## NB-0315AADA

# NON-ELEV. ALUM. 3 ROW x 15'-0" BLEACHER WITH (2) ADA

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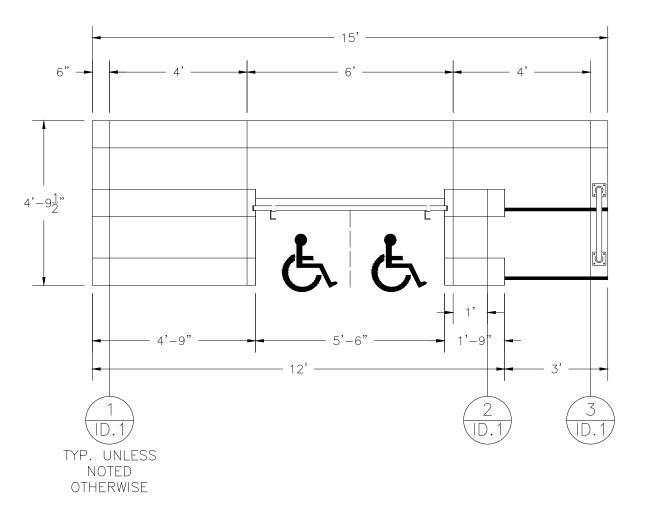


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PROJECT/SITE: NB-0315AADA

DESCRIPTION: NON-ELEV. 3 ROW x 15'-0" ASSEMBLY PRINTS

DRAWN BY: BMP DATE: 9/10/18 REVISION: SCALE: N.T.S. SHEET NUMBER: CS.1



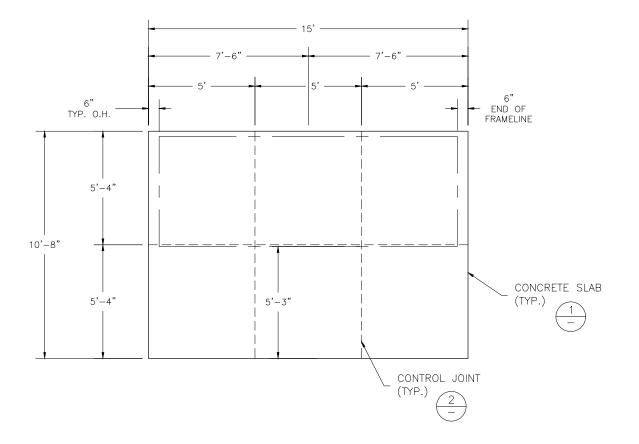
SECTION	GROSS	ACTUAL	NO. OF	NET		
LENGTH	SEATS	SEATS	ROWS	SEATS		
15	10.00	10.00	1	10		
4.75	3.17	3.00	2	6		
1.75	1.17	1.00	2	2		
	18					
	2					
TOTAL N	20					
(BASED ON 18" PER SEAT)						



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DESCRIPTION: NON-ELEV. 3 ROW x 15'-0" SEATING PLAN

DRAWN BY: BMP DATE: 9/10/18 SCALE: N.T.S. SHEET NUMBER: TD. REVISION:



#### **CONCRETE FOUNDATION SPECIFICATIONS**

#### SCOPE

Foundation construction is not part of NATIONAL RECREATION SYSTEMS, INC's., scope of work unless noted otherwise in the contract documents. The OWNER shall review the foundation design with local code authorities and coordinate with NRS, Inc.

#### FOUNDATION DESIGN & ANCHORS:

- 1) The foundation designs are based on the following:
  - a) Minimum presumed soil bearing of 1000 psf.
  - b) Bleacher frame dead and live load of 700 lbs./ft.
  - c) Bleacher frame wind uplift of 250 lbs./ft.
- 2) Unless otherwise specified on the drawings the bleacher frames shall be attached to concrete with a ½" dia. x 3" wedge type expansion anchor. The anchors shall be embedded a minimum of 2" into the concrete.

