

CITY OF MENTOR MENTOR MARSH PUBLIC ACCESS PROJECT PHASE 1 & 2 8365 HARBOR DRIVE, MENTOR, OHIO 44060 LAKE COUNTY, OHIO MAY 2022

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- DAVID A. SWIGER, P.E., CITY ENGINEER
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- KENN KAMINSKI, DIRECTOR OF PARKS, RECREATION AND PUBLIC FACILITIES

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- JULIE SCHIAVONI, CLERK OF COUNCIL



PLANS PREPARED BY:

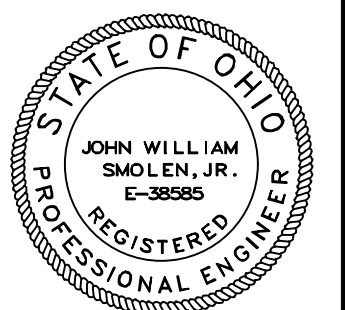
SMOLEN ENGINEERING, LTD.
1876 STATE ROUTE 46 NORTH
JEFFERSON, OHIO 44047

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John Smolen
JOHN W. SMOLEN P.E., P.S.

5/11/2022
DATE



1876 State Route 46 North, Jefferson, OH 44047

NO.	DATE	REVISION

PROJECT NO.: 5E1977 SCALE: DATE: 5/11/22 DESIGN: DRAWN: CHECK: JWS	MENTOR MARSH PUBLIC ACCESS PLAN DESIGN DRAWINGS MENTOR, OHIO TITLE SHEET
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SHEET NO. **1**

GENERAL ESTIMATED QUANTITIES

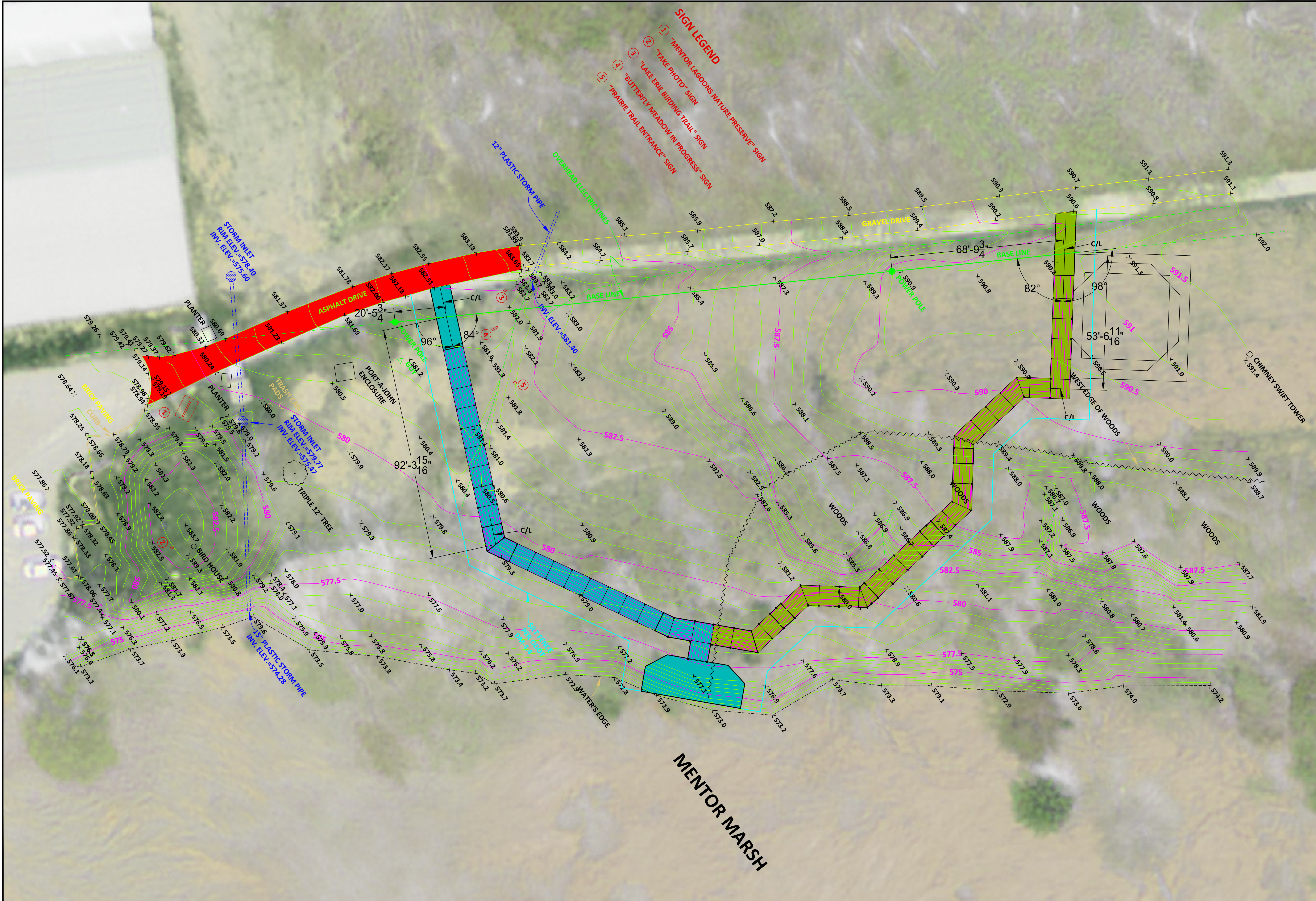
ODOT ITEM	QUANTITY (PHASE I)	QUANTITY (PHASE II)	UNIT	DESCRIPTION (MATERIALS PROVIDED BY MENTOR CITY WHERE NOTED)
201	1	1	LUMP SUM	CLEARING AND GRUBBING
203	4	4	CU. YD.	EXCAVATION AND STRIPPING TOP SOIL FOR CONCRETE RAMPS
203	22	22	CU. YD.	EMBANKMENT FOR CONCRETE RAMPS
204	28	28	SQ. YD.	SUBGRADE COMPACTION FOR CONCRETE RAMPS
304	4.6	4.6	CU. YD.	AGGREGATE BASE FOR CONCRETE RAMPS
452	24	24	SQ. YD.	NON-REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT FOR CONCRETE RAMPS
659	163	314	SQ. YD.	SEEDING AND MULCHING (ODOT SLOPE MIXTURE CLASS 3A)
659	16	31	SQ. YD.	REPAIR SEEDING MULCHING
659	40	80	POUNDS	COMMERCIAL FERTILIZER
659	0.11	0.22	TONS	MULCHING (STRAW ONLY)
601	9.3		CU. YD.	DUMPED ROCK FILL, TYPE D W/FILTER
611	30	15	LINEAR FEET	12" CONDUIT - STORM SEWER TYPE B
507	30		EACH	INSTALLATION OF PRE-BORED HOLES
507	30		EACH	INSTALLATION OF TIMBER PILINGS (PILINGS PROVIDED BY MENTOR CITY)
SPECIAL 530	460	670	LINEAR FEET	INSTALLATION OF TIMBER POSTS (POSTS PROVIDED BY MENTOR CITY)
SPECIAL 530	50	75	POUNDS	HARDWARE (NAILS AND SCREWS)
SPECIAL 530	334	316	LINEAR FEET	INSTALLATION OF FLOOR BEAMS (FLOOR BEAMS AND JOIST HANGERS PROVIDED BY MENTOR CITY)
SPECIAL 530	2064	1531	LINEAR FEET	INSTALLATION OF JOISTS (JOISTS PROVIDED BY MENTOR CITY)
SPECIAL 530	2104	1936	SQ. FT.	INSTALLATION OF COMPOSITE DECKING (COMPOSITE DECKING AND CONCEALED FASTENERS PROVIDED BY MENTOR CITY)
SPECIAL 530	142	219	LINEAR FEET	INSTALLATION OF BARRIER RAILING (LUMBER ONLY, PROVIDED BY MENTOR CITY)
SPECIAL 530	426	557	SQ. FT.	INSTALLATION OF BARRIER RAILING PANELS
SPECIAL 530	363	311	LINEAR FEET	INSTALLATION OF PIPE RAILING AND CURB
SPECIAL 530		557	LINEAR FEET	INSTALLATION OF HAND RAILING
SPECIAL 530	4	4	EACH	SIGN SUPPORTS (SIGN BOARDS BY MENTOR CITY)
SPECIAL 530	1	1	LUMP SUM	SITE PRECONSTRUCTION VIDEO
SPECIAL 530	2		EACH	CONSTRUCT BENCHES (LUMBER PROVIDED BY MENTOR CITY)
SPECIAL 530	100		LINEAR FEET	INSTALL PILE BRACING (LUMBER PROVIDED BY MENTOR CITY)
511	1.33	1.33	CU. YD.	CLASS QC1-CONCRETE-4.0 KSI
509	156	156	POUNDS	REINFORCING STEEL
514	640	986	SQ. FT.	PAINTING MISC. STAINING OF TIMBER RAILING
513	1879	1477	POUNDS	INSTALL STRUCTURAL STEEL: PLATES, ANGLES AND ASSEMBLIES (PROVIDED BY MENTOR CITY)
623	1	1	LUMP SUM	CONSTRUCTION LAYOUT STAKES BY OHIO LICENSED SURVEYOR
832	1	1	LUMP SUM	STORM WATER POLLUTION PREVENTION PLAN
832	271	267	LINEAR FEET	SILT FENCE



NO.	DATE	REVISION

PROJECT NO. 5E1977
 SCALE: _____
 DATE: 5/11/22
 DESIGN: _____
 DRAWN: _____
 CHECK: JWS

MENTOR MARSH PUBLIC ACCESS PLAN
 DESIGN DRAWINGS
 MENTOR, OHIO
 ESTIMATED QUANTITIES

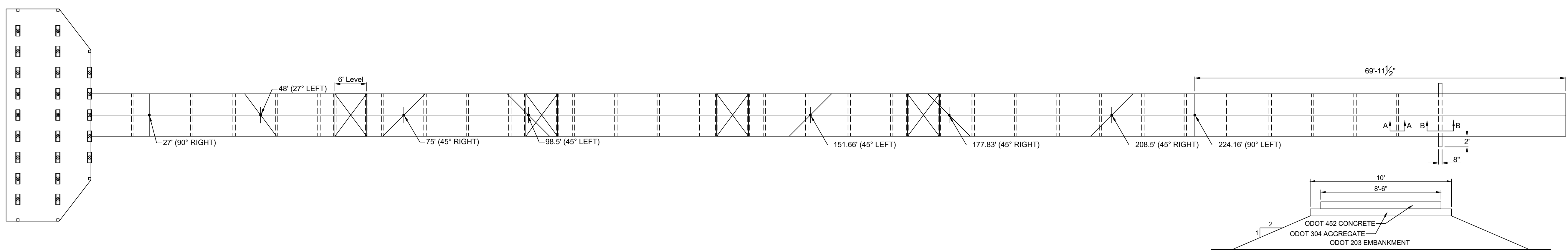


MENTOR MARSH

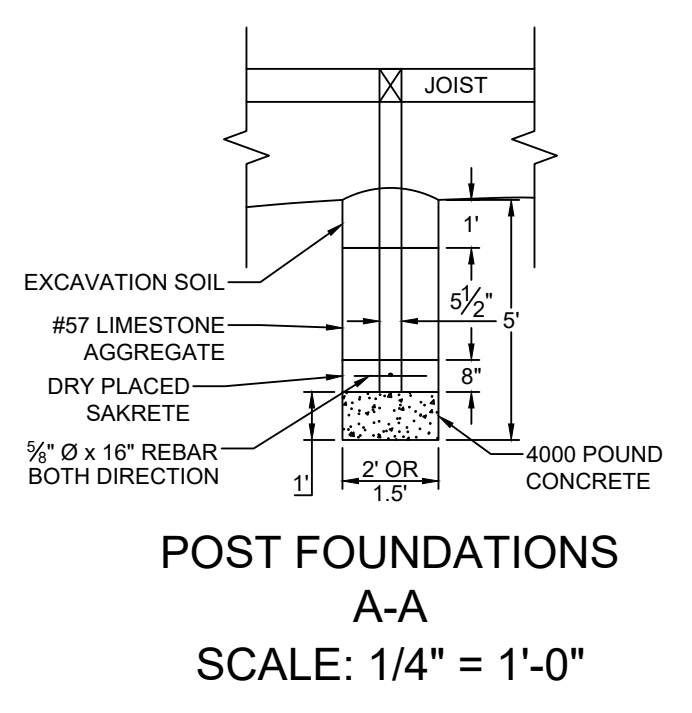
NO.	DATE	REVISION

PROJECT NO.: SEL19177
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 DRAWN: ZN & CAS
 CHECK: JMS

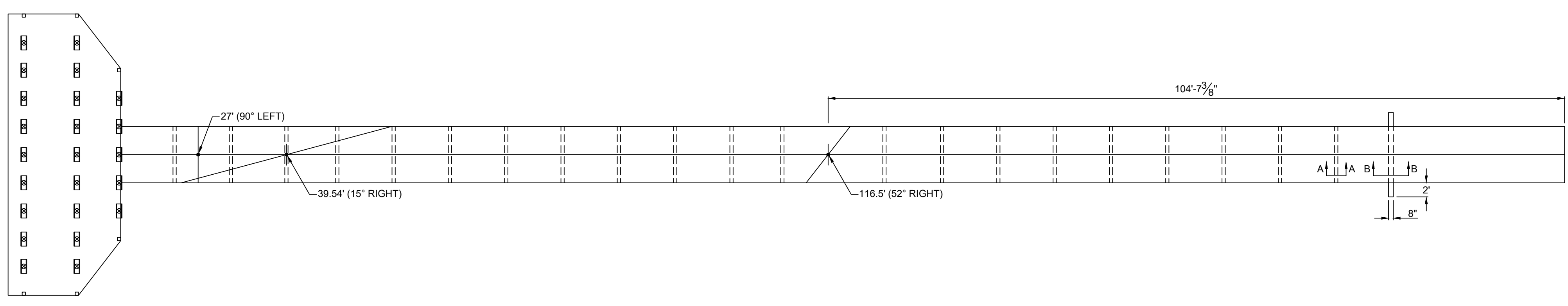
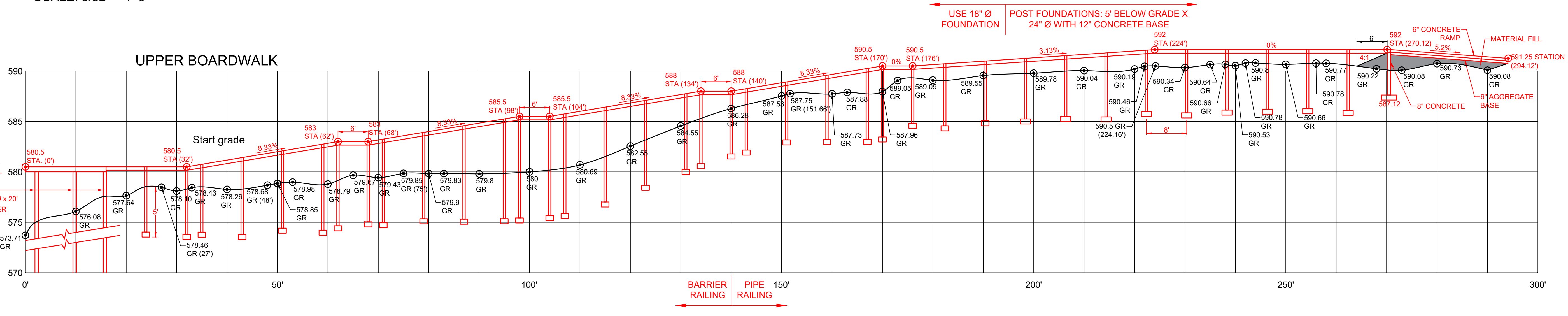
MENTOR MARSH PUBLIC ACCESS PLAN
 DESIGN DRAWINGS
 MENTOR, OHIO
 SITE PLAN



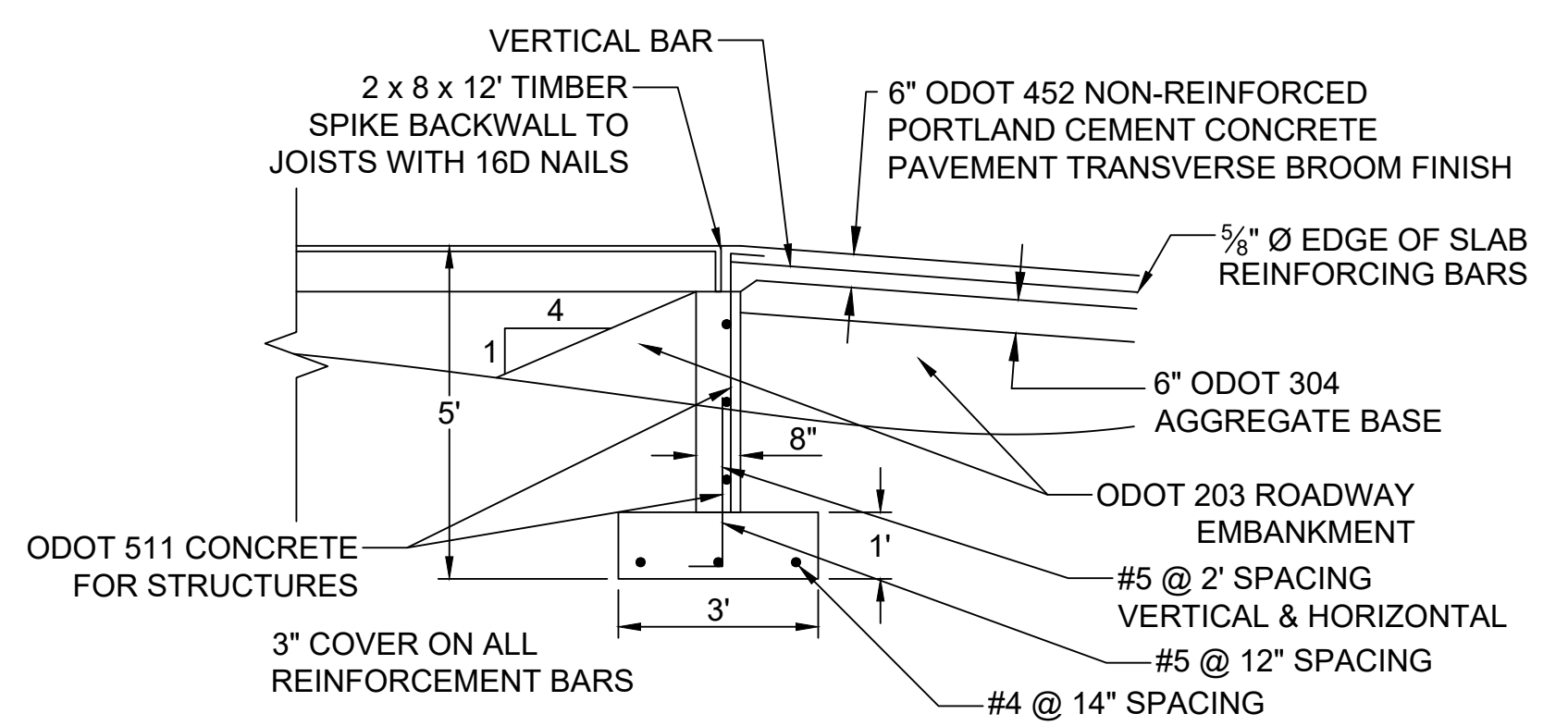
SCALE: 3/32" = 1'-0"



POST FOUNDATIONS
 A-A
 SCALE: 1/4" = 1'-0"

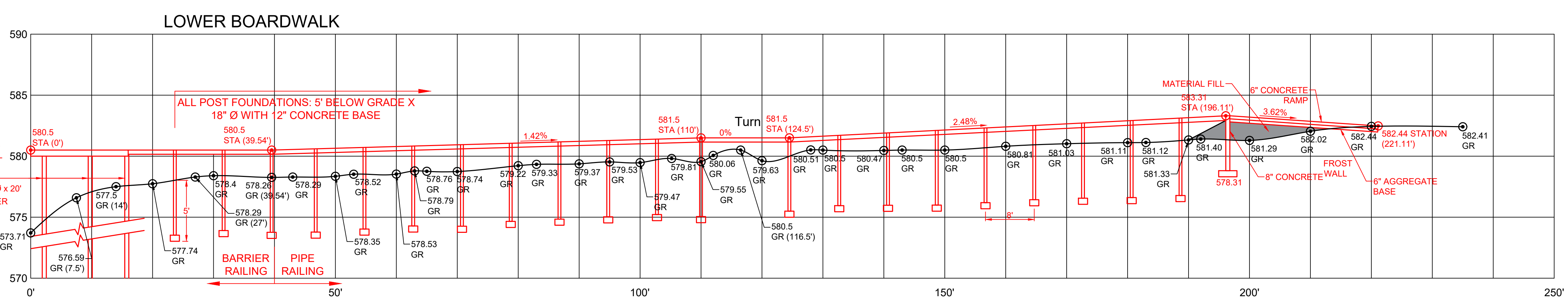
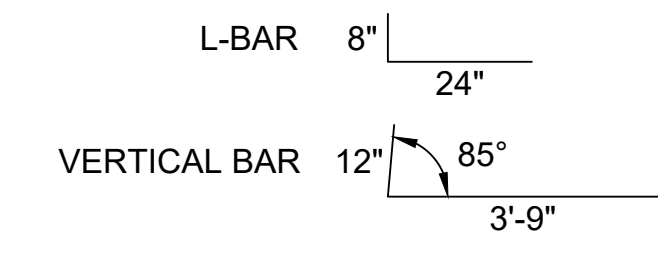


SCALE: 3/32" = 1'-0"



CONCRETE RAMPS
 B-B

SCALE: 3/8" = 1'-0"

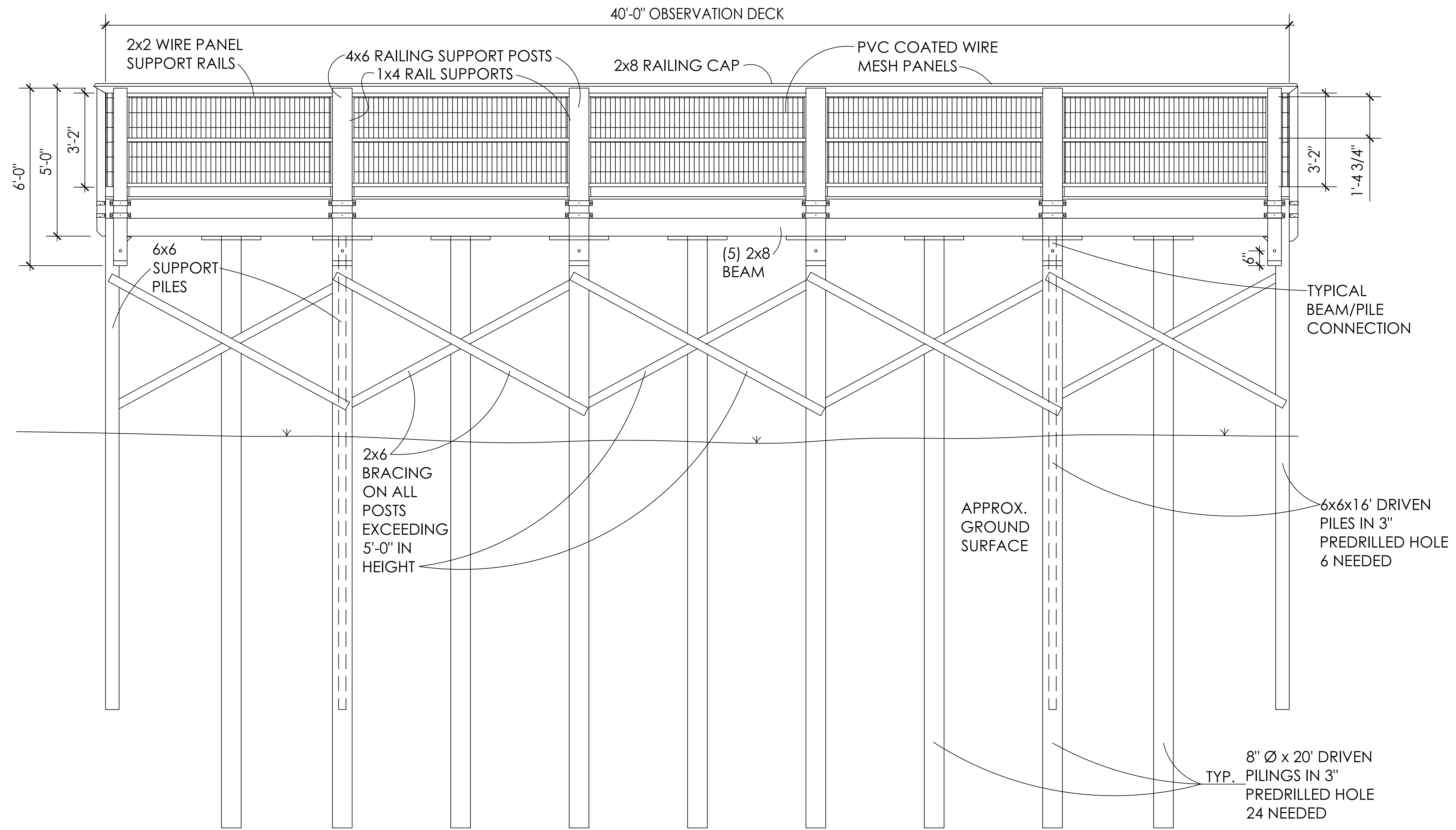


ODOT 509 REINFORCING STEEL REBAR CHART					
DESCRIPTION	NO.	LENGTH	TOTAL LENGTH	WT/FT	WEIGHT
FOOTING BARS	3 EA	x 11'-6"	34'-6"	0.668	23.0
L-BAR	11 EA	x 2'-8"	29'-4"	1.043	30.6
VERTICAL BAR	6 EA	x 4'-9"	28'-6"	1.043	29.7
HORIZONTAL BAR	2 EA	x 11'-6"	23'-0"	1.043	24.0
EDGE OF SLAB	2 EA	x 23'-6"	47'-0"	1.043	49.0
				TOTAL	156.3

