Welcome Ramp Systems, Inc.

Component Aluminum Ramp System for Safe, User-Friendly Building Access.

www.welcomerampsystems.com

CODE COMPLIANCE

1. IBC 2021, CHAPTERS 10 & 11 COMPLIANT
2. RISK FACTORS I & II
3. RAMP SLOPE, MAX.RISE = 1:12 (VERT/HORZ) [30" MAX. RISE EACH RAMP RUN BETWEEN PLATFORMS]
4. CROSS SLOPE, MAX. = 2%
5. STAIR RISE = 7" MAX., 4" MIN.
6. DESIGN LOADING:
   - 6.1. DECK/RAMP 100 PSF / 300# CONC.
   - 6.2. STAIR TREAD 300 LBS./TREAD
   - 6.3. RAILING 50 PLF/200 LBS. CONC.
   - 6.4. LATERAL LOAD 600# PEDESTRIAN DYNAMIC LOADING PER 30-FT RAMP
   - 6.5. WIND LOAD 135 MPH, EXP C, Kzt=1.0
   - 6.6. SEISMIC LOAD Sds=1.0, SEISMIC CAT. 'D'
7. DOOR CLEARANCE AS REQUIRED BY IBC.
8. STANDARD 3 LINE RAIL FOR COMPONENTS 30" OR LESS FROM GRADE TO WALKING SURFACE OF RAMP, LANDING, OR STAIR.
9. 48" WIDE STAIR CLEARANCE.
10. 42" VERTICAL PICKET GUARDRAIL FOR COMPONENTS OVER 30" FROM GRADE TO WALKING SURFACE OF RAMP, LANDING, OR STAIR.
11. GRASPABLE CONTINUOUS HANDRAIL AT 36" OFF RAMP, PLATFORM, OR STAIR NOSING. INSTALL BOTH SIDES OF STAIRS AND RAMP.
12. HANDRAILS TO EXTEND 12" HORIZONTALLY OVER WALKING SURFACE AND RETURN TO WALL OR RAIL COLUMN.
13. RAMP AND RAILINGS TO HAVE CURBS WHICH DO NOT ALLOW PASSAGE OF 4" SPHERE WHERE ORIGINAL POSITION OF SPHERE IS WITHIN 4" OF THE WALKING SURFACE.
14. FOOTING INFORMATION: 12"x12"x1-1/2" P.T. WOOD OR 12"x12" PRE-MANUFACTURED ABS PAD REQUIRED UNDER ALL ADJUSTABLE LEGS.

GENERAL NOTES:

1. THESE PLANS AND SPECIFICATIONS ARE NOT VALID FOR ANY OTHER ASSEMBLY THAN PRODUCTS PRODUCED BY WELCOME RAMP SYSTEMS, INC. PRODUCTS PRODUCED THE STANDARDS SET FORTH IN THESE DRAWINGS AND ACCOMPANYING DESIGN.
2. THE RAMP SYSTEM, STAIRS AND PLATFORM HAVE BEEN DESIGNED TO MEET IBC REQUIREMENTS. THE VERTICAL DESIGN LOADING CRITERIA IS 100 PSF UNIFORM LIVE LOAD AND 300# LIVE OR DEAD CONCENTRATED LOAD. USES FOR LOADS IN EXCESS OF THOSE STATED ABOVE REQUIRE REDESIGN BY WELCOME RAMP SYSTEMS, INC.
3. RAMP DESIGN LIMITS: THE SLOPE SHALL BE 1:12. THE MAXIMUM CROSS SLOPE SHALL BE LESS THAN 2%. THE MAXIMUM RUN SHALL BE 30'. THE MAXIMUM HEIGHT WITHOUT ADDITIONAL ENGINEERING JUSTIFICATION SHALL BE 48" FROM THE PLATFORM TO FINISHED GRADE.
4. WELCOME RAMPS, PLATFORMS, AND STAIRS ARE DESIGNED TO BE FREE STANDING.
5. DETAILS SHOW MOST USED HEIGHTS, OTHER HEIGHTS ARE SIMILAR.