#### CONCRETE SPECIFICATIONS:

- 1) All concrete construction shall be in accordance with ACI 318.08.
- 2) All concrete shall be air-entrained using an air entraining admixtruing meeting ASTM C620. Total air content: 5%-7% per ASTM C173.
- 3) All concrete shall have a minimum 28-day strength of Fc=3000psi. Concrete shall have air-entrainment
- 4) A ¼" bituminous expansion joint material shall be placed between strip and slab foundations when adjacent to each other.
- 5) The depressions in the top of the foundations between high spots shall not exceed \( \frac{1}{6} \) elow 10-foot long straightedge. The 10-foot straightedge method used to measure foundation flatness shall be in accordance with \( ACI \) 302. IR-04 "Guide for Concrete Floor and Slab \( Construction" \).

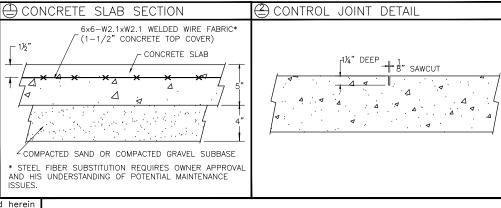
#### CONCRETE SLAB RECOMMENDED SPECIFICATIONS:

- 1) Concrete slab shall have a minimum thickness of 5" (some areas may require 6") and placed on 4" of compacted gravel or compacted sub base.
- 2) NRS. INC., recommends that the concrete slab be reinforced with 6x6-W2.1xW2.1 welded wire fabric at 1½" concrete cover from the top. In lieu of welded wire fabric, steel fiber substitution requires OWNER approval and his understanding of potential maintenance issues.
- 3) Contractor may substitute blended fiber reinforcing, provided the blend consists of multifilament polypropylene fibers and cold drawn steel wire fibers. Novamesh 950 or approved equivalent, applied at a dosage rate of 5lb/CY unless specified otherwise or a different recommendation is made by the manufacturer.
- 4) Crack control joints shall be sawed into slab to form approximate square patterns. The maximum spacing for control joints shall not exceed 13'-6", UNLESS INDICATED OTHERWISE. The bleacher frames shall not be set on control joints. The designer shall contact NRS to coordinate joint spacing requirements with the specific bleacher design.
- The slab may be sloped a maximum of 1/8 inch per foot for drainage. The maximum overall out of level slope for the slab perpendicular to the seats (front to rear) shall not exceed 2" and parallel to the seats (end to end) shall not exceed 4".

# National Recreation Systems

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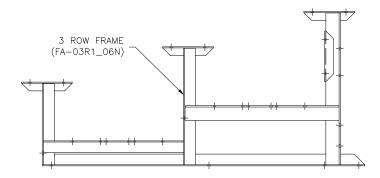
PROJECT/SITE: NB-0315AADA

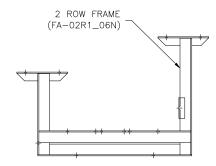
DESCRIPTION: NON-ELEV. 3 ROW x 15'-0" FOUNDATION PLAN

DRAWN BY: BMP DATE: 9/10/18 REVISION: SCALE: N.T.S. SHEET NUMBER: FP.

