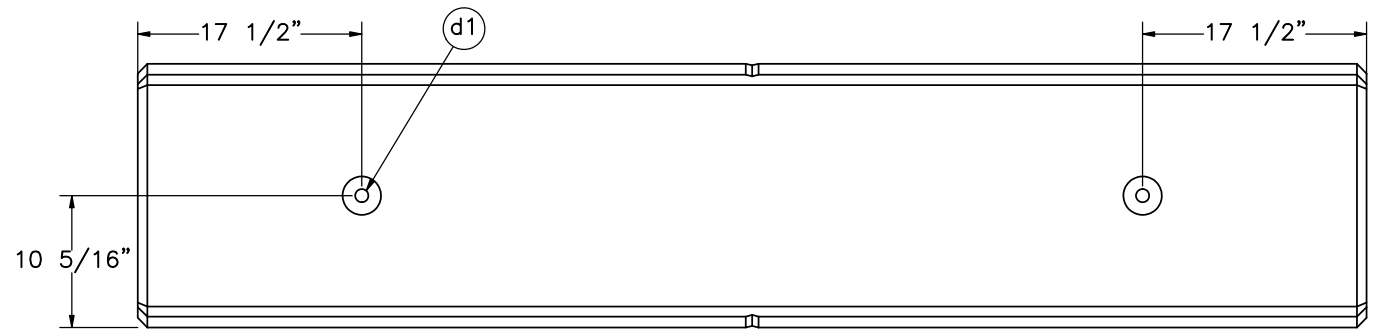


Bill of Bars					
Item No.	Bar No.	QTY.	Lap Length	Unbent Length	Material Specification
b2	#4	16	—	—	ASTM A615 Gr. 80
c3	#5	8	—	36 1/4"	ASTM A615 Gr. 80
c4	#4	8	12"	48 5/8"	ASTM A615 Gr. 80
c5	#4	8	12"	63 1/2"	ASTM A615 Gr. 80

