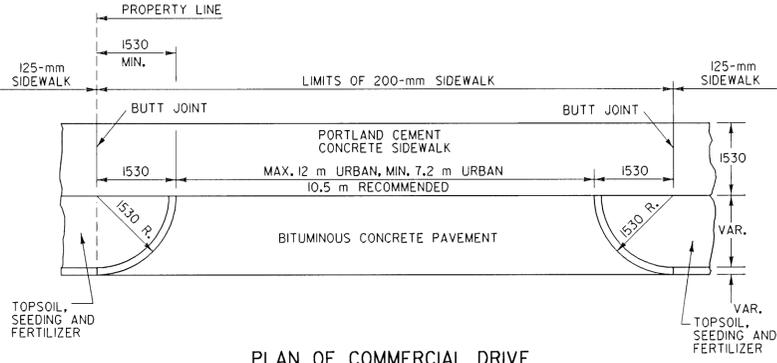
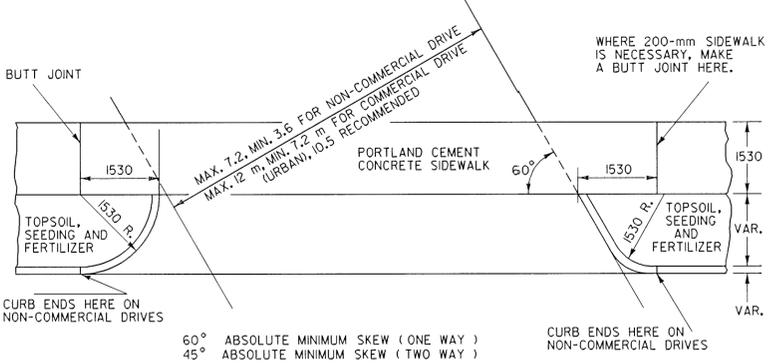


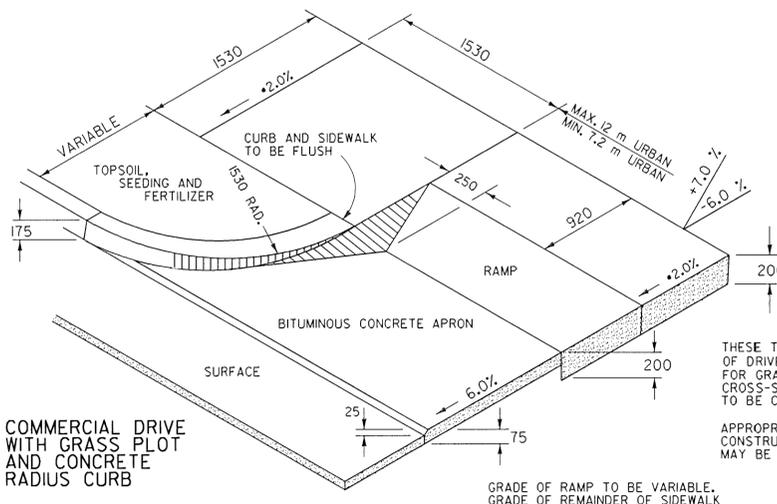
PORTLAND CEMENT CONCRETE SIDEWALK, 125 mm (WITH CONCRETE CURB)