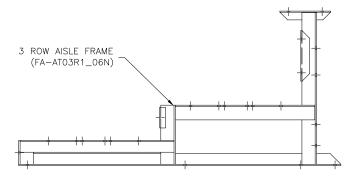














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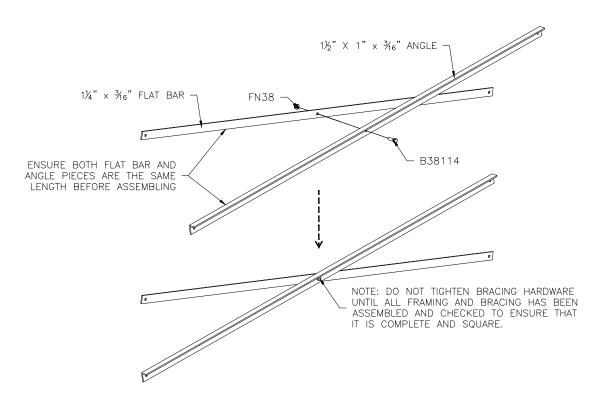
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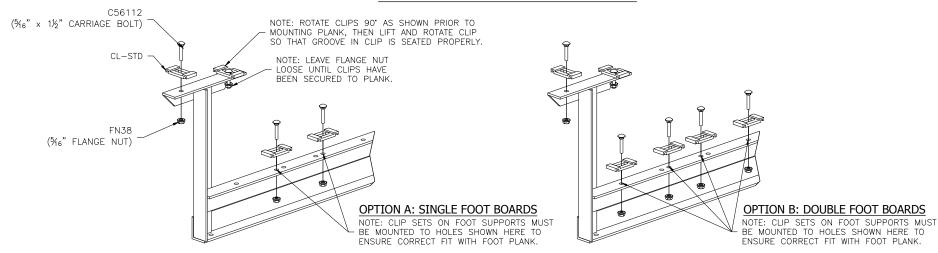
DESCRIPTION: NON-ELEV. 3 ROW FRAME IDENTIFICATION

SCALE: N.T.S. SHEET NUMBER: ID.1 DRAWN BY: BMP DATE: 9/10/18 REVISION:

