

SECTION A-A
NO SCALE

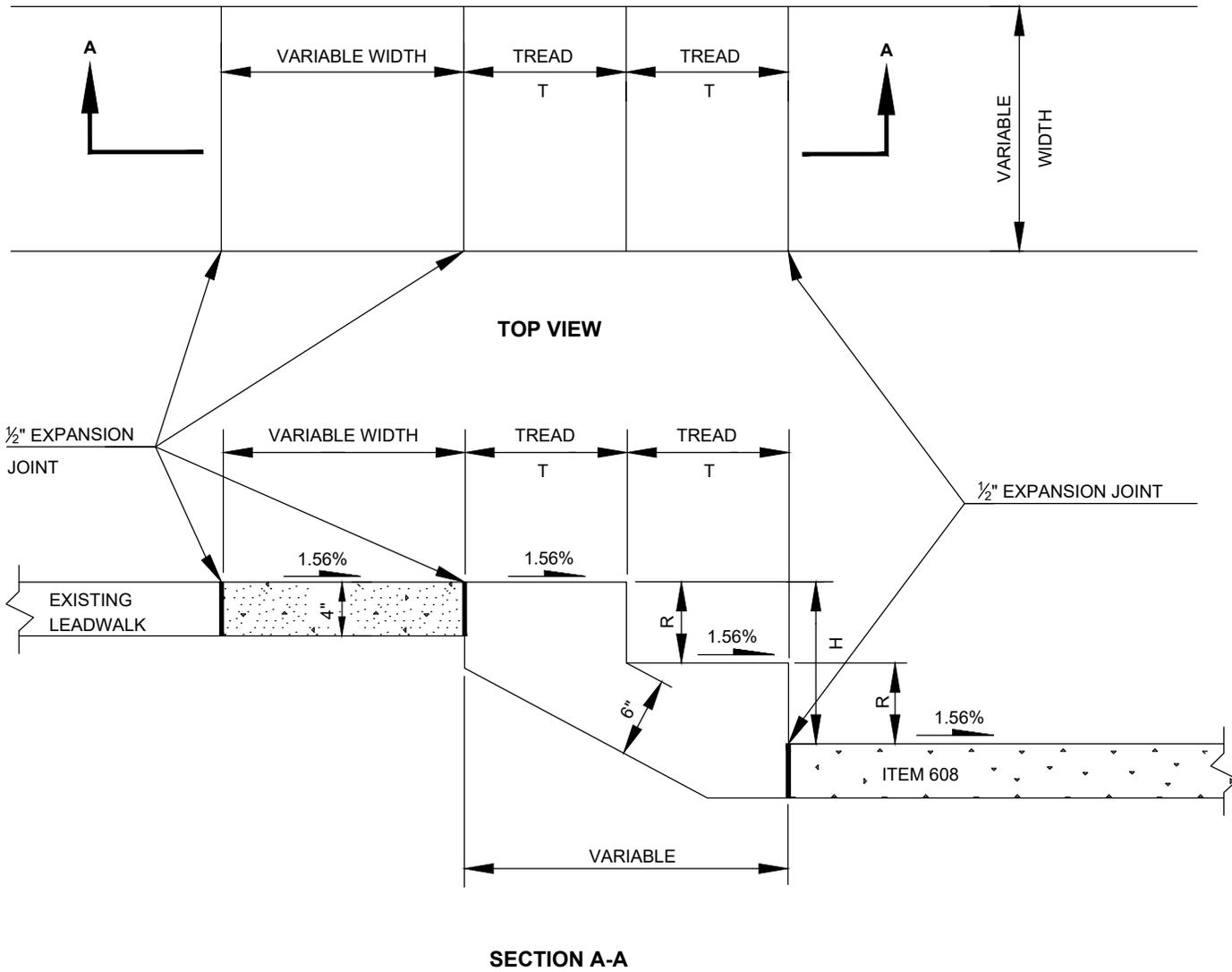
HR- HAND RAIL HEIGHT = 34" MIN., 38" MAX.
L = EQUAL INTERIOR PANEL LENGTHS. THE UPPER AND LOWER PANEL LENGTHS MAY VARY. PANEL LENGTHS ARE NOT TO EXCEED 3'-0"

[1] = MEASURABLE TREAD PER CMSC 608.06
[2] = 36" STAIR WIDTH UNLESS OTHERWISE SHOWN ON PLAN

FOR "H"=24" AND UNDER SEE SHEET 2 OR 3	
NO. OF RISERS	"D"
4	8"
5	10"
6	10"
7	12"
8	12"

STAIR TREADS AND RISERS SHALL BE OF EQUAL SIZE AND SHAPE. TOLERANCE BETWEEN THE LARGEST AND SMALLEST RISER HEIGHT OR BETWEEN THE LARGEST AND SMALLEST TREAD DEPTHS SHALL NOT EXCEED 3/8 INCHES.

