

GUIDELINES

FOR

SIDEWALK

AND

DRIVE APPROACH

CONSTRUCTION

REVISED 2008

PERMITS

Permits are required for all work on public right-of-way. The permit fees established are as follows:

Residential:

Drive Approach	\$20.00
Sidewalk - Over 50 SF and up to 70 LF	\$25.00
71 LF and over, add \$0.35/LF	
Curb Only - Over 10 LF	\$25.00
Drive Approach/Sidewalk/Curb Constructed @ Same Time	\$40.00

Commercial:

Drive Approach (Each)	\$40.00
Sidewalk - Over 50 SF and up to 70 LF	\$25.00
71 LF and over, add \$0.35/LF	
Curb Only - Over 10 LF	\$25.00
1 Drive Approach/Sidewalk/Curb Constructed @ Same Time	\$65.00

Permits may be obtained in the Public Works Department, City Hall Room #307 between 8AM and 5PM Monday through Friday, Phone 494-8803 or from the inspector on the job. If the permit is obtained from the inspector, the only method of payment acceptable is a check made payable to City of Peoria.

INSPECTIONS

The permit fee covers three inspections of driveway, sidewalk and/or curb.

For replacement of existing sidewalks and driveways, the inspections shall include an inspection prior to any work beginning to determine if City participation is warranted, an inspection prior to placement of concrete and a final inspection after work is done. For new construction, the first two inspections may be made during preparations of forms and subgrade. At the discretion of the inspector, additional inspections may be made.

Requests for inspections should be made 24 hours in advance of the planned placement of concrete and after the forms and subgrade are substantially complete. See the **REGION MAP** for the correct phone number for your area. It should be understood that the inspector may not be able to respond to an inspection request as soon as a contractor may wish due to prior commitments.

The City encourages contractors, or anyone doing work on the right-of-way, to call for inspections if there are any questions regarding the work. It is the intent of the City to minimize problems and cost by answering questions prior to work progressing beyond a point that might require re-work. Any material placed without a prior inspection may be subject to removal.

CONCRETE CONSTRUCTION

Subgrade Preparation

During hot weather construction, the subgrade must be moistened just prior to placement of concrete. The subgrade shall be tamped or rolled until thoroughly compacted and shall be constructed true to grade and cross section for the bottom of the sidewalk and driveway approach. During cold weather construction, the subgrade shall be protected to prevent freezing per notes to follow. Fill material shall be CA6 unless otherwise approved.

Forms

Side forms shall be of lumber not less than 2 inches nominal thickness or of steel of equal rigidity. They shall be held securely in place by stakes or braces, with the top edges true to line and grade. The forms for the sidewalks shall be set so that the slab will have a fall of 1/4 inch/foot horizontal from the edge nearest the property line toward the edge farthest from the property line. Forms for the driveway approach shall be set so that the slab will have a uniform fall between the sidewalk proper and the curb grade. Maximum grade FOR COMBINATION CURB/SIDEWALK DRIVE APPROACHES shall not exceed one inch per foot (1:12).

After the concrete has cured, the spaces along the edges of the sidewalk shall be backfilled to the required elevation with approved material unless otherwise specified. The material shall then be compacted until firm and the surface neatly graded.

Expansion Joints

Expansion joints shall be located per following:

- A. Where concrete driveway meets back of walk
- B. All property lines
- C. All private walks where they meet public walks and/or curbs
- D. Every 40 feet and no more than every 50 feet
- E. Between all depth changes of concrete, (i.e. sidewalk meeting drive approach)
- F. Along existing concrete structures, retaining walls (with ccs w & clsw), private walks. Contact your inspector.

Portland Cement Concrete

Concrete shall be City Mix Class X with an air content between 5 and 8 percent and having a compressive strength of not less than 3500 psi in 14 days.

Concrete Placement

When a drive approach is to be constructed next to combination curb and gutter (CC&G), the CC&G shall be poured separately and prior to the drive approach.

When a curblin sidewalk is to be replaced along an existing curb in good condition, the sidewalk shall be pinned to the curb by drilling the back of the curb and installing #4 x 6" rebars at 2'6" center to center. Curb and gutter replacement sections shall be pinned to existing curb and gutter.

When combination curb and gutter is removed and replaced with combination curb and sidewalk, the area of the flag (if removed) shall be replaced as PCC Base Course. The base course shall be poured to the top of the adjacent pavement. Any damage to the street will be incidental to removal and replacement costs. Acceptable patch material will be either UPM (Unique Paving Material) or QPR-2000 high grade cold mix.

Welded wire mesh or fiber mesh is required in all combination curb and sidewalk and drive approaches where curb exists. The welded wire fabric shall be #10 x #10 with 6" x 6" spacing weighing approximately 21 pounds per 100 SF. Fiber mesh mixed in the concrete may be used in lieu of welded wire mesh. All curb faces shall be finished.

Curing and Protective Coat

After the concrete has been finished and immediately after the water sheen has disappeared from the surface of the concrete, the surface shall be sealed with a membrane curing compound. The seal shall be maintained for the specified curing period. The edges of the concrete shall, likewise, be sealed immediately after the forms are removed. Two separate applications, applied at least one minute apart, each at the rate of not less than one gallon to an area of 250 square feet, will be required upon the surfaces and edges of the concrete.

Cold Weather

During low temperatures the following shall apply:
Chemical admixtures for lowering the freezing point shall not be added. Concrete shall not be placed on frozen subgrade. When the Official National Weather Service Forecast for the construction area predicts a low of 32 degrees F., or lower, or if the actual temperature drops to 32 degrees F., or lower, concrete less than 72 hours old shall be provided at least the following protection:

Minimum Temperature

25 through 32 degrees F.

Protection

2 layers of polyethylene sheeting or 1 layer of polyethylene and 1 layer of burlap, or 2 layers of waterproof paper.

Below 25 degrees F.

1 layer of polyethylene sheeting, 6 inches of straw, and 1 additional layer of Polyethylene sheeting.

These protective covers shall remain in place until the concrete is at least 96 hours old. When straw is required on pavement cured with membrane curing compound, the compound shall be covered with a layer of burlap, polyethylene sheeting or waterproof paper before the straw is applied.

Thermoblankets may be used in lieu of the 6" of straw and polyethylene sheeting.

Regardless of the precautions taken, the contractor shall be responsible for protection of the concrete placed and any concrete damaged by cold temperatures shall be removed and replaced by the contractor at his/her own expense.