#### PRE-ASSEMBLE X-BRACE PAIR(S)



### ONCE FRAMING IS COMPLETE, PRE-ASSEMBLE CLIP SETS ON BLEACHER FRAMES





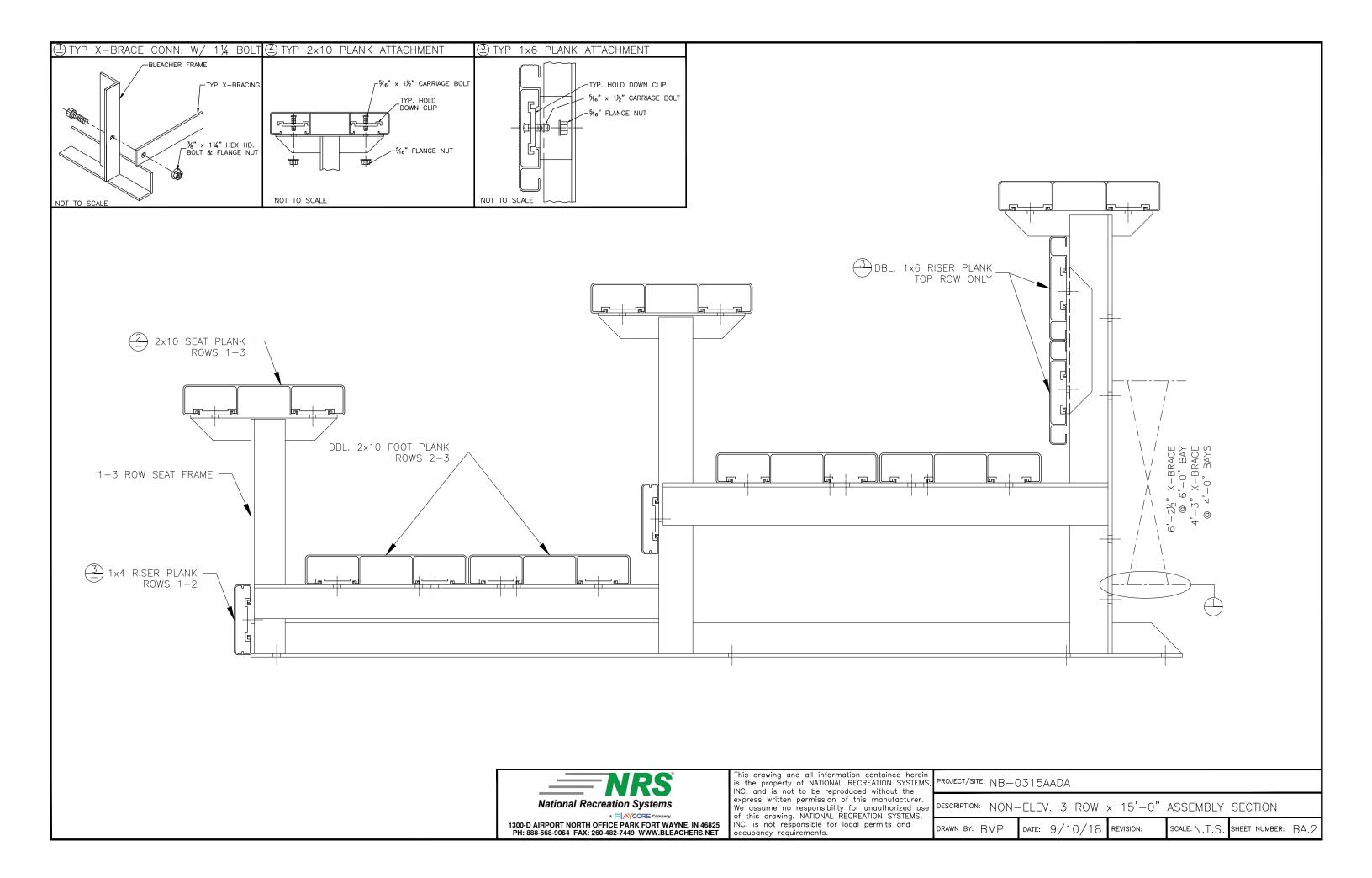
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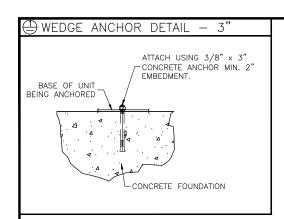
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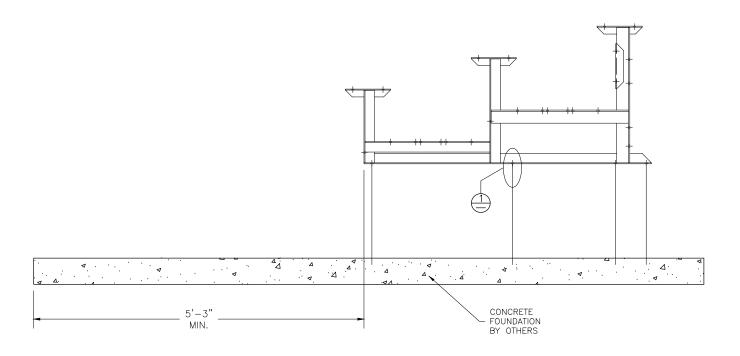
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DESCRIPTION: NON-ELEV. 3 ROW x 15'-0" BLEACHER PREP