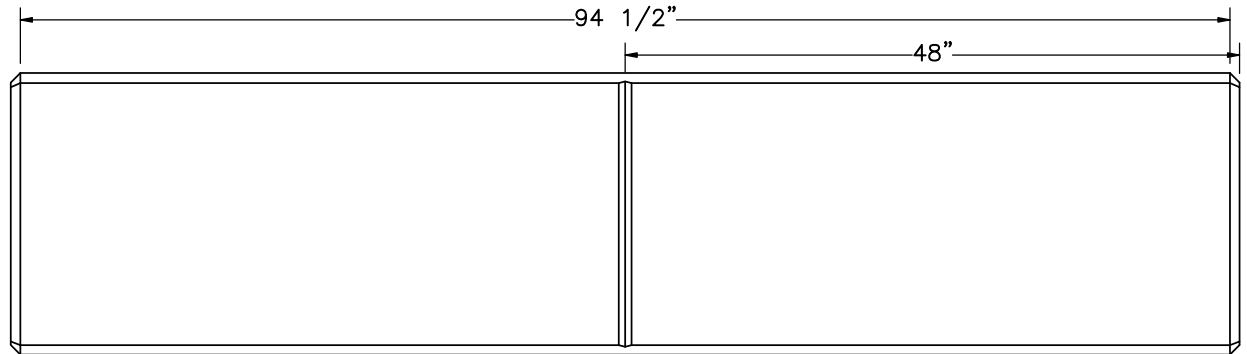
MWRSF

Midwest Roadside
Safety Facility

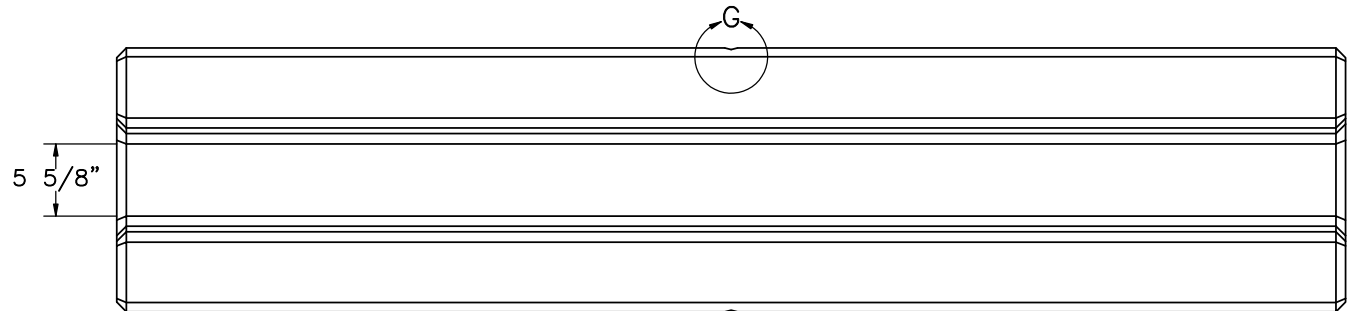
Interlocking Portable Concrete Barrier Test Series MWPCB		SHEET: 10 of 16
Rebar Details		DATE: 6/10/2025
DWG. NAME: MWPCB_R10		DRAWN BY: RWB
SCALE: 1:8 UNITS: in.		REV. BY: JJQ/KAL/RWB



PLAN VIEW



ELEVATION VIEW



BOTTOM VIEW

Part c1



Midwest Roadside
Safety Facility

Interlocking Portable
Concrete Barrier
Test Series MWPCB

Top Assembly

DWG. NAME.
MWPCB_R10

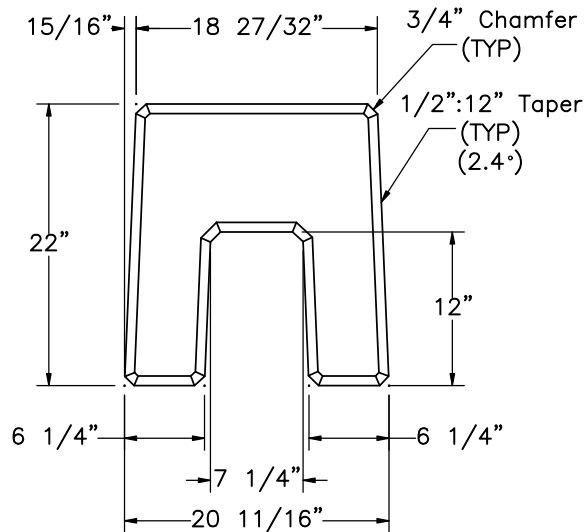
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SHEET:
11 of 16