The contractor should take note that concrete placed late in the season, when the weather is cooler and curing time is limited, has more chance of spalling due to salt damage during the winter. It is the contractor's responsibility to replace any damaged concrete.

Traffic Control

It is the contractor's responsibility to adequately protect the workers and the work site. The contractor shall provide the necessary signs, cones, barricades, etc., to provide a safe work area and to adequately warn the traveling public of the construction activities.

Traffic control on major thoroughfares must be approved by the City Traffic Engineer or his designate prior to construction and conform to the Illinois Highway Design Standards for Traffic Control.

In general, anytime a sidewalk or any part of the street is excavated or blocked by equipment, material, or any other items, warning devices that conform to the Highway Design Standards may be required.

Sidewalks that are not available for safe pedestrian traffic shall be protected by either a Class I or Class II barricade at each point of ingress. It is also recommended that yellow caution tape be used to enclose the area to discourage pedestrian use.

CONTRACTOR'S QUICK CHECK LIST

- 1) SUBGRADE: All subgrades shall be compacted CA-6. Any fill needed shall be CA-6. No sand or pea gravel allowed.
- 2) CONCRETE THICKNESSES: Sidewalk - 4" minimum (outside drive approach)
Residential Drive Approach - 6" minimum
Commercial Drive Approach - 8" minimum
Barrier Curb - 6" x 6" x 18"
- 3) COLD WEATHER: Must be 32 degrees F. and rising for placement of concrete. No placement of concrete on frozen subgrade. Must protect concrete to City guidelines.
- 4) HOT WEATHER: No placement of concrete after 12:00 noon when the National Weather Service forecasts 95 degrees or higher.
- 5) FALL: Cross slope on sidewalk - 1/4" per foot. Cross slope and flares on CCSW & CLSW through drive approach - should not exceed 1" per foot (1:12). Slope on access ramps should not exceed 1" per foot (1:12) in any direction.
- 6) DRIVEWAY FLARE WIDTHS: RESIDENTIAL} All residential drive approach flares w/o curblines sidewalks (CLSW), combination curb/sidewalks (CCSW) or no sidewalks exist, driveway flares shall measure 3'6". COMMERCIAL} Varies 5' to 10' (contact your inspector). All drive approach flares with CLSW or CCSW shall not exceed 1:12 maximum. Radius flares are only accepted on commercial approaches with a 10' minimum radius.
- 7) DRIVEWAY WIDTHS: Maximum widths of driveways at property line/back of sidewalk: Residential: single car garage = 15' double car garage = 20' triple car garage = 30'
Commercial: Minimum = 24' Maximum = 30' (where distance from curblines to property line is less than 7', the width may be 35'). Minimum (one way) = 15'
- 8) CURB CUTS: Sawcut - every 20', Expansion joint - every 100'. All curb faces shall be finished.
- 9) EXPANSION JOINTS: Expansion joints per City guidelines.

METHOD OF PAYMENT FOR ACCESS RAMPS

Access ramps shall be constructed per ADA requirement. Details of ramps are present in the City guidelines provided. Any variation in the shape of curbs and sidewalk or needed landscaping of dirt at corner to accommodate ramps for the handicapped shall not be paid for separately, but shall be considered incidental to the item of construction involved.

Any proposal shall be provided to the City prior to initiation of any work. This work will be paid for separately and shall be calculated by square foot for P.C.C. 4" combination curb/sidewalk and P.C.C. 4" property line sidewalk. This unit cost shall reflect the same unit cost charged to the adjacent property where the work is being preformed.

Any side curb poured in conjunction with Type "A" and "Modified" ramps will be paid for as P.C.C. combination curb/sidewalk. Unit cost shall include all exposed surface areas to include side curbs. Side curbs on Type "A" ramps shall be included at the rate of 1.5' added to the width of the sidewalk. On "Modified" ramps, the side curb shall be included at the rate of .75'x length of side curb. All other curb at street will be paid as linear feet.

The truncated dome detectable warning area of ramp will be paid for separately when using a ceramic/precast panel. There shall be a minimum of four inches of P.C.C. concrete placed below any precast panel. Payment will be made when a copy of proof of payment is forwarded to the City.

ADA TRUNCATED DOME RAMPS

This work shall consist of a 24-inch strip of the Federal Standard color 30166, brick red, as its standard of detectable warning in the direction of travel and shall extend the full width of the curb ramp or flush surface. This work shall conform to the detail given in the plans and in accordance with Section 424 of the "Standard Specifications for Road and Bridge Construction".

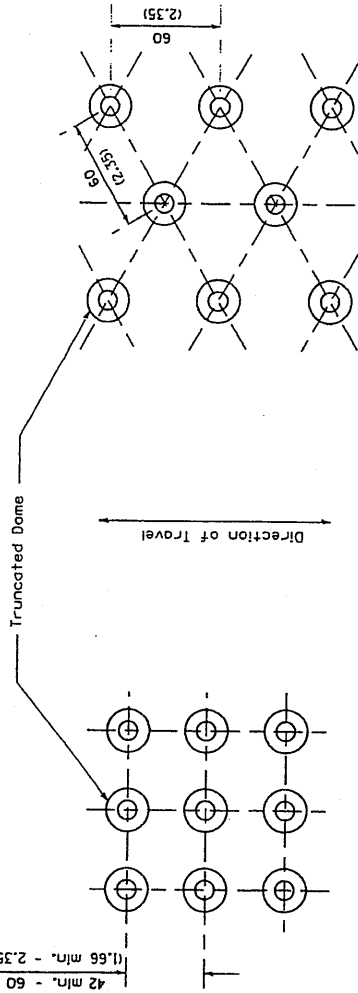
The following will be the acceptable construction techniques.

1. Cast-in-Place truncated dome ramps must be formed with a rigid mold. Every area of the tool shall be tamped directly above the stamp to form a uniform appearance. The concrete used shall be Class SI concrete that has the Federal Standard color 30166, brick red, the entire depth. Broadcasting brick red dye or painting the sidewalk brick red **will not** be acceptable methods.
2. Ceramic truncated dome ramp panels. Panels must be the Federal Standard color 30166, brick red. Panels shall be placed within the Class SI concrete. They shall have a minimum of four anchors per ceramic panel to secure the panels to the concrete ramp.
3. Pre-Cast concrete truncated dome ramp panels. The panels shall be a minimum of 2-inches thick with the entire depth consisting of Class SI concrete that is Federal Standard color 30166, brick red. The pre-cast panels shall have wire mesh or fiber mesh reinforcement. Tapered edges or holes so that dowel reinforcement rod can be placed within the insert shall be acceptable methods. These shall be placed before placing the rest of the ramp so that they are tightly secured into place.

