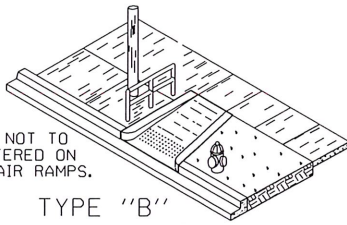
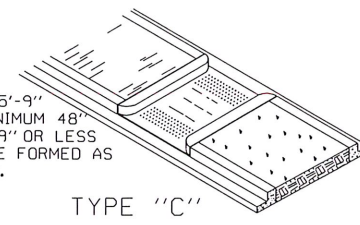


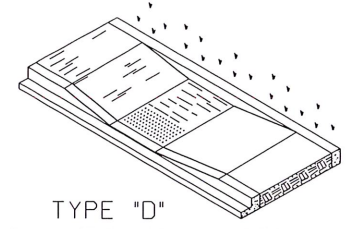
TYPE "A"



TYPE "B"



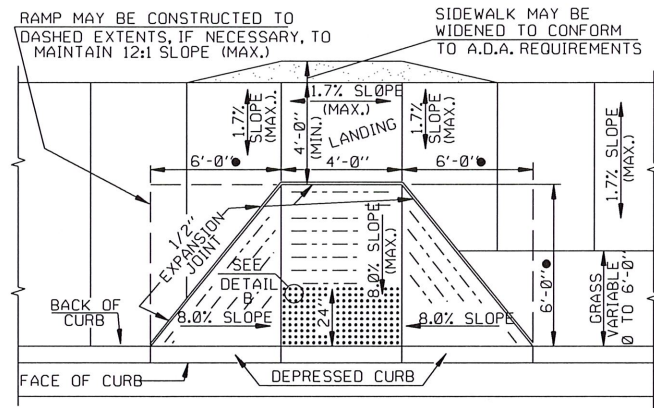
TYPE "C"



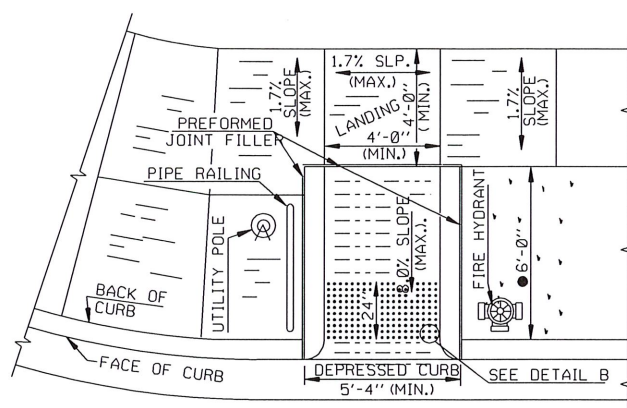
TYPE "D"

USE TYPE "B" RAMP WHEN OBSTRUCTIONS, WHICH ARE NOT TO BE REMOVED, ARE ENCOUNTERED ON EITHER SIDE OF WHEELCHAIR RAMPS.

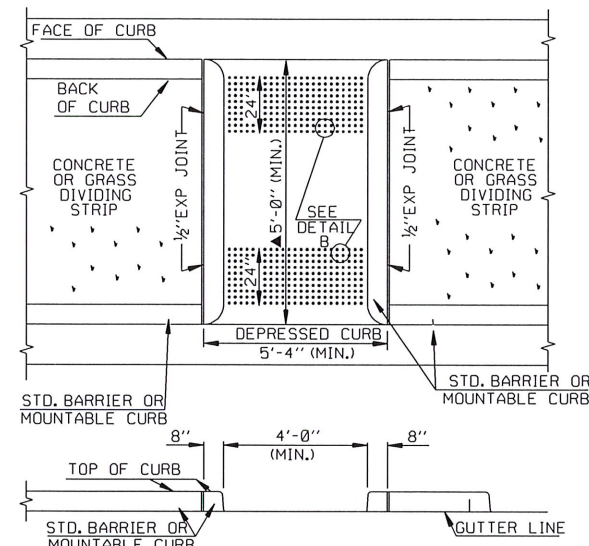
▲ FOR MEDIAN GREATER THAN 15'-9" USE TYPE "B" RAMP WITH MINIMUM 48" LANDING - IF MEDIAN IS 15'-9" OR LESS (5'-0" MIN.) SIDES ARE TO BE FORMED AS SHOWN IN THE DETAIL BELOW.