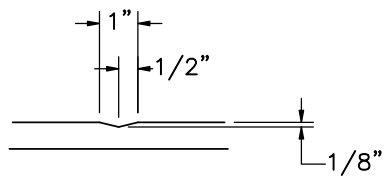
DATE:
6/10/2025

DRAWN BY:
RWB

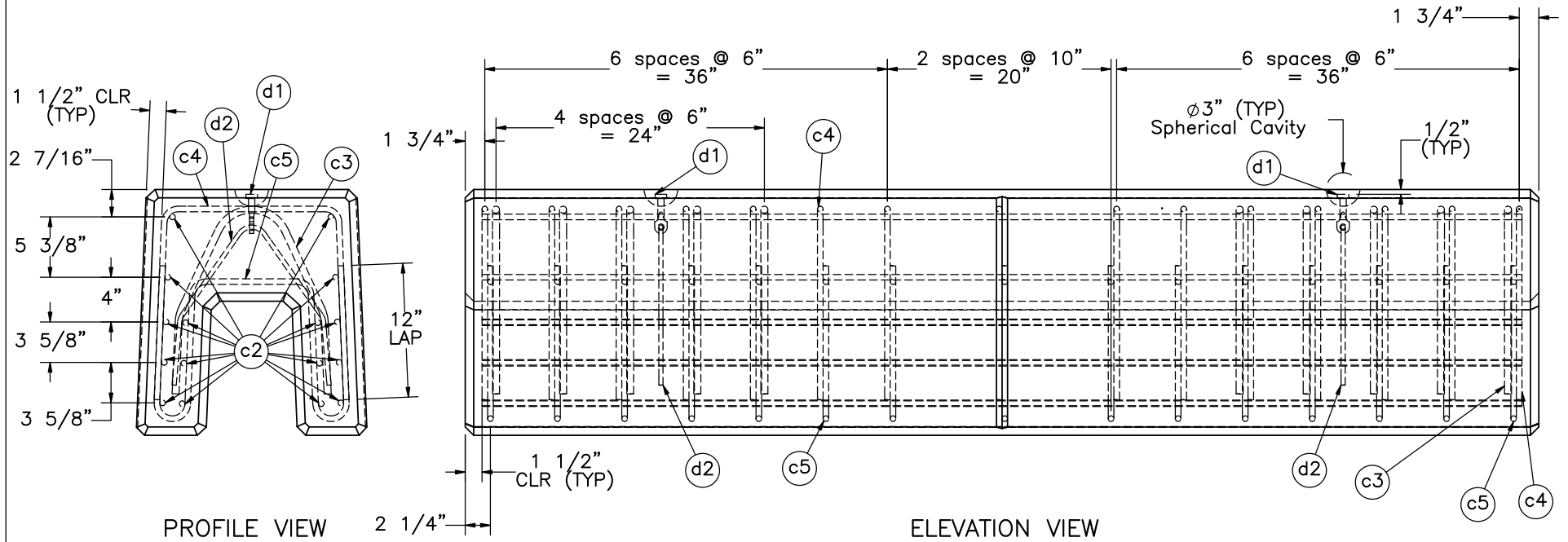
REV. BY:
JJQ/KAL/RWB



PROFILE VIEW



DETAIL G
SCALE 1 : 5



Midwest Roadside
Safety Facility

Interlocking Portable
Concrete Barrier
Test Series MWPCB

Top Assembly Reinforcement

DWG. NAME.
MWPCB_R10

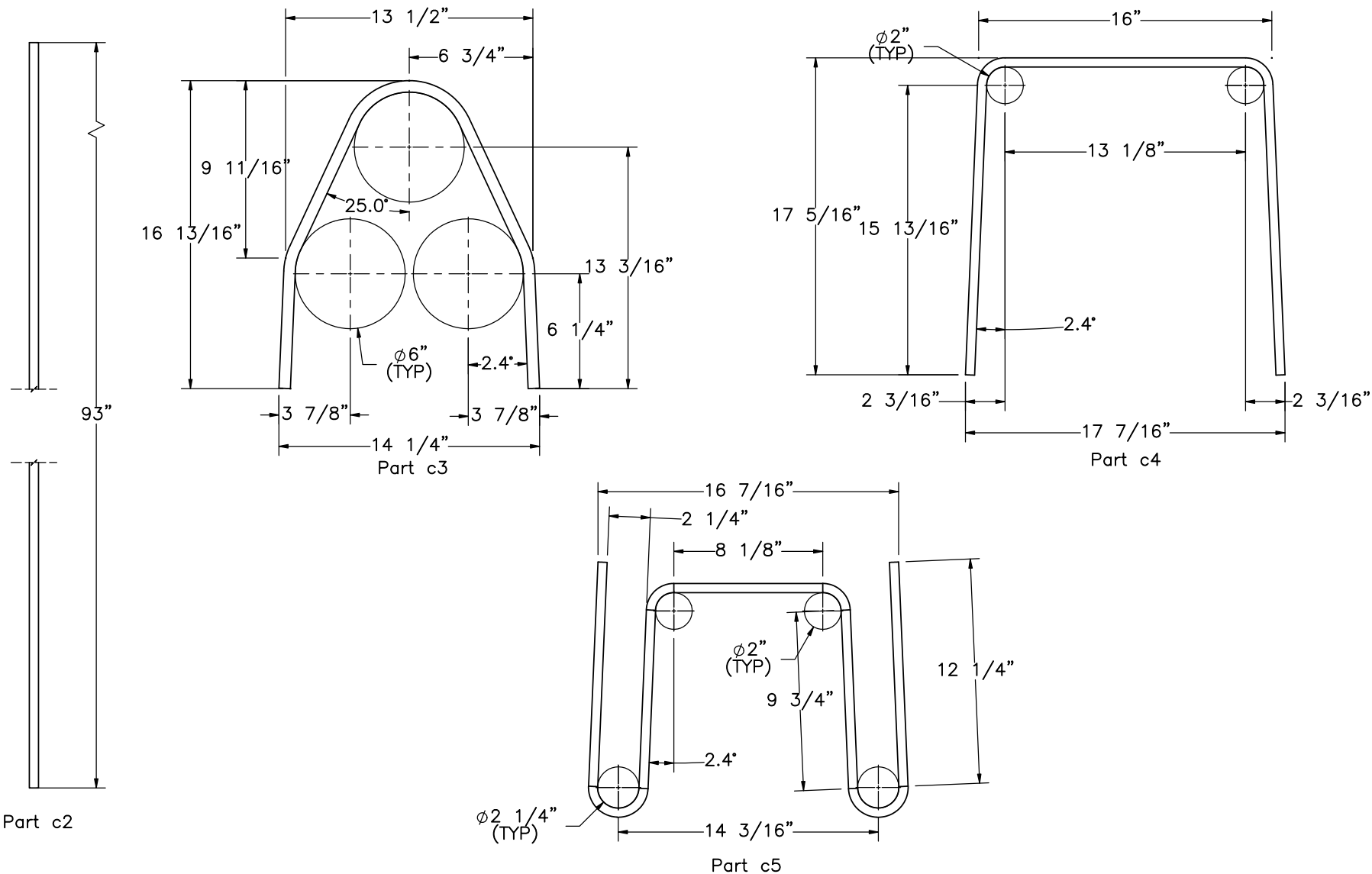
SCALE: 1:14
UNITS: in.