Final determination of acceptability shall be the responsibility of the construction engineer.

THESE THREE METHODS ARE THE ONLY ACCEPTABLE MEANS FOR TRUNCATED DOME RAMPS WITHIN THE CITY OF PEORIA.

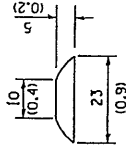
42 min. - 60 max.
 (1.66 min. - 2.35 max.)



SQUARE PATTERN
 (Parallel Alignment)

TRIANGULAR PATTERN

DETECTABLE WARNINGS DETAIL

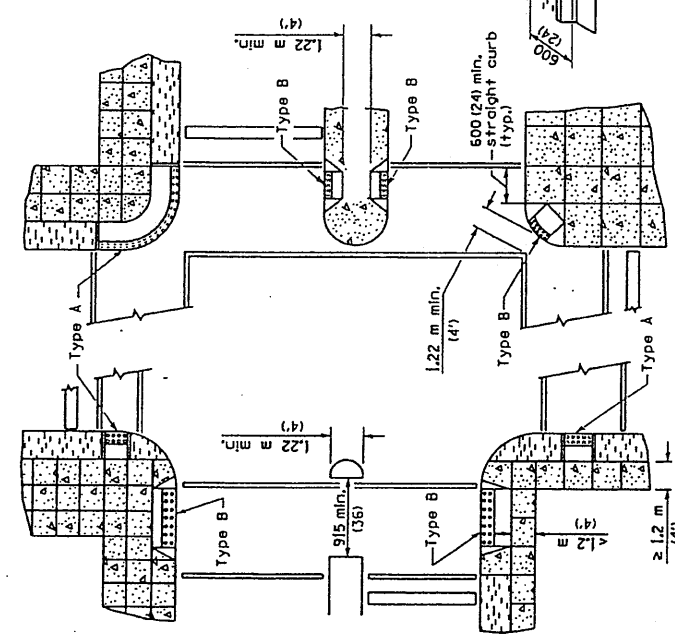


TRUNCATED DOME DETAIL

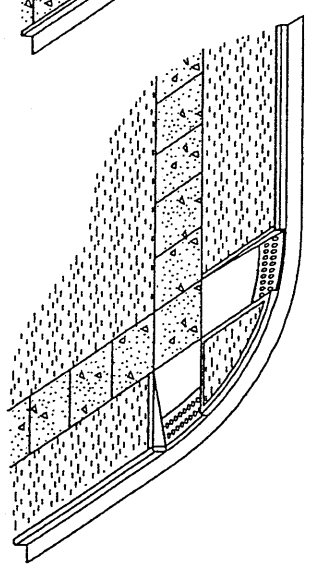
All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).
 All dimensions are in millimeters (inches) unless otherwise shown.

Illinois Department of Transportation	
DESIGNED	August 1, 2005
ENGINEER OF PROJECT AND INSPECTIONS	August 1, 2005
APPROVED	August 1, 2005
ENGINEER OF DESIGN AND CONSTRUCTION	

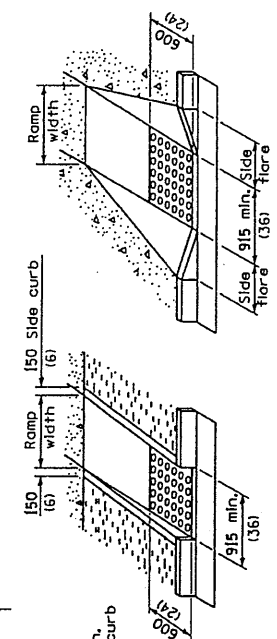
CURB RAMPS FOR SIDEWALKS	
(Sheet 2 of 2)	
STANDARD 424001-04	



RECOMMENDED LOCATION OF RAMPS



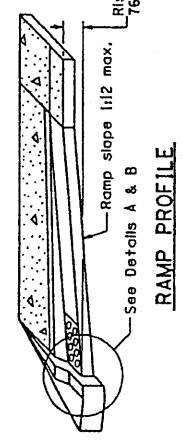
TYPE A RAMPS



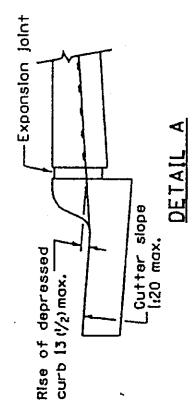
TYPE A

TYPE B

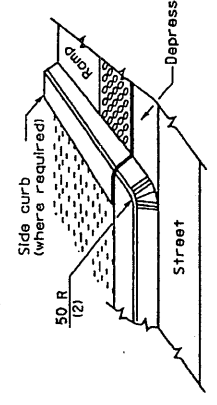
DETAILS OF RAMPS



RAMP PROFILE



DETAIL A

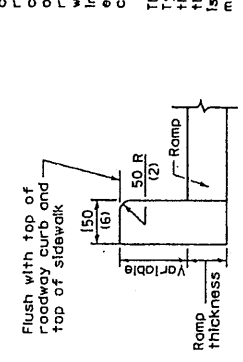


DETAIL B

LEGEND

- Sidewalk
- Ramp
- Detachable Warnings
- Non walking area

SECTION A-A



DETAIL OF SIDE CURB

(Side curb may be constructed monolithically with ramp)

GENERAL NOTES

Detectable warnings shall be installed at curb ramps, medians and pedestrian refuge islands, at-grade railroad crossings, transit platform edges, and other locations where pedestrians are required to cross a hazardous vehicular way. Detectable warnings shall also be installed at alleys and commercial entrances when permanent traffic control devices are present.

The maximum slope of the side flare for Type B ramps shall be 1:10; however, if the width of the landing area between the top of the ramp and an obstruction is less than 1.2 m (4'-0"), then the maximum slope shall be 1:12.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H). All dimensions are in millimeters (inches) unless otherwise shown.

DATE	REVISIONS
8-1-05	Revised placement of detectable warnings
1-1-04	Added detectable warnings and changed title.

