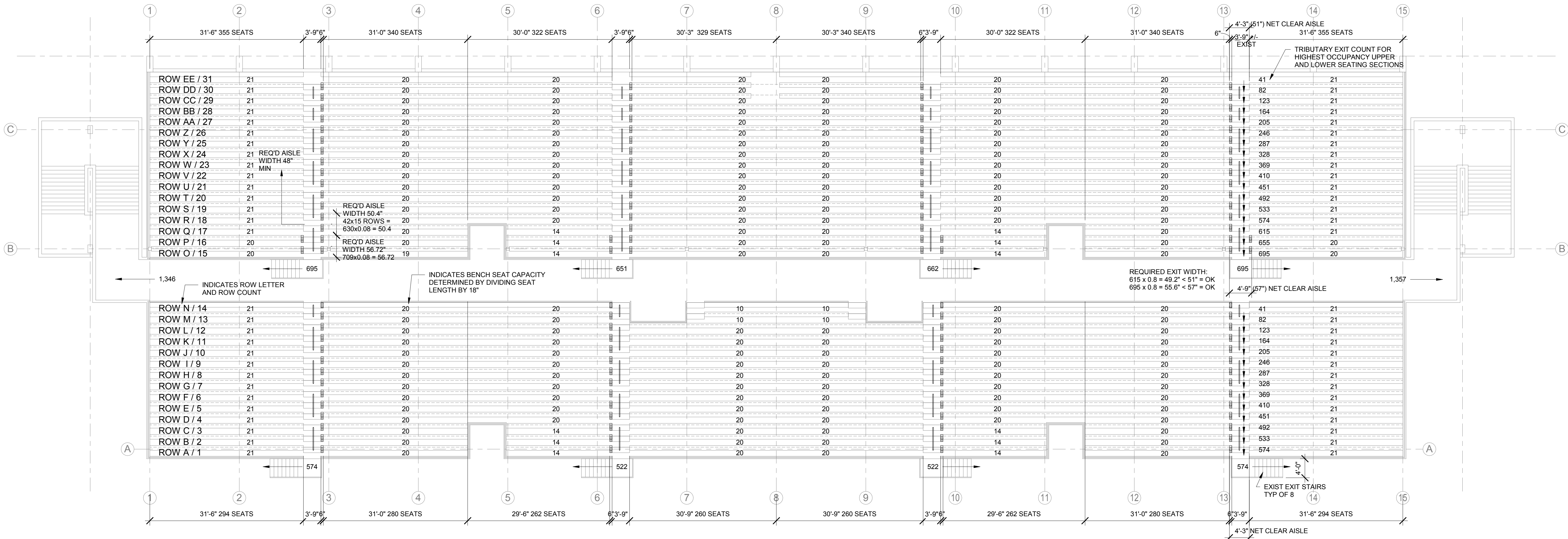


KELSO SCHOOL DISTRICT
SCHROEDER FIELD STADIUM HANDRAILS

ALLEN STREET, KELSO, WA 98626



CODE EGRESS PLAN
A1.0
3/32" = 1'-0"