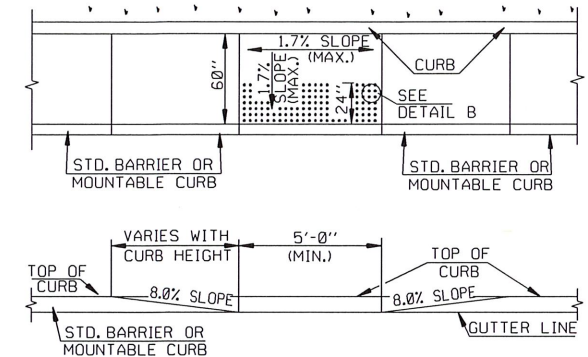
ELEVATION



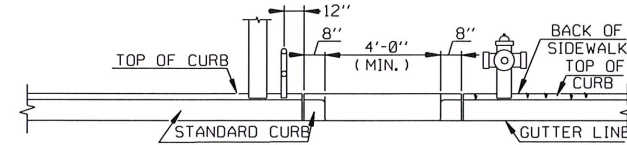
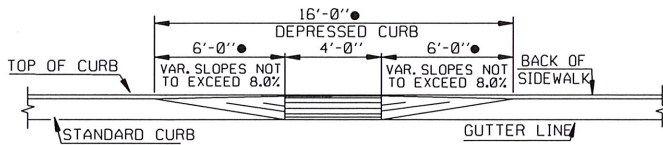
ELEVATION



ELEVATION



ELEVATION

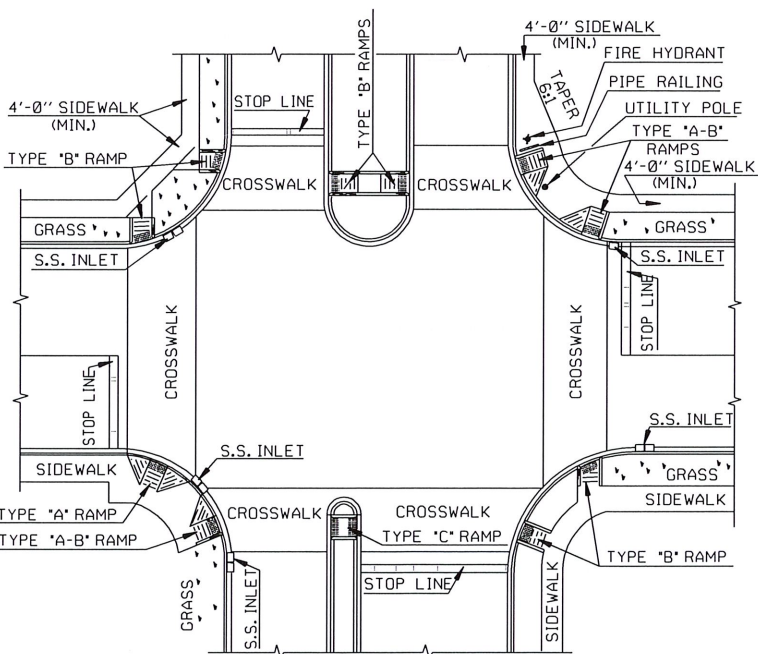


ELEVATION

ELEVATION

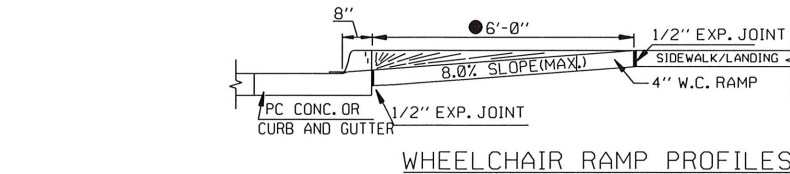
ELEVATION

ELEVATION

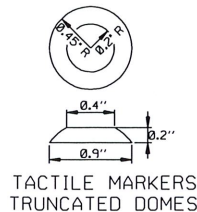
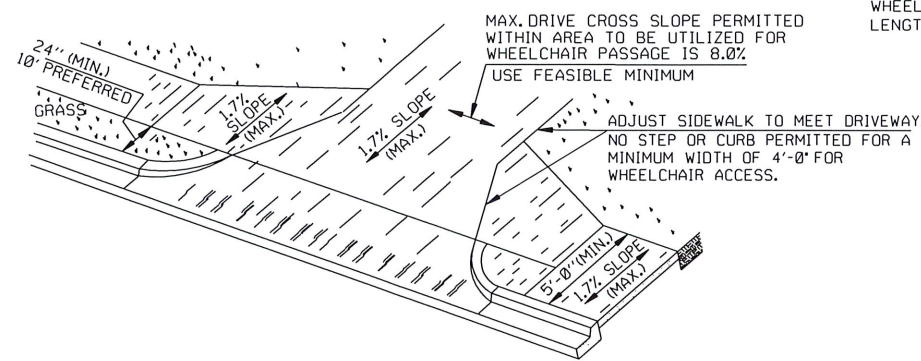