MATERIAL SPECIFICATIONS

PLANKING:
- THIS DESIGN IS LIMITED TO GALVANIZED METAL PLANKING MATERIALS.
- RAMP: ALL PLANKING SHALL BE 13 GA. 12"W x 1 1/2" DEEP.
- PLATFORM: ALL PLANKING SHALL BE 13 GA. 12" W x 1-1/2" D. SEE PLAN FOR LENGTH.
- STAIRS: ALL PLANKING SHALL BE 11 GA. 12"W x 2" DEEP.

LEGS:
- LEVELING FEET ASSUMED TO BE PLACED ON SUITABLE FIRM BEARING GROUND.
- LEG MATERIAL SHALL BE 1-1/2" SQ.X .120" AL.TUBING.
- LEG POCKETS SHALL BE 1.781" SQ X .125" AL. TUBING.
- ADJUSTING BOLT - 3/8" X 2-1/4" GRADE 5 CAP SCREW W/NYLON LOCK NUT, ZINC PLATED

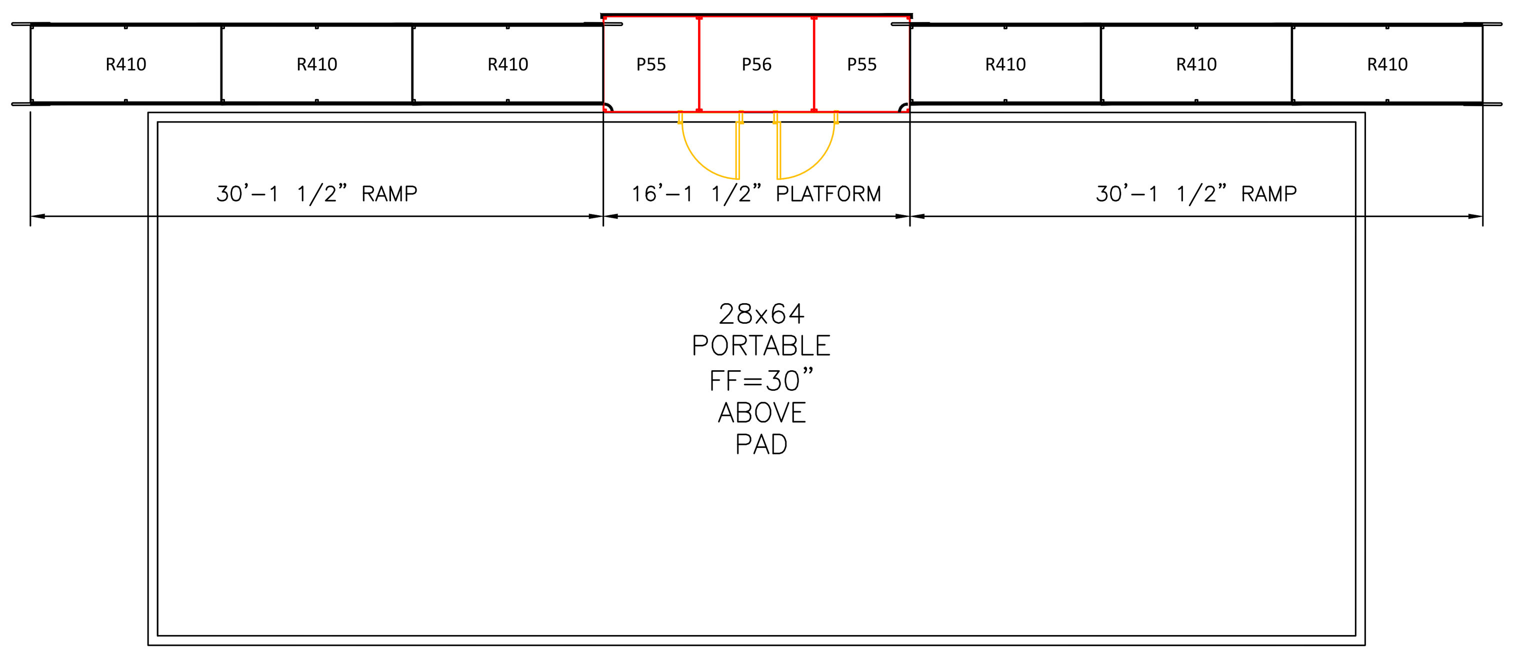
ALUMINUM:
- THE 1-1/2" AL. HANDRAIL SHALL BE 6063-T5 WITH A YIELD STRESS OF 16 KSI.
- ALL OTHER ALUMINUM PARTS SHALL BE 6061-T6 ALUMINUM WITH A YIELD STRESS OF 35 KSI.