SEATING CAPACITY @ 18" PER SEAT = 4,895 SEATS TOTAL
UPPER LEVEL - 2,703 SEATS
LOWER LEVEL - 2,192 SEATS

CODE NOTES

BUILDING/ FIRE CODES: 2015 IBC/ IFC WITH WASHINGTON STATE AMENDMENTS.
OCCUPANCY CLASSIFICATION: A-5 STADIUM PER SEC 302.
OCCUPANT LOAD FACTORS: PER1004.4 Fixed seating For areas having fixed seats and aisles, the occupant load shall be determined by the number of fixed seats installed therein.
CONSTRUCTION: TYPE V-B (COMBUSTIBLE NON-RATED).
EGRESS:
1004.4 Fixed Seating. For areas having fixed seating without dividing arms, the occupant load shall be not less than the number of seats based on one person for each 18 inches of seating length.
SECTION 1005 MEANS OF EGRESS SIZING
1005.1 General. All portions of the means of egress system shall be sized in accordance with this section.
Exception: Aisles and aisle accessways in rooms or spaces used for assembly purposes complying with Section 1029.
1005.3.1 Stairways. The capacity, in inches, of means of egress stairways shall be calculated by multiplying the occupant load served by such stairways by a means of egress capacity factor ...
Exceptions:
3. Facilities with outdoor smoke-protected assembly seating shall be permitted to the Capacity factors in Section 1029.6.3 indicated for stepped aisles for exit access or exit stairways where the entire path for means of egress from the seating to the exit discharge is open to the outdoors.
SECTION 1014 HANDRAILS
1014.1 Where required. Handrails for stepped aisles and ramped aisles required by Section 1029.15 shall comply with Sections 1014.2 through 1014.8.
1014.2 Height. Handrail height, measured above stair tread nosings, or finish surface of ramp slope, shall be uniform, not less than 34 inches and not more than 38 inches.
1014.3.1 Type 1. Handrails with a circular cross section shall have an outside diameter of not less than 1 1/4 inches and not greater than 2 inches.
1014.4 Continuity. Handrail gripping surfaces shall be continuous, without interruption...
Exceptions: 5. Handrails serving stepped aisles or ramped aisles are permitted to be discontinuous in accordance with Section 1029.15.1.
1014.6 Handrail extensions.
Exceptions:
2. Handrails serving aisles in rooms or spaces used for assembly purposes are permitted to comply with the handrail extensions in accordance with Section 1029.15.
SECTION 1018 AISLES
1018.2 Aisles in assembly spaces. Aisles and aisle access-ways serving a room or space used for assembly purposes shall comply with Section 1029.
1029.6.3 Outdoor smoke-protected assembly seating. The required capacity in inches of aisles shall be not less than the total occupant load served by the egress element multiplied by 0.08 where egress is by stepped aisle...

1029.9.1 Minimum aisle width. The minimum clear width for aisles shall comply with one of the following:
1. Forty-eight inches for stepped aisles having seating on each side.
3. Twenty-three inches between a stepped aisle handrail or guard and seating where the stepped aisle is subdivided by a mid-aisle handrail.
1029.13.2.3 Tread contrasting marking stripe. A contrasting marking stripe shall be provided on each tread at the nosing or leading edge such that the location of each tread is readily apparent when viewed in descent. Such stripe shall be not less than 1 inch, and not more than 2 inches wide.
Exception: The contrasting marking stripe is permitted to be omitted where tread surfaces are such that the location of each tread is readily apparent when viewed in descent.
1014.3 Handrail graspability. Required handrails shall comply with Section 1014.3.1 or shall provide equivalent graspability.
1014.5 Fittings. Handrail extensions. Handrails shall return to a wall, guard or the walking surface or shall be continuous to the handrail of an adjacent flight of stairs or ramp run. Where
1014.7 Clearance. Clear space between a handrail and a wall or other surface shall be not less than 1 1/2 inches. A handrail and a wall or other surface adjacent to the handrail shall be free of any sharp or abrasive elements.
1029.15 Handrails. ...and stepped aisles shall be provided with handrails in compliance with Section 1014 located either at one or both sides of the aisle or within the aisle width.
Exceptions:
3. Handrail extensions are not required at the top and bottom of stepped aisles and ramped aisles to permit crossovers within the aisles.
1029.15.1 Discontinuous handrails. Where there is seating on both sides of the aisle, the mid-aisle handrails shall be discontinuous with gaps or breaks at intervals not exceeding five rows... These gaps or breaks shall have a clear width of not less than 22 inches and not greater than 36 inches, measured horizontally, and the mid-aisle hand-rail shall have rounded terminations or bends.
1029.15.3 Mid-aisle termination. Mid-aisle handrails shall not extend beyond the lowest riser and shall terminate within 18 inches measured horizontally, from the lowest riser. Handrail extensions are not required.
Exception: Mid-aisle handrails shall be permitted to extend beyond the lowest riser where the handrail extensions do not obstruct the width of the cross aisle.
1029.15.4 Rails. Where mid-aisle handrails are provided in stepped aisles, there shall be an additional rail located approximately 12 inches below the handrail. The rail shall be adequate in strength and attachment in accordance with Section 1607.8.1.2.