NO.	DATE	REVISION

PROJECT NO.: SEL1977
 SCALE: 5/32"
 DATE: 5/3/22
 DESIGN: JWS
 DRAWN: CAS
 CHECK: JWS

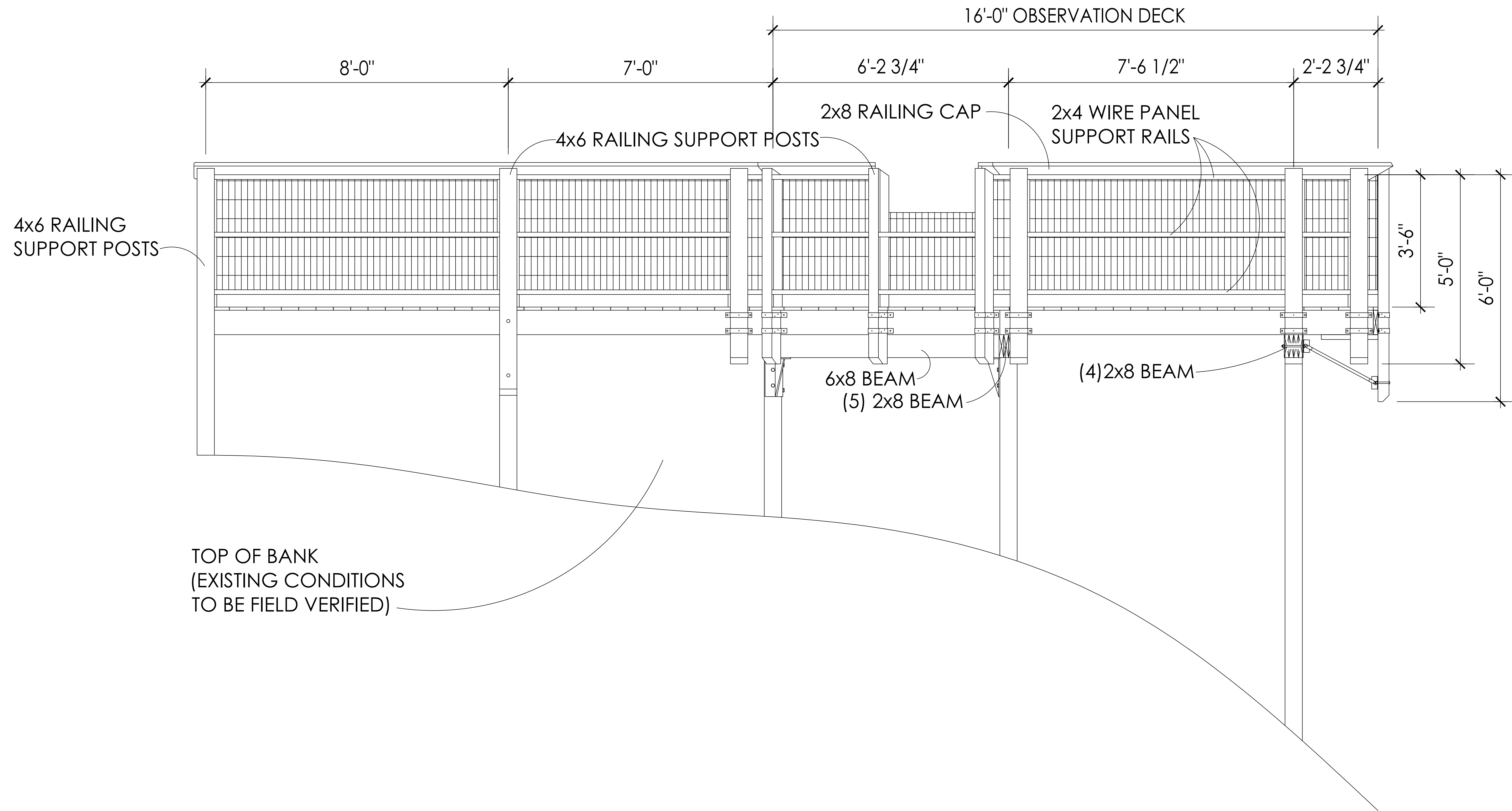
MENTOR MARSH PUBLIC ACCESS PLAN
 DESIGN DRAWINGS
 MENTOR, OHIO
 ELEVATION PROFILES



TIMBER PILING: 8" BUTT Ø x 20' SOUTHERN PINE CCA TREATED TO .6 LB./FT.³
FEDERAL SPECIFICATION TT-W-571 AND ASTM D25

PROJECT NO.	NO.	DATE	REVISION
SEL1977			
SCALE: 1/2"=1'-0"			
DATE: 5/2/22			
DESIGN: JN			
DRAWN: JN			
CHECK: JWS			

MENTOR MARSH PUBLIC ACCESS PLAN
DESIGN DRAWINGS
MENTOR, OHIO
FRONT ELEVATION



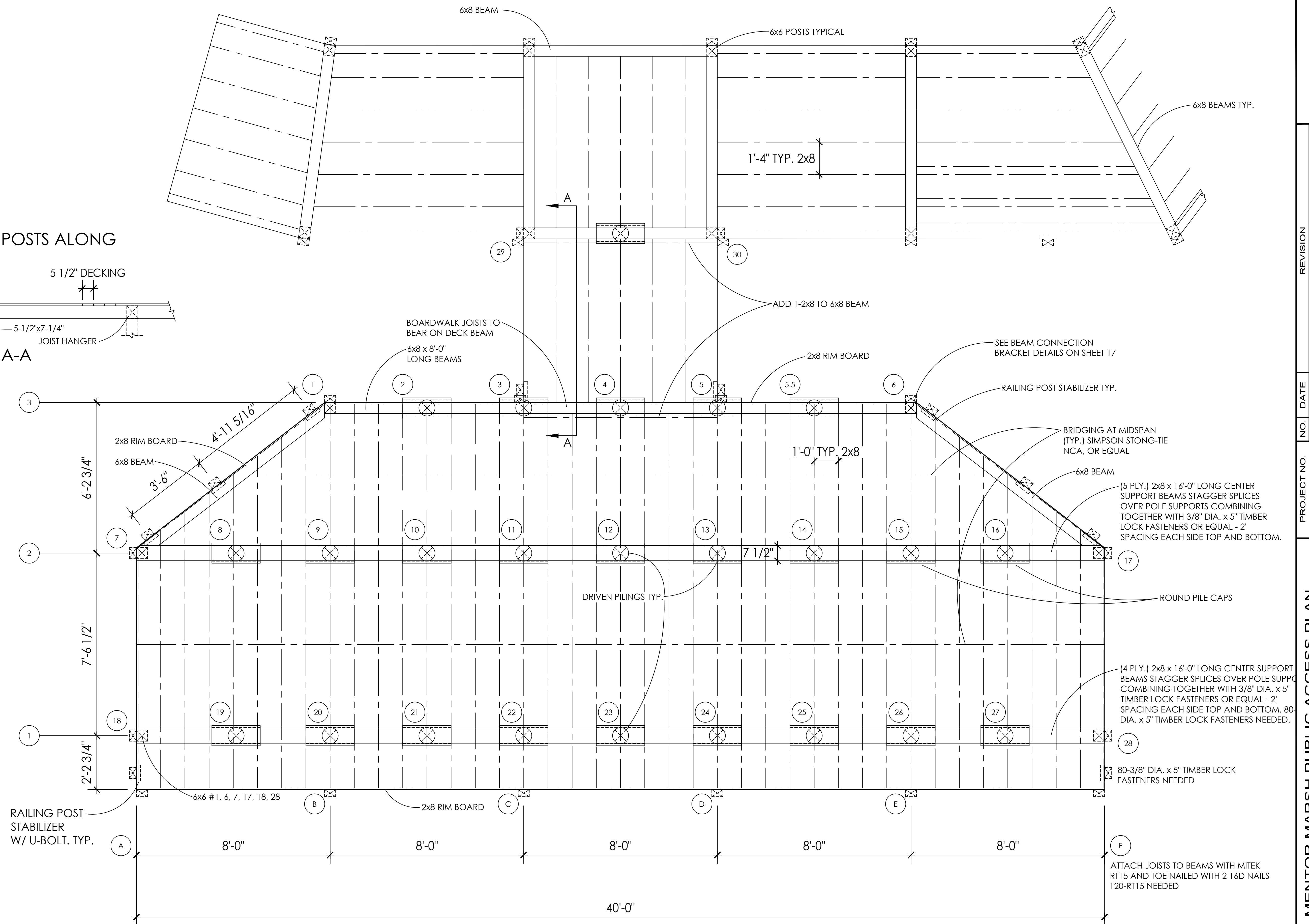
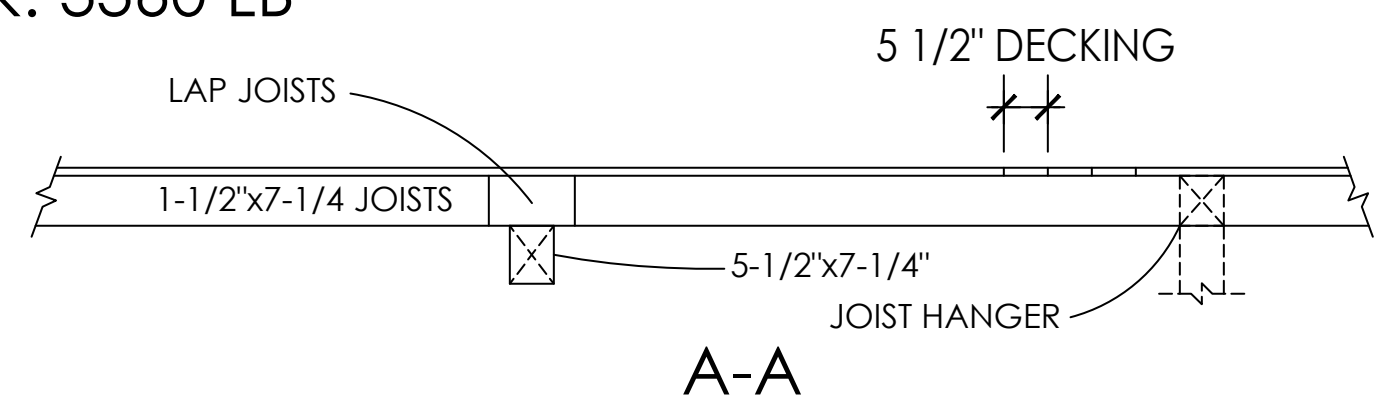
PROJECT NO.	NO.	DATE	REVISION
5E1977			
SCALE: 3/4"=1'-0"			
DATE: 4/20/22			
DESIGN: ZN			
DRAWN: ZN			
CHECK: JWS			

MENTOR MARSH PUBLIC ACCESS PLAN
 DESIGN DRAWINGS
 MENTOR, OHIO
 OBSERVATION DECK ELEVATION VIEW (LEFT SIDE)

LOADING ON FOUNDATION POSTS:

- 1: 1080 LB
- 2: 1116 LB
- 3: 1690 LB
- 4: 2390 LB
- 5: 1690 LB / 5.5 1116 LB
- 6: 1080 LB
- 7: 972 LB
- 8-16: 2520 LB
- 17: 972 LB
- 18: 585 LB
- 19-27: 2160 LB
- 28: 585 LB

LOADING FOR UNIFORM SPACED POSTS ALONG BOARDWALK: 3360 LB

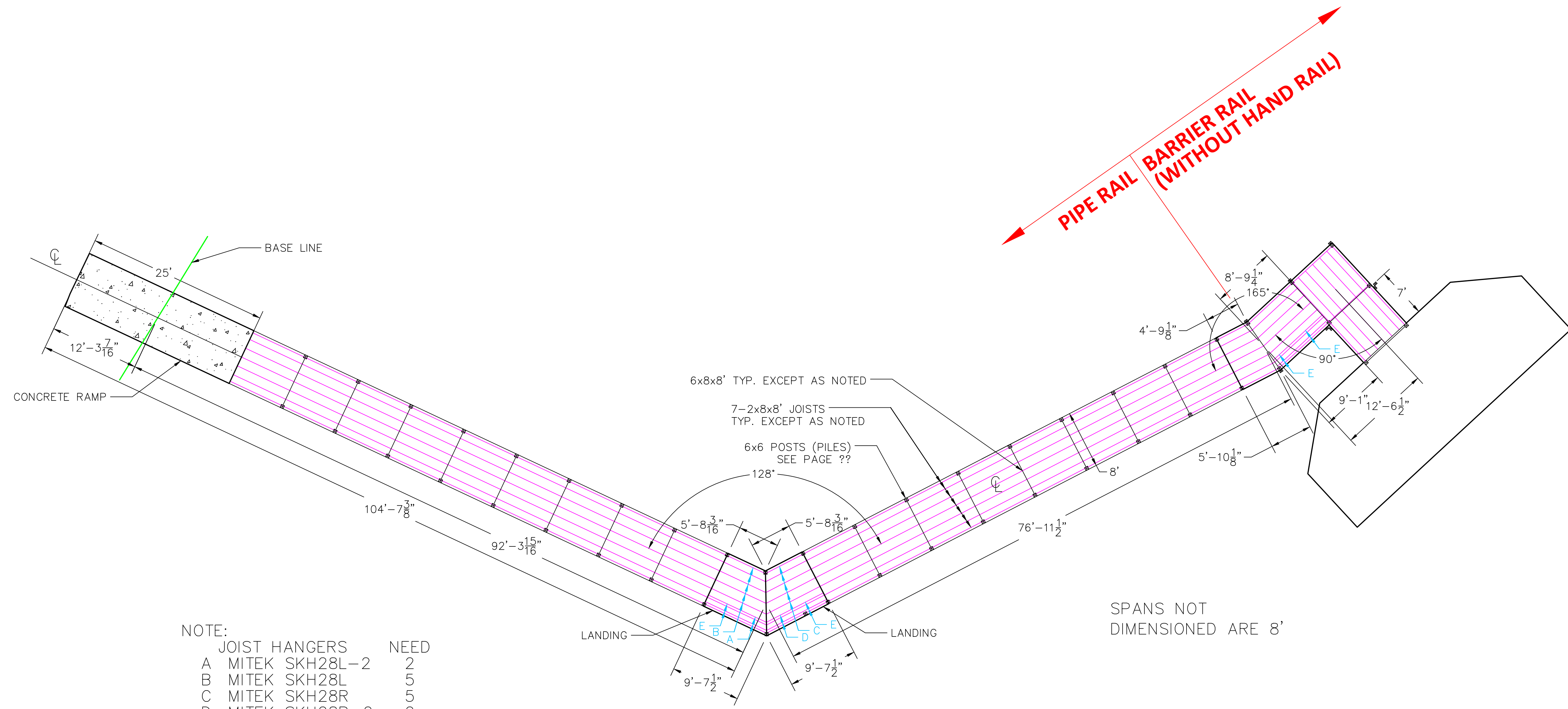
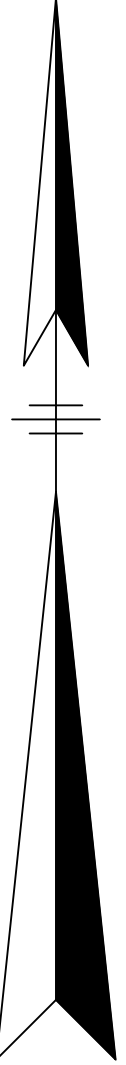


NO.	DATE	REVISION

PROJECT NO. SEL1977
SCALE: 1/2" = 1'-0"
DATE: 5/2/22
DESIGN: JWS
DRAWN: ZN
CHECK: JWS

MENTOR MARSH PUBLIC ACCESS PLAN
DESIGN DRAWINGS
MENTOR, OHIO
FRAMING PLAN

NORTH



NOTE:

JOIST HANGERS	NEED
A MITEK SKH28L-2	2
B MITEK SKH28L	5
C MITEK SKH28R	5
D MITEK SKH28R-2	2
E MITEK HUS28-2	8
ALL OTHER LOCATIONS USE MITEK HUS28	294

REVISION

NO. DATE

PROJECT NO. SEL1977

SCALE: 1/8" = 1'-0"

DATE: 5/10/22

DESIGN: JWS

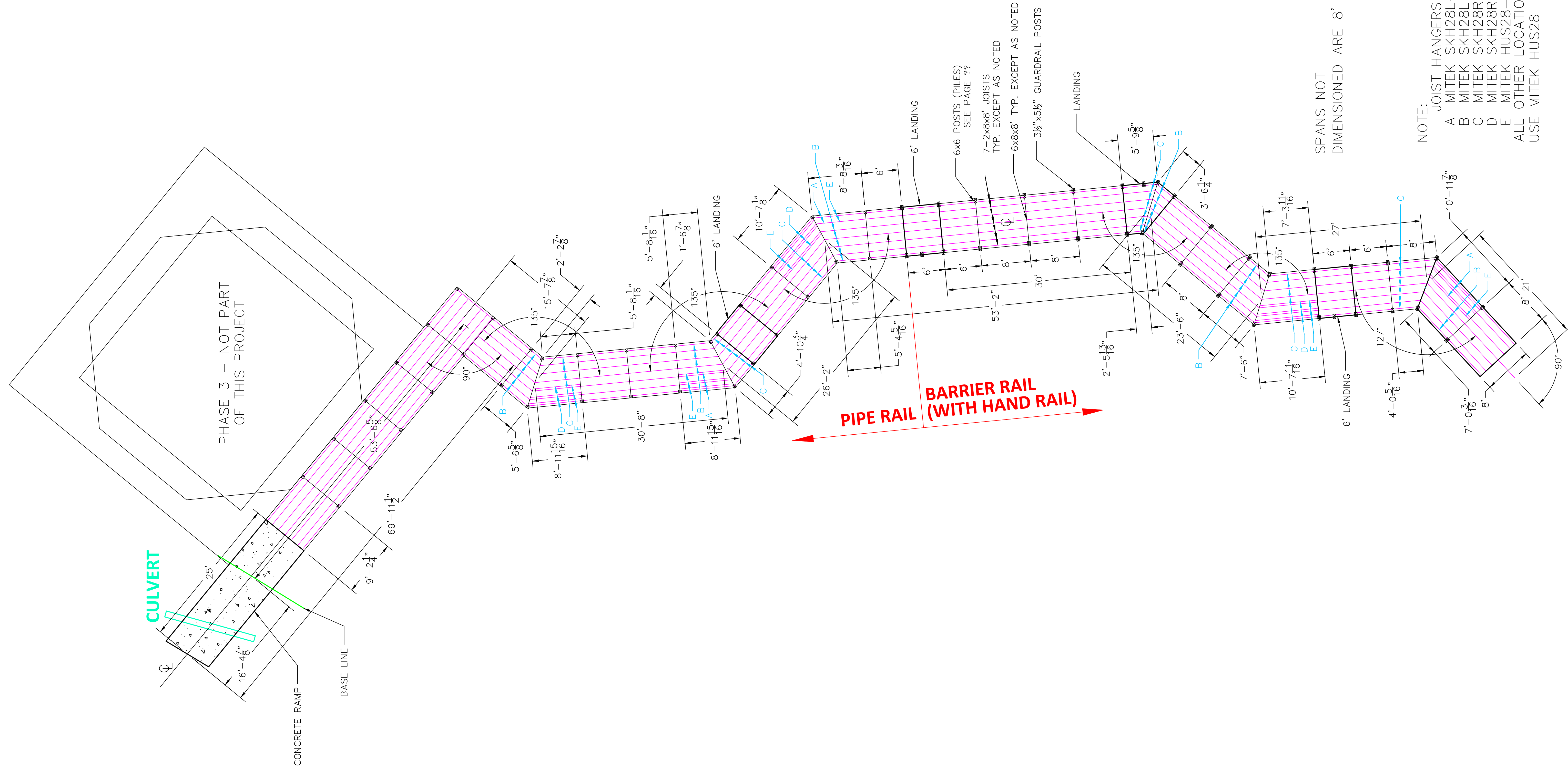
DRAWN: JWS

CHECK: JWS

MENTOR MARSH PUBLIC ACCESS PLAN
 DESIGN DRAWINGS
 MENTOR, OHIO
 LOWER BOARDWALK FRAMING PLAN (PHASE I)

SHEET NO.