HAND RAILS:
- STAIRS AND RAMPS: USE 1-1/2" SQ. X 5/32" THICK WALLED TUBING FOR POSTS AND HORIZONTAL RAILS EXCEPT THE TOP 1-1/2" ROUND HAND RAIL.
- STANDARD HANDRAIL (W/O PICKETS) IS ALLOWED ON FINISHED PLATFORM HEIGHTS OF 30" AND LESS. ALL PLATFORM HEIGHTS ABOVE 30" SHALL USE PICKET STYLE HANDRAILS.
- PLATFORM: USE 1-1/2 SQ. X 5/32" THICK WALLED TUBING FOR POSTS AND ALL HORIZONTAL RAILS.
- HEIGHT: TOP OF GRIPPING SURFACES OF HANDRAILS SHALL BE 36 INCHES VERTICALLY ABOVE WALKING SURFACES.

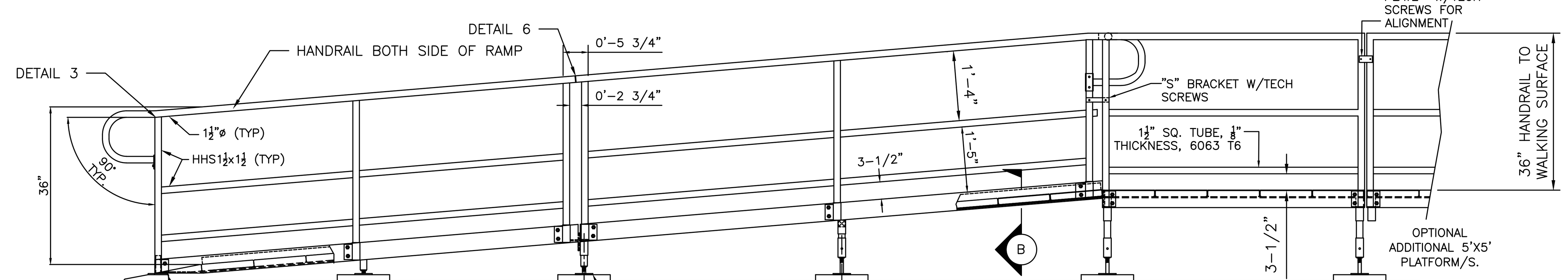
WELDING:
- ALL REFERENCES TO WELDING ON PLAN SET REFER TO IN-PLANT FABRICATION. NO ON-SITE WELDING IS REQUIRED.
- FABRICATION PLANT WELDING BY WELDERS CERTIFIED BY A THIRD PARTY INSPECTOR AND IN ACCORDANCE WITH ANSI/AWS D1.2 CODE.
- WELD SIZES ARE EQUAL OR LARGER THAN THE ELEMENT BEING WELDED.
- WELDING IS ALL AROUND UNLESS OTHERWISE NOTED. CARE IS TAKEN TO AVOID EXCESS WARPING OF WELDED ELEMENTS.
- FABRICATOR TO CERTIFY ASSEMBLED PART ARE PER THE DRAWINGS PER IBC 1704.2.2.