VICINITY MAP



PROJECT SITE

PROJECT TEAM

OWNER
KELSO SCHOOL DISTRICT NO. 458
601 CRAWFORD STREET
KELSO WA 98626
PHONE: (360) 501-1903
CONTACT: GARY SCHIMMEL
EMAIL: gary.schimmel@kelsoasd.org

ARCHITECT
COLLINS ARCHITECTURAL GROUP PS
950 12th AVE SUITE 200
LONGVIEW WA 98632
PHONE: (360) 425-0000
CONTACT: CRAIG COLLINS
E-MAIL: craig@collinsarchgroup.com

PROJECT DESCRIPTION

THIS PROJECT IS A SAFETY AND CIRCULATION IMPROVEMENT TO 4,942 SEAT KELSO HIGH SCHOOL STADIUM/ SCHROEDER FIELD. IMPROVEMENTS CONSIST OF WIDENING THE STEPPED AISLES FROM 45" TO 51" AND ADDING INTERMEDIATE HANDRAILS CENTERED ON THE WIDENED STEPPED AISLES.

INDEX OF DRAWINGS

ARCHITECTURAL
A1.0 COVER / CODE SHEET
A3.0 PLANS AND DETAILS

Revision Schedule		
#	Date	Description



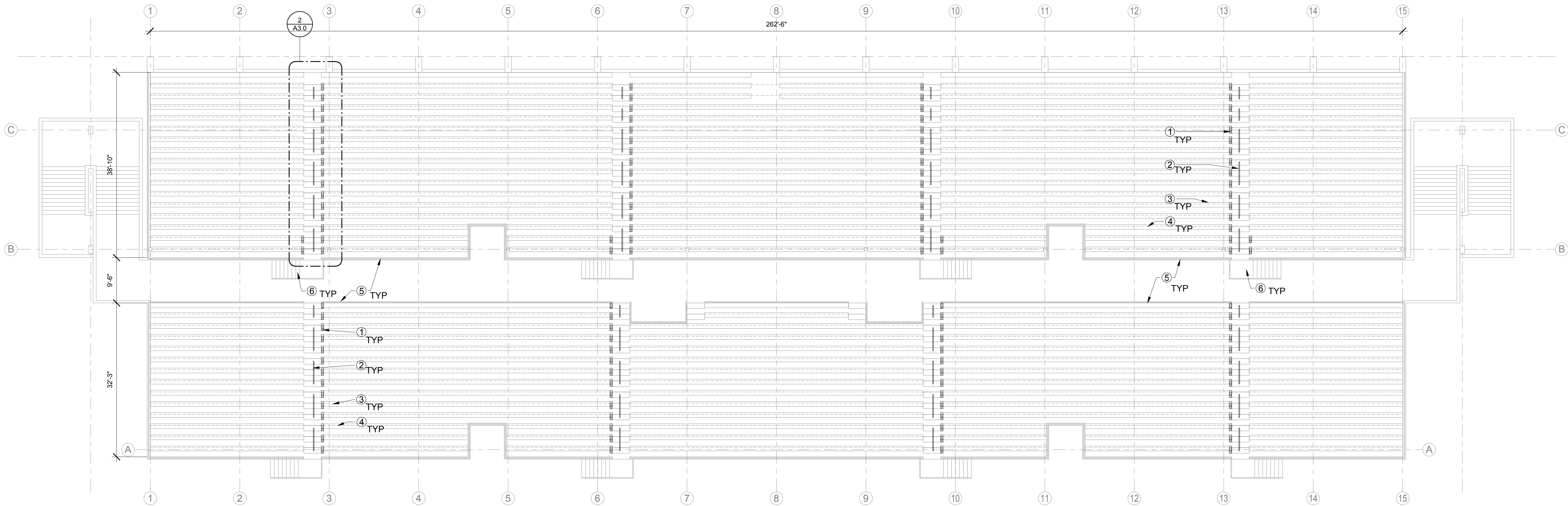
KELSO SCHOOL DISTRICT
SCHROEDER FIELD STADIUM
HANDRAILS
ALLEN STREET, KELSO, WA 98626

PERMIT
MAY 15, 2019

COVER
SHEET

2019-15
SHEET NO.