CURB RAMPS FOR SIDEWALKS

(Sheet 1 of 2)

STANDARD 424001-04

ILLINOIS DEPARTMENT OF TRANSPORTATION

ISSUED 1-1-97

APPROVED: *Michael J. Hane*

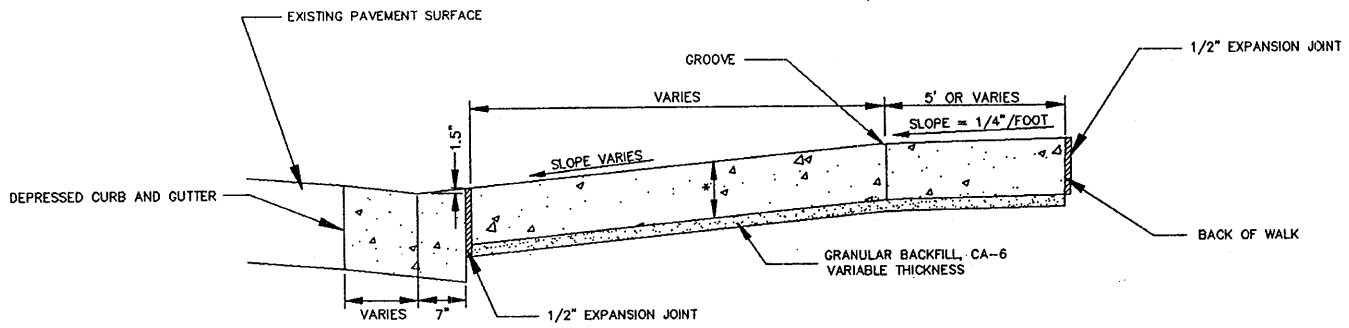
ENGINEER OF TRAVEL AND PROCEEDINGS

APPROVED: *Michael J. Hane*

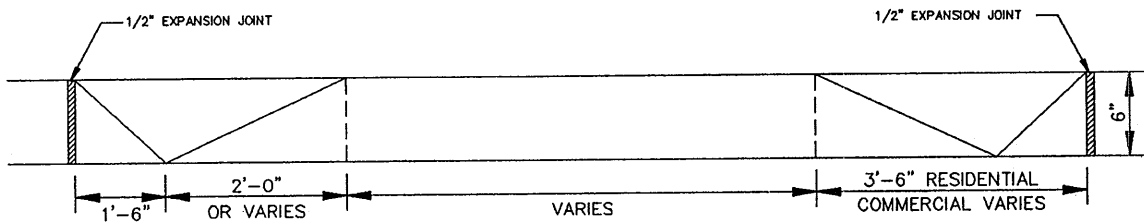
ENGINEER OF TRAVEL AND PROCEEDINGS



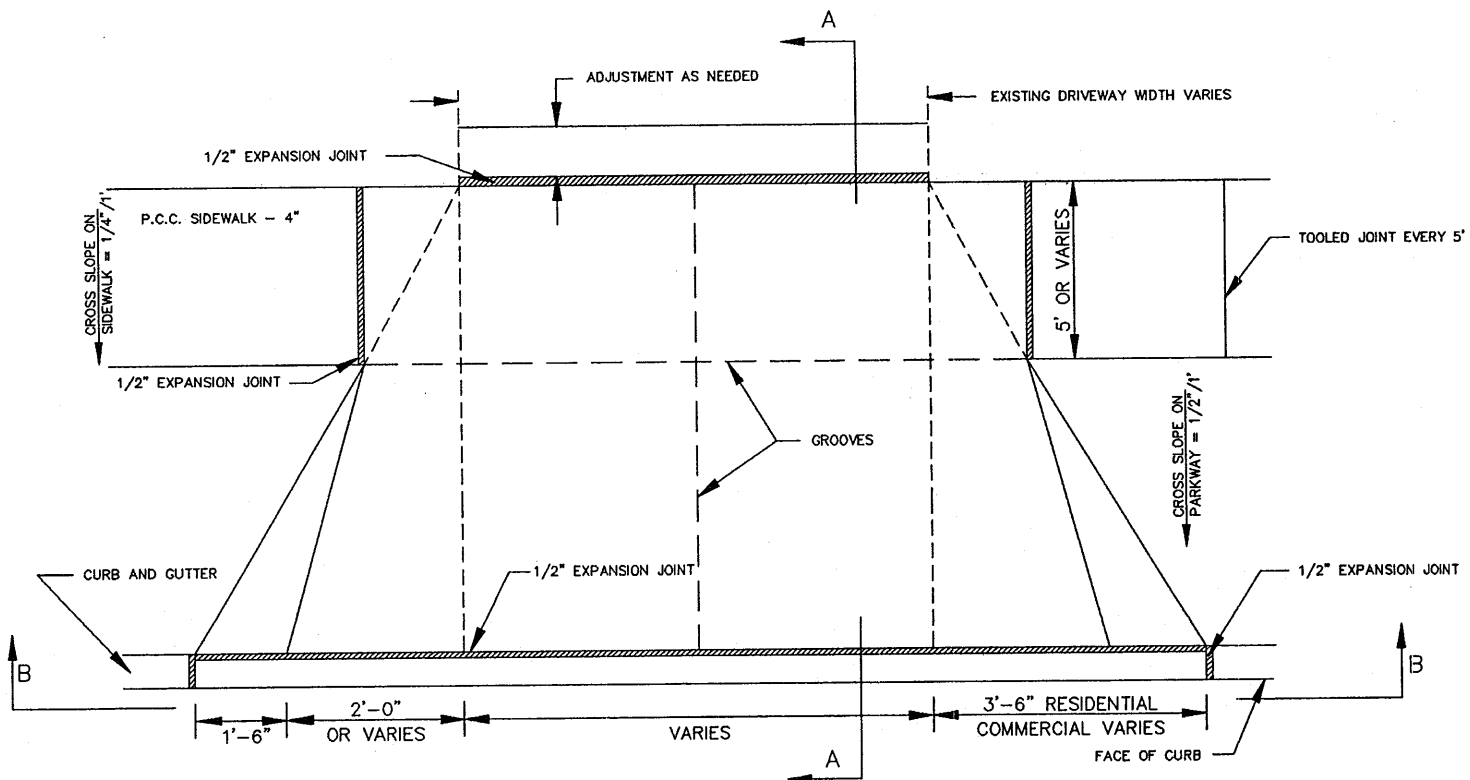