NORTH



PHASE 3 - NOT PART OF THIS PROJECT

CULVERT

CONCRETE RAMP

BASE LINE

PIPE RAIL
BARRIER RAIL
(WITH HAND RAIL)

SPANS NOT DIMENSIONED ARE 8'

NOTE:

JOIST HANGERS	NEED
A MITEK SKH28L-2	6
B MITEK SKH28L	36
C MITEK SKH28R	34
D MITEK SKH28R-2	9
E MITEK HUS28-2	22
ALL OTHER LOCATIONS USE MITEK HUS28	196

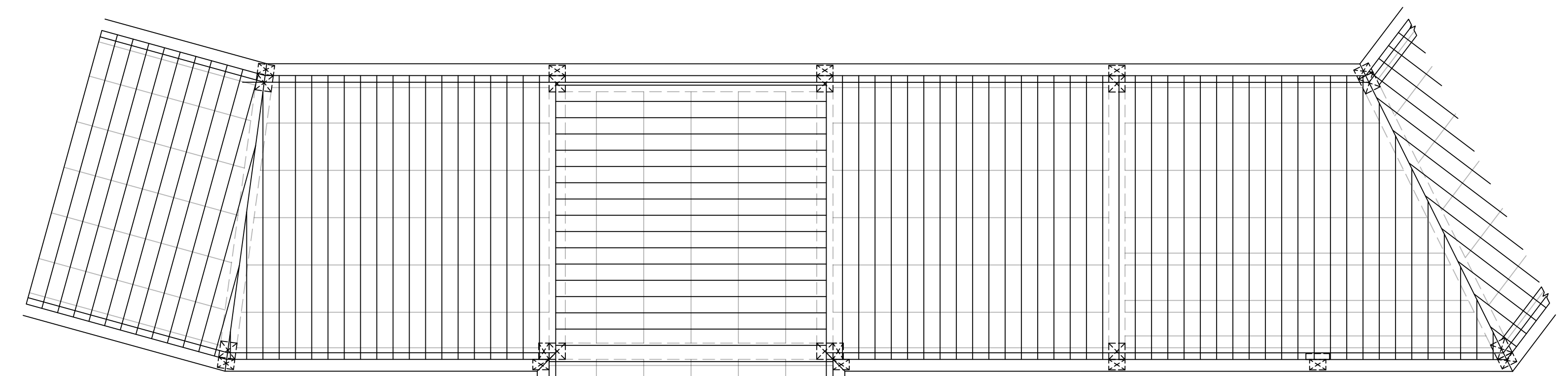
MENTOR MARSH PUBLIC ACCESS PLAN
 DESIGN DRAWINGS
 MENTOR, OHIO

UPPER BOARDWALK FRAMING PLAN (PHASE II)

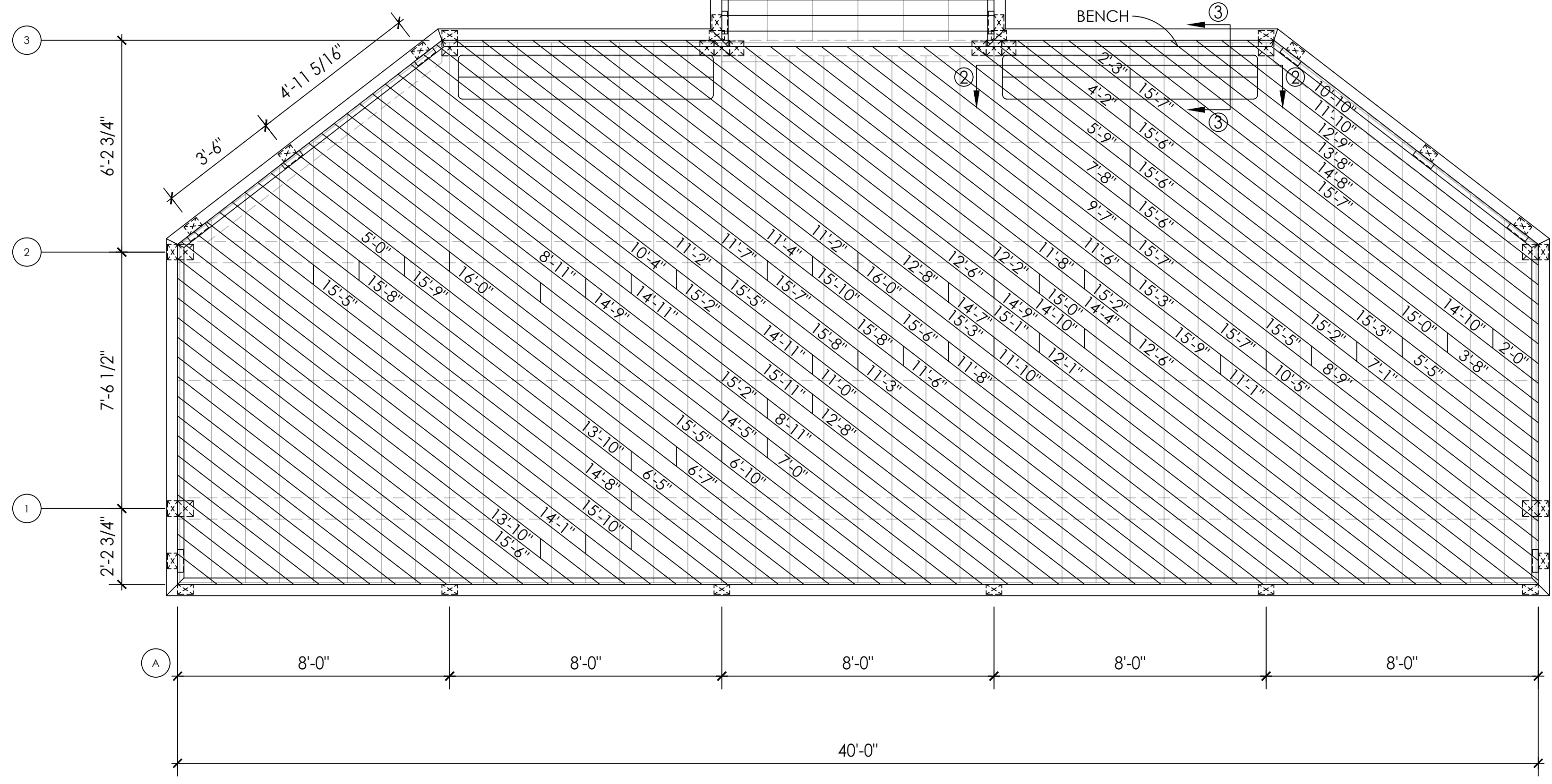
SHEET NO.
 10

PROJECT NO. SEL1977
 SCALE: 1/8"=1'-0"
 DATE: 5/2/22
 DESIGN: JMS
 DRAWN: JMS
 CHECK: JMS

NO.	DATE	REVISION

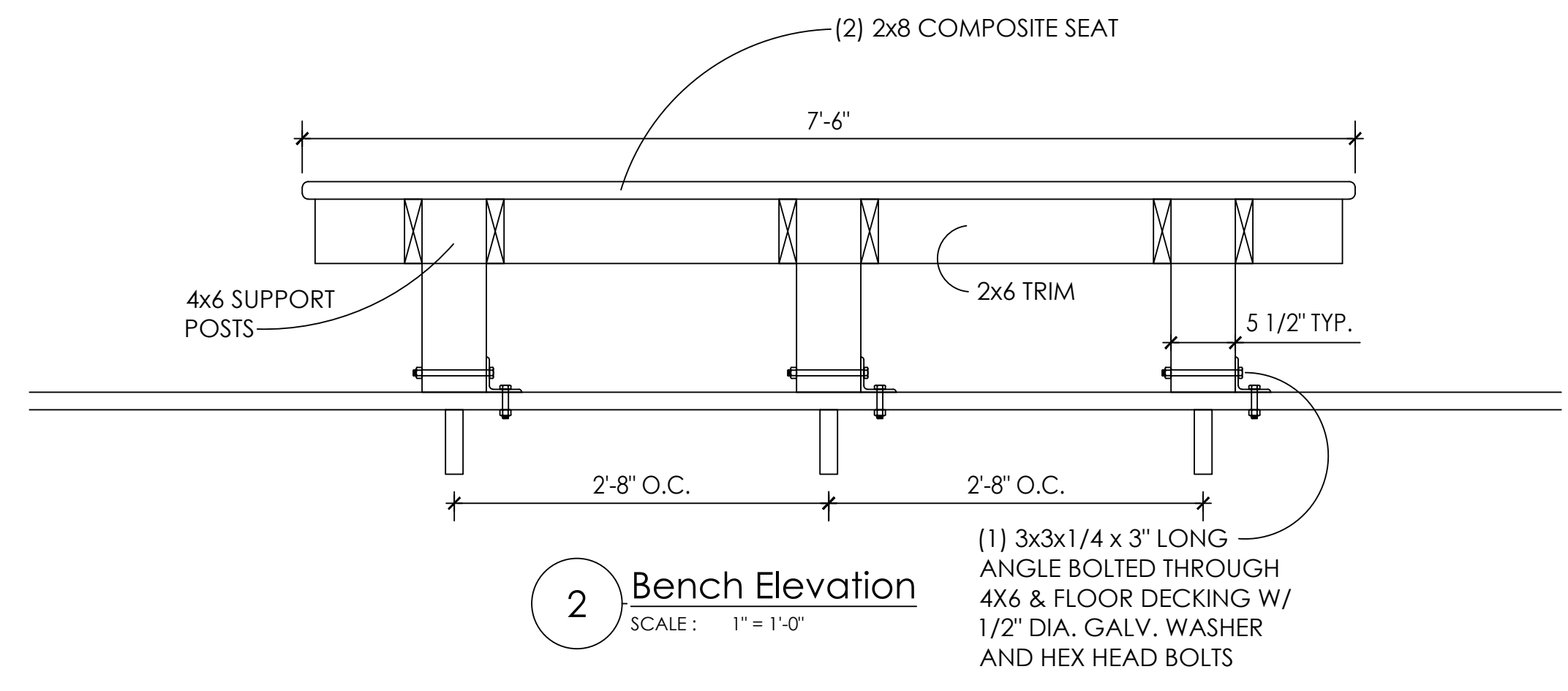


RANDOM CUT OFF DECK BOARDS WILL BE USED ON THE BOARDWALK ANGLES.



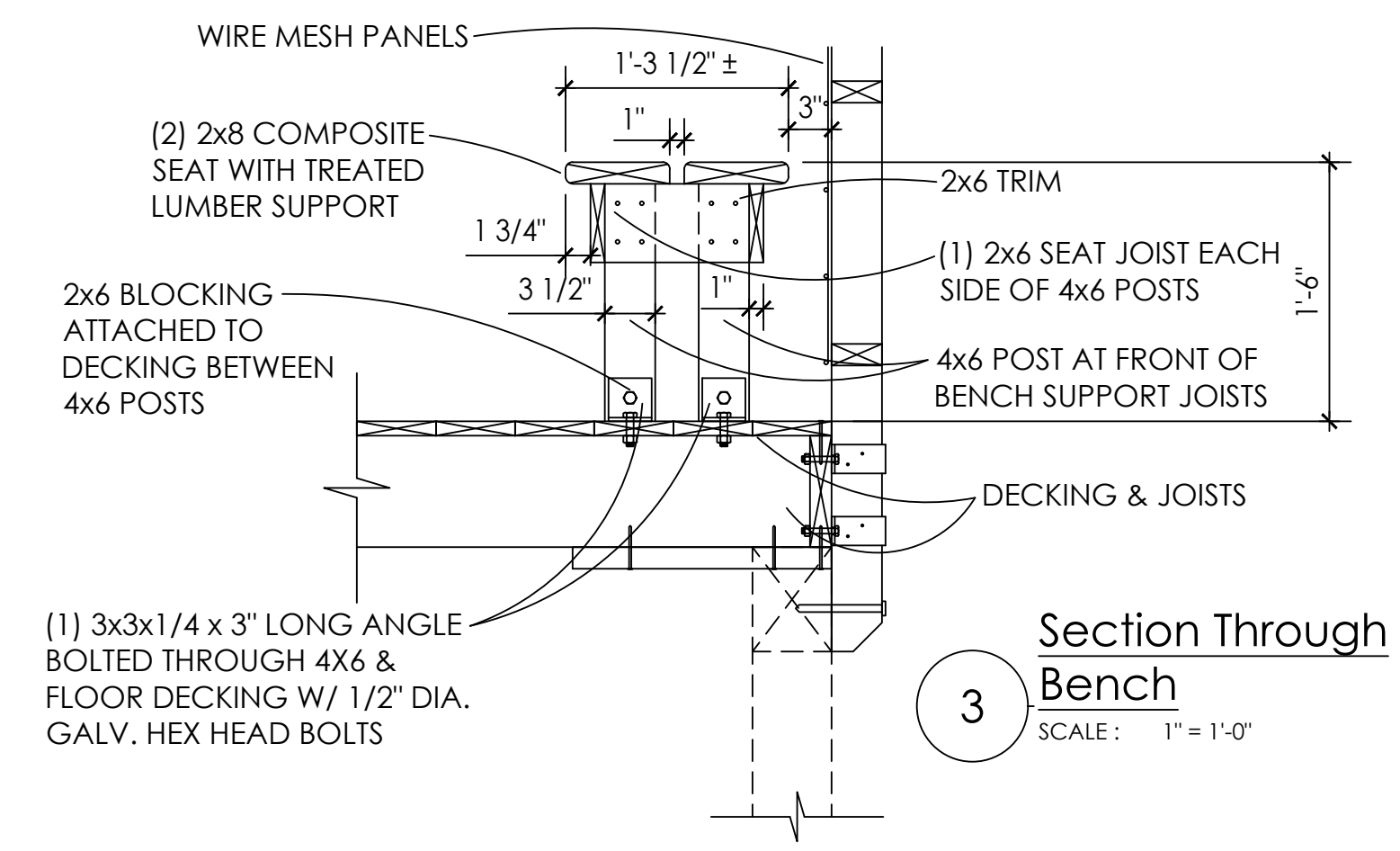
1 Deck Plan View
 SCALE: 3/8" = 1'-0"

RECOMMENDED SPLICE PATTERN
 THESE DIMENSIONS ARE ALL ±
 BASED ON BOARDS @ 5-1/2" O-C



2 Bench Elevation
 SCALE: 1" = 1'-0"

(1) 3x3x1/4 x 3" LONG ANGLE BOLTED THROUGH 4X6 & FLOOR DECKING W/ 1/2" DIA. GALV. WASHER AND HEX HEAD BOLTS



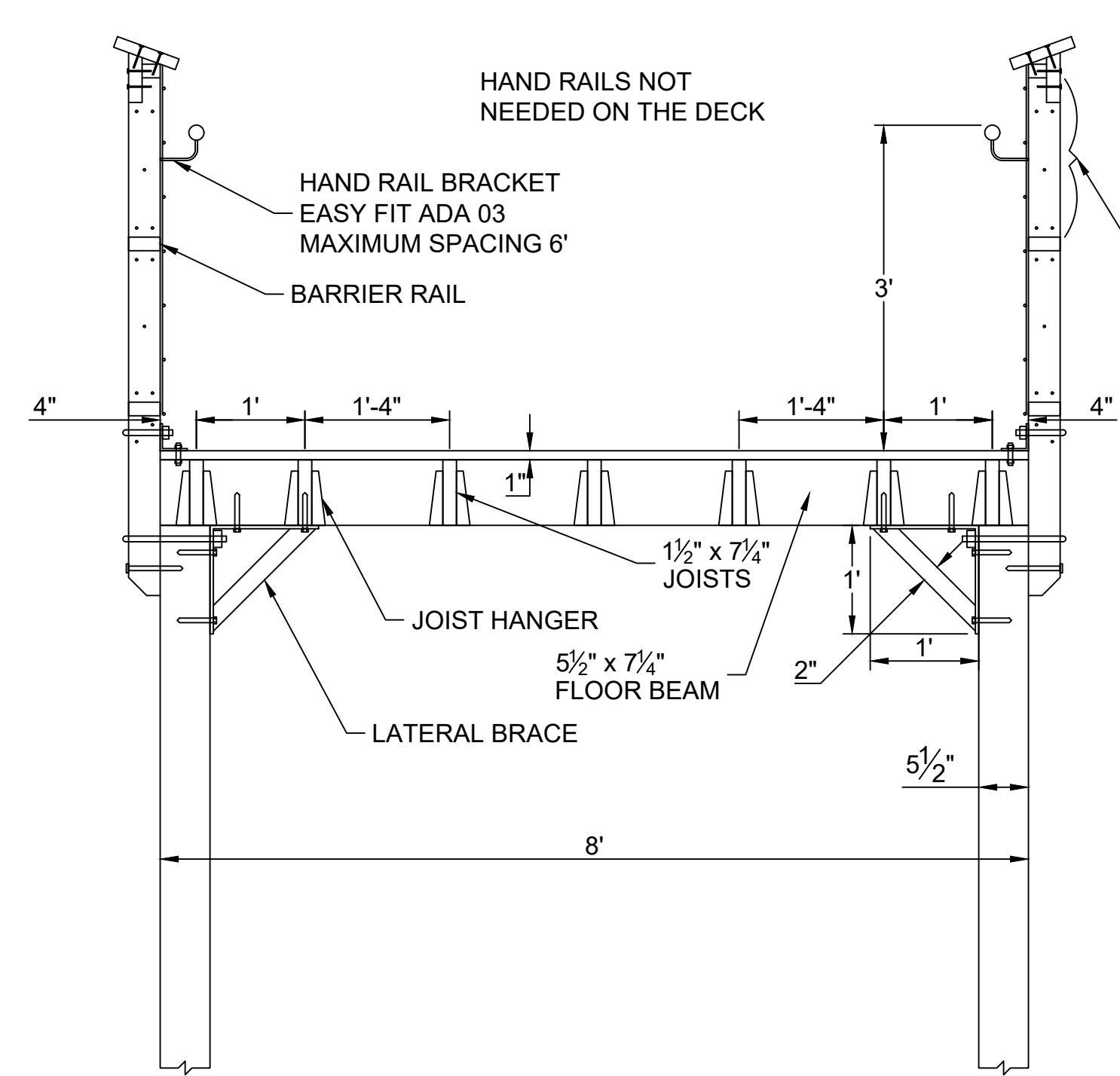
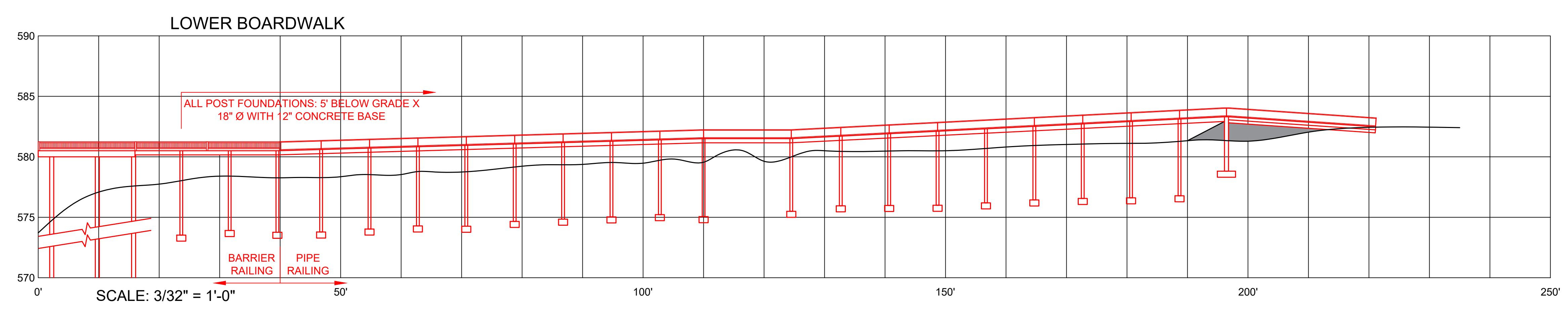
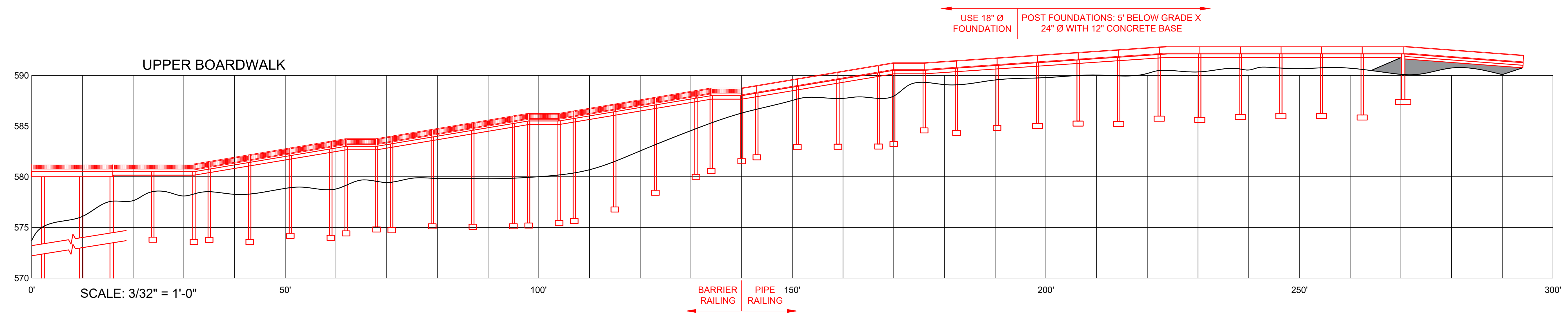
3 Section Through Bench
 SCALE: 1" = 1'-0"

(1) 3x3x1/4 x 3" LONG ANGLE BOLTED THROUGH 4X6 & FLOOR DECKING W/ 1/2" DIA. GALV. HEX HEAD BOLTS

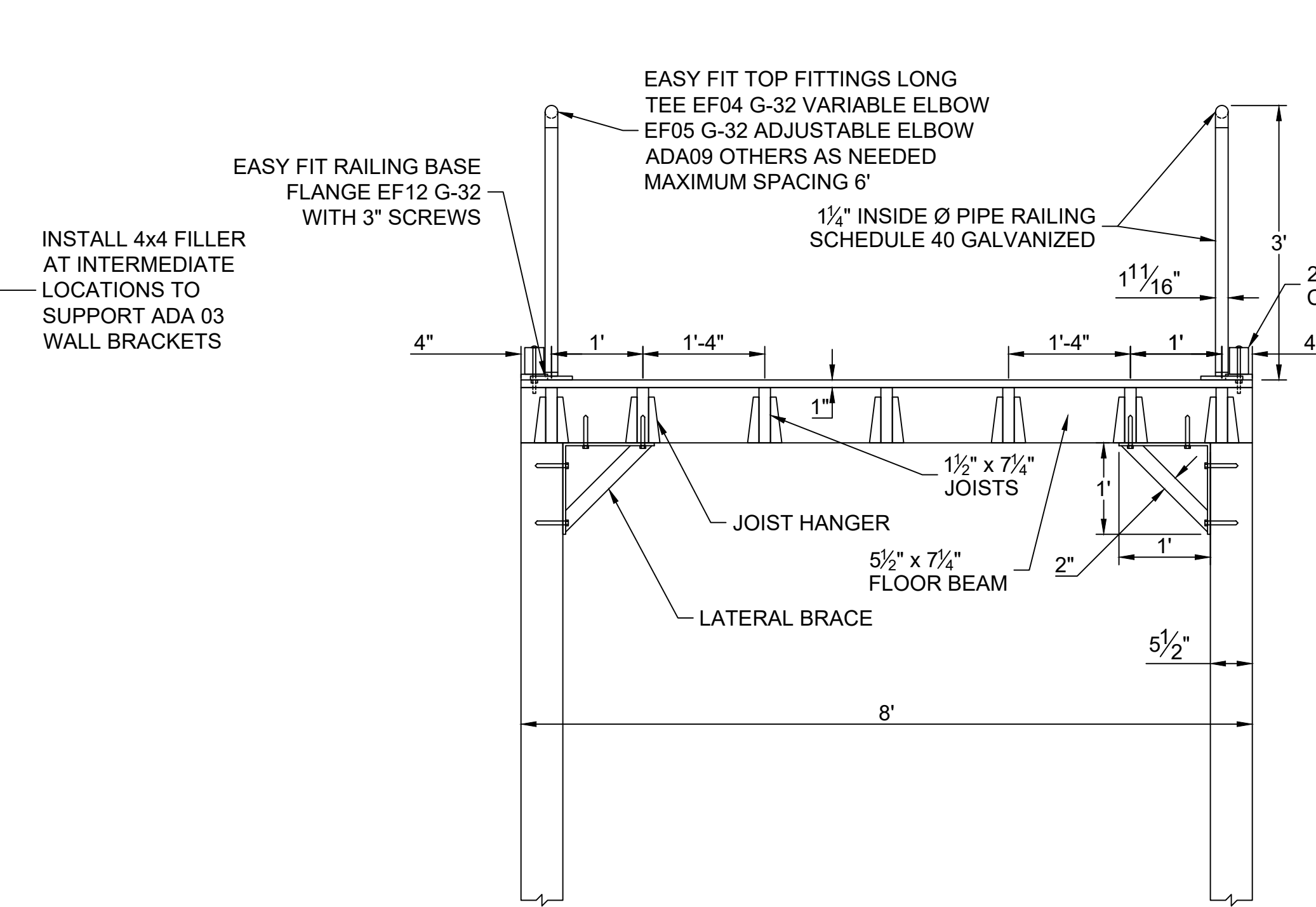
NO.	DATE	REVISION

PROJECT NO. SEL1977
 SCALE: 5/2/22
 DATE: 5/2/22
 DESIGN: ZN
 DRAWN: ZN
 CHECK: JWS

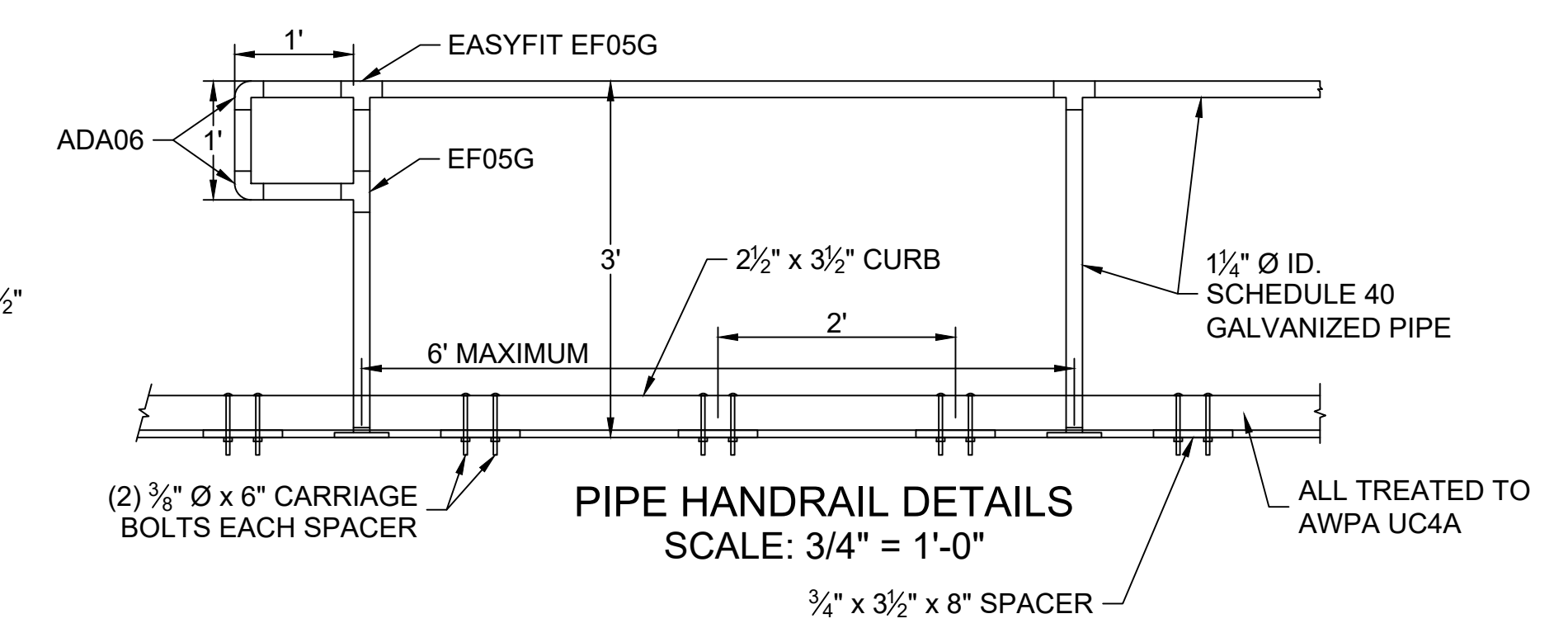
MENTOR MARSH PUBLIC ACCESS PLAN
 DESIGN DRAWINGS
 MENTOR, OHIO
 DECKING & BENCH PLANS