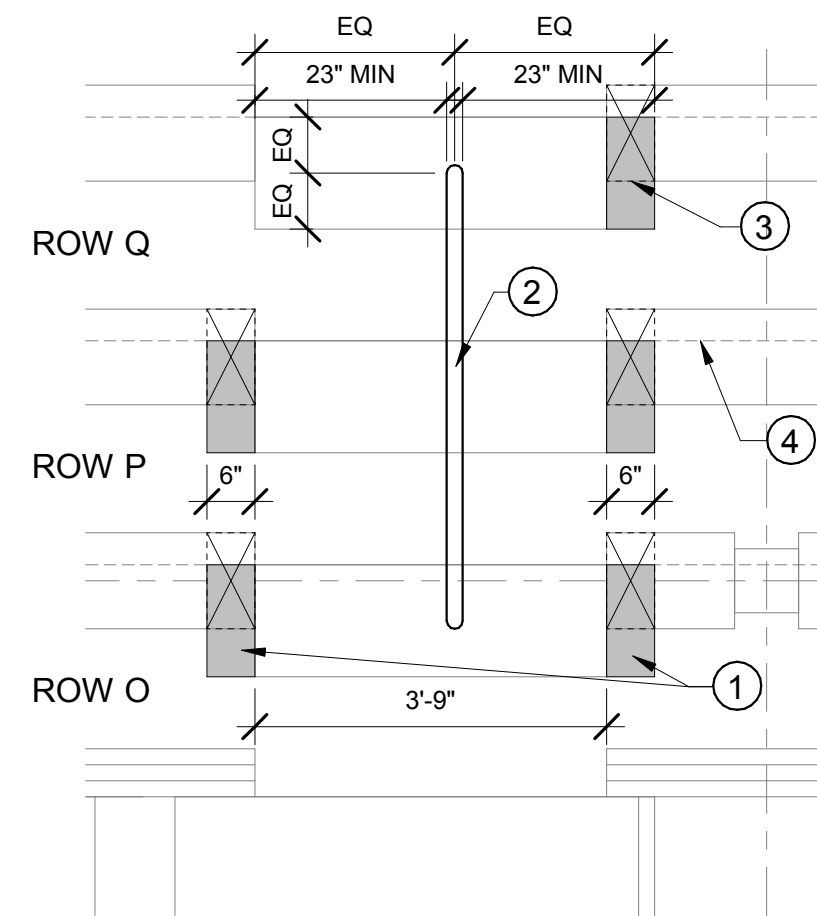
A1.0



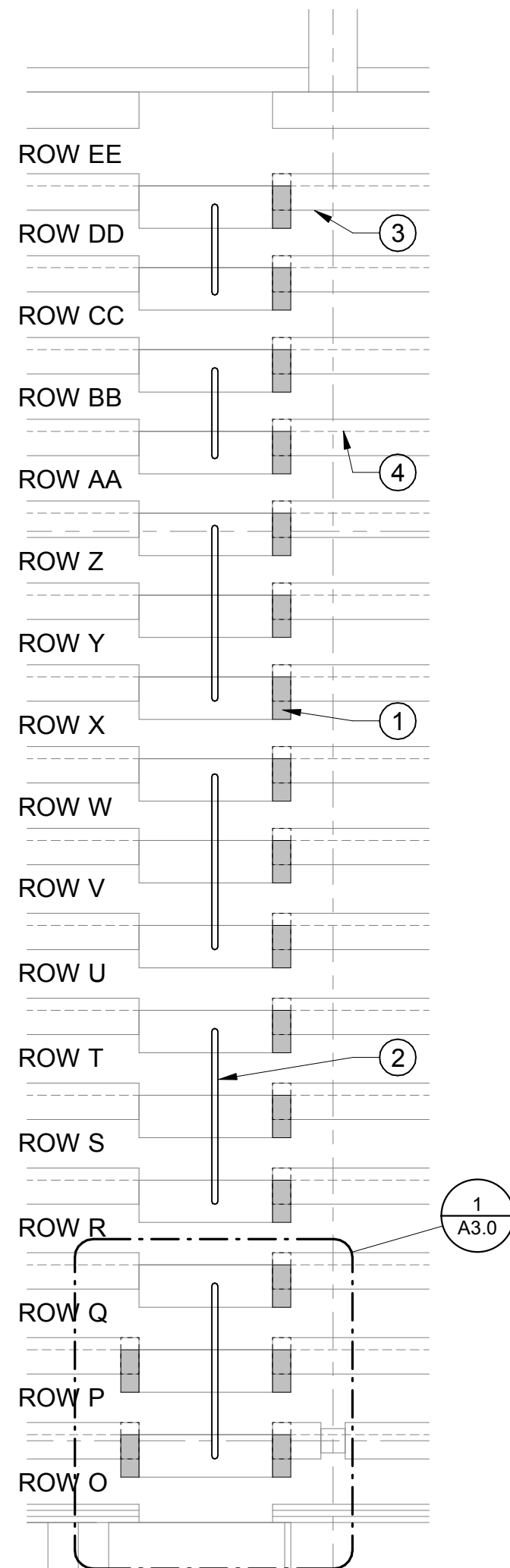
A
A3.0
GRANDSTAND STADIUM SEATING PLAN
3/32" = 1'-0"