** 4' FOR RESIDENTIAL ON A MAJOR THOROUGHFARE WITH NO ON STREET PARKING



SECTION A-A

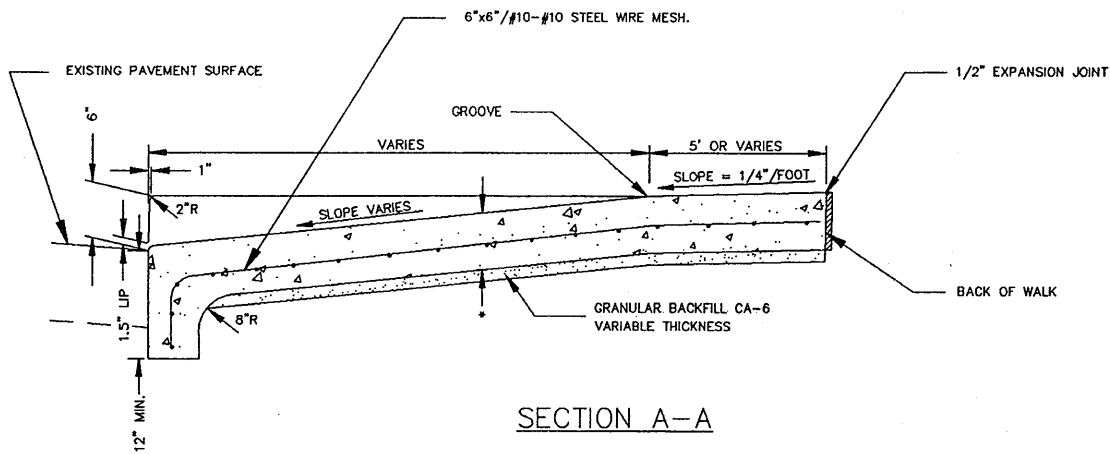


SECTION B-B

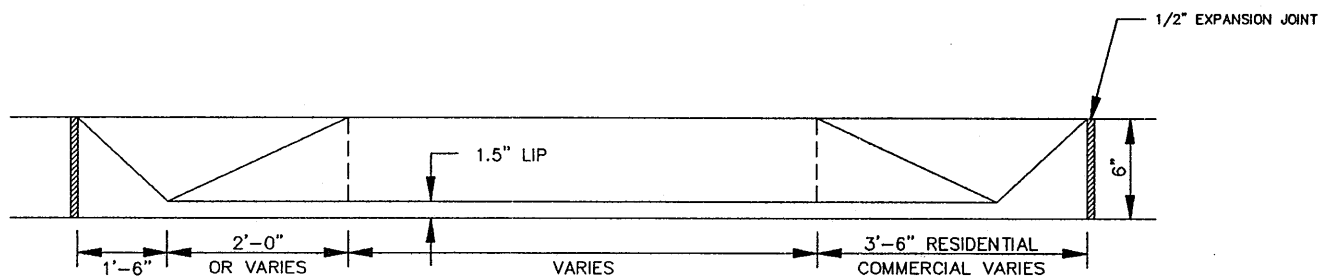


P.C.C. DRIVEWAY PAVEMENT, 6"
WITH CURB AND GUTTER (PROPERTY LINE SIDEWALK)

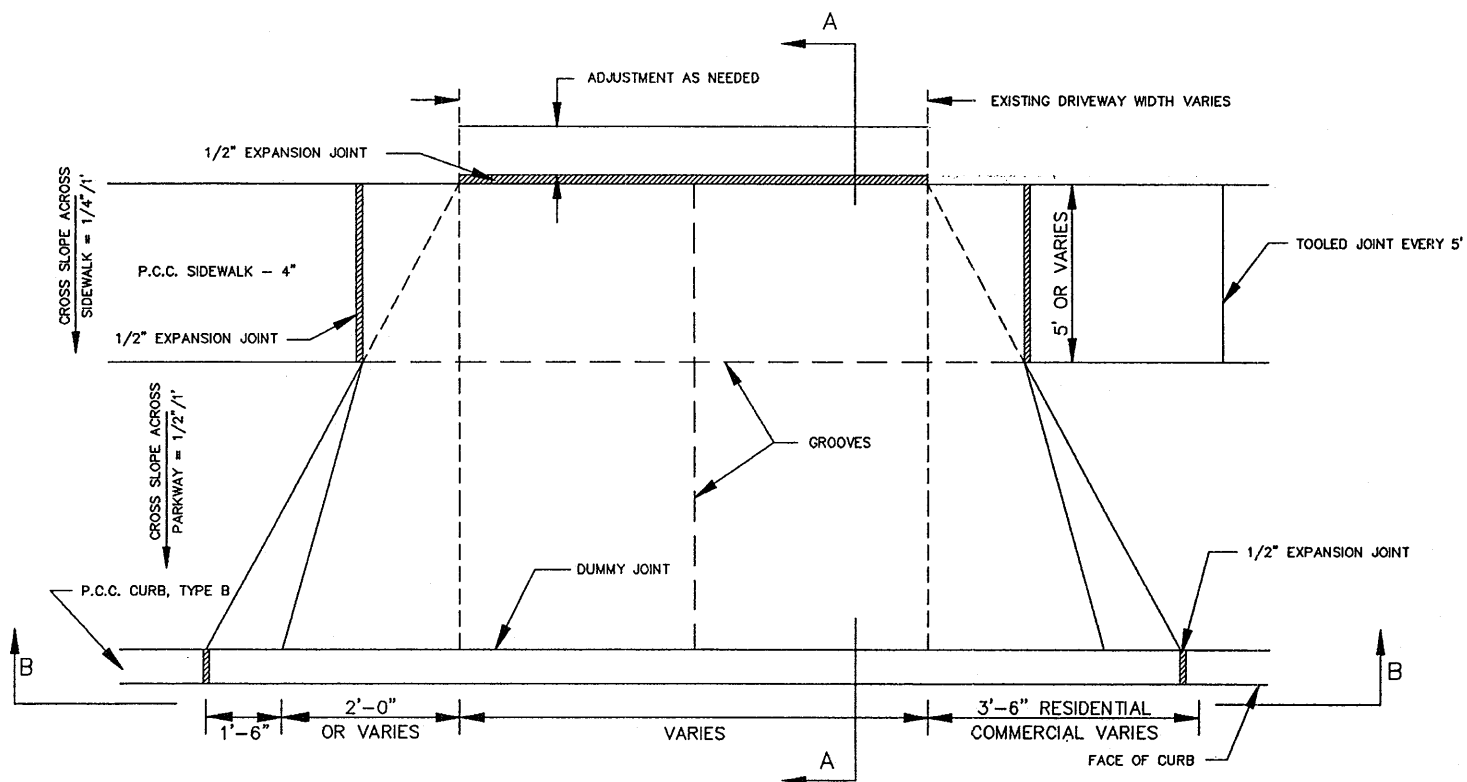
* P.C.C. DRIVEWAY THICKNESS
6" - RESIDENTIAL
8" - COMMERCIAL



