NOTES

GENERAL: This drawing shows curb ramp types, details, and placement examples for curb ramp construction, including the installation of detectable warnings.

Curb ramp types are shown on Sheet 2 and include Perpendicular, Parallel, and Combination types as specified to be constructed in the locations shown on the project plans.

Curb ramps added to an existing intersection or walk should be individually detailed on the project plans to assure that the design is appropriate for site constraints and all items can be constructed to ADA standards. The contractor may adjust the placement of curb ramps if existing field conditions warrant the approval of the engineer.

Detectable Warnings: Install detectable warnings on each curb ramp with approved materials, as shown on Sheet 3. Install these proprietary products per manufacturer’s written instructions.

Drainage: Contractor is to ensure the base of each constructed curb ramp allows for proper drainage, without exceeding allowable cross slope or ramp slopes. Vertical change in level exceeding 1/8 between the 3 pavement and gutter, and 2 gutter and ramp, are not allowed.

Surface Texture: Texture concrete surfaces by broom or broom or by hand to the ramp slopes to be rougher than the adjacent walk.

Joins: Provide expansion joints in the curb ramp as extensions of walk joints and consistent with Item 608-03 requirements for new concrete slabs. Provide a 2 1/2 x 105.03 joint filler around the edge of ramps built in existing concrete slabs. Use shown on this drawing indicates the ramp edges and slope changes, and do not necessarily indicate joint lines.

Payment: Measure and pay for the ramp area within the shaded limits of this drawing as Item 608-03 Curb Ramp, Square Foot. This includes the cost of the curb curbing, detectable warning, landing grass, and any additional materials, installation, grading, forming, and finishing required within the shaded area.

Work beyond the shaded ramp/landing area is paid for as curb (item 608-03 and walk 4088). Removal of existing curb, walk or existing curb ramp is paid under item 202.

For all grade crossing locations where only detectable warnings are required in order to achieve ADA compliance, measure and pay for the strip of detectable markings as Item 608-03 Detectable Warning, Square Foot. The work to cast the tiles in place will also require removal of existing pavement Item 201 to the nearest joint, or if no joint exists, a minimum of 4 feet.

Acceptable design for retrofit only where utilities prevent using a preferred layout.

PERPENDICULAR Curb Ramps

PREFERRED CONSTRUCTION PLACEMENT

ParalleL Curb Ramps

Combination Curb Ramps

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NOTES

The running slope of the ramp is preferred to be 1:10 or flatter. In existing sidewalk, where the maximum ramp slope is not feasible due to site constraints e.g. utility poles or vaults, right-of-way (R.O.W.) limit, it may be reduced as follows:

A) To a max. rise of 8%B) To a max. rise of 5%C) Blt over a max. run of 2 ft for historic areas where a flatter slope is not feasible.

To prevent chaining the gradate indefinitely, the transition from existing sidewalk to the shaded curb ramp area is required to exceed 2 ft. in length.

While ramps may be skewed to the crosswalk, the entire lower landing area must fall within the crosswalk that the ramp serves and cannot be located in the traveled lane of opposing traffic.

The counter slope of the gutter or street at the foot of a curb ramp, landing or blended transitions shall be 1:10 or flatter.

The bottom edge of the ramp shall change planes perpendicular to the landing.

The edge of the curb shall be flush with the edge of the adjacent pavement and gutter and surface slopes that meet grade breaks shall also be flush.

Ramp landings shall be 4 min. x 4 min. with a 1:10 or flatter cross slope and running slope.

See Sheet 3 for Sections.
DETECTABLE WARNINGS NOTES

GENERAL: Detectable Warnings are a distinctive surface pattern of truncated domes which are detectable by cane or underfoot to alert people with visual impairments of their approach to streets and hazardous drop-offs.

PLACEMENT: Detectable domes are to be installed at any location where pedestrian or vehicle cross paths with vehicular traffic lanes, such as the edge of concrete islands or crosswalks. A 24" strip of domes is to be installed for the full width of the ramp or walk. Typical street corner placement locations are shown on Sheet 1.

The depth of concrete underneath detectable warning products shall be a minimum of 4". See DETAIL A.

ALIGNMENT: Truncated domes should be aligned with the primary direction of the ramp as shown on the DETECTABLE WARNING ALIGNED DETAIL. Namely the detectable domes shall be flush with the back of the curb, but in severe conditions, at least one corner of the 24" strip should be adjacent to the street. Expansive and settlement materials may have to be milled and placed segmentally.

PRODUCTS & COLORS: Color of the detectable warnings should contrast with surrounding concrete walk and ramp. Black is an acceptable color. Approved products and guidance on color may be found in the Office of Roadway Engineering Service's Detectable Warning Approved List. Install products as per manufacturer's printed instructions.