THE ABOVE EXAMPLES ARE TYPICAL ONLY AND ARE SHOWN TO ILLUSTRATE POSSIBLE RAMP TYPES, POSSIBLE RAMP LOCATIONS, POSSIBLE INLET LOCATIONS, AND HOW THE RAMP WILL BE DESIGNATED ON THE PLANS. CARE SHOULD BE EXERCISED TO ASSURE THAT MEDIAN RAMP AND CURB RAMP LINE UP, AND THAT RAMPS THROUGHOUT A PROJECT ARE LOCATED WITH SOME DEGREE OF UNIFORMITY. TYPE "A" RAMPS SHOULD BE USED WHEREVER POSSIBLE.

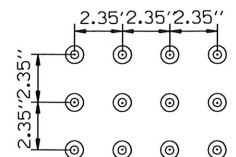
■ THICKNESS OF RAMP AND ADJACENT SIDEWALK SHALL BE A MINIMUM OF 4" AT ARTERIAL INTERSECTIONS THE THICKNESS OF THE RAMP AND SIDEWALK ADJACENT TO THE CURB RADIUS SHALL BE 8".



WHEELCHAIR RAMP PROFILES



TACTILE MARKERS TRUNCATED DOMES



DETAIL "B"

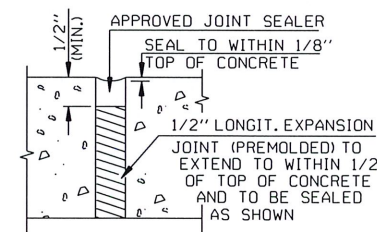
TACTILE WARNING DETAILS INSTALLATION NOTES

THE TRUNCATED DOME SURFACE SHALL CONTRAST VISUALLY WITH THE ADJOINING WALKING SURFACES.

THE TRUNCATED DOMES SHALL BE:
 - PRE-CAST CONCRETE PANELS WITH A NOMINAL THICKNESS OF 7/8 INCH TO 2 INCHES, AND A MINIMUM SIZE OF 12' X 16'. THEY SHALL BE CONSTRUCTED WITH A MINIMUM OF 4000 PSI CONCRETE. THEY SHALL BE YELLOW IN COLOR AND MEET ALL ADA REQUIREMENTS FOR COLOR CONTRAST AND DIMENSIONS
 OR
 - FLANGED CAST IN PLACE GLASS AND CARBON REINFORCED COMPOSITE PANEL AS MANUFACTURED BY ADA SOLUTIONS
 OR
 - DUCTILE IRON
 OR
 - CAST IRON

RETROFIT INSTALLATIONS WILL NOT REQUIRE EXISTING DEPRESSED CURBING TO BE REPLACED. A NOMINAL 6 TO 8 INCH SETBACK FROM FACE OF CURB SHALL BE ENFORCED FOR NEAR EDGE OF TACTILE DOMES.

AT DRIVEWAY LOCATIONS, THE NORMAL 4'-0" SIDEWALK MUST BE SET BACK FROM CURB, OR A WIDER SIDEWALK (5'-0" TYP.) USED TO ASSURE WHEELCHAIR PASSAGE. WHEELCHAIR PASSAGE MUST BE AVAILABLE ON EXTENDED LENGTHS OF SIDEWALKS AT INTERVALS LESS THAN 200 FEET.



1/2" EXPANSION JOINT

JOINT FILLER SHALL MEET THE REQUIREMENTS OF SECTIONS 701.08.A AND 701.08.B OF THE 2019 ODOT STANDARDS AND SPECIFICATIONS.

JOINT FILLER SHALL BE USED BETWEEN SIDEWALK AND CURBS, WHEELCHAIR RAMPS, DRIVEWAYS, STREETS, RETAINING WALLS, ETC.