SECTION A-A

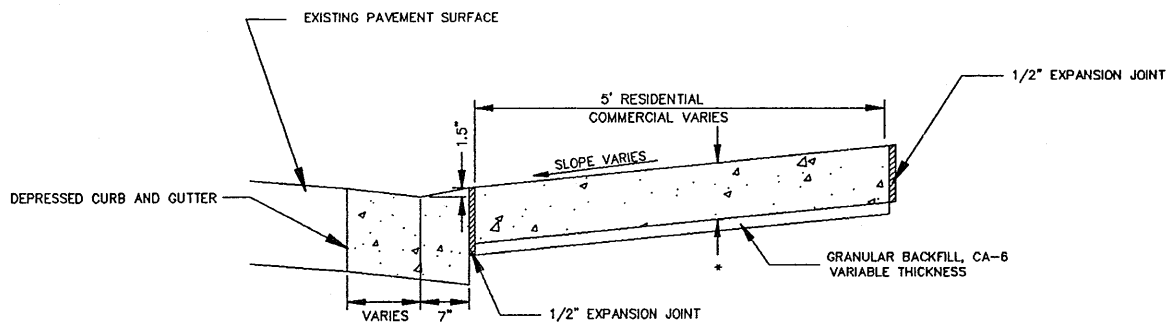


SECTION B-B

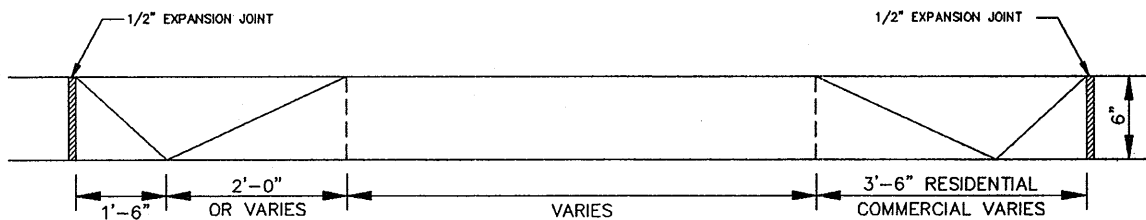


P.C.C. DRIVEWAY PAVEMENT, 6"
WITH CURB TYPE B (PROPERTY LINE SIDEWALK)

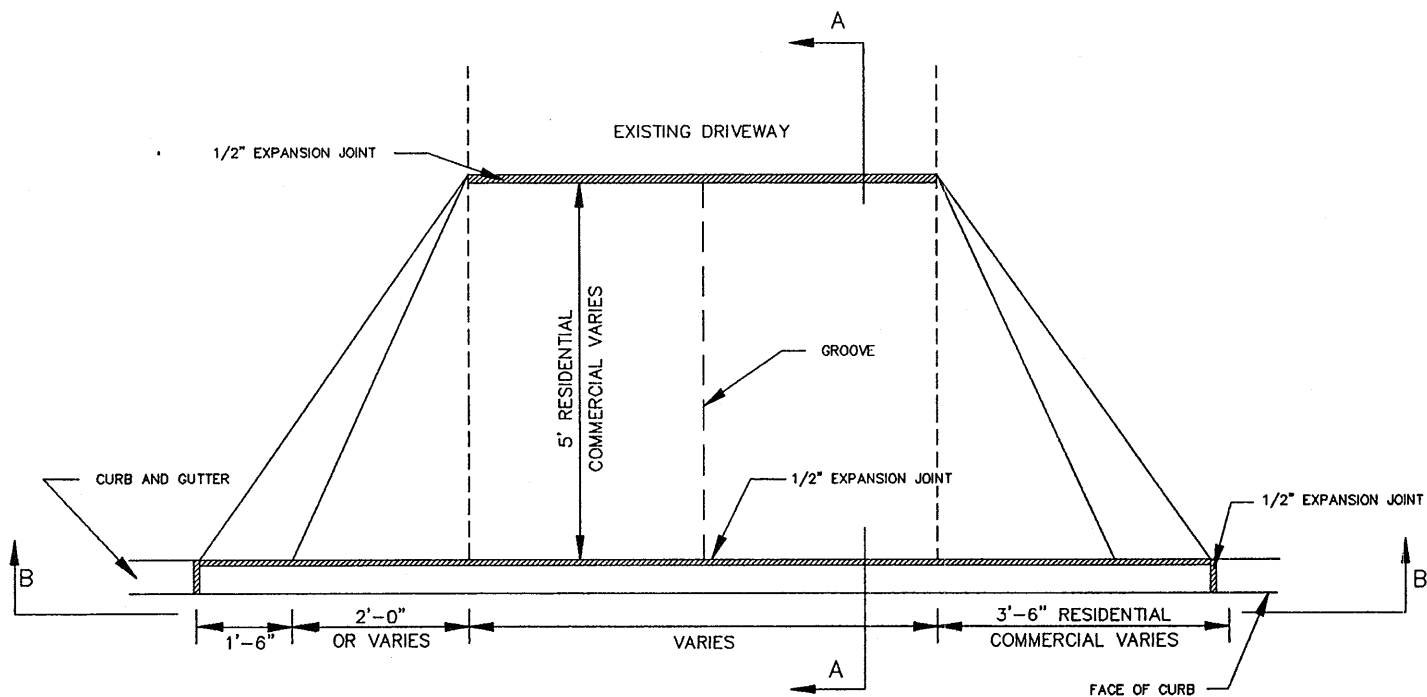
* P.C.C. DRIVEWAY THICKNESS
6" - RESIDENTIAL
8" - COMMERCIAL