BOLTS:
- ALL BOLTS SHALL BE GRADE 5 ZINC PLATED, UNLESS OTHERWISE SPECIFIED. PROVIDE LOCKING WASHERS UNDER ALL NUTS AND ANCHOR BOLTS UNLESS OTHERWISE SPECIFIED.
- HIGH STRENGTH BOLTS ARE DESIGNED AT LESS THAN 50% CAPACITY FOR ADDITIONAL FACTOR OF SAFETY AND DO NOT REQUIRE SPECIAL INSPECTION.

TECH SCREWS:
- ZINC PLATED #10x1¼", SELF TAPPING.

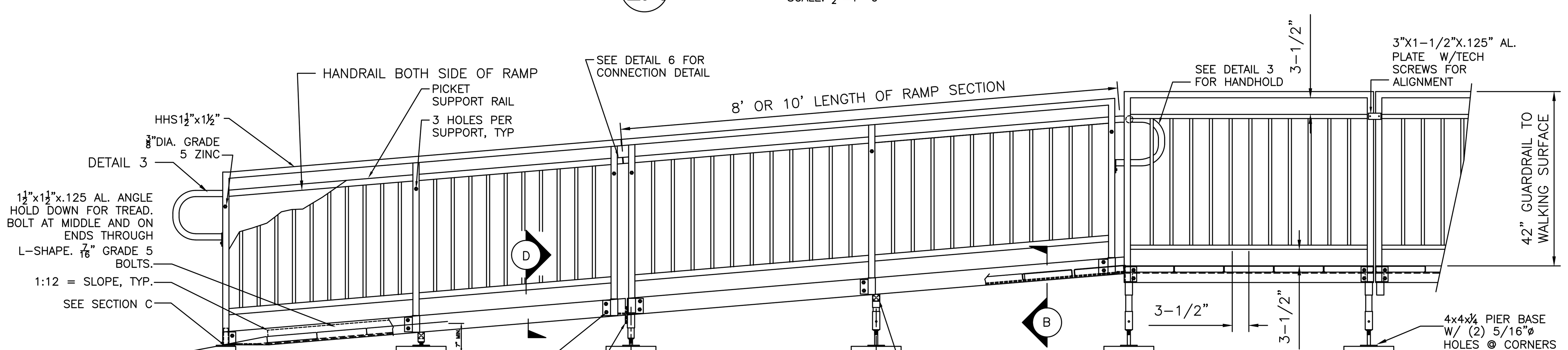


CUSTOM CONFIGURATION
1/8" = 1'-0"



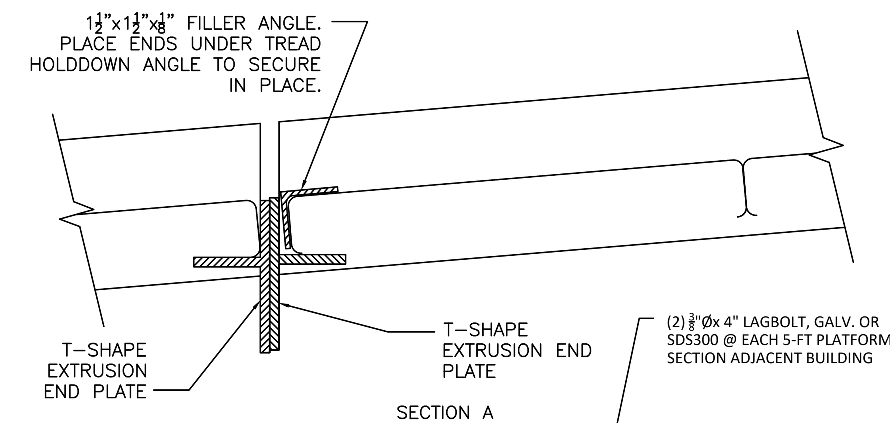
EA TYPICAL ELEVATION (WITH STANDARD RAIL)
SCALE: ½"=1'-0"

NOTE: USE THIS RAILING FOR 30-INCH OR LOWER TOTAL PLATFORM HEIGHT.