SHEET:
12 of 16

DATE:
6/10/2025

DRAWN BY:
RWB

REV. BY:
JJQ/KAL/RWB



- Notes: (1) Part nos. b3, b4, and b5 are symmetrical about center.
 (2) Quantities in Bill of Bars represents one segment.

Bill of Bars					
Item No.	Bar No.	QTY.	Lap Length	Unbent Length	Material Specification
c2	#4	16	—	—	ASTM A615 Gr. 80
c3	#5	10	—	36 1/4"	ASTM A615 Gr. 80
c4	#4	15	12"	48 5/8"	ASTM A615 Gr. 80
c5	#4	15	12"	63 1/2"	ASTM A615 Gr. 80



Midwest Roadside
Safety Facility

Interlocking Portable
Concrete Barrier
Test Series MWPCB

Rebar Details

DWG. NAME.
MWPCB_R10

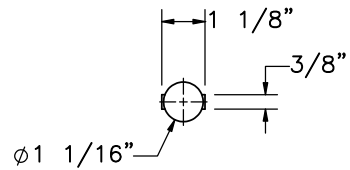
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SHEET:
13 of 16

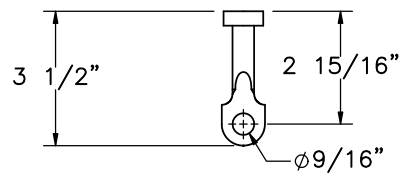
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6/10/2025