SECTION A-A

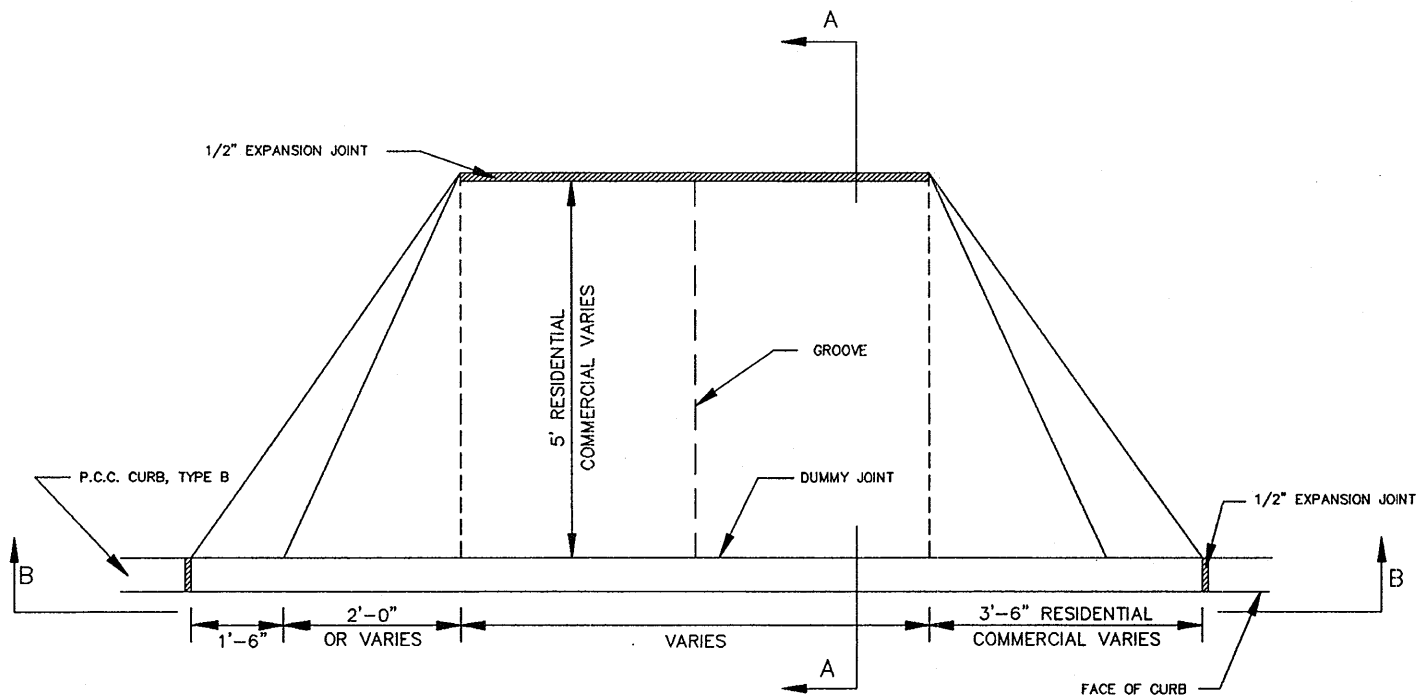
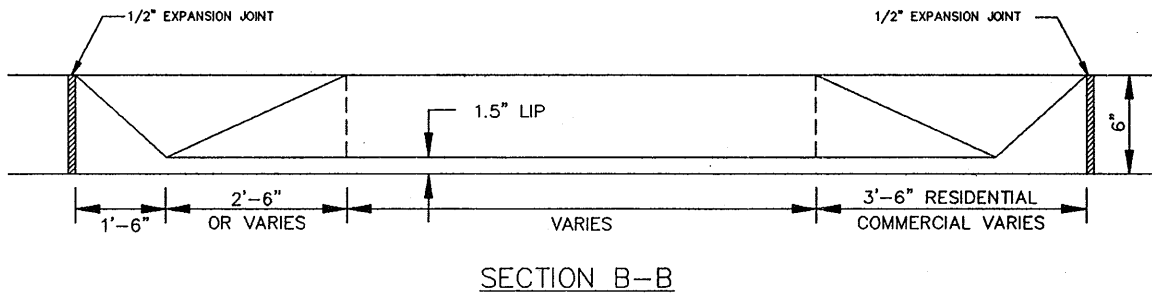
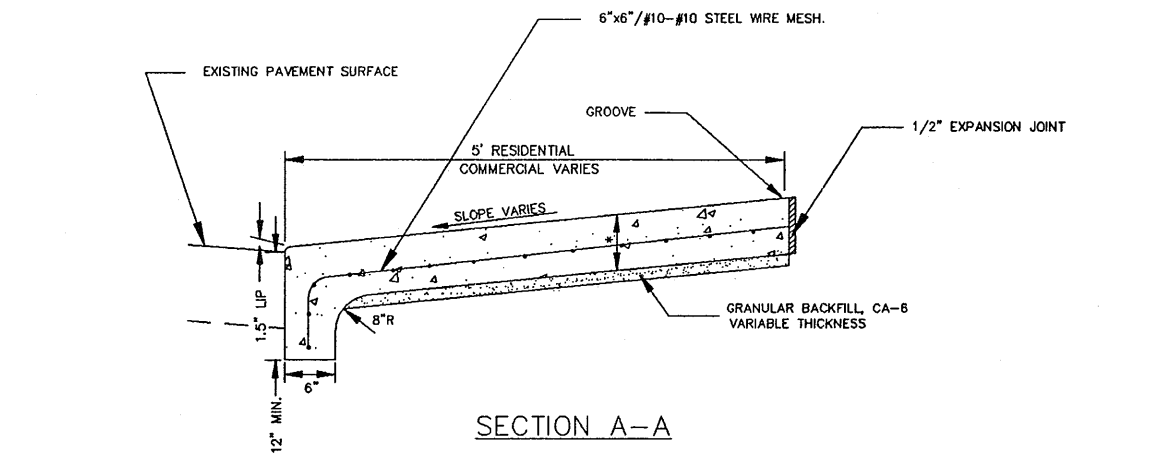


SECTION B-B



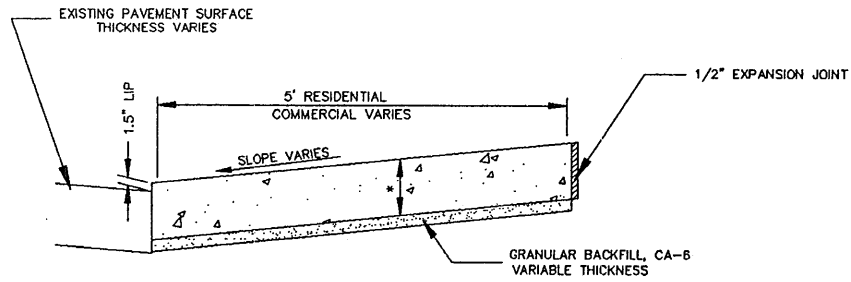
P.C.C. DRIVEWAY PAVEMENT, 6"
WITH CURB AND GUTTER (NO SIDEWALK)