<h1>CONCRETE STEPS</h1>	
CITY OF COLUMBUS, OHIO DEPARTMENT OF PUBLIC SERVICE DIVISION OF DESIGN AND CONSTRUCTION	
 CITY ENGINEER	STD DWG 2328 7/01/2022 SHT 1 OF 4



T = TREAD - 11" MIN, 15" MAX (*9" MIN. RESIDENTIAL)
 R = RISER - 4" MIN, 7" MAX (*8.25" MAX. RESIDENTIAL)

* THESE LIMITS MAY BE USED IF THE TYPICAL MIN./MAX. IS INFEASIBLE FOR A RESIDENTIAL APPLICATION

IF "H" IS GREATER THAN 24", SEE SHT. 1 OF 4

STAIR TREADS AND RISERS SHALL BE OF EQUAL SIZE AND SHAPE. TOLERANCE BETWEEN THE LARGEST AND SMALLEST RISER HEIGHT OR BETWEEN THE LARGEST AND SMALLEST TREAD DEPTHS SHALL NOT EXCEED 3/8 INCHES.

CONCRETE STEPS

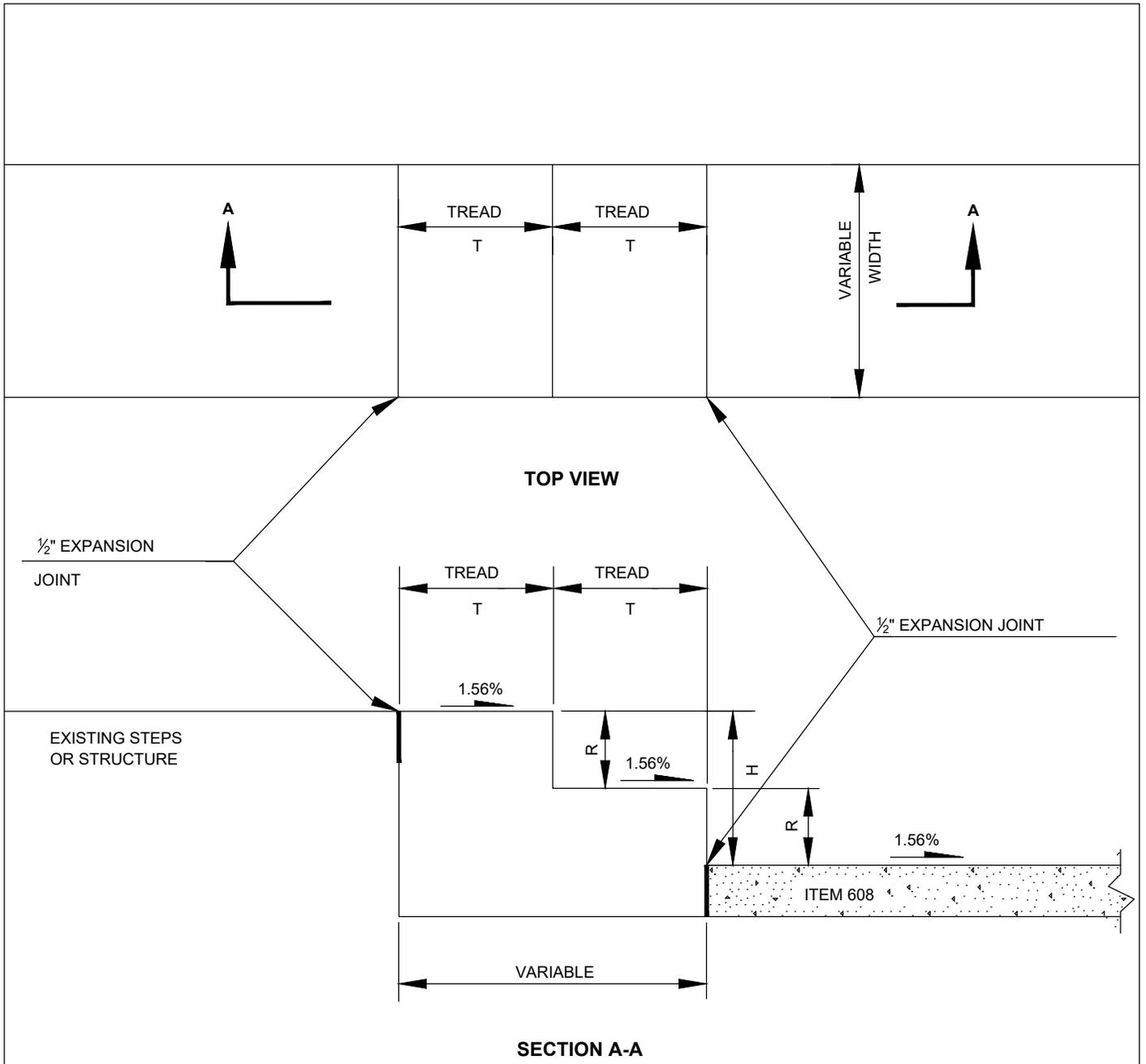
CITY OF COLUMBUS, OHIO
 DEPARTMENT OF PUBLIC SERVICE
 DIVISION OF DESIGN AND CONSTRUCTION