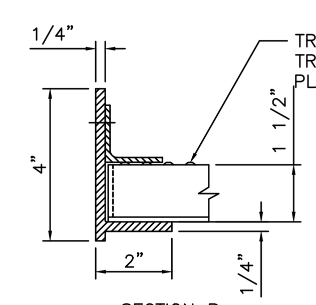


EB TYPICAL ELEVATION (INSTALLED WITH GUARDRAIL)
SCALE: ½"=1'-0"

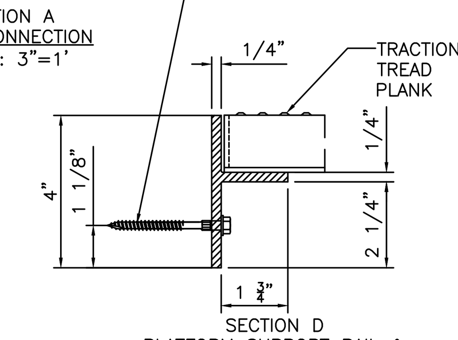
NOTE: USE THIS RAILING FOR TOTAL PLATFORM HEIGHT GREATER THAN 30-INCHES.



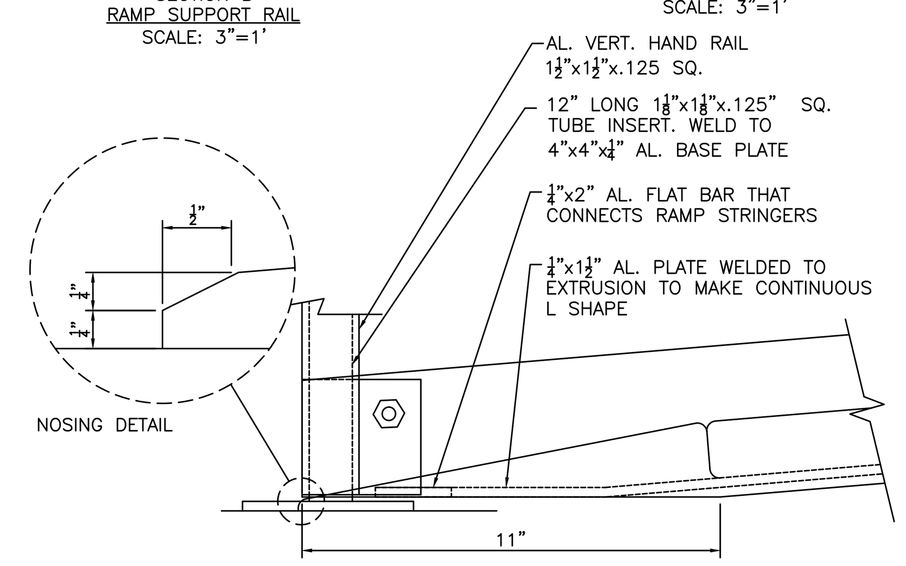
SECTION A
RAMP CONNECTION
SCALE: 3"=1'