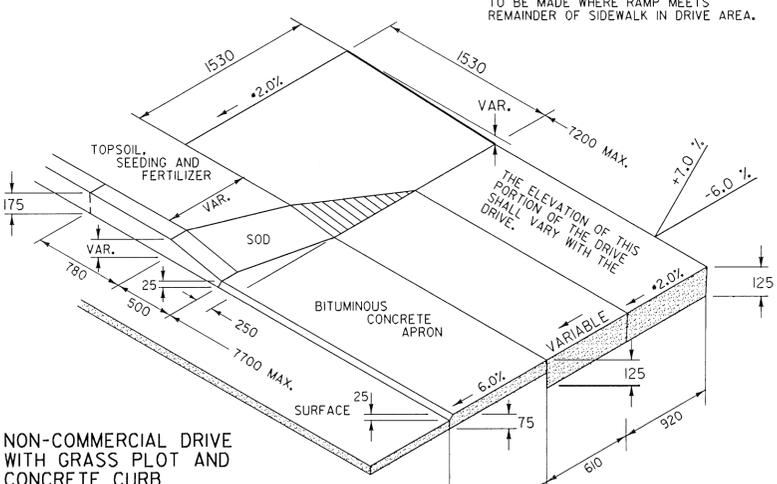
PLAN OF COMMERCIAL DRIVE



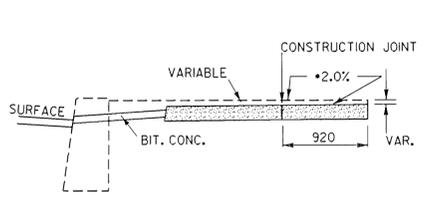
PLAN OF SKEW DRIVE



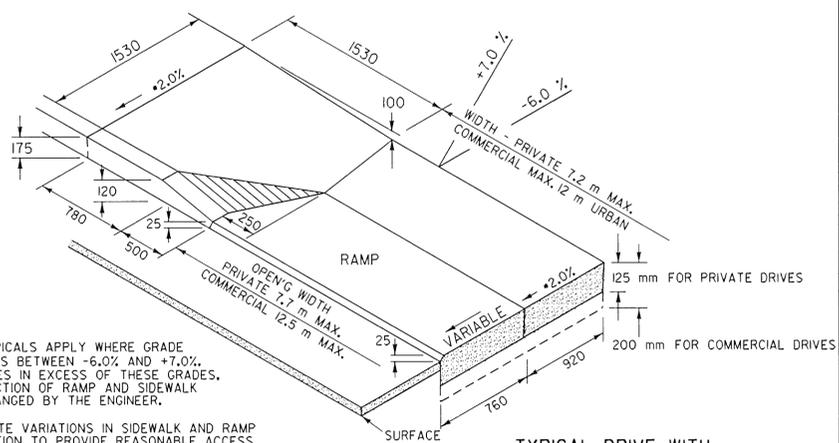
COMMERCIAL DRIVE WITH GRASS PLOT AND CONCRETE RADIUS CURB



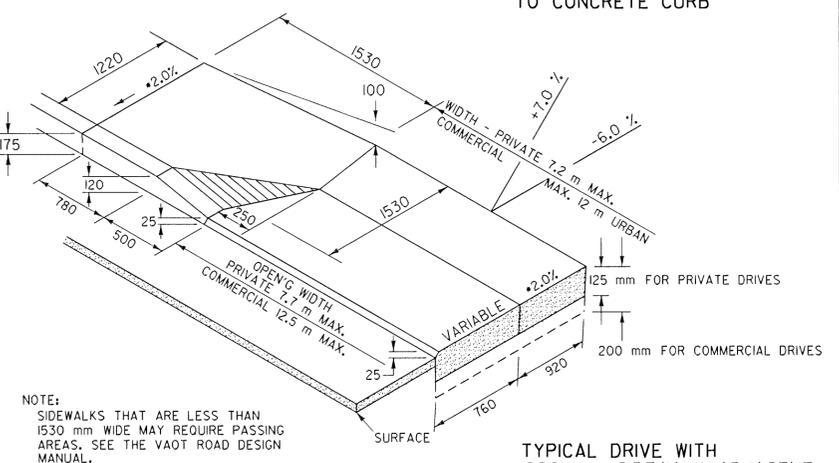
NON-COMMERCIAL DRIVE WITH GRASS PLOT AND CONCRETE CURB



NOTE: FOR FURTHER DETAILS REGARDING DRIVEWAYS, SEE STANDARD B-71M.

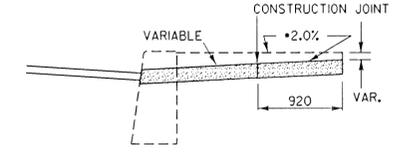


TYPICAL DRIVE WITH 1530-mm SIDEWALK ADJACENT TO CONCRETE CURB



TYPICAL DRIVE WITH 1220-mm SIDEWALK ADJACENT TO CONCRETE CURB

DISTANCE BETWEEN DOUBLE DRIVEWAYS 3000 mm MINIMUM (URBAN)



RAMPS TO BE PAID FOR AS PORTLAND CEMENT CONCRETE SIDEWALK • IN NO CASE SHALL THE CROSS SLOPE OF AN ACCESSIBLE ROUTE EXCEED 2.0%.

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm) EXCEPT WHERE NOTED.