DRAWN BY:
RWB

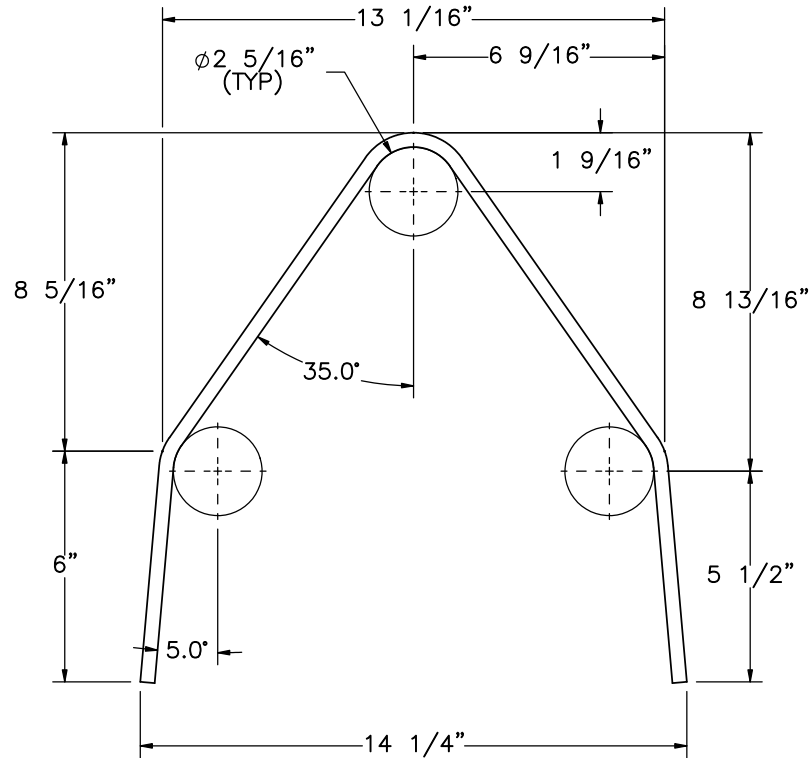
REV. BY:
JJQ/KAL/RWB



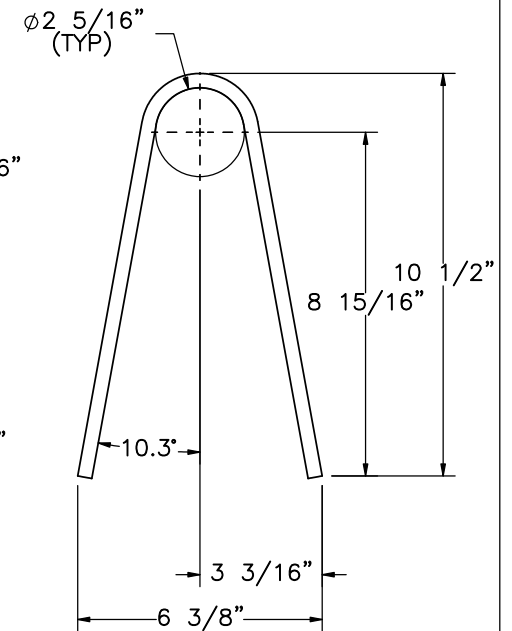
PLAN VIEW



ELEVATION VIEW
Part d1



Part d2



Part d3

Notes: (1) Part nos. d2 and d3 are symetrical about center.

Bill of Bars

Item No.	Bar No.	QTY.	Lap Length	Unbent Length	Material Specification
d2	#3	52	—	32 5/8"	ASTM A615 Gr. 60
d3	#3	50	—	22 1/2"	ASTM A615 Gr. 60



Midwest Roadside
Safety Facility

Interlocking Portable
Concrete Barrier
Test Series MWPCB

Lift Hardware Details

DWG. NAME.
MWPCB_R10

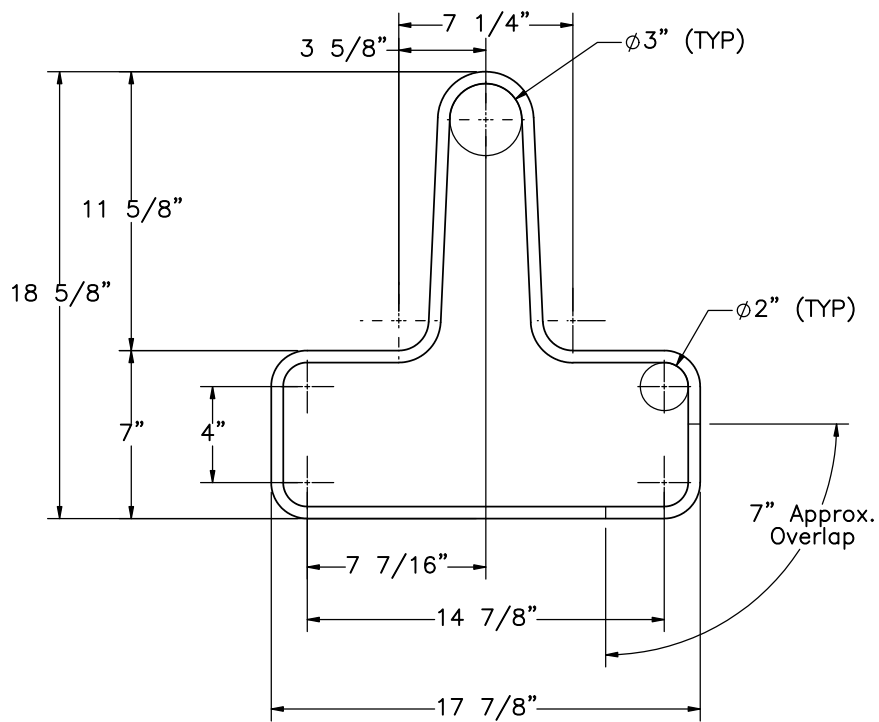
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UNITS: in.