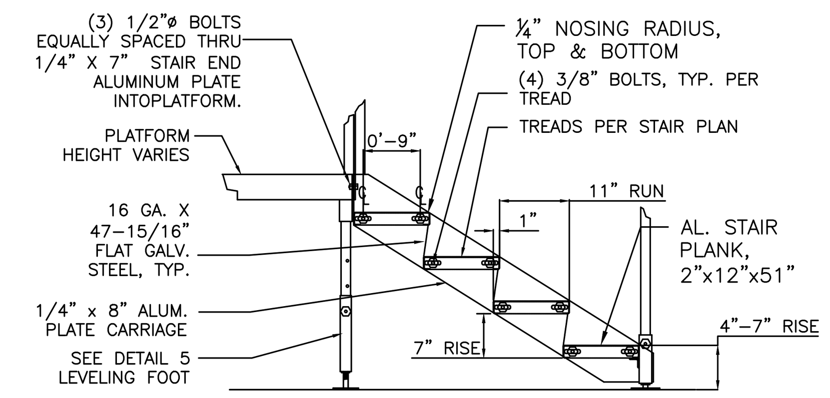
SECTION B
RAMP SUPPORT RAIL
SCALE: 3"=1'



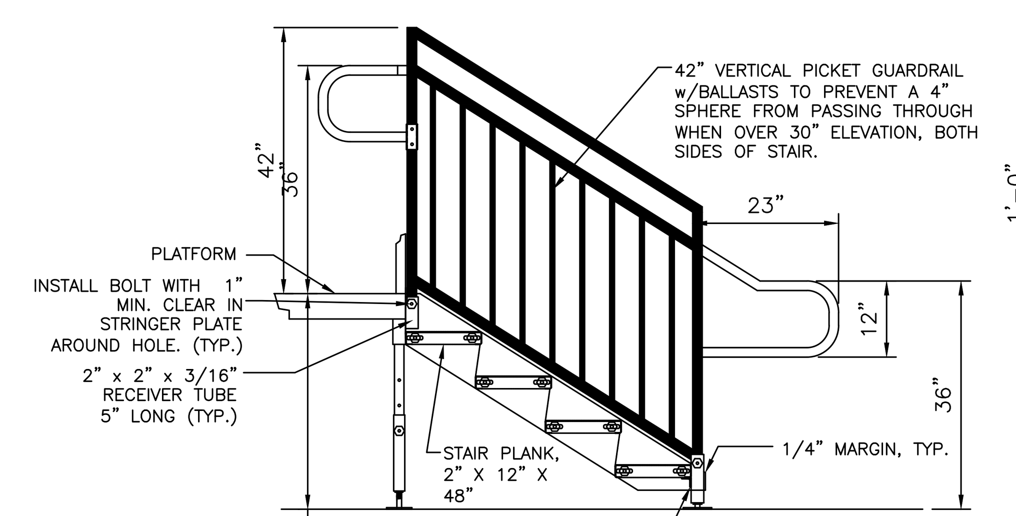
SECTION D
PLATFORM SUPPORT RAIL & CONNECTION TO BUILDING
SCALE: 3"=1'



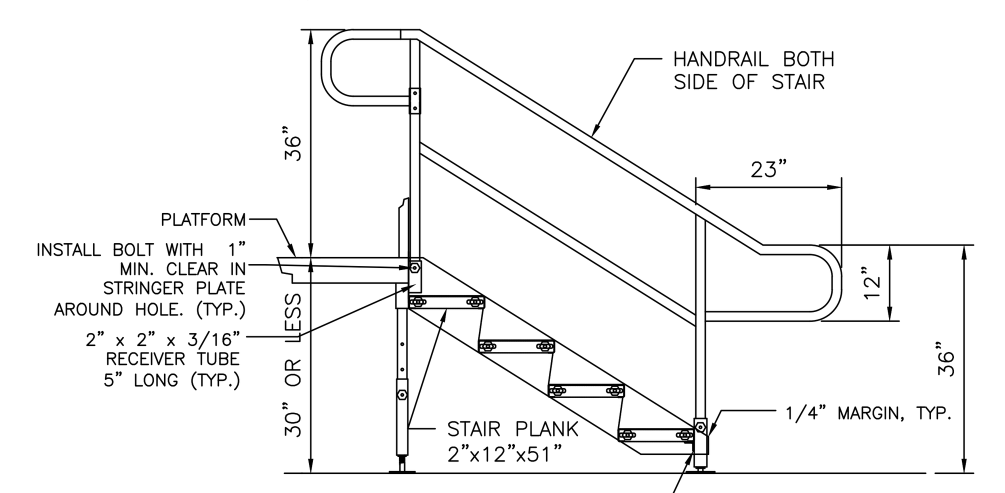
SECTION C
RAMP END TRANSITION END LEG
SCALE: 3"=1'