* P.C.C. DRIVEWAY THICKNESS
6" - RESIDENTIAL
8" - COMMERCIAL

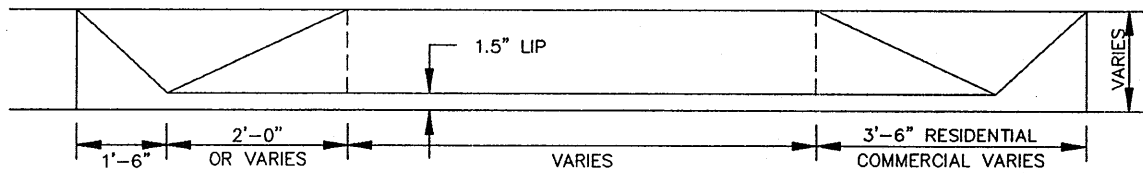


P.C.C. DRIVEWAY PAVEMENT, 6"
WITH CURB TYPE B (NO SIDEWALK)

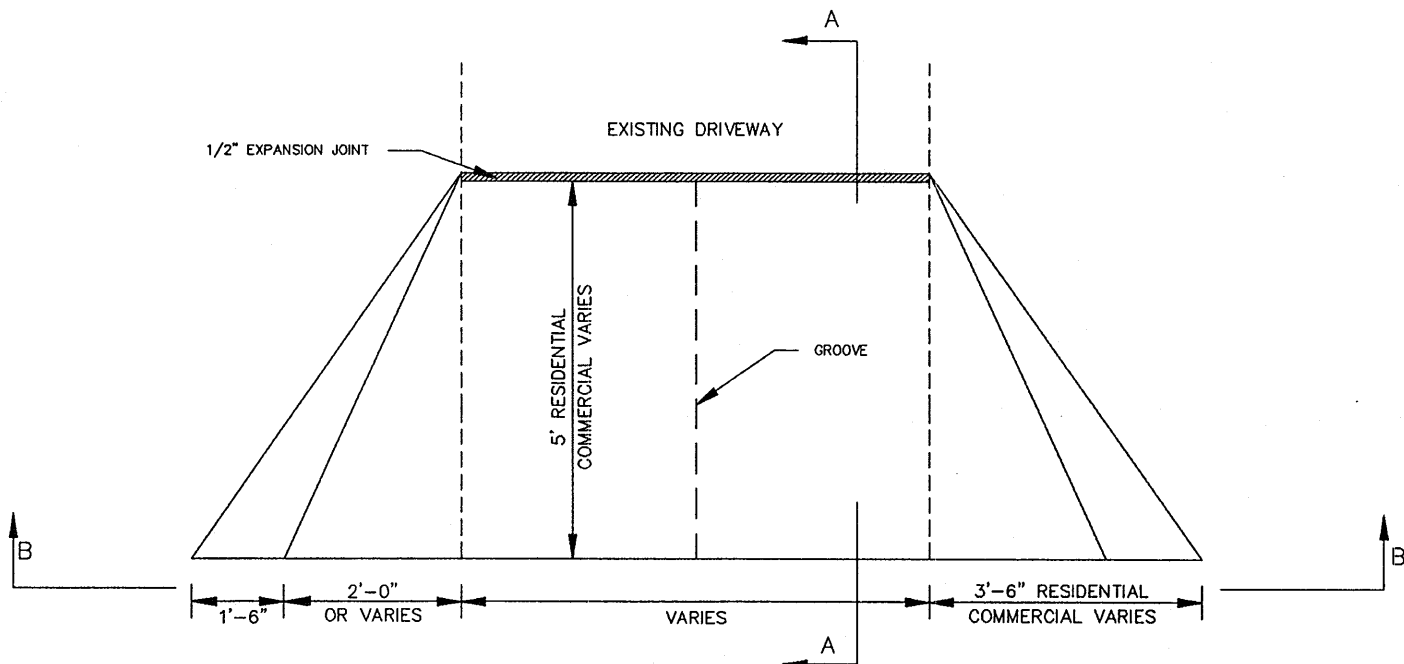
* P.C.C. DRIVEWAY THICKNESS
6" - RESIDENTIAL
8" - COMMERCIAL



SECTION A-A

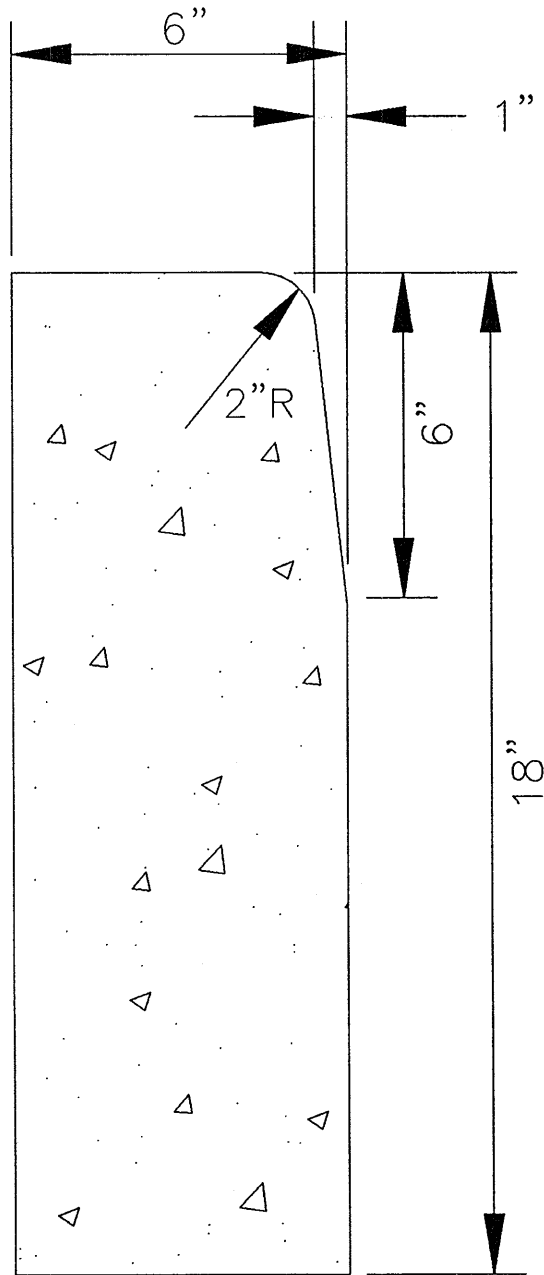


SECTION B-B



P.C.C. DRIVEWAY PAVEMENT, 6"
WITHOUT CURB OR CURB AND GUTTER

* P.C.C. DRIVEWAY THICKNESS
6" - RESIDENTIAL
8" - COMMERCIAL



P.C.C. CURB, TYPE B