SHEET:
14 of 16

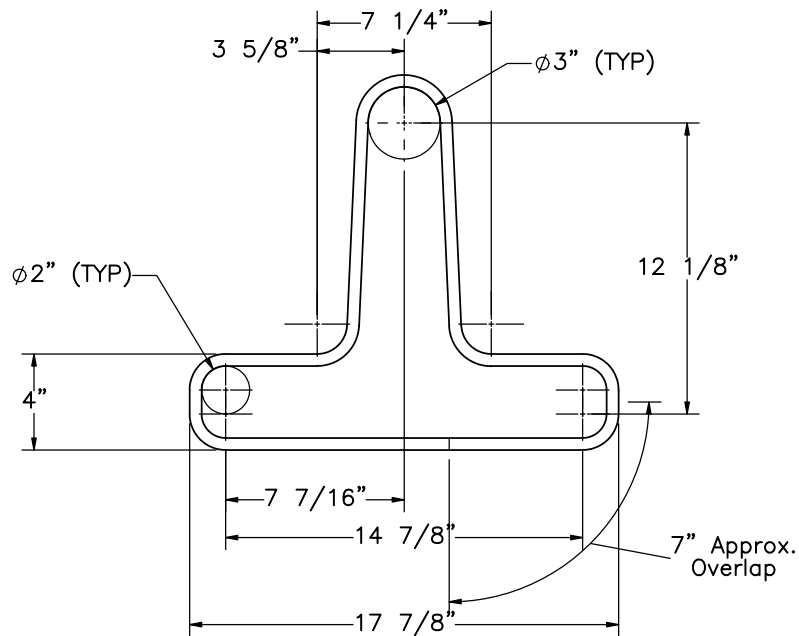
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6/10/2025