STD DWG

2328

7/01/2022

SHT 2 OF 4



T = TREAD - 11" MIN, 15" MAX (*9" MIN. RESIDENTIAL)

R = RISER - 4" MIN, 7" MAX (*8.25" MAX. RESIDENTIAL)

* THESE LIMITS MAY BE USED IF THE TYPICAL MIN./MAX. IS INFEASIBLE FOR A RESIDENTIAL APPLICATION

IF "H" IS GREATER THAN 24", SEE SHT. 1 OF 4

THIS STANDARD DRAWING SHALL BE USED WHEN CONSTRUCTING A SMALL PORCH STOOP OR WHEN MEETING EXISTING STEPS.

STAIR TREADS AND RISERS SHALL BE OF EQUAL SIZE AND SHAPE. TOLERANCE BETWEEN THE LARGEST AND SMALLEST RISER HEIGHT OR BETWEEN THE LARGEST AND SMALLEST TREAD DEPTHS SHALL NOT EXCEED 3/8 INCHES.

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HANDRAIL

FABRICATE HAND RAILING AND STAIR POSTS FROM NOMINAL SIZE 1-1/2" DIAMETER 0.145" WALL THICKNESS STEEL PIPE MEETING THE REQUIREMENTS OF THE SPECIFICATION FOR WELDED AND SEAMLESS STEEL PIPE ASTM A 53 STANDARD WEIGHT, SCHEDULE NUMBER 40 OR ALUMINUM PIPE MEETING THE REQUIREMENTS OF THE SPECIFICATION FOR ALUMINUM-ALLOY PIPE ASTM B 241, 6063 BT6 ASA, SCHEDULE NUMBER 40.

GALVANIZE STEEL HANDRAILS AND STAIR POSTS AFTER FABRICATION, AS SPECIFIED IN ASTM A 123. FIELD WELD SPLICES FOR STEEL RAILING. RE-GALVANIZE AREAS ON WHICH THE SHELTER COATING HAS BEEN DAMAGED, AS SPECIFIED IN AASHTO M 36, SECTION 24. METALIZING PROCESS OR REPAIR UNDER THE DIRECTION OF THE ENGINEER WITH STICK-FORM GALVANIZING REPAIR COMPOUND MEETING FEDERAL SPECIFICATION O-G-93.

INSTALL A SINGLE HANDRAIL TO THE RIGHT SIDE OF THE STAIRS, FACING UP, UNLESS OTHERWISE NOTED IN THE PLANS.

FOR STAIR WIDTHS GREATER THAN 43", A HANDRAIL IS REQUIRED ON BOTH SIDES OF THE STAIRS. INSTALL HAND RAILINGS ON BOTH SIDES OF THE STAIRS THAT ARE LESS THAN 43" WIDE, WHEN REQUIRED BY THE PLANS.

PROVIDE SPLICES FOR ALUMINUM RAILING WITH INTERNAL SLEEVES. AFTER WELDING THE CONNECTION SHALL BE SMOOTH AND WATER TIGHT.

CAST IN PLACE OR SET STAIR POSTS IN SOCKETS FILLED WITH 1:3 PROPORTIONED CEMENT MORTAR. PROVIDE A HEAVY COATING OF ASPHALT VARNISH OR COAL-TAR PITCH PAINT (BOTH INSIDE AND OUTSIDE) TO THE PORTION OF ALUMINUM STAIR POSTS SET INTO CONCRETE OR MORTAR.

EMBED THE STAIR POSTS A MINIMUM DEPTH OF 4".

INSTALL STAIR POSTS AND HANDRAILS FREE OF BURRS OR SHARP PROJECTIONS.

A HANDRAIL SHALL BE PLACED ON AT LEAST ONE SIDE OF ANY STAIRWAY WHICH HAS A TOTAL RISE OF TWENTY-FOUR (24) INCHES OR MORE.

ANY STAIRWAY EXTENDING TO THE SECOND FLOOR OR ABOVE SHALL HAVE HANDRAILS ON ALL UNENCLOSED SIDES.

PORCHES, BALCONIES, AND STOOPS LOCATED MORE THAN THIRTY-SIX (36) INCHES HIGHER THAN THE ADJACENT AREA SHALL HAVE HANDRAILS ON ALL OPEN SIDES.

SEE CITY OF COLUMBUS CODES AND ORDINANCES.

CONCRETE STEPS

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