BARRIER RAIL DETAILS (WITH HANDRAIL)
 SCALE: 3/4" = 1'-0"



PIPE RAIL DETAILS
 SCALE: 3/4" = 1'-0"

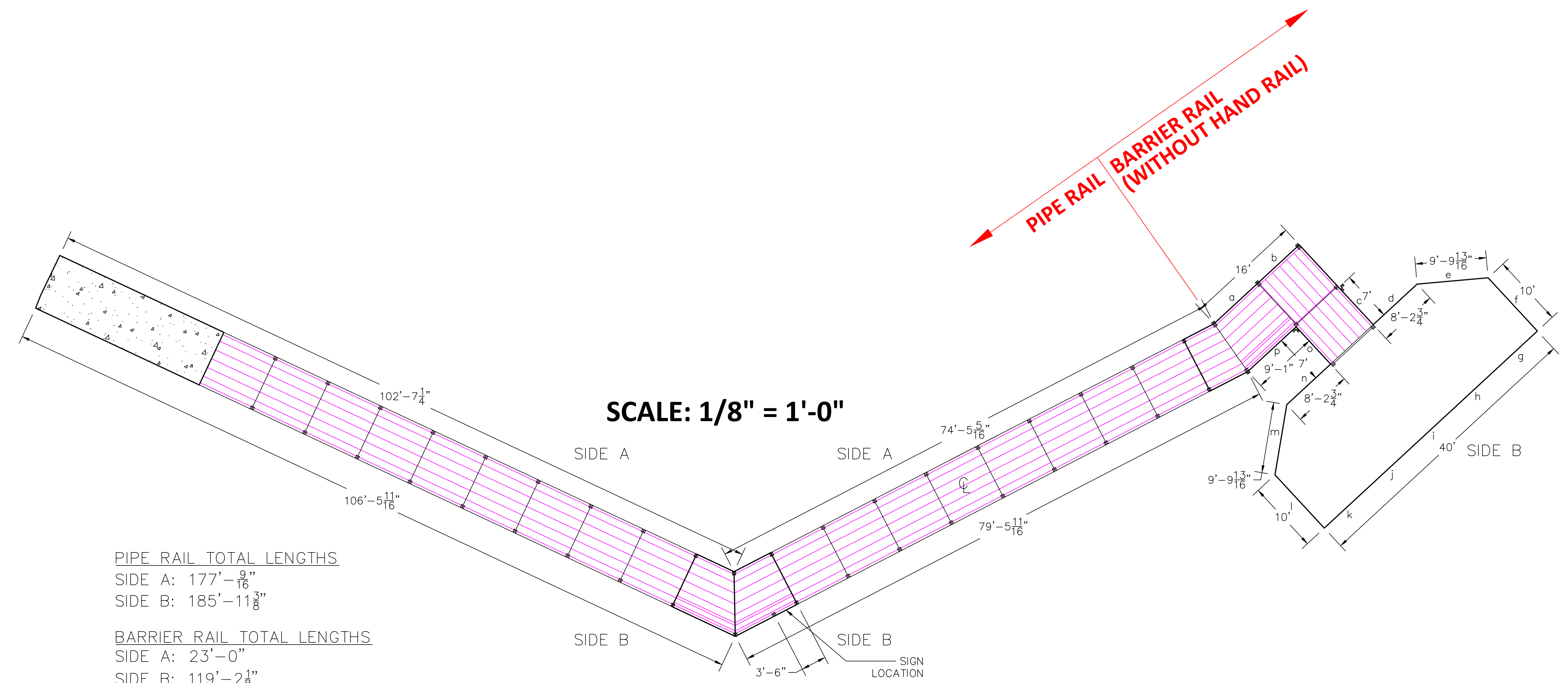
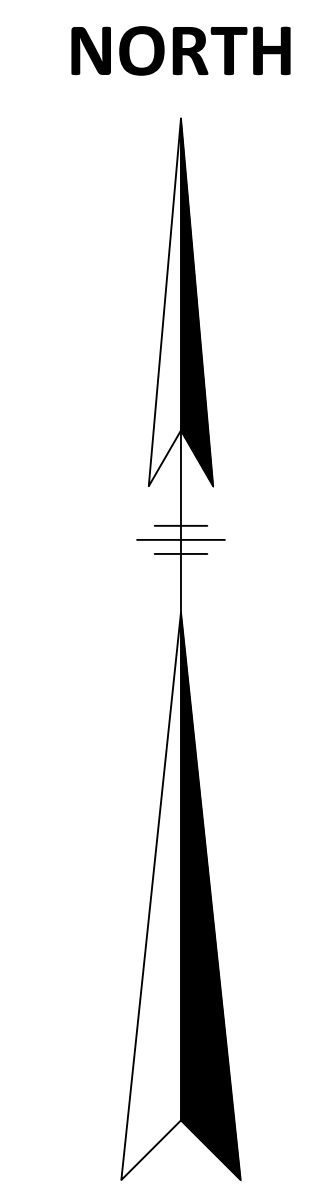


PIPE HANDRAIL DETAILS
 SCALE: 3/4" = 1'-0"

NO.	DATE	REVISION

PROJECT NO.: SEL1977
 SCALE: 3/32" = 1'-0"
 DATE: 5/11/22
 DESIGN: JWS
 DRAWN: CAS
 CHECK: JWS

MENTOR MARSH PUBLIC ACCESS PLAN
 DESIGN DRAWINGS
 MENTOR, OHIO
 BOARDWALK RAILINGS

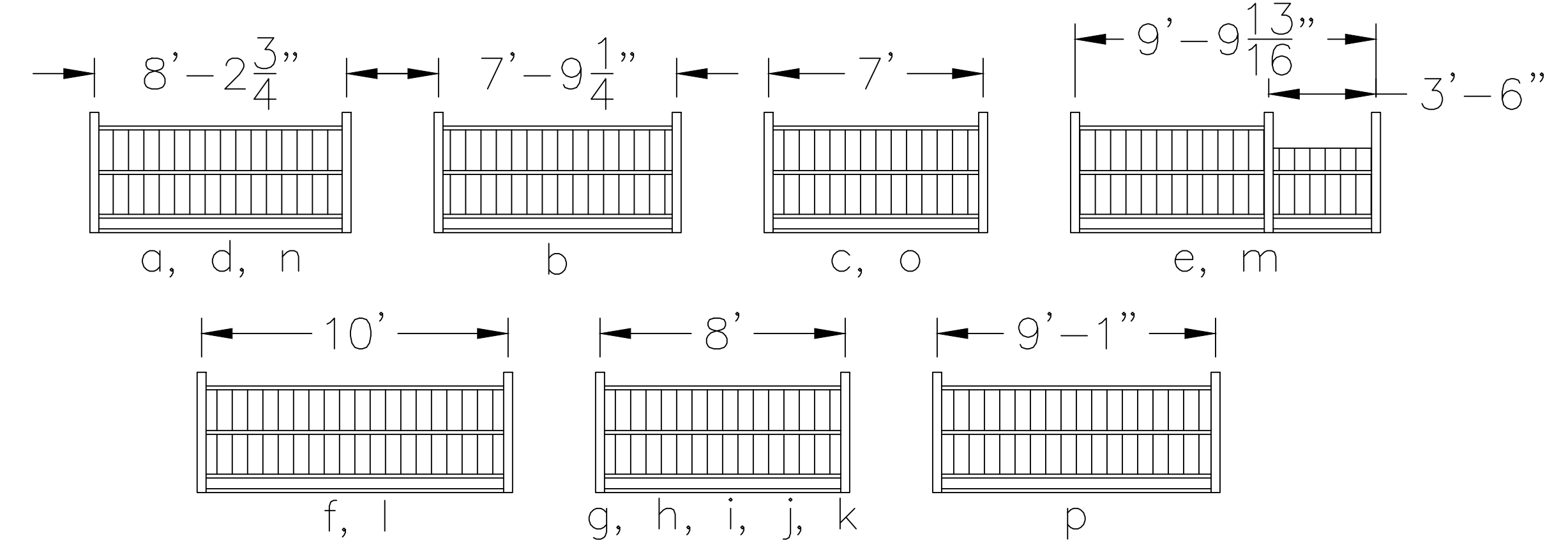


PIPE RAIL TOTAL LENGTHS
 SIDE A: 177'- $\frac{9}{16}$ "
 SIDE B: 185'- $11\frac{3}{8}$ "

BARRIER RAIL TOTAL LENGTHS
 SIDE A: 23'-0"
 SIDE B: 119'- $2\frac{1}{8}$ "

GRAND TOTAL LENGTHS
 SIDE A: 200'- $\frac{9}{16}$ "
 SIDE B: 305'- $1\frac{1}{2}$ "

BARRIER PANELS



PANELS e AND m TO BE TRIMMED FOR SIGN PLACEMENT

SCALE: 1/4" = 1'-0"

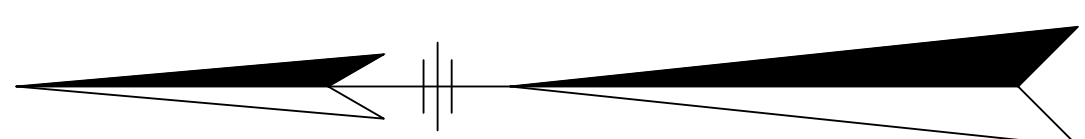
NO.	DATE	REVISION

PROJECT NO. SEL1977
 SCALE: 1/8" = 1'-0"
 DATE: 5/10/22
 DESIGN: JMS
 DRAWN: JMS
 CHECK: JMS

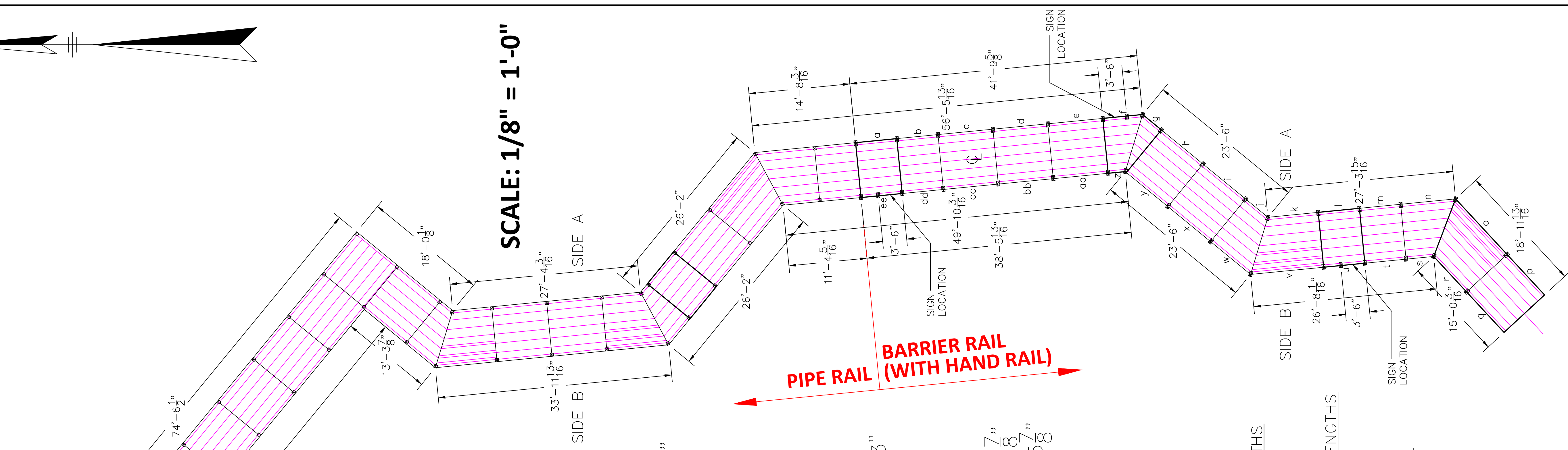
MENTOR MARSH PUBLIC ACCESS PLAN
 DESIGN DRAWINGS
 MENTOR, OHIO

LOWER BOARDWALK FENCING PLAN (PHASE I)

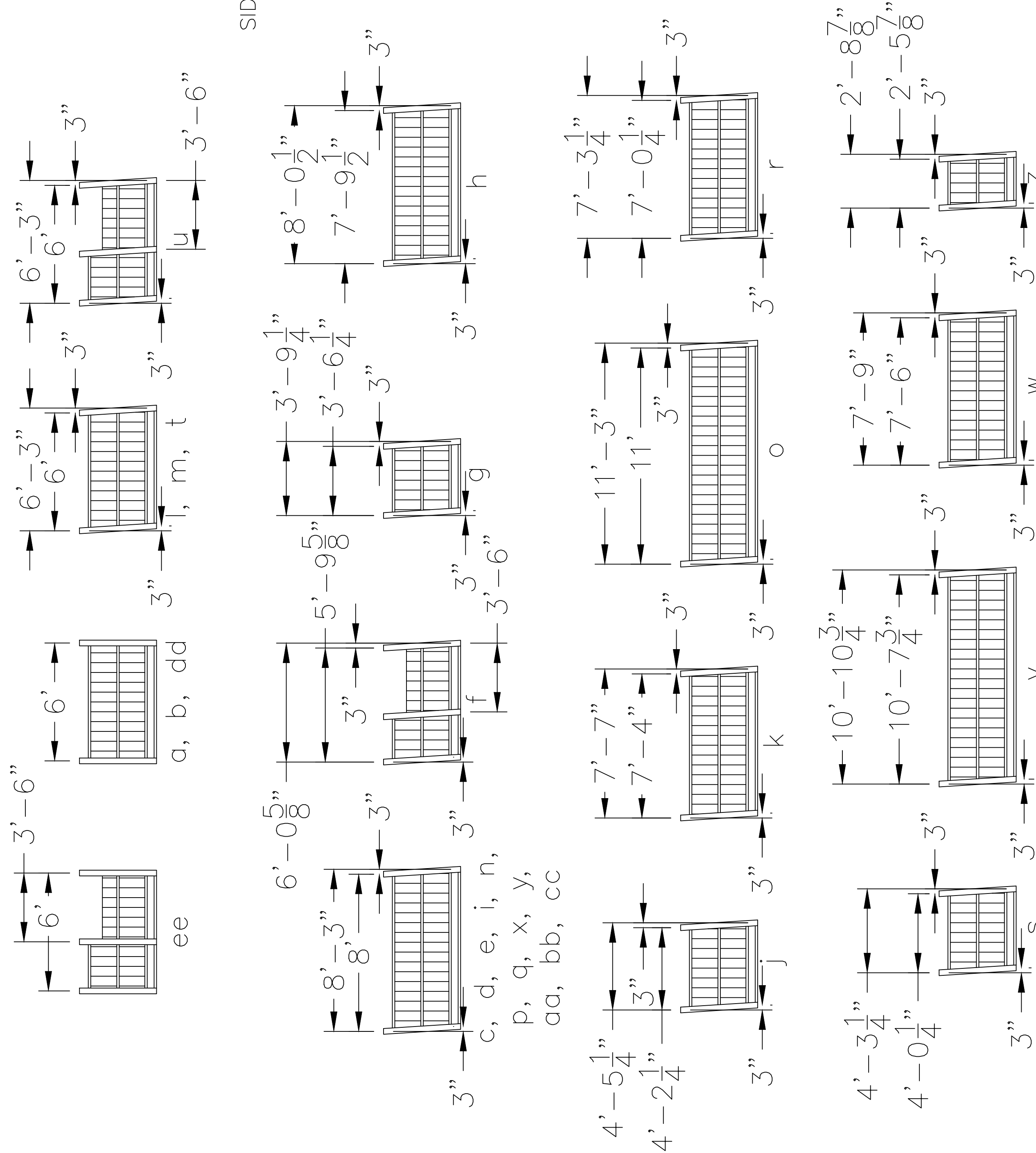
NORTH



SCALE: 1/8" = 1'-0"



BARRIER PANELS



PANELS ee, f, AND u TO BE TRIMMED FOR SIGN PLACEMENT

SCALE: 1/4" = 1'-0"

PIPE RAIL TOTAL LENGTHS

SIDE A: 160'-9"

SIDE B: 150'-22"

BARRIER RAIL TOTAL LENGTHS

SIDE A: 111'-7 3/8"

SIDE B: 103'-8 1/16"

GRAND TOTAL LENGTHS

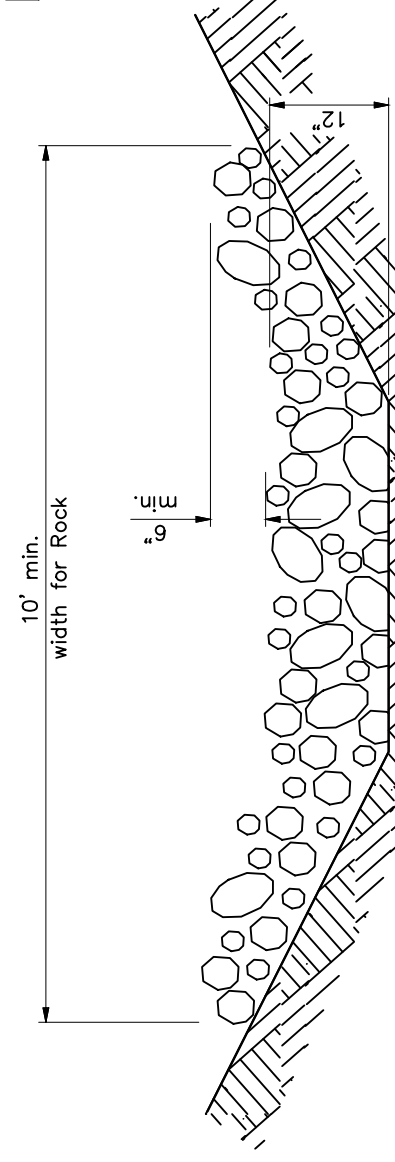
SIDE A: 272'-4 7/16"

SIDE B: 253'-10 1/2"

PROJECT NO.	NO.	DATE
SEL1977		
SCALE:	DESIGN:	
DATE: 5/2/22	DRAWN:	
	CHECK:	JMS

REVISION

DITCH CHECKS



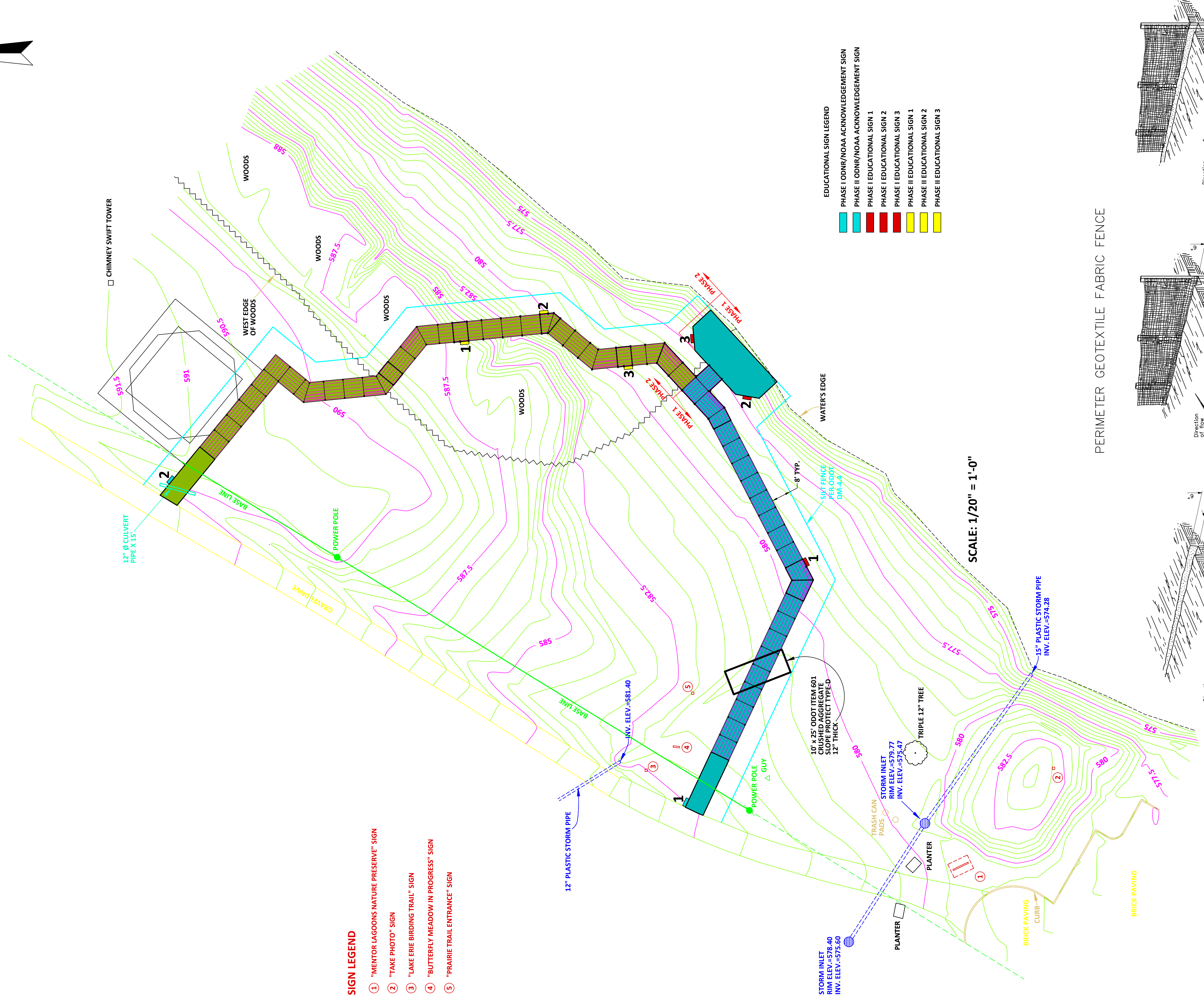
ROCK CHECKS:
MATERIALS:
Furnish material conforming to Item 601 - Rock Channel Protection, Type D, Without Filter.