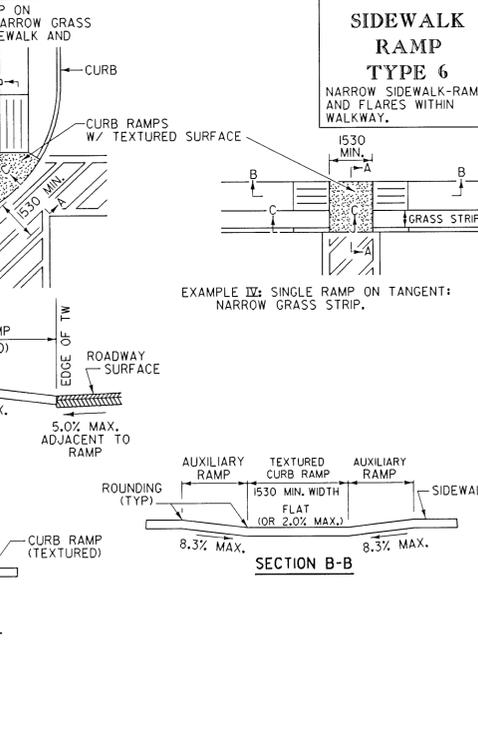
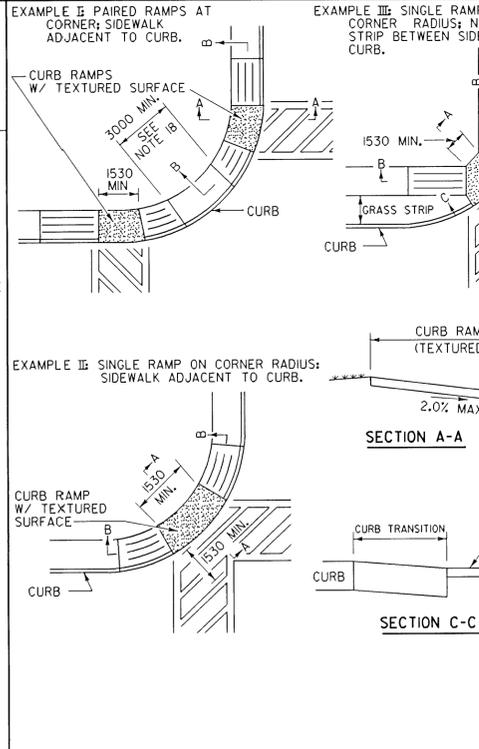
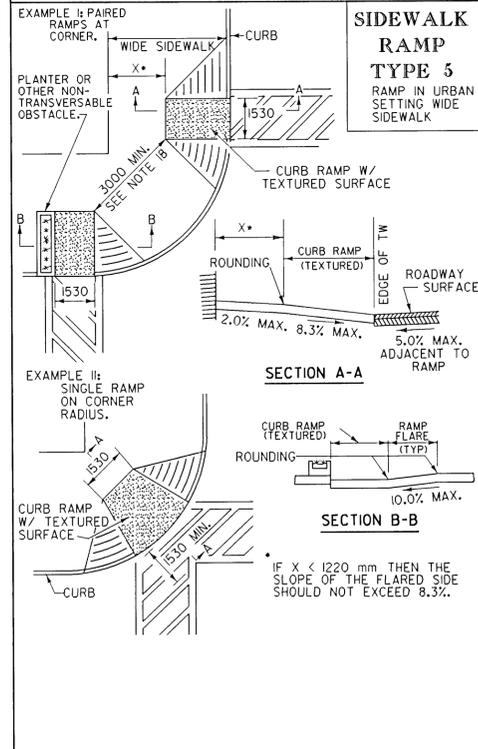
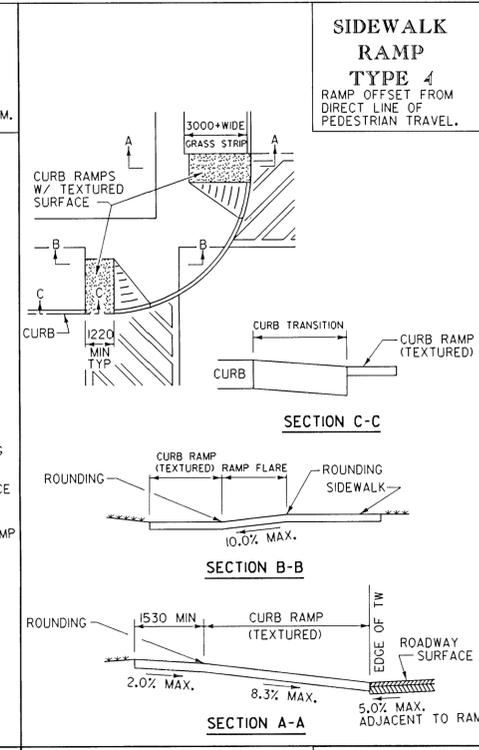
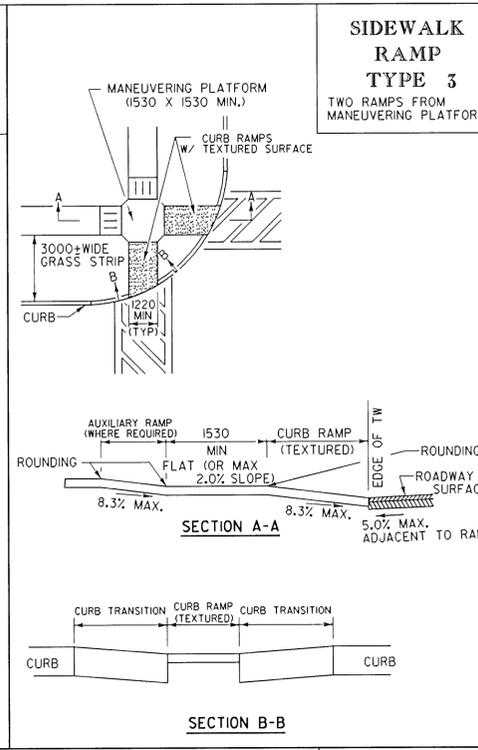