DRAWN BY: BMP DATE: 9/10/18 REVISION: SCALE: N.T.S. SHEET NUMBER: BA.









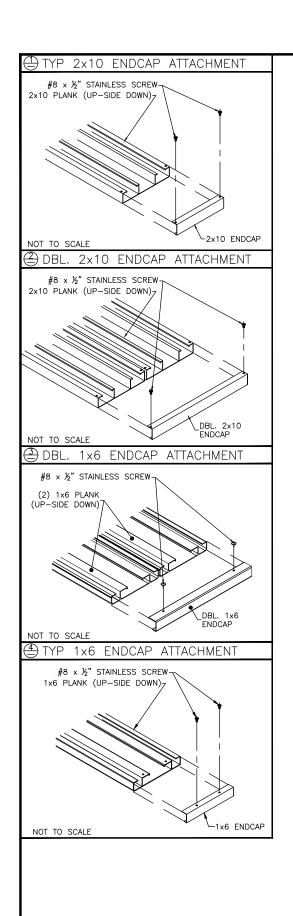
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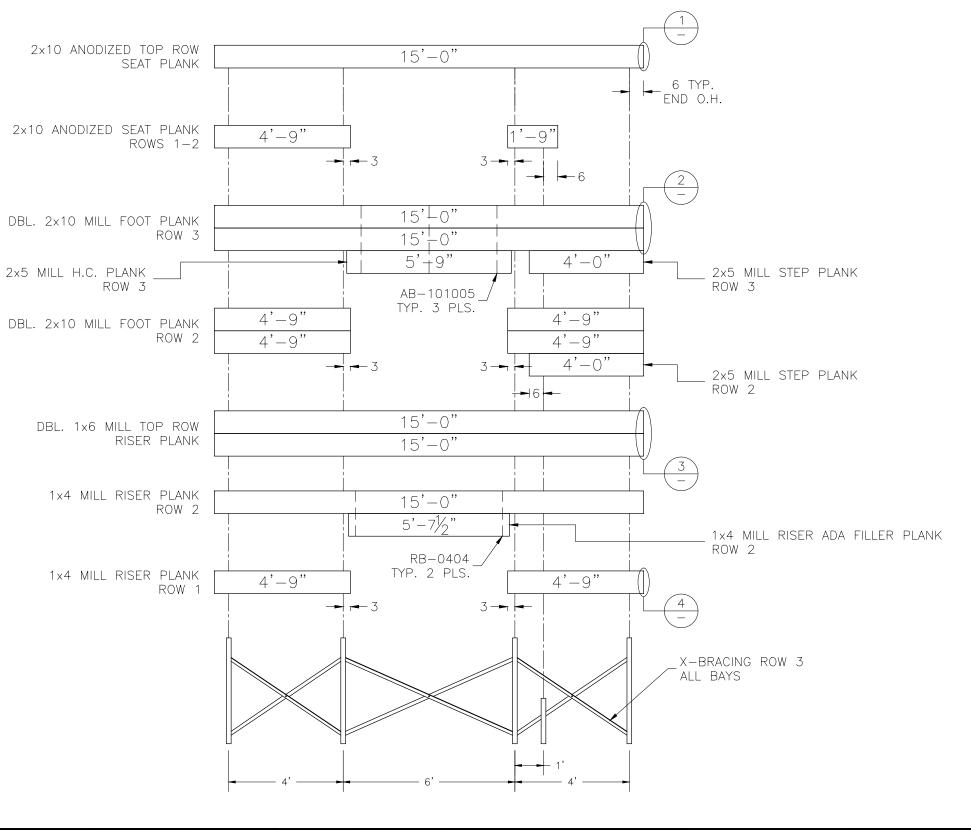
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DESCRIPTION: NON-ELEV. 3 ROW x ANCHORING PLAN

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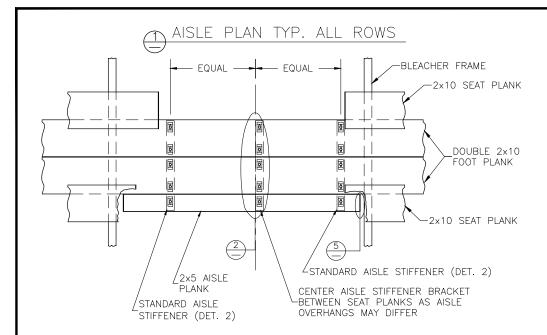
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PROJECT/SITE: NB-0315AADA

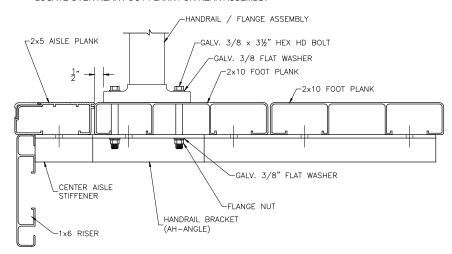
DESCRIPTION: NON-ELEV. 3 ROW x 15'-0" PLANK & FRAMING PLAN