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RWB

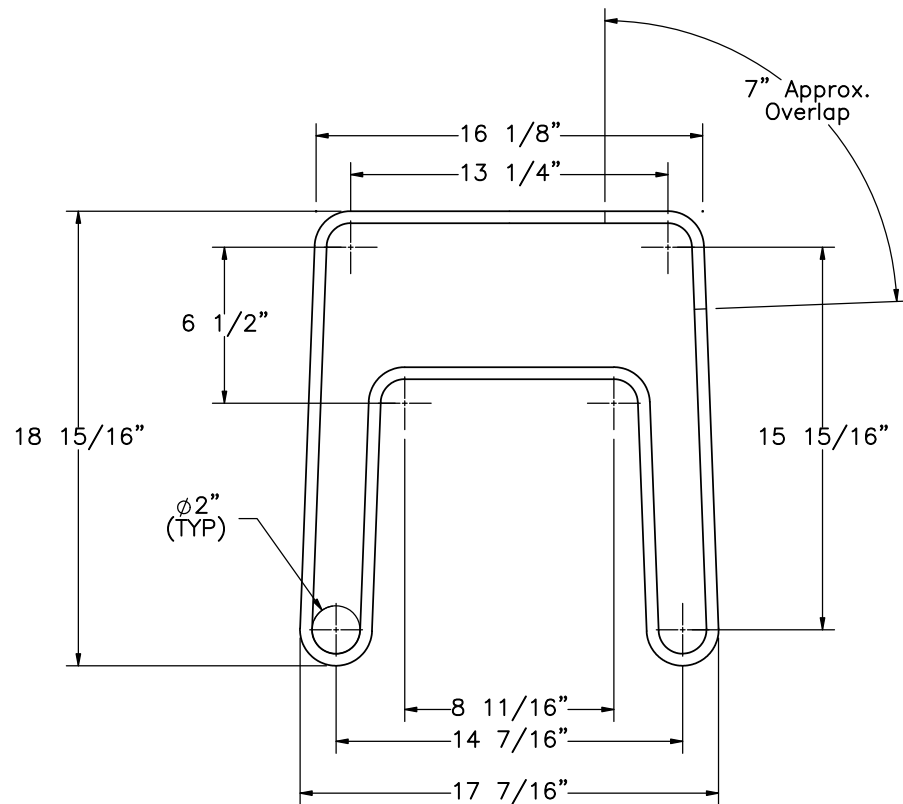
REV. BY:
JJQ/KAL/RWB



Part a9
Replaces parts a4 and a5



Part a10
Replaces parts a5 and a7



Part b6
Replaces parts c4 and c5

- Notes: (1) Part nos. a9, a10, and b6 are symmetrical about center.
(2) Quantities in Bill of Bars represents one segment.

Optional Bill of Bars

Item No.	Bar No.	QTY.	Lap Length	Unbent Length	Material Specification
a9	#4	9	7"	72 1/8"	ASTM A615 Gr. 60
a10	#4	6	7"	65 1/8"	ASTM A615 Gr. 60
b6	#4	15	7"	95 1/2"	ASTM A615 Gr. 60



Midwest Roadside
Safety Facility

Interlocking Portable
Concrete Barrier
Test Series MWPCB

Optional Bars

DWG. NAME.
MWPCB_R10

SCALE: 1:8
UNITS: in.

SHEET:
15 of 16

DATE:
6/10/2025

DRAWN BY:
RWB

REV. BY:
JJQ/KAL/RWB

Item No.	QTY.	Description	Material Specification	Treatment Specification
a1	25	Reinforced Concrete Bottom Assembly	Min f'c = 5,000 psi	—
a2	300	#4 Rebar, 93" Total Length	ASTM A615 Gr. 80	—
a4	225	#4 Rebar, 59" Total Unbent Length	ASTM A615 Gr. 80	—
a5	375	#4 Rebar, 43 5/8" Total Unbent Length	ASTM A615 Gr. 80	—
a6	100	#4 Rebar, 62 1/2" Total Unbent Length	ASTM A615 Gr. 80	—
a7	150	#4 Rebar, 53" Total Unbent Length	ASTM A615 Gr. 80	—
a8	100	#4 Rebar, 55 3/8" Total Unbent Length	ASTM A615 Gr. 80	—
b1	2	Reinforced Concrete End Section	Min f'c = 5,000 psi	—
b2	32	#4 Rebar, 45" Total Length	ASTM A615 Gr. 80	—
c3	16	#5 Rebar, 36 1/4" Total Unbent Length	ASTM A615 Gr. 80	—
c4	16	#4 Rebar, 48 5/8" Total Unbent Length	ASTM A615 Gr. 80	—
c5	16	#4 Rebar, 63 1/2" Total Unbent Length	ASTM A615 Gr. 80	—
c1	24	Reinforced Concrete Top Assembly	Min f'c = 5,000 psi	—
c2	384	#4 Rebar, 93" Total Length	ASTM A615 Gr. 80	—
c3	240	#5 Rebar, 36 1/4" Total Unbent Length	ASTM A615 Gr. 80	—
c4	360	#4 Rebar, 48 5/8" Total Unbent Length	ASTM A615 Gr. 80	—
c5	360	#4 Rebar, 63 1/2" Total Unbent Length	ASTM A615 Gr. 80	—
d1	102	Meadow Burke DB-53 Dogbone Eye Anchor	2-Ton	Hot-Dip Galvanized
d2	52	DB-53 Dogbone Rebar Reinforcing Pin — 2 Ton	ASTM A615 Gr. 60	—
d3	50	DB-53 Dogbone Rebar Reinforcing Pin — 2 Ton	ASTM A615 Gr. 60	—
d4	4	1 1/2" Dia., 12" Total Length Pin	ASTM A36	—



Midwest Roadside
Safety Facility

Interlocking Portable
Concrete Barrier
Test Series MWPCB

Bill of Materials

DWG. NAME.
MWPCB_R10

SCALE: 1:768
UNITS: in.

SHEET:
16 of 16

DATE:
6/10/2025

DRAWN BY:
RWB

REV. BY:
JJQ/KAL/RWB