NOTES

CROSS-SECTIONAL VIEW
SLOPE PROTECTION

NOT TO SCALE

NORTH



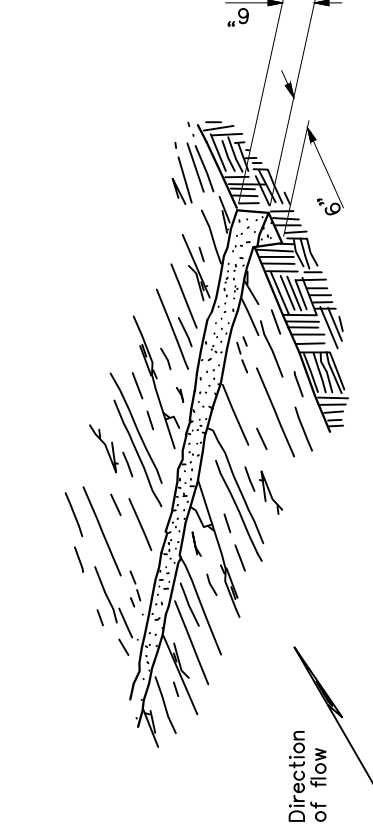
SIGN LEGEND

- 1 "MENTOR LAGOONS NATURE PRESERVE" SIGN
- 2 "TAKE PHOTO" SIGN
- 3 "LAKE ERIE BIRDING TRAIL" SIGN
- 4 "BUTTERFLY MEADOW IN PROGRESS" SIGN
- 5 "PRAIRIE TRAIL ENTRANCE" SIGN

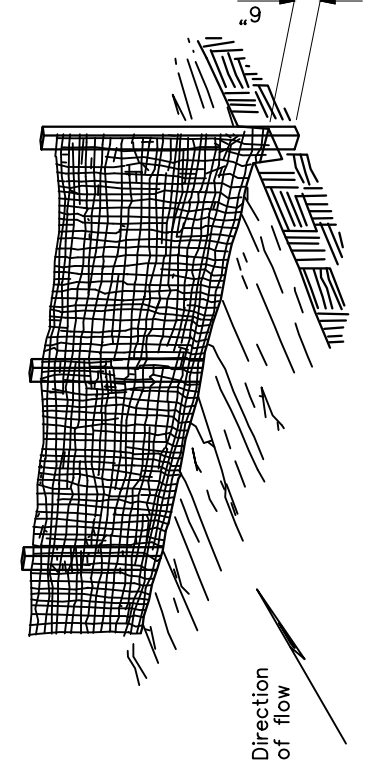
- EDUCATIONAL SIGN LEGEND
- PHASE I ODNR/NOAA ACKNOWLEDGEMENT SIGN
 - PHASE II ODNR/NOAA ACKNOWLEDGEMENT SIGN
 - PHASE I EDUCATIONAL SIGN 1
 - PHASE I EDUCATIONAL SIGN 2
 - PHASE I EDUCATIONAL SIGN 3
 - PHASE II EDUCATIONAL SIGN 1
 - PHASE II EDUCATIONAL SIGN 2
 - PHASE II EDUCATIONAL SIGN 3

SCALE: 1/20" = 1'-0"

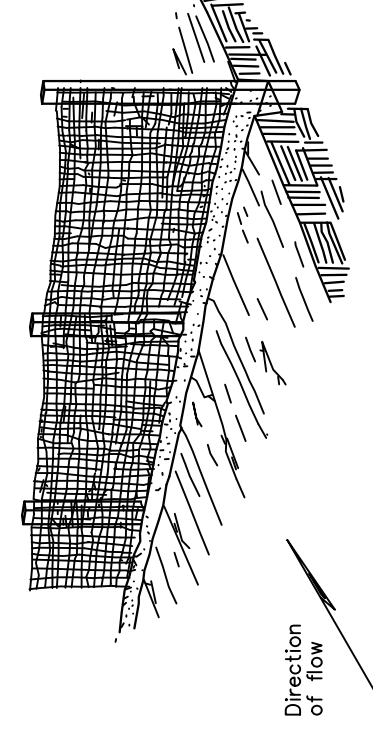
PERIMETER GEOTEXTILE FABRIC FENCE



STEP 1
Excavate a 6"x6" trench along the proposed fence line.



STEP 2
Place fabric and support stakes and extend fabric into the trench.



STEP 3
Backfill and compact the excavated soil.

NOTES

MATERIALS:
Use geotextile fabric with a minimum tensile strength of 712.09, Type C.

CONSTRUCTION:
Trench the geotextile fabric fence as detailed. The contractor may excavate the trench on steps 1 through 3 in one planting operation.

NOT TO SCALE

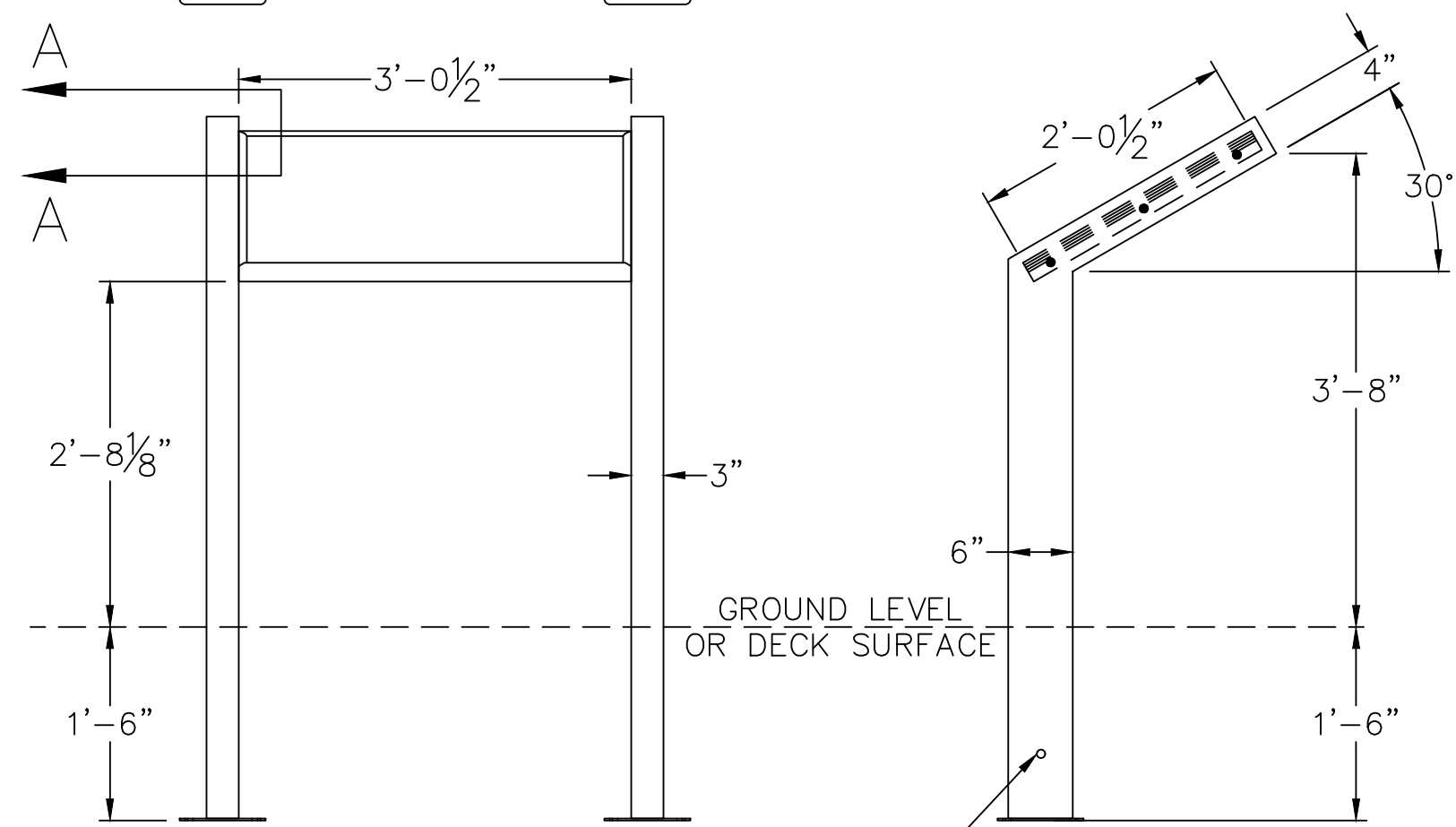
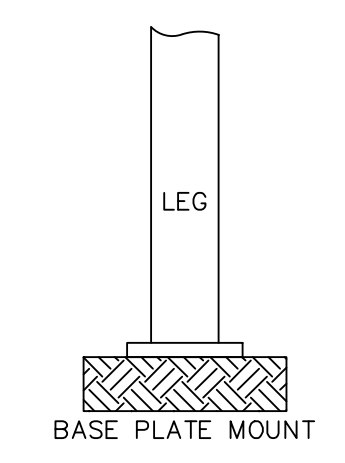
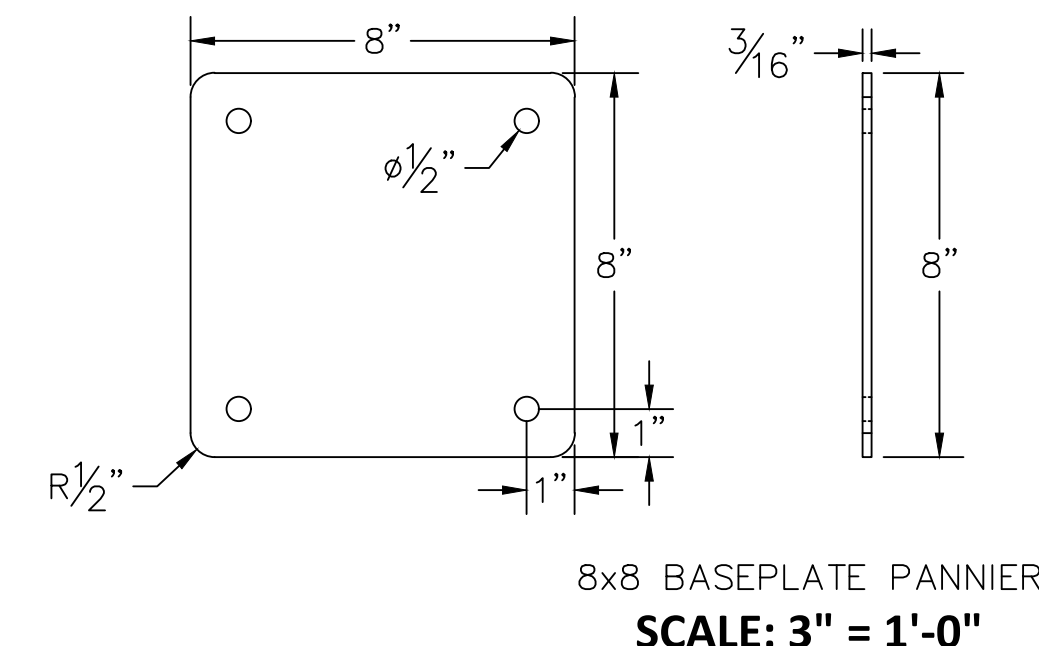
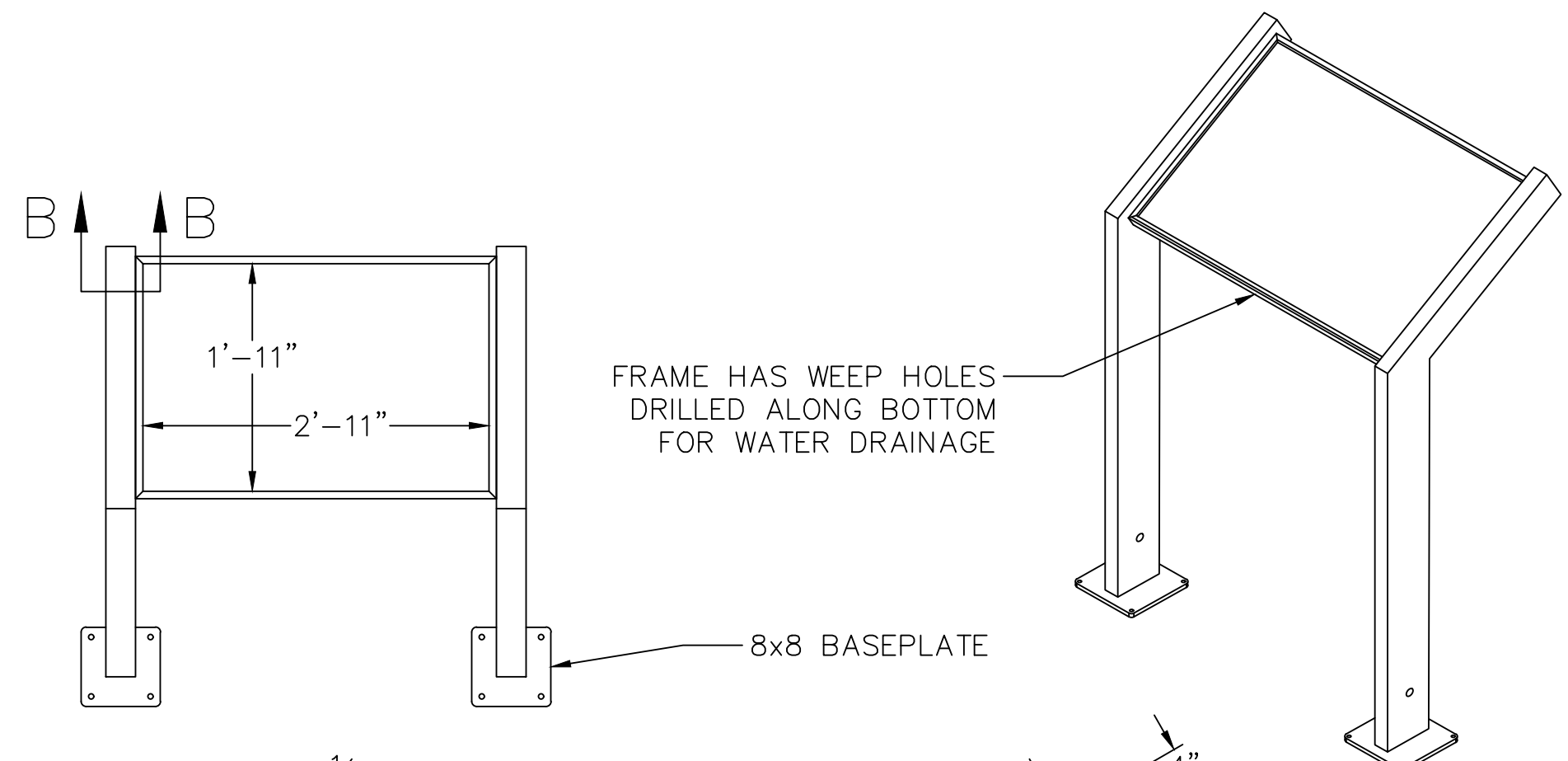
MENTOR MARSH PUBLIC ACCESS PLAN
DESIGN DRAWINGS
MENTOR, OHIO
SILT FENCE, SIGN LOCATIONS,
& SLOPE PROTECTION

SHEET NO.
15

PROJECT NO. SEL977
SCALE: 4/28/22
DATE: 4/28/22
DESIGN: JMS
DRAWN: JMS
CHECK: JMS

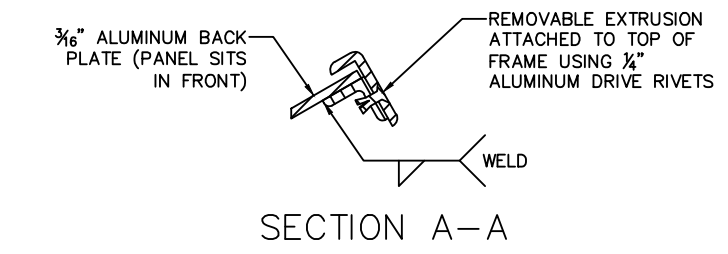
REVISION

NO. DATE

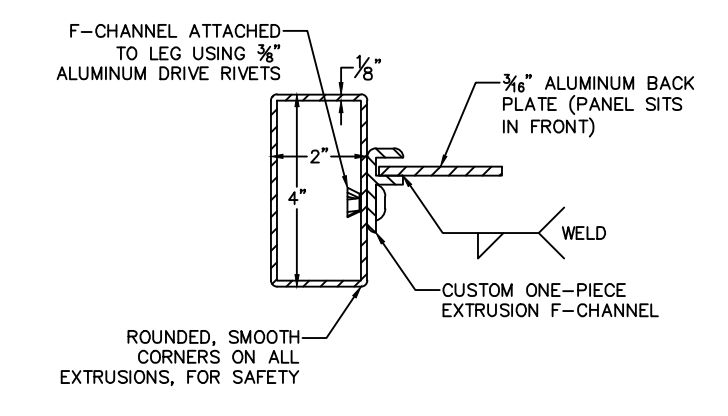


SCALE: 3/4" = 1'-0"

1. SIGN IS CONSTRUCTED USING FIBERGLASS EMBEDMENT AS PRODUCED BY PANNIER CORPORATION, 345 OAK ROAD, GIBSONIA, PA 15044. OR COMPATIBLE PRODUCT.
2. ALL COPY AND GRAPHICS ARE PERMANENTLY EMBEDDED IN THE FIBERGLASS PANEL. THE RESULTING SIGN IS A SOLID, ONE-PIECE PANEL WITH ALL GRAPHIC ELEMENTS INSEPARABLE FROM THE FIBERGLASS IN WHICH THEY ARE EMBEDDED. ARTWORK BECOMES A PERMANENT PART OF THE FIBERGLASS SIGN, SO IT WILL NOT DELAMINATE.
3. SIGN IS MANUFACTURED OF CLEAR, UV STABILIZED, ACRYLIC-MODIFIED POLYESTER RESIN REINFORCED WITH HIGH SOLUBILITY, CHOPPED STRAND FIBERGLASS MAT SO THAT THE INDEX OF REFRACTION ENSURES CLARITY OF ALL COLOR, COPY, AND GRAPHICS. SIGN HAS A GLASS CONTENT OF NO LESS THAN 28% OF THE TOTAL SIGN WEIGHT.
4. SIGN FACE CANNOT BE PERMANENTLY DEFACED BY STEAM, MILD ACIDS, AROMATICS, SCRATCHING, INKS, OR PAINTS AND CAN BE READILY WIPED CLEAN WITH CLEANING SOLUTIONS WITHOUT AFFECTING THE APPEARANCE OR LEGIBILITY OF THE SIGN FINISH OR GRAPHICS.
5. SIGN FACE RETAINS LEGIBILITY AND FINISHED APPEARANCE WHEN SPRAYED WITH A 10% SOLUTION OF HYDROCHLORIC, NITRIC, OR SULFURIC ACID FOR ONE-HALF HOUR OR WHEN SCRUBBED BY A BRUSH OF MEDIUM HARDNESS USING COMMON COMMERCIAL CLEANING COMPOUNDS SUCH AS AMMONIA, LAUNDRY SOAPS, DETERGENTS, CARBON TETRACHLORIDE, OR PETROLEUM BASED SOLVENTS.
6. SIGN CAN BE OPAQUE OR TRANSLUCENT WITH A CLEAR OR MATTE FINISH, AS INDICATED, WITH A MINIMUM EMBEDMENT OF ALL GRAPHIC ELEMENTS OF .03125 INCHES (1/32").
7. SIGNS ARE ROUTER CUT, AND THE SIGN EDGES WILL NOT BE CRAZED OR CRACKED. THE EDGE FINISH WILL BE SMOOTH, CLEAN, AND NEAT. THE FINISHED SIGN IS FLAT.

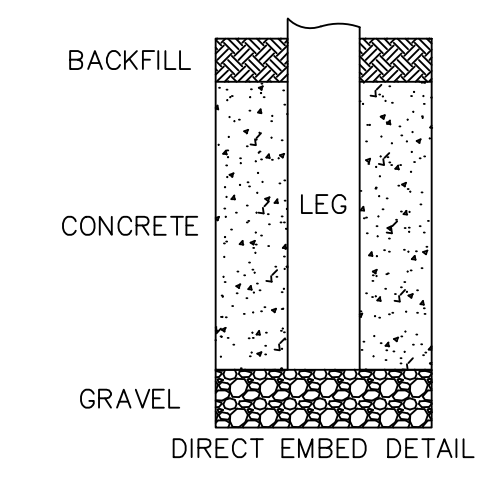


SCALE: 3" = 1'-0"

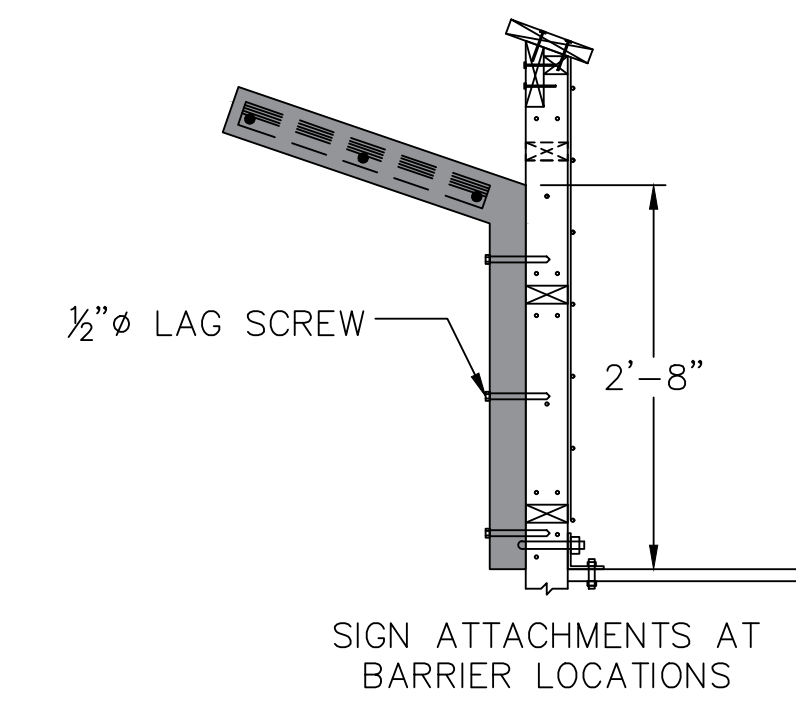


SCALE: 3" = 1'-0"