DRAWN BY: BMP DATE: 9/10/18 REVISION: SCALE: N.T.S. SHEET NUMBER: PF.1

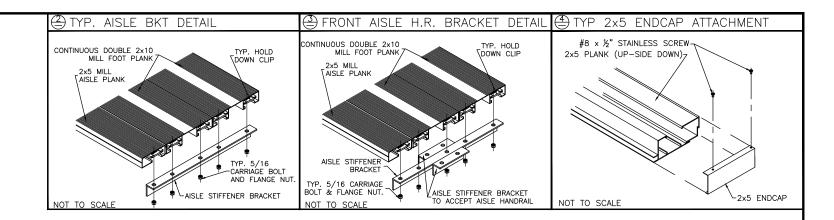


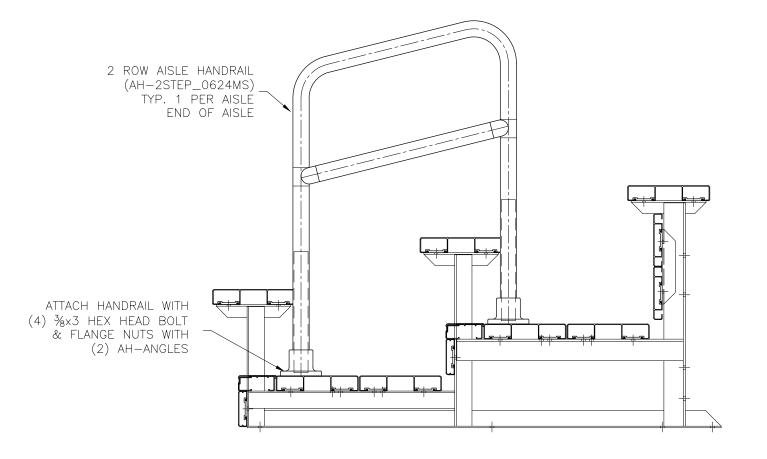
#### **DETAIL A**

FRONT HANDRAIL ASSEMBLY SHOWN
LOCATE OVER REAR FOOT PLANK FOR REAR ASSEMBLY



ALIGN EDGE OF FLANGE APPROX. 1/2" FROM THE LEADING EDGE OF THE FRONT MOST CONTINUOUS 2×10 FOOT PLANK (NOT THE 2×5 AISLE STEP PLANK). SLIGHTLY ADJUST FLANGE LOCATION, IF NECESSARY, SO THAT THE BOLT HOLE IS NOT DRILLED INTO A VERTICAL LEG OF THE PLANK. DRILL \$7/16" HOLES (FOR 3/8" BOLT). ASSEMBLE AS SHOWN USING GALV. STEEL BOLTS, FLAT WASHERS & FLANGE NUTS.







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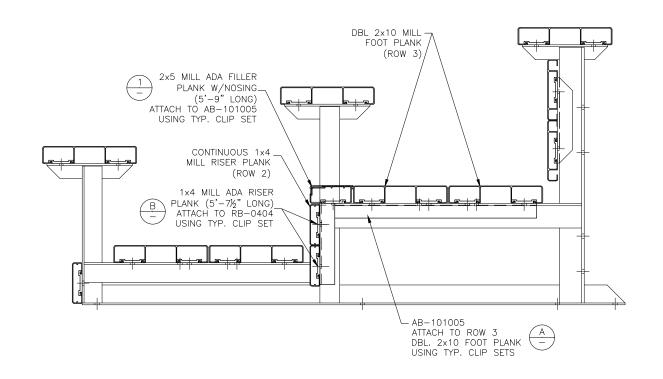
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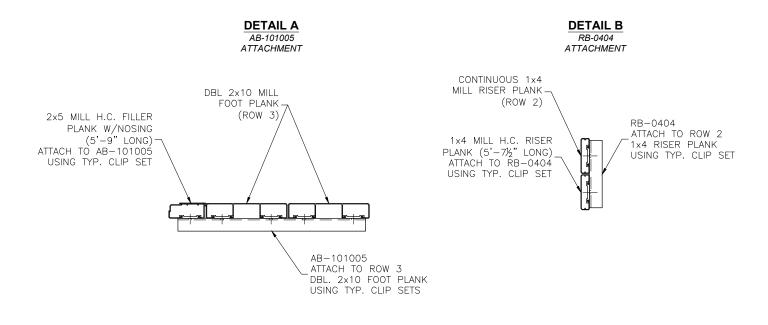
DESCRIPTION: 3 ROW VERTICAL AISLE ASSEMBLY

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#### FRONT VIEW







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PROJECT/SITE: NB-0315AADA

DESCRIPTION: WHEELCHAIR INSERT ASSEMBLY

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