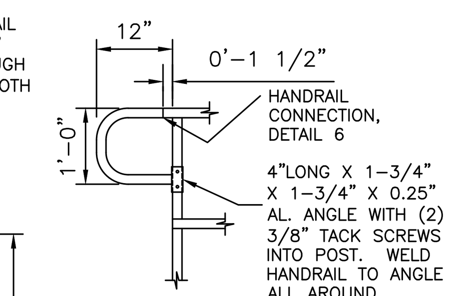
2 STAIRWAY ELEVATION
SCALE: 1/2"=1'



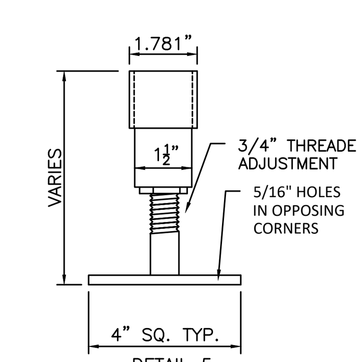
DETAIL 1 - STAIR HAND RAIL
SCALE: 1/2"=1'



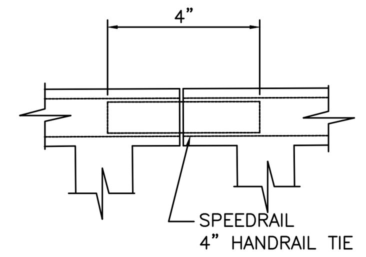
DETAIL 4 - STAIR HAND RAIL
SCALE: 1/2"=1'



DETAIL 3
HANDHOLD
SCALE: 1/2"=1'



DETAIL 5
LEVELING FOOT
SCALE: 3"=1'



DETAIL 6
HANDRAIL CONNECTION
SCALE: 3"=1'

PRPF20241231

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

BRIGGS ENGINEERING, INC.
BRIGGS
CIVIL STRUCTURAL LAND SURVEY
5999 W STATE ST 'A', GARDEN CITY, ID 83703 · (208) 871-0200

THESE DRAWINGS, OR ANY PORTION THEREOF, SHALL NOT BE USED ON ANY PROJECT OR EXTENSIONS OF THIS PROJECT EXCEPT BY WRITTEN AGREEMENT FROM BRIGGS ENGINEERING, INC.

PROJECT NAME:
CASCADE CHRISTIAN SCHOOLS,
811 21ST STREET SE, PUYALLUP, WA 98372
DECK, RAMPS, STAIRS

DATE: 10/8/2024
BY: DB/KG
JOB NUMBER: 202410.07.2-1
SHEET 1 OF 1

WELCOME RAMP SYSTEMS INC.
ACCESS RAMPS & STAIRS
STANDARD PLANS/DETAILS/NOTES

USE OF THESE DRAWINGS OR DESIGN FOR OTHER THAN WELCOME RAMP SYSTEMS PRODUCTS IS PROHIBITED, INCLUDING BUILDING PERMITING. THESE DRAWINGS AND THE INCORPORATED DESIGN ARE THE PROPERTY OF WELCOME RAMP SYSTEM, INC. WELCOME RAMP SYSTEMS, INC. WILL NOT BE LIABLE FOR THE USE OF THESE PLANS BY ENTITIES FOR OTHER SYSTEMS OR OTHER USES THAN STATED AND MAY PROSECUTE THE MISUSE OF THE PLANS TO THE FULLEST EXTENT OF THE LAW.