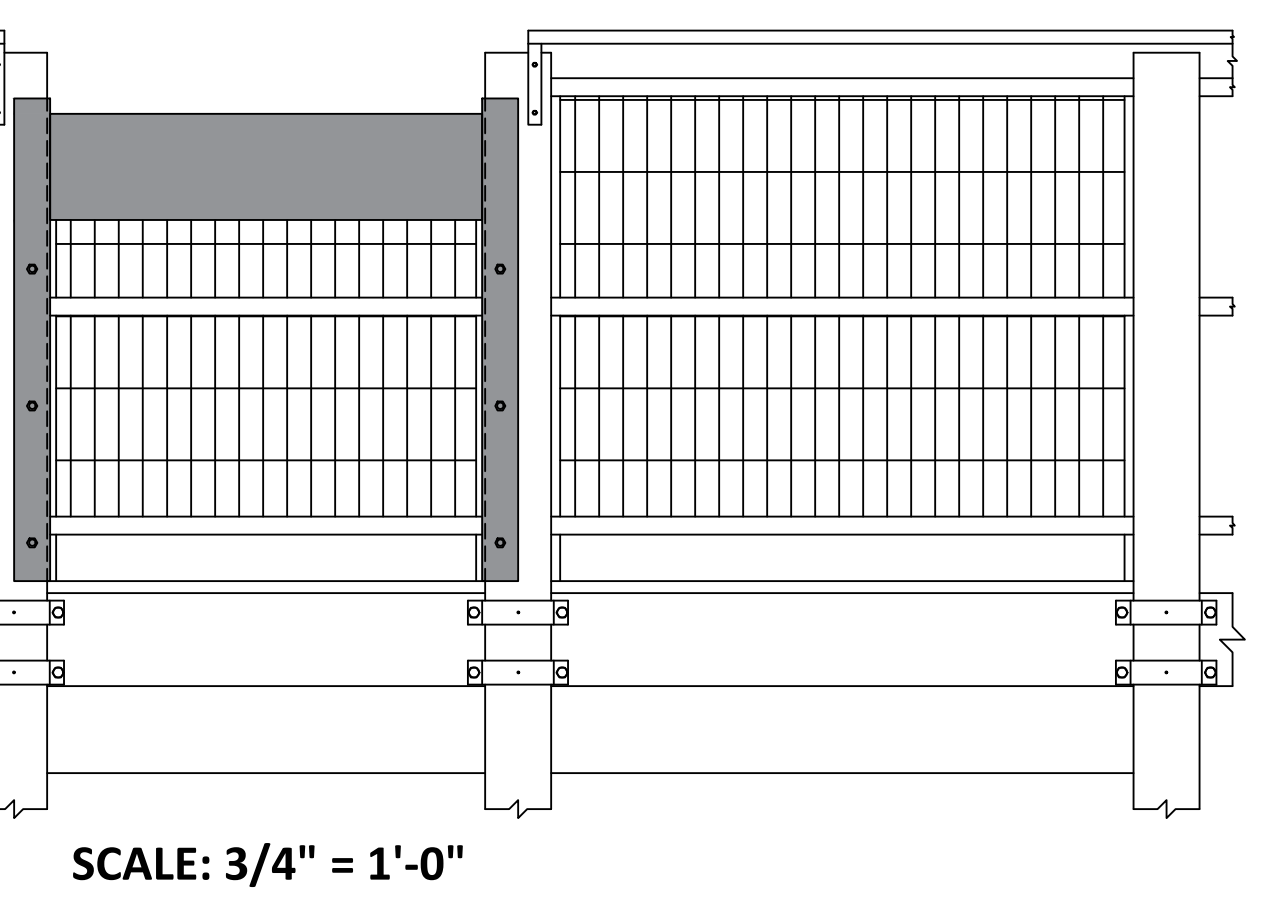
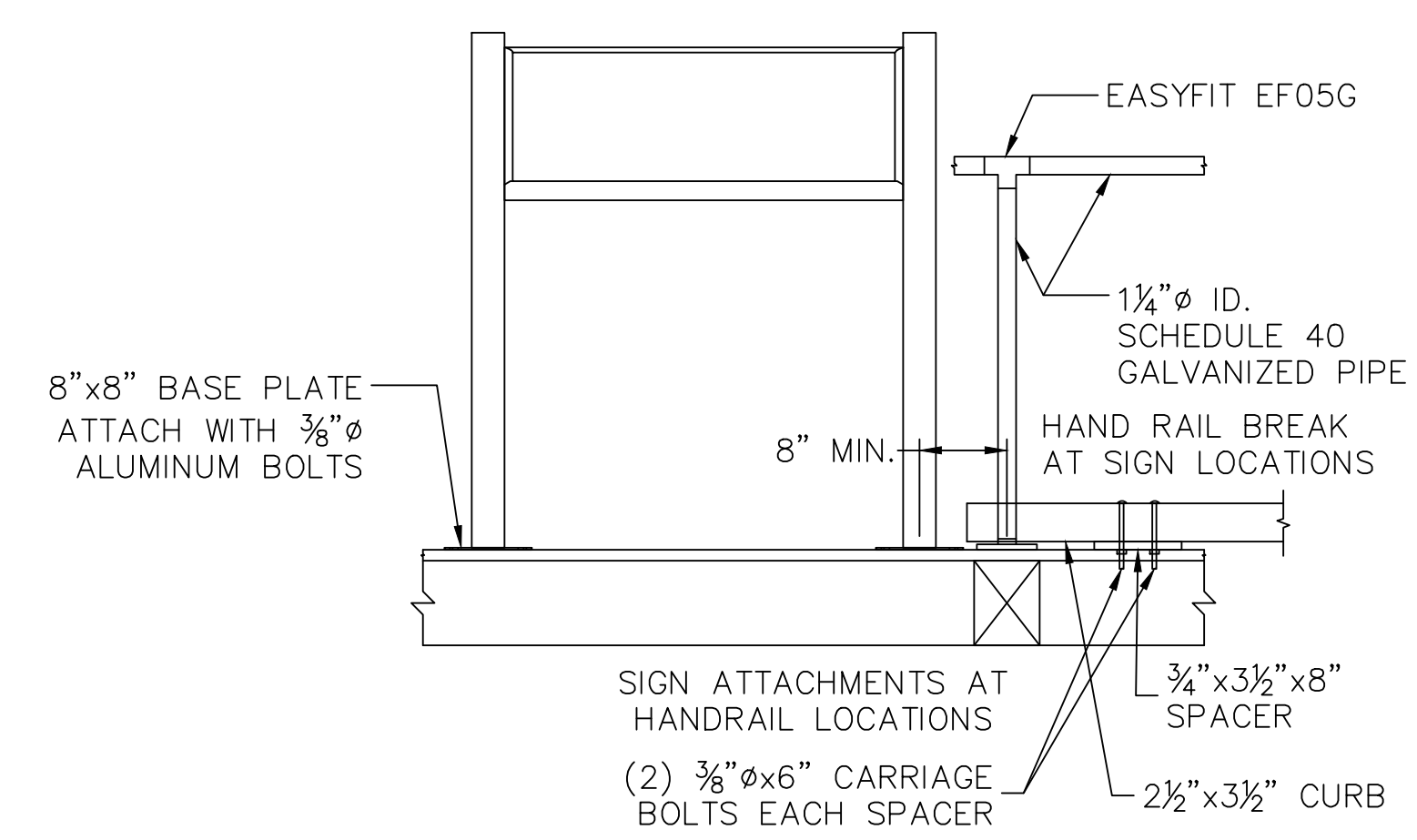
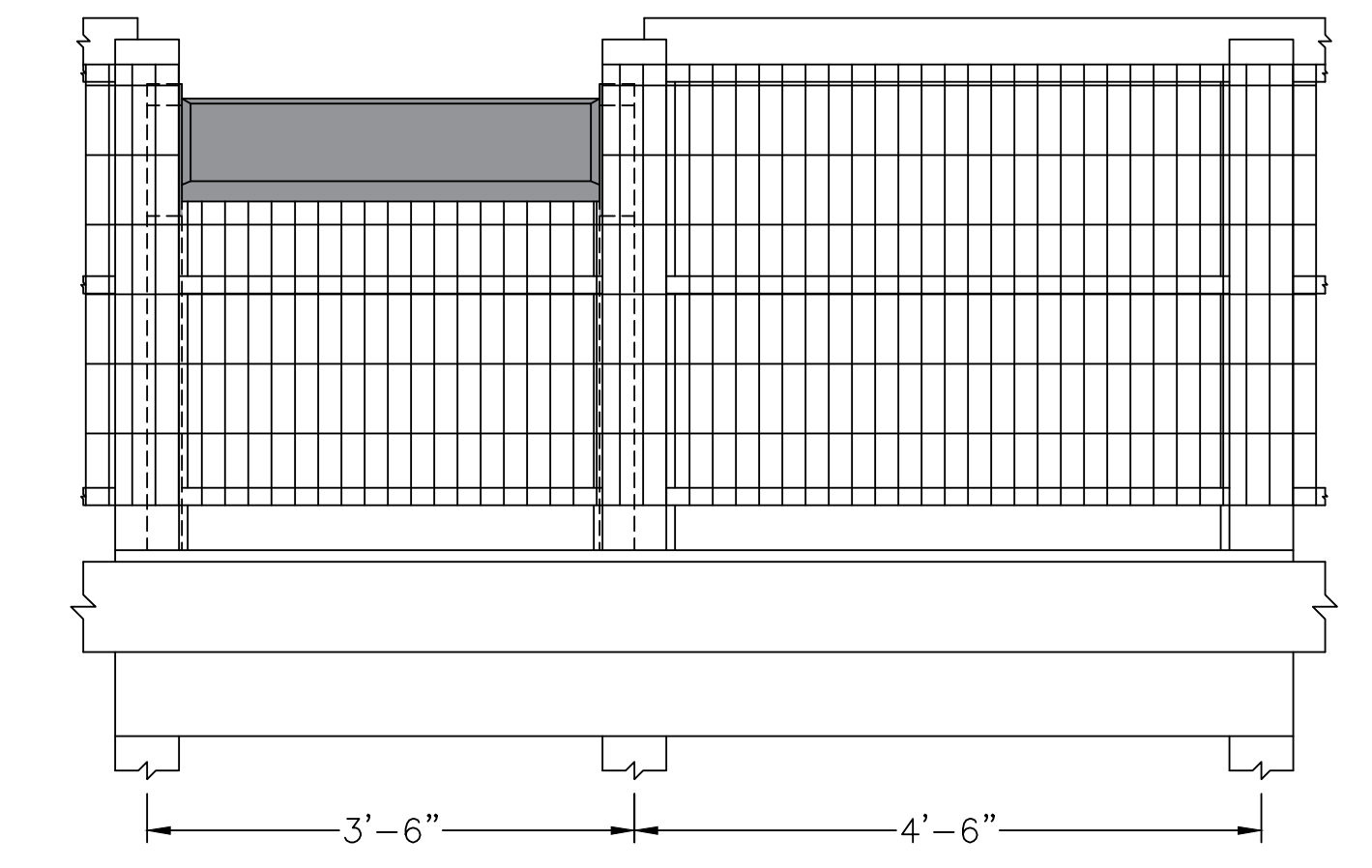
HARDWARE INCLUDED		
TYPE	QUALITY	IMAGE
1/4" ALUMINUM DRIVE RIVETS	3 EACH	
3/8" ALUMINUM DRIVE RIVETS	6 EACH	



MINIMUM AND MAXIMUM SIZE	1"H X 1"W TO 70"H X 180"W
MINIMUM AND MAXIMUM THICKNESS*	.040"D TO .250"D*
WEIGHT	1 FT 2 /.125"D = 1 LB.*
FINISH	OPAQUE OR TRANSLUCENT
DIFFUSION	GLOSSY OR MATTE
REFLECTIVITY	
AMBIENT TEMPERATURE RANGE*	-25°F TO +150°F
	* NOMINAL
ALL TESTING IS BASED ON .125" THICKNESS PANEL	



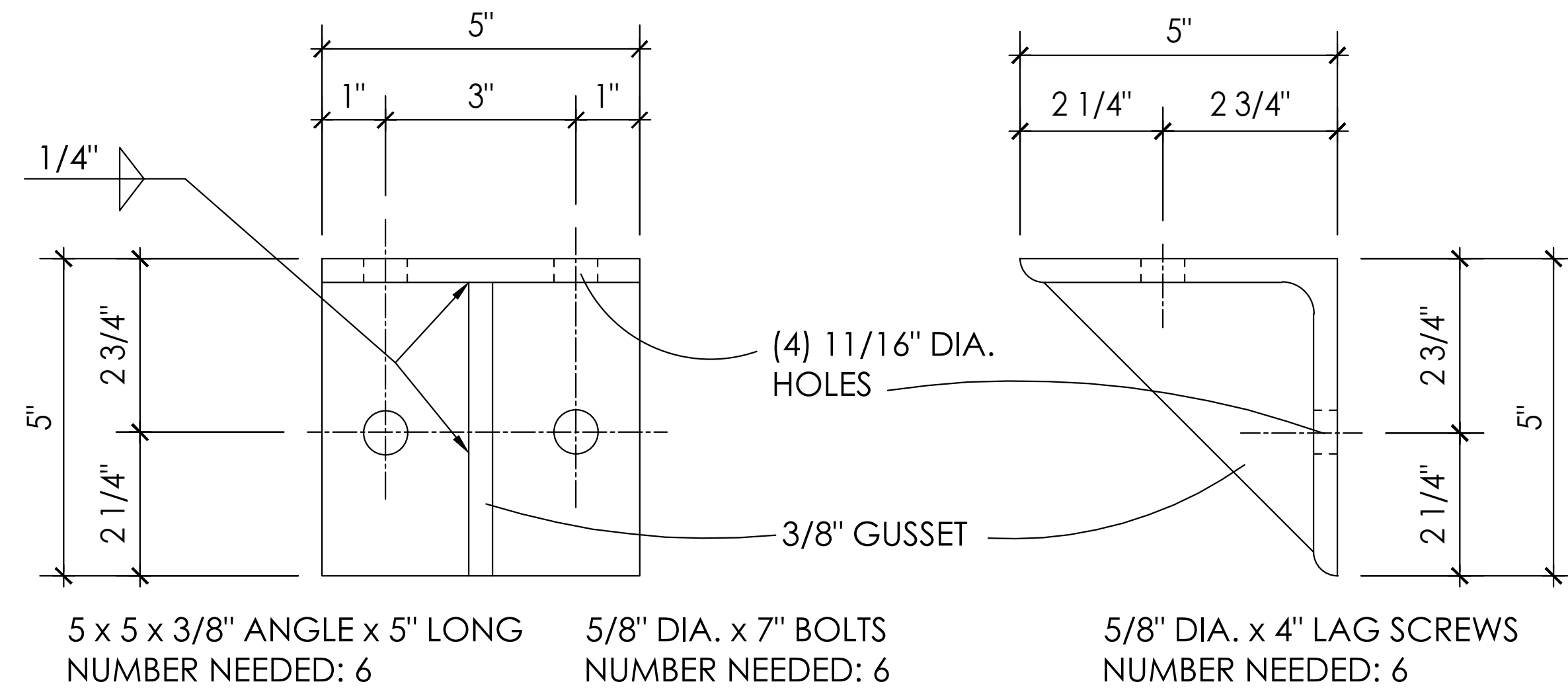
SCALE: 3/4" = 1'-0"



SCALE: 3/4" = 1'-0"

NO.	DATE	REVISION	PROJECT NO.	SCALE:	DATE:	DESIGN:	DRAWN:	CHECK:

ATTACH WITH (2) 5/8" DIA. x 4" LAG BOLTS INTO BEAM ABOVE AND (2) 5/8" DIA. L x 7" BOLTS THROUGH POST

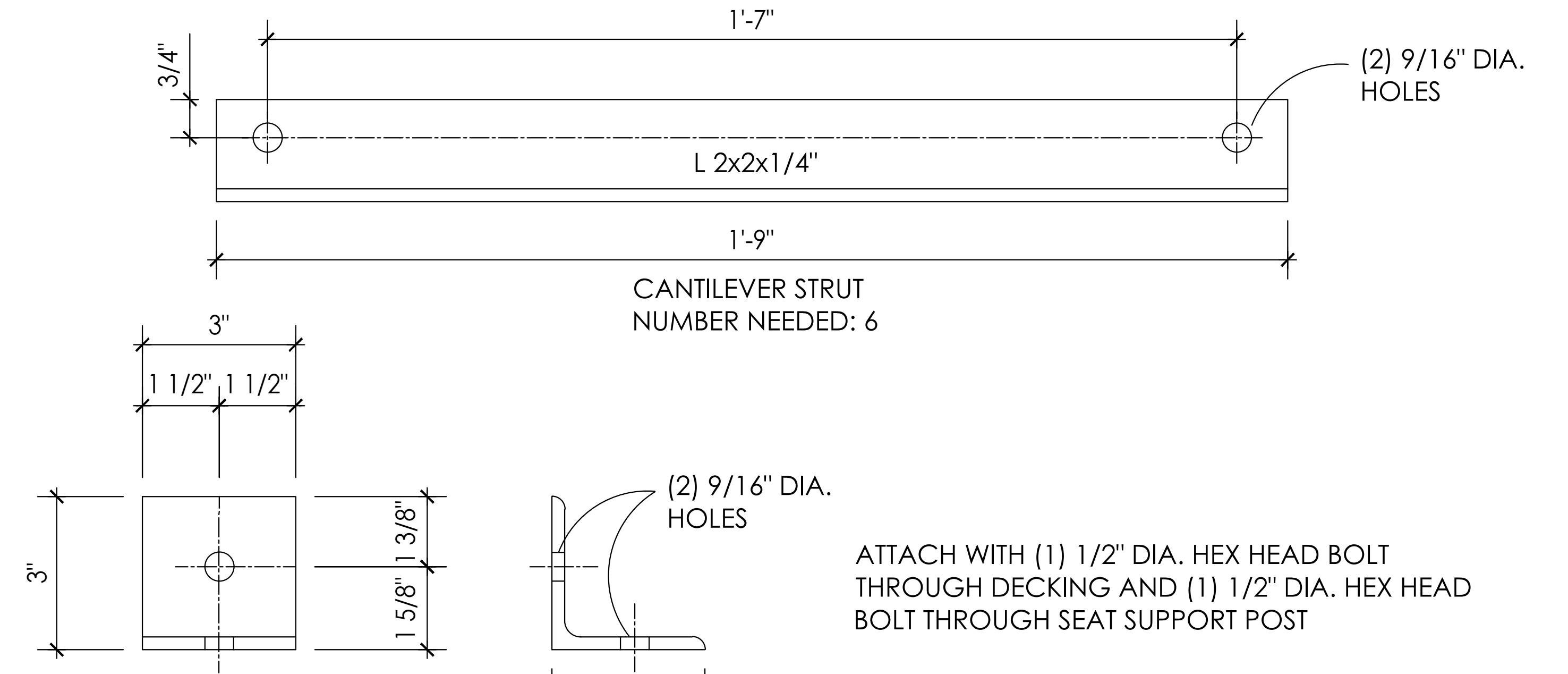


1 Typical Deck Beam / Post Connection Details
SCALE: 6" = 1'-0"

5 x 5 x 3/8" ANGLE x 5" LONG
NUMBER NEEDED: 6

5/8" DIA. x 7" BOLTS
NUMBER NEEDED: 6

5/8" DIA. x 4" LAG SCREWS
NUMBER NEEDED: 6



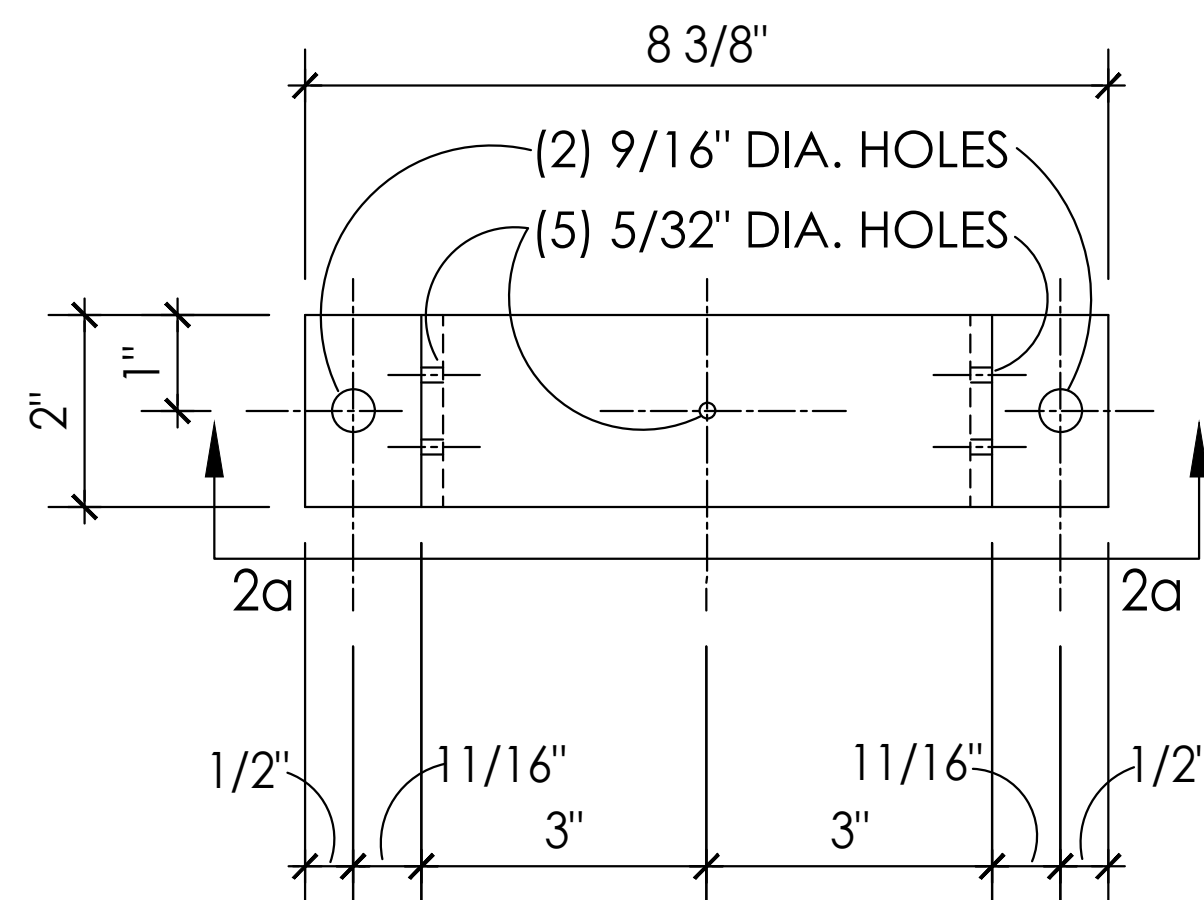
3 Typical Cantilever Strut Ends Bench Anchor Details
SCALE: 6" = 1'-0"