KEY NOTES

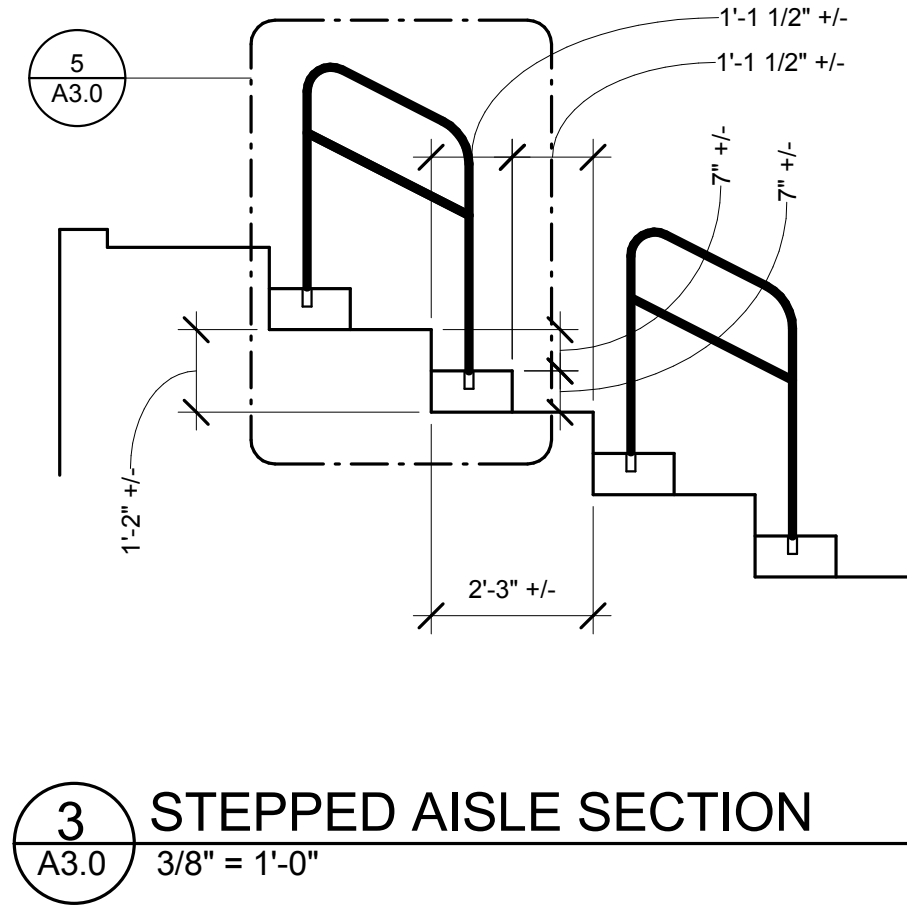
- 6" LONG PRECAST CONCRETE STEP USING 4,000 PSI CONCRETE. ATTACH TO CONCRETE RISER AND EXIST STEP WITH NON-SHRINK GROUT. MATCH PROFILE AND FINISH OF EXISTING PRECAST STEP. FIELD VERIFY SIZE AND PROFILE OF EXIST STEP AT MULTIPLE LOCATIONS. APPLY NON-SAG POLYURATHANE CONCRETE JOINT SEALANT BETWEEN NEW STEP, EXIST STEP AND EXIST CONCRETE RISER.
- 1 1/4" DIAMETER MID-AISLE STEEL HAND RAILS. PLACE RAIL INTO 1-1/2" DIA x 3" DEEP CORE DRILLED HOLE AND SECURE WITH EPOXY GROUT. SHOP PRIME AND SHOP PAINT WITH POWDERCOAT PAINT.
- TYP. ALUMINUM BENCH SEAT. REMOVE PROTECTIVE END CAP. REMOVE 6" OF BENCH NEXT TO AISLE. REATTACH EXIST PROTECTIVE END CAP.
- DASHED LINE INDICATES FACE OF RISER BELOW BENCH.
- EXISTING RAILINGS.
- EXISTING STAIRS AND LANDING.