CONTRACTION JOINT SPACED 5 FEET O.C. 1/2" EXPANSION JOINT SPACED 25 FEET O.C. FILLER TO BE 1/2" PREMOULDED BITUMINOUS FIBERBOARD 3/4" DEEP, SEAL 1/2" DEEP WITH SELF-LEVELING SILICONE. SLOPE TOWARD CURB OR DITCH AT 1/4" PER FT.

- GENERAL NOTES
- RAMP DIMENSIONS SHOWN ARE BASED ON A CURB HEIGHT OF SIX INCHES. THE DIMENSIONS SHOULD BE ADJUSTED FOR OTHER CURB HEIGHTS. THE MAXIMUM PERMISSIBLE SLOPES OF THE WHEELCHAIR RAMPS IS 8.0% (12:1). RAMP SLOPE MAY BE 10:1 (MAX.) ALONG FACE OF TAPERED CURB.
 - TRANSVERSE GROOVING SHALL NOT BE USED ON RAMPS.
 - DRAINAGE STRUCTURES SHALL NOT BE PLACED IN LINE WITH THE RAMPS.
 - THE NORMAL GUTTER LINE PROFILE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP WITH A 1.7% SLOPE (DESIGN MAX.). SEE NOTE NO. 10.
 - WHEELCHAIR RAMPS SHOULD BE LOCATED SO THAT THE RAMP WILL BE ON THE TRAFFIC APPROACH SIDE OF ANY OBSTACLE.
 - WHEELCHAIR RAMPS SHOULD BE BUILT AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE TYPE OF RAMP WILL BE DESIGNATED ON THE PLANS. IF A RAMP IS TO BE CONSTRUCTED AS A COMBINATION OF TWO TYPES (ONE SIDE TYPE A AND ONE SIDE TYPE B), THE RAMP SHALL BE DESIGNATED AS TYPE A-B.
 - PIPE RAILING CONSTRUCTION DETAILS, WHEN REQUIRED AT TYPE B WHEELCHAIR RAMPS, WILL BE SHOWN ON THE PLANS.
 - EXCAVATION, BACKFILL, EXPANSION JOINT MATERIAL, PIPE RAILING, SEALERS, AND OTHER RELATED MISCELLANEOUS ITEMS WILL NOT BE PAID FOR SEPARATELY BUT THE COST THEREOF SHALL BE INCLUDED IN THE COST OF THE SIDEWALK RAMP.
 - ALL FEATURES OF CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, SIDEWALKS, CURB RAMPS, AND CROSSWALK MARKINGS SHALL COMPLY WITH THE PROPOSED RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG). WHERE SPATIAL LIMITATIONS OR EXISTING FEATURES WITHIN THE LIMITS OF THE PROJECT PREVENT FULL COMPLIANCE WITH PROWAG, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER UPON DISCOVERY OF SUCH FEATURE(S). THE CONTRACTOR SHALL NOT PROCEED WITH ANY ASPECT OF THE WORK WHICH IS NOT IN FULL COMPLIANCE WITH THE PROWAG WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER. ANY WORK WHICH IS NOT PERFORMED WITHIN THE GUIDELINES OF THE PROWAG, FOR WHICH THE CONTRACTOR DOES NOT HAVE WRITTEN APPROVAL, SHALL BE COLLECTED AT THE CONTRACTOR'S EXPENSE.
 - AGGREGATE BASE SHALL BE PAID FOR SEPARATELY AND ESTIMATED AT 2.4 C.Y. FOR EACH RAMP AT CORNER LOCATIONS.
 - WHEELCHAIR RAMPS SHALL BE PAID FOR BY EACH.
 - THE TRUNCATED DOMES WILL BE MEASURED AND PAID FOR BY THE SQUARE FOOT OF PANEL AREA. THE ROWS OF TRUNCATED DOMES SHALL ALIGN PERPENDICULAR OR RADIAL TO THE GRADE BREAK BETWEEN THE RAMP, LANDING OR BLENDED TRANSITION AND THE STREET.
 - PIPE RAILING SHALL BE PAID FOR BY THE LINEAR FOOT.
 - SIDEWALKS AND RAMPS SHALL MEET THE ADA ACCESSIBILITY TECHNICAL REQUIREMENTS AS SHOWN AT WWW.ACCESS-BOARD.GOV/PROWAG/

[Signature]
 CITY ENGINEER

[Signature]
 DESIGN MANAGER

CITY OF TULSA, OKLAHOMA
 ENGINEERING SERVICES DEPARTMENT

STANDARD SIDEWALK RAMP

REVISION	BY	DATE