CANTILEVER STRUT
NUMBER NEEDED: 6

3x3x1/4" ANGLE x 3" LONG

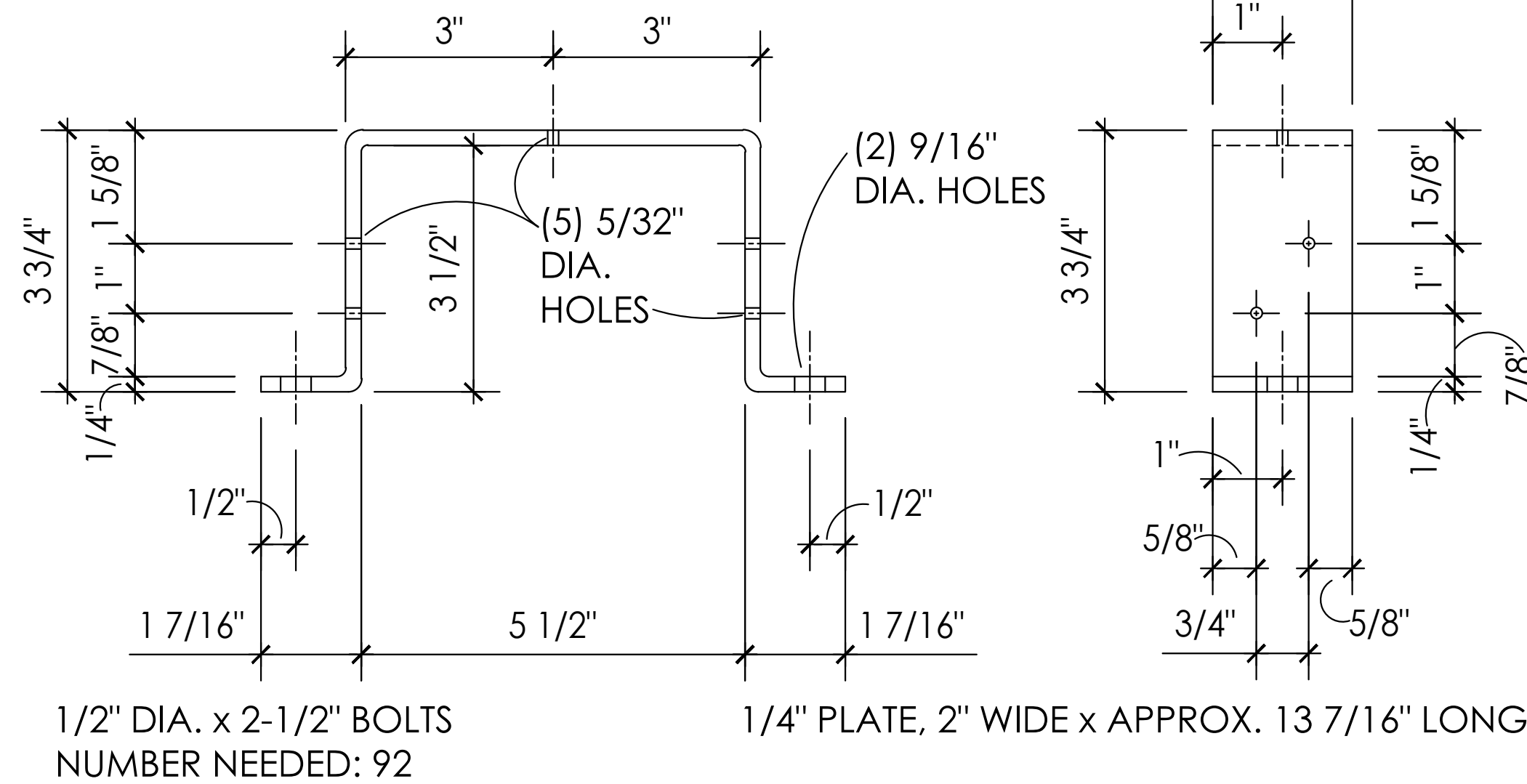
PHASE I
NUMBER NEEDED:
CANTILEVER STRUT ENDS: 12
BENCH ANCHORS: 12

ATTACH WITH (1) 1/2" DIA. HEX HEAD BOLT THROUGH DECKING AND (1) 1/2" DIA. HEX HEAD BOLT THROUGH SEAT SUPPORT POST



ATTACH WITH (2) 1/2" DIA. HEX HEAD BOLTS THROUGH RIM BOARD AND (5) 10d x 1 1/2" NAILS THROUGH POST

(2) TIES PER RAILING POST SPACED 5" O.C. VERTICALLY

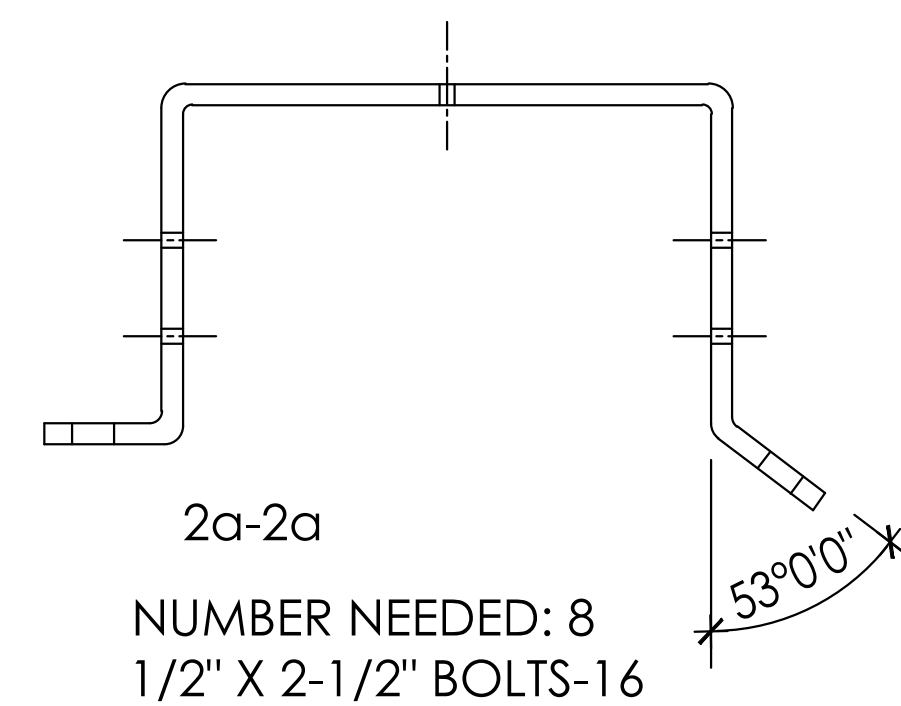


1/2" DIA. x 2-1/2" BOLTS
NUMBER NEEDED: 92

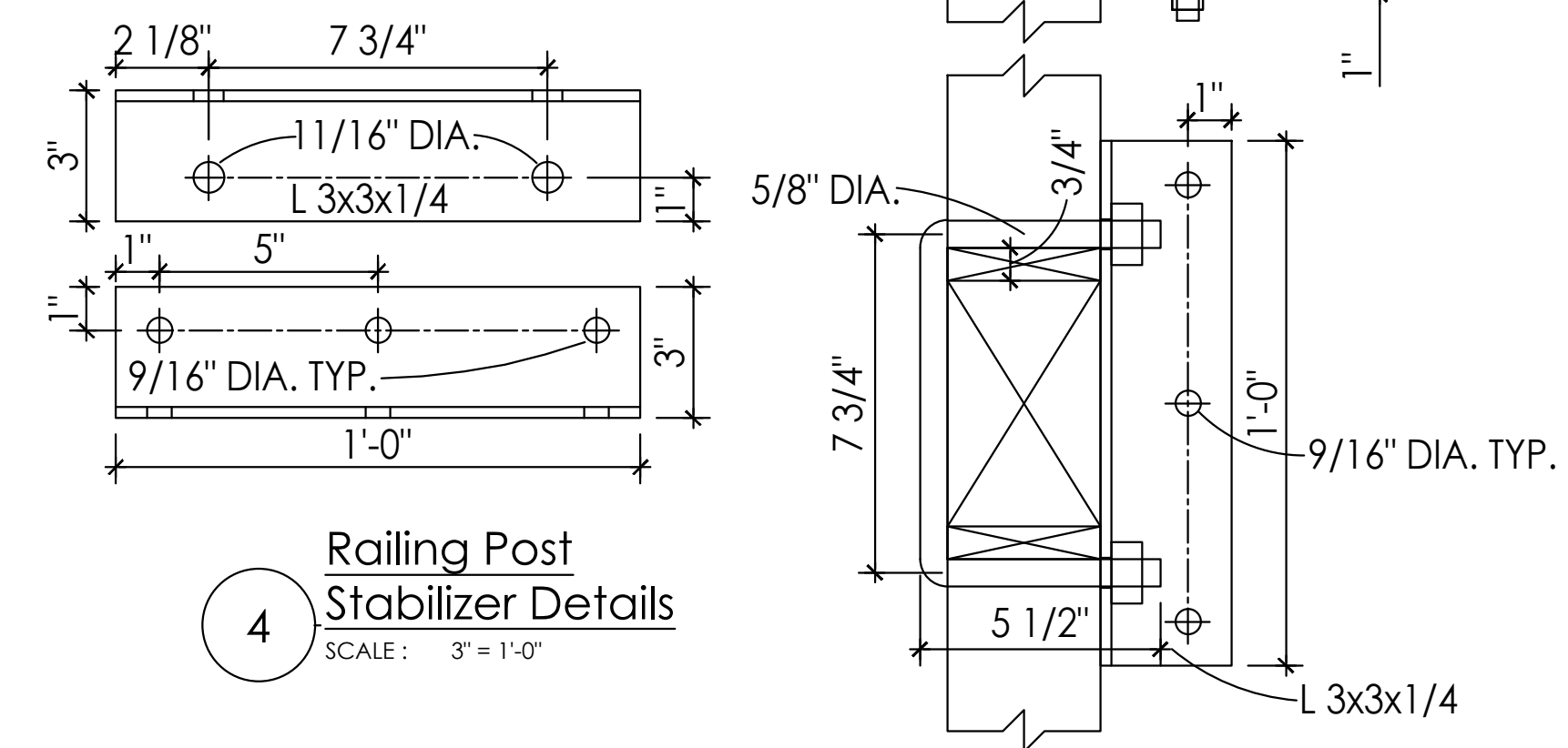
1/4" PLATE, 2" WIDE x APPROX. 13 7/16" LONG

PHASE I
NUMBER NEEDED: 46

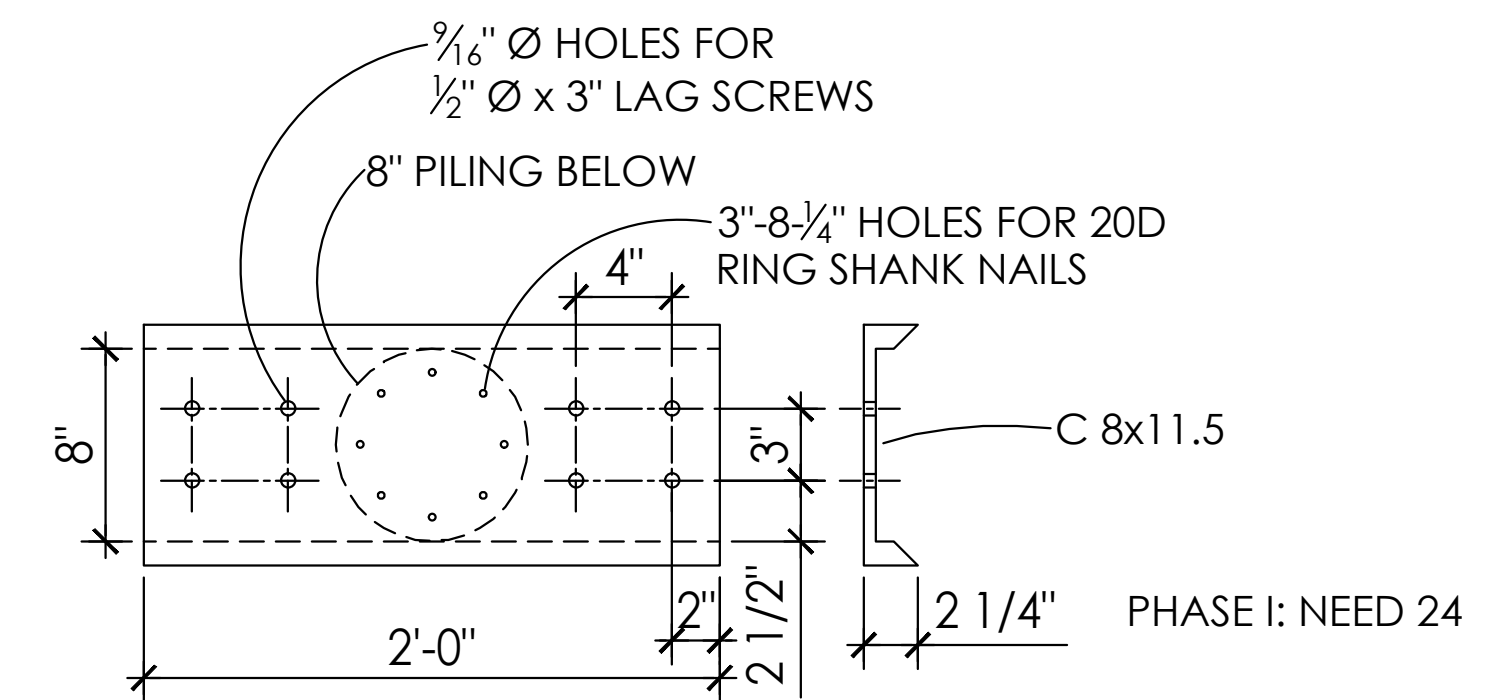
2 Railing Post Tie Details
SCALE: 6" = 1'-0"



2a-2a
NUMBER NEEDED: 8
1/2" x 2-1/2" BOLTS-16
NAILS: MITEK N10-GC .148 x 1-1/2"
NUMBER NEEDED: 210



4 Railing Post Stabilizer Details
SCALE: 3" = 1'-0"



5 Round Pile Cap (Deck)
SCALE: 1-1/2" = 1'-0"

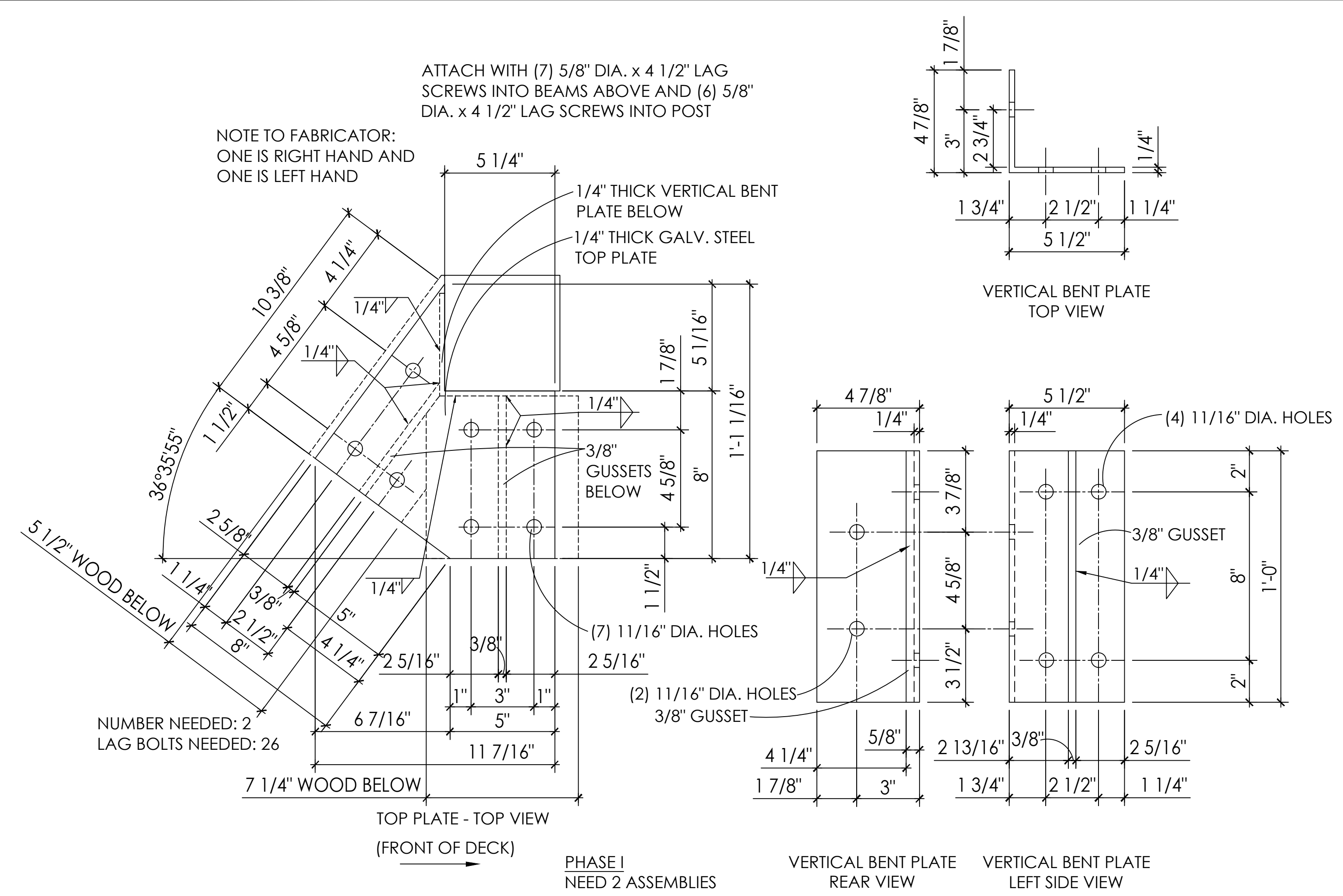
PHASE I
NEED 16 ASSEMBLIES

PHASE II
NEED 32 ASSEMBLIES

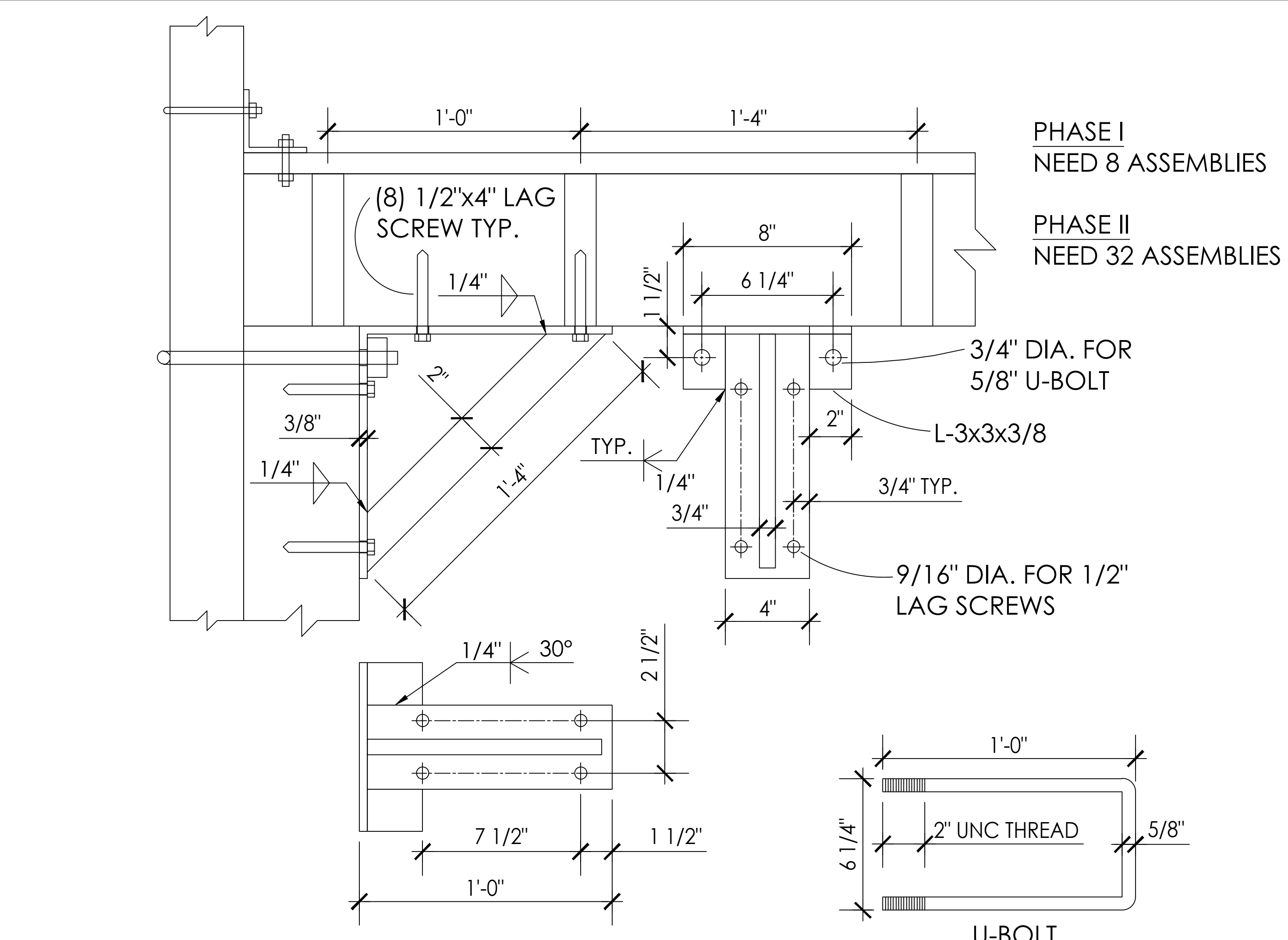
PHASE I: NEED 24

NO.	DATE	REVISION

PROJECT NO. 5E1977
SCALE: 4/12/22
DATE: 4/12/22
DESIGN: JN
DRAWN: JN
CHECK: JMS



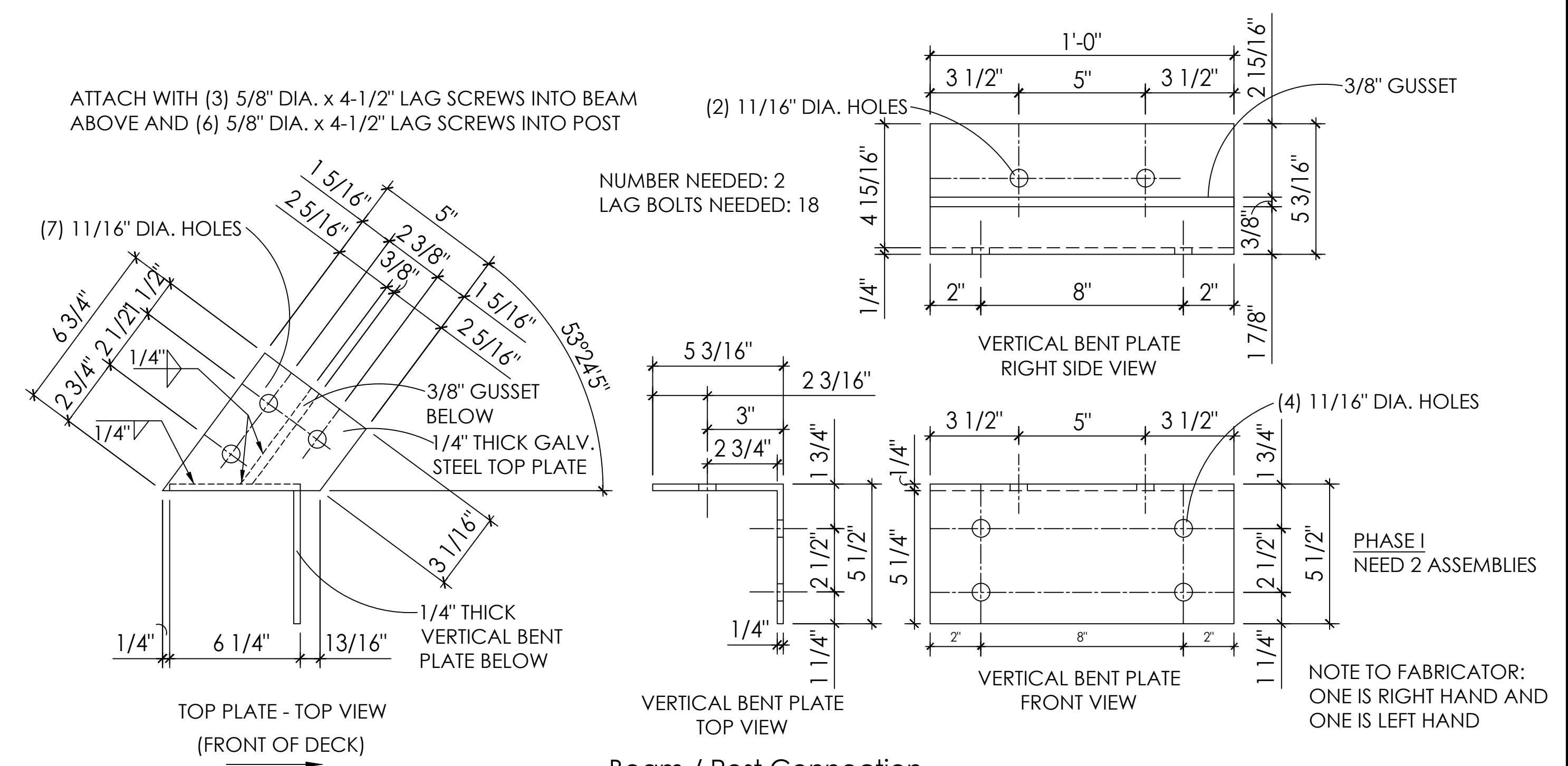
6 Beam / Post Connection
 Bracket Details @ A-2 & F-2
 SCALE: 3" = 1'-0"



7 Boardwalk Post to Floor Beam
 Attachment w/ Barrier Railing
 SCALE: 3" = 1'-0"

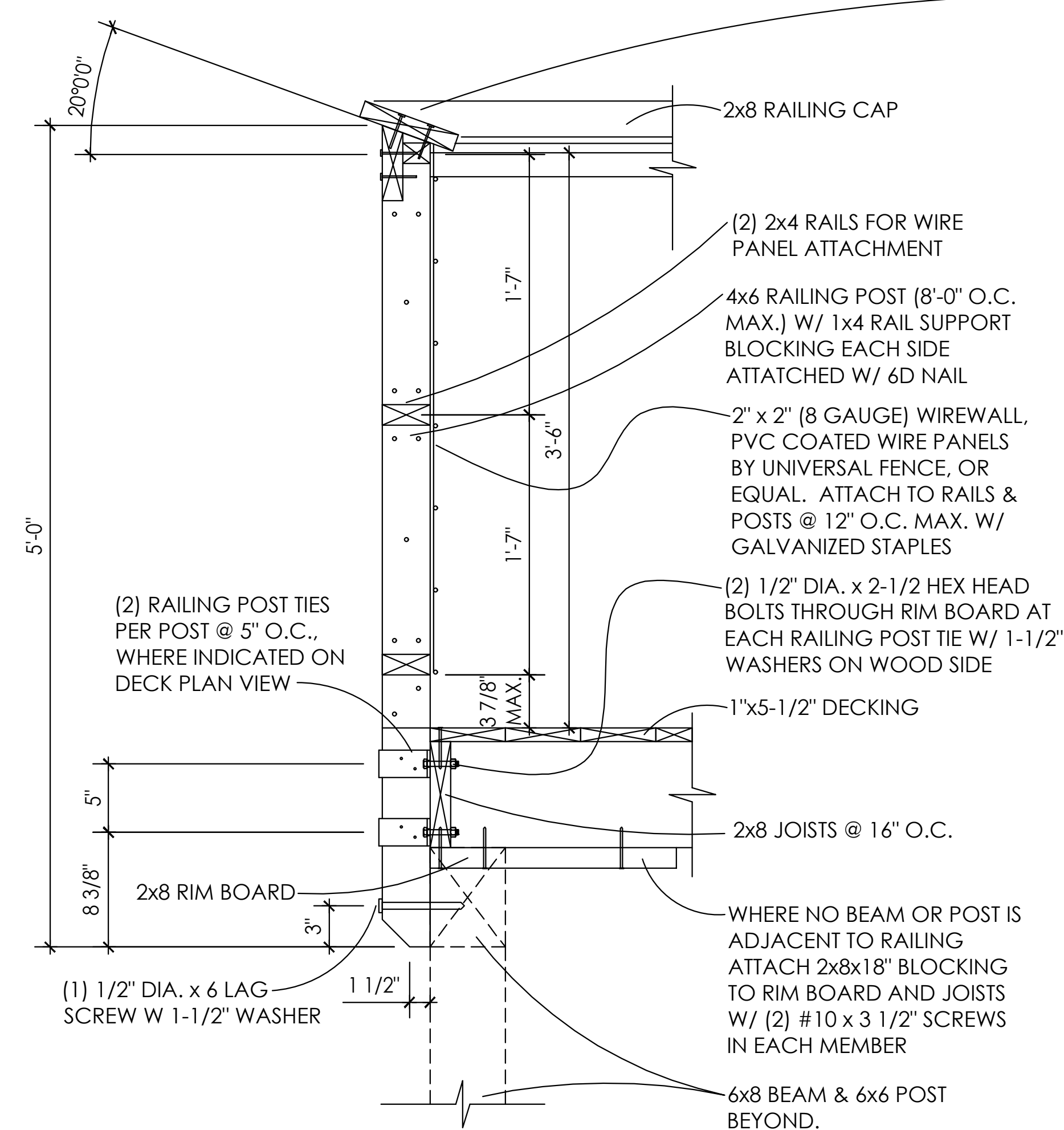
ATTACHMENT METHOD CHART

DIAGONAL BRACE TO DECK SUPPORT POST/PILINGS	(4)-3/8" x 6" LAG SCREWS
RIM BOARD TO JOISTS	(3)-#10 x 3 1/2" SCREWS
DECKING TO RIM BOARD	(2)-#10 x 3 1/2" SCREWS - COUNTERSINK 1/8"
DECKING TO JOISTS	(2)-#10 x 3 1/2" SCREWS - COUNTERSINK 1/8"
BENCH FRAME CONNECTIONS	(4)-#10 x 3 1/2" SCREWS
BENCH SEAT	(2)-#10 x 3 1/2" SCREWS - COUNTERSINK 1/8"
BENCH SEAT TO TRIM	#10 x 3 1/2" SCREWS @ 12" O.C. - COUNTERSINK 1/8"
BENCH TRIM TO FRAME	(2)-#10 x 3 1/2" SCREWS @ 12" O.C. - COUNTERSINK 1/8"