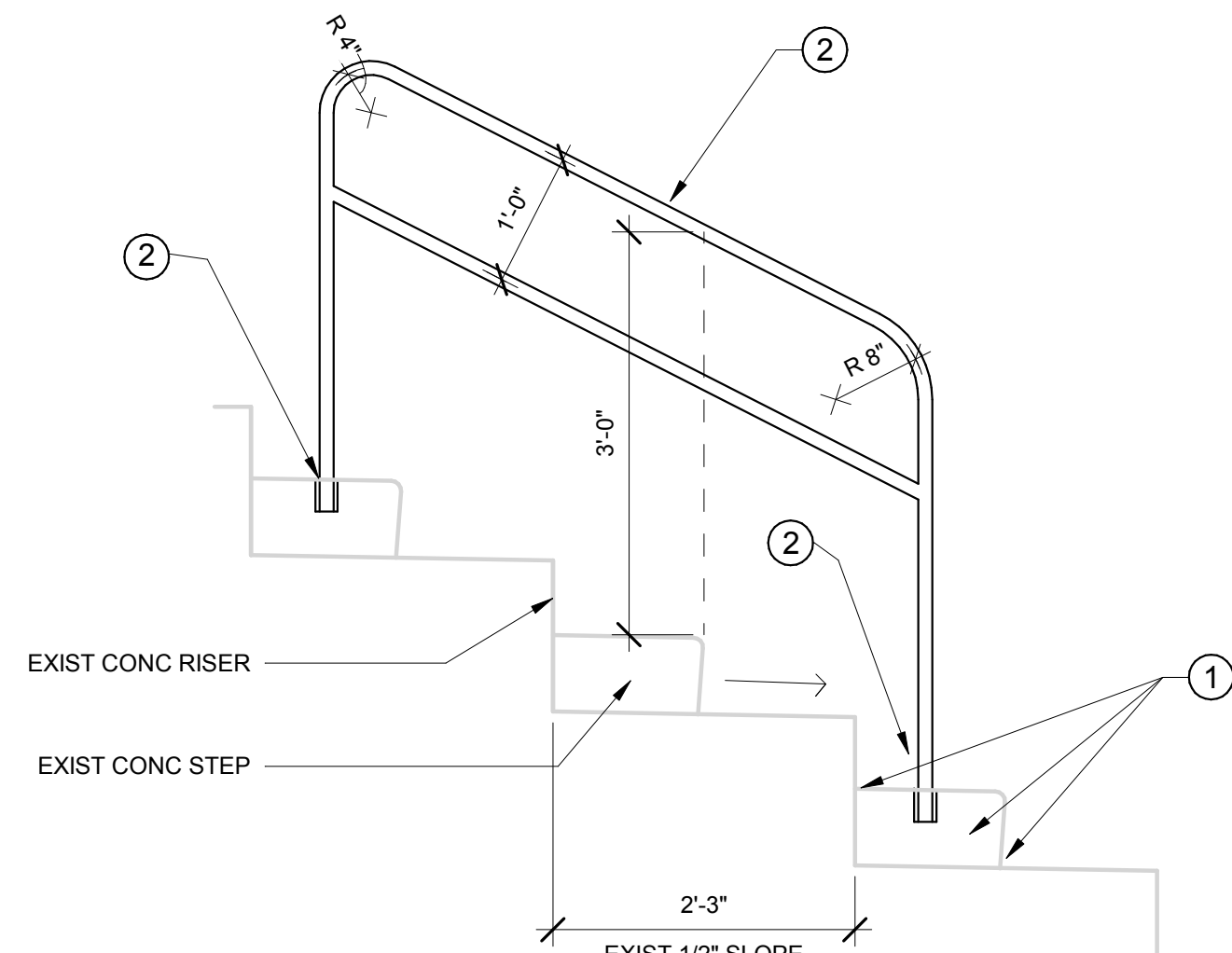
1
A3.0
LANDING PLAN
1/2" = 1'-0"