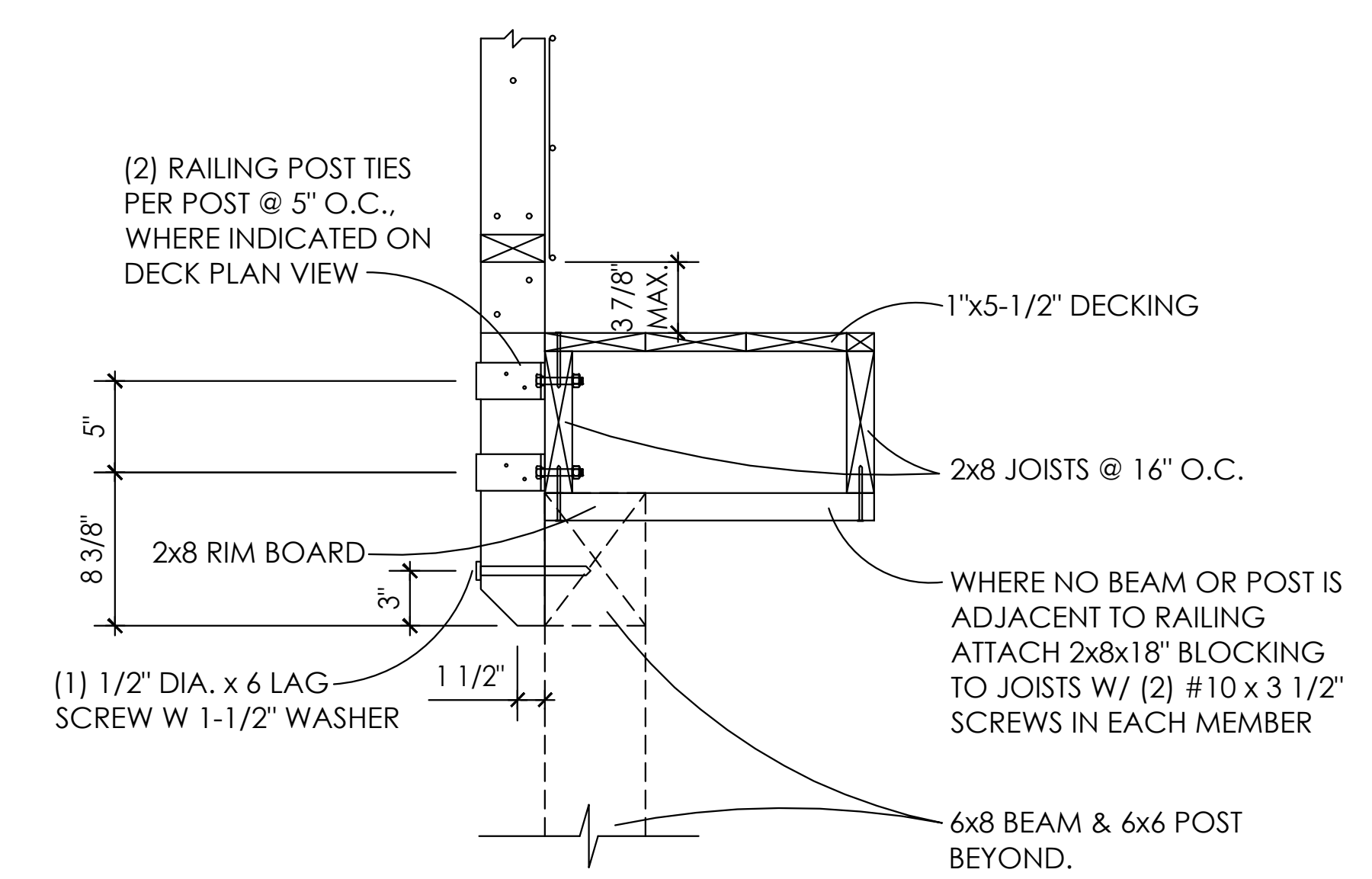
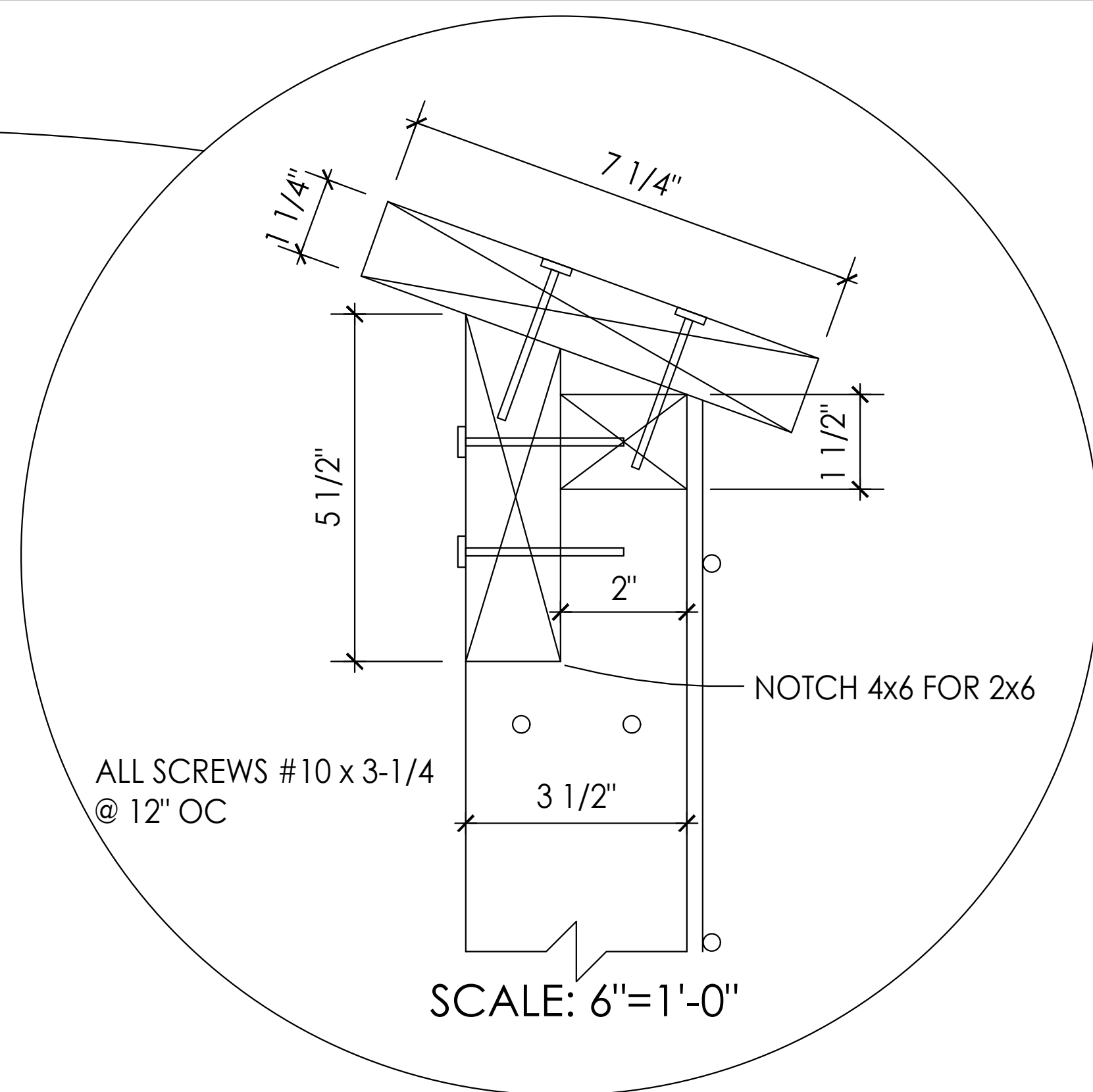


8 Beam / Post Connection
 Bracket Details @ B-3 & E-3
 SCALE: 3" = 1'-0"

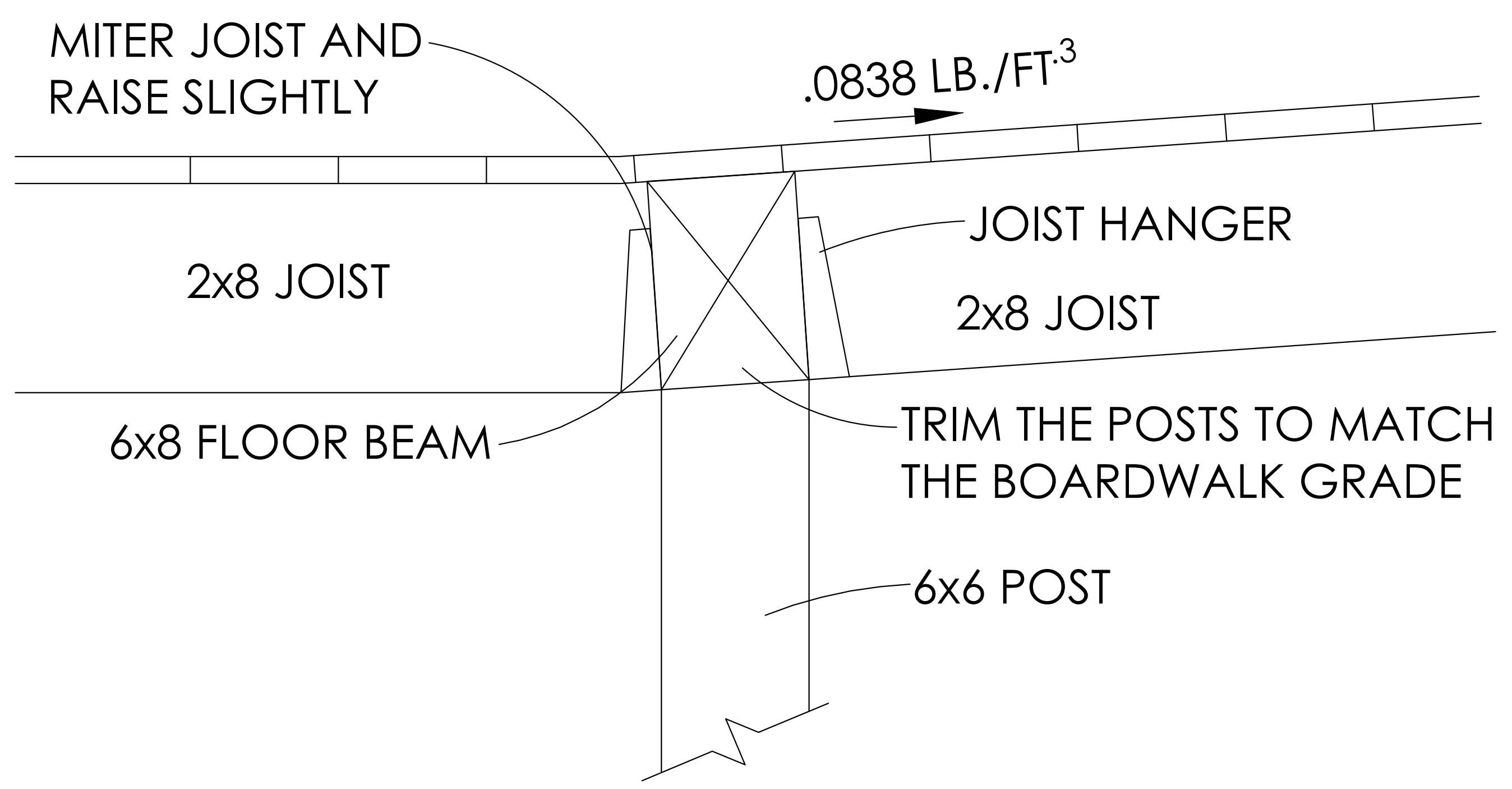
PROJECT NO. SEL1977	NO.	DATE	REVISION
SCALE: 4/19/22			
DESIGN: JN			
DRAWN: JN			
CHECK: JWS			



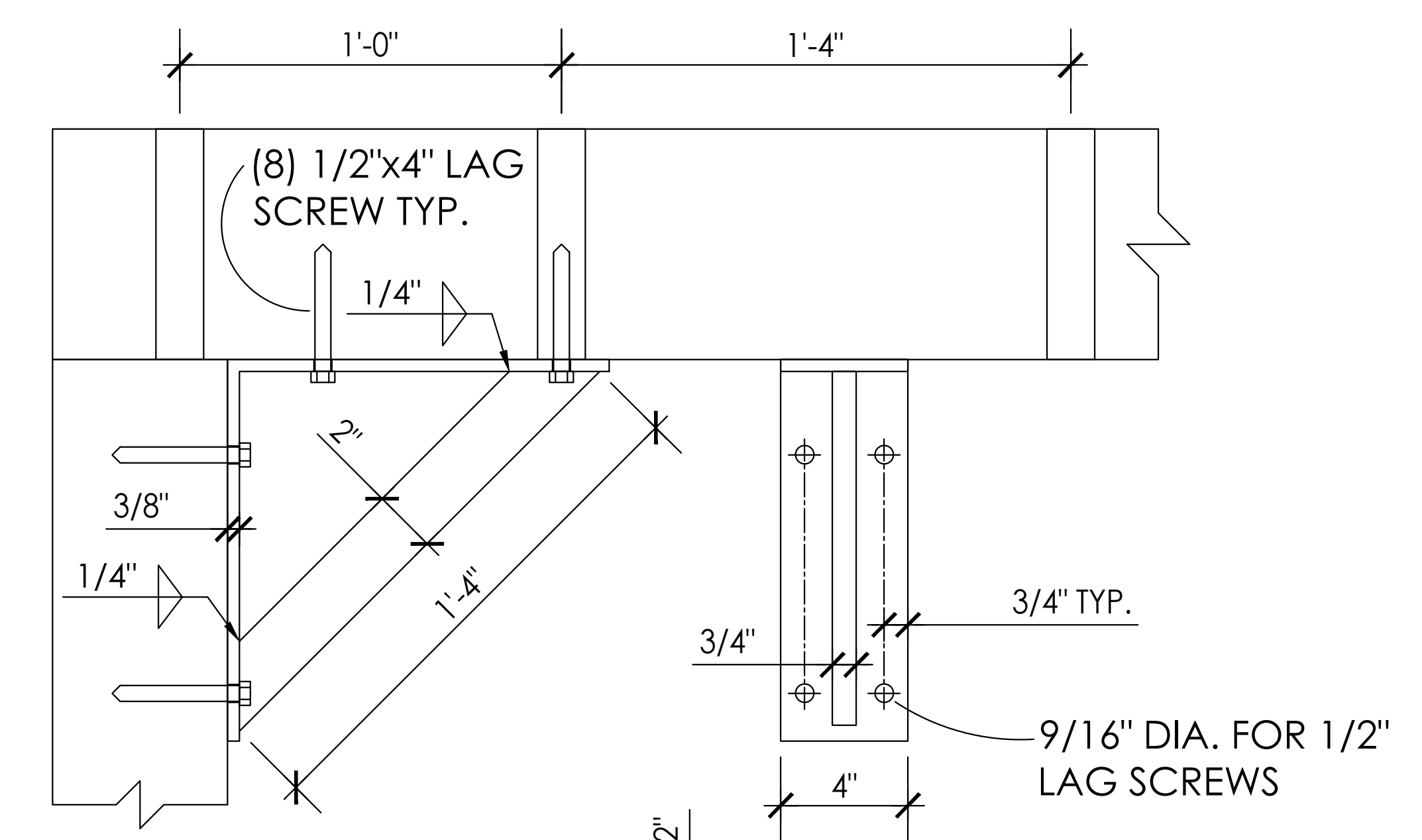
9 Railing Post Tie Attachment Detail @ B-3, C-3, D-3, E-3
 SCALE: 1 1/2" = 1'-0"



10 Railing Post Tie Attachment Detail @ A-1, A-2; F-1, F-2
 SCALE: 1 1/2" = 1'-0"



11 Boardwalk Framing with Grade Change
 SCALE: 3" = 1'-0"



PHASE I
 NUMBER NEEDED: 38 ASSEMBLIES
 PHASE II
 NUMBER NEEDED: 38 ASSEMBLIES

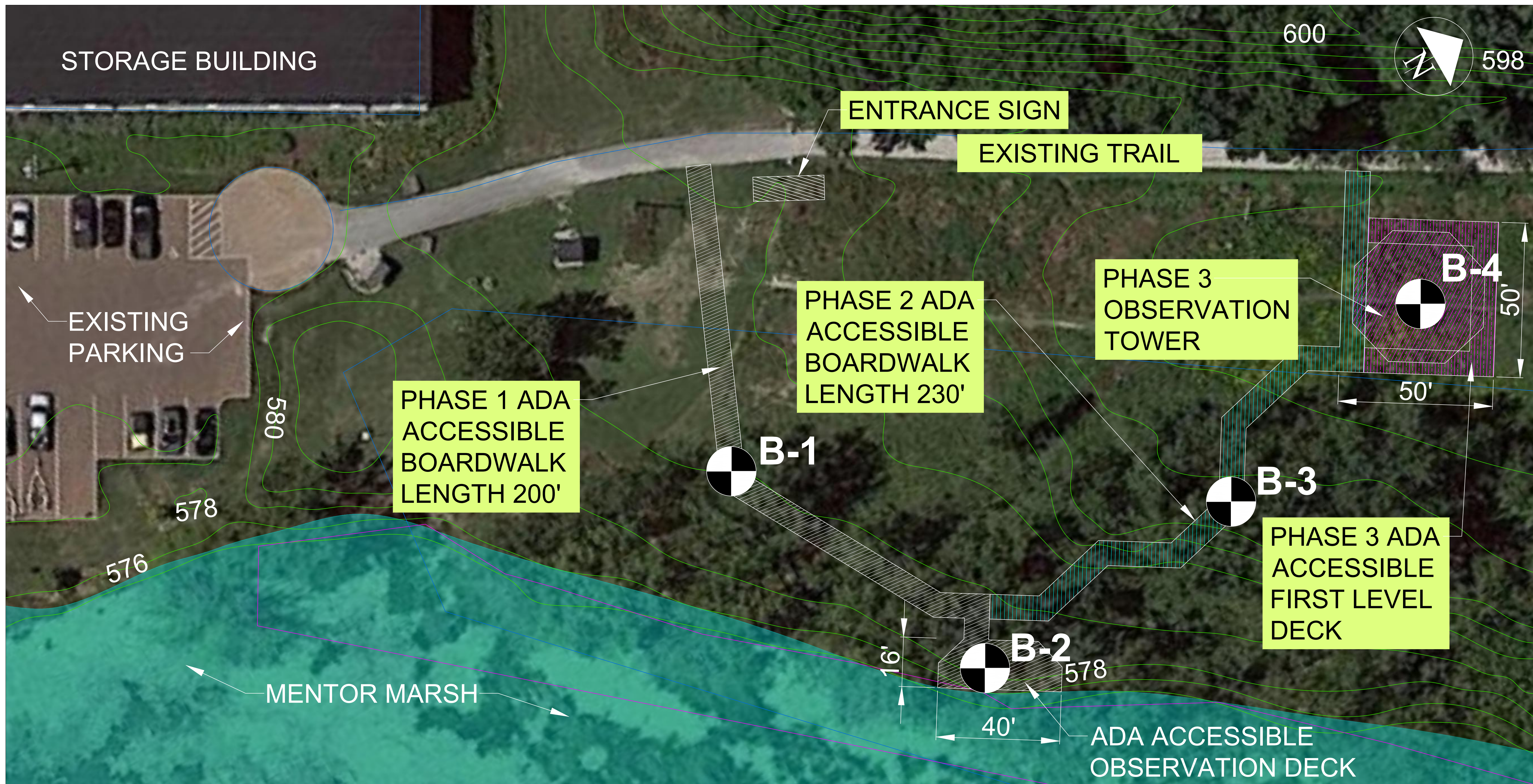
12 Boardwalk Post to Floor Beam Attachment w/ Pipe Railing
 SCALE: 3" = 1'-0"

NO.	DATE	REVISION

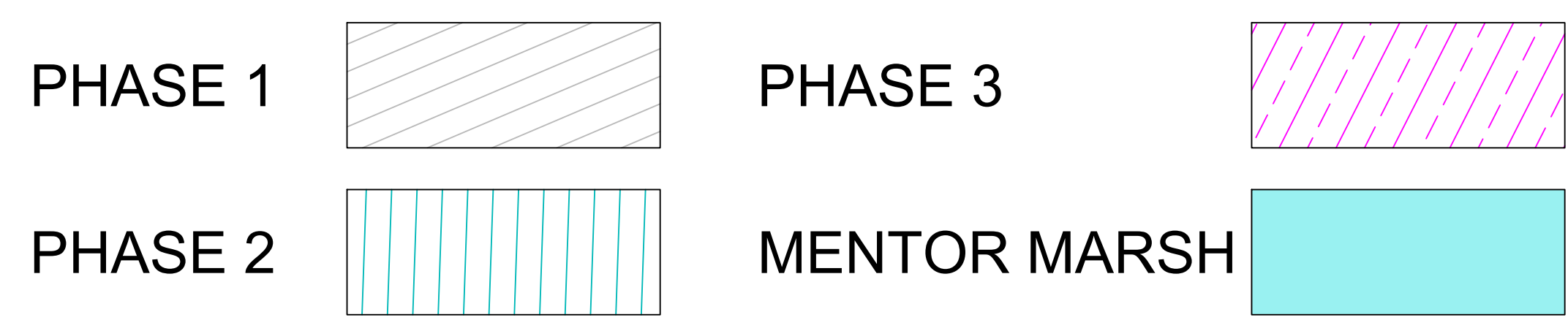
PROJECT NO. 5E1977
 SCALE: 5/2/22
 DATE: 5/2/22
 DESIGN: JN
 DRAWN: JN
 CHECK: JMS

MENTOR MARSH PUBLIC ACCESS PLAN
 DESIGN DRAWINGS
 MENTOR, OHIO
 FABRICATED STEEL PARTS (CONTINUED)

MENTOR MARSH PUBLIC ACCESS CONCEPT PLAN

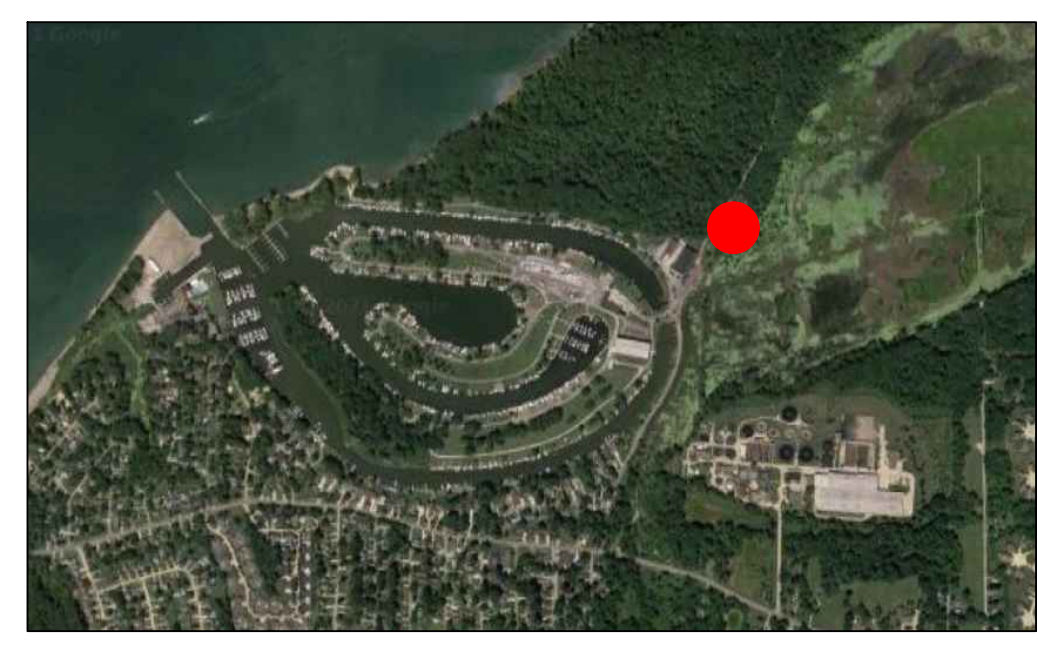


LEGEND



SITE PLAN

SCALE 1/16" = 1'-0"



PROJECT LOCATION

PROPOSED BORING SYMBOLS AND NUMBERING ADDED BY DV LEWIN 1-26-21

NO.	DATE	REVISION

PROJECT NO.: 5E1977
SCALE: 1/4" = 1'-0"
DATE: 1/4/22
DESIGN: JWS
DRAWN: JWS
CHECK: JWS

MENTOR MARSH PUBLIC ACCESS PLAN
DESIGN DRAWINGS
MENTOR, OHIO
CONCEPT APPENDIX