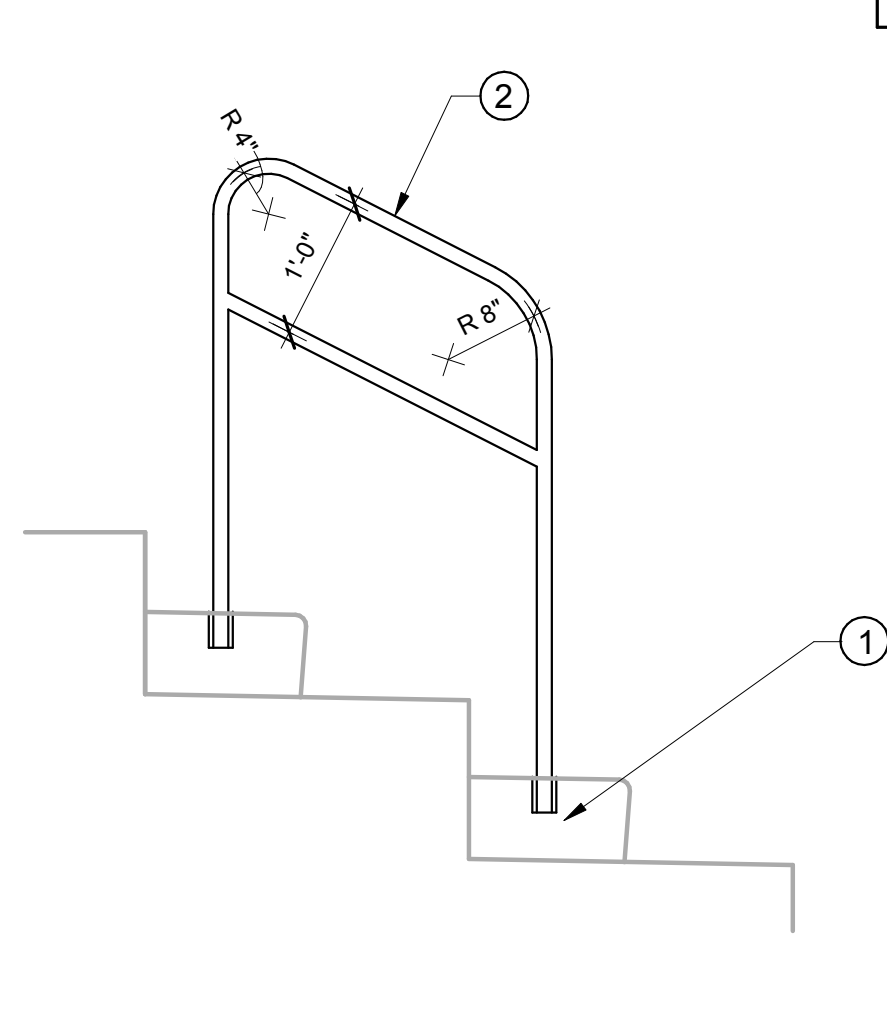
2
A3.0
STEPPED AISLE PLAN
1/4" = 1'-0"



3
A3.0
STEPPED AISLE SECTION
3/8" = 1'-0"



4
A3.0
RAIL TYPE A
3/4" = 1'-0"



5
A3.0
RAIL TYPE B
3/4" = 1'-0"

2'-3"
22" MIN PER IBC 1029.15.1

4
A3.0

EXIST STAIR LANDING
AND RAILS

3'-0"
3/4" MIN 38" MAX

Revision Schedule		
#	Date	Description



**KELSO SCHOOL DISTRICT
SCHROEDER FIELD STADIUM
HANDRAILS**
ALLEN STREET, KELSO, WA 98626

PERMIT
MAY 15, 2019

FLOOR PLAN
DETAILS

2019-15
SHEET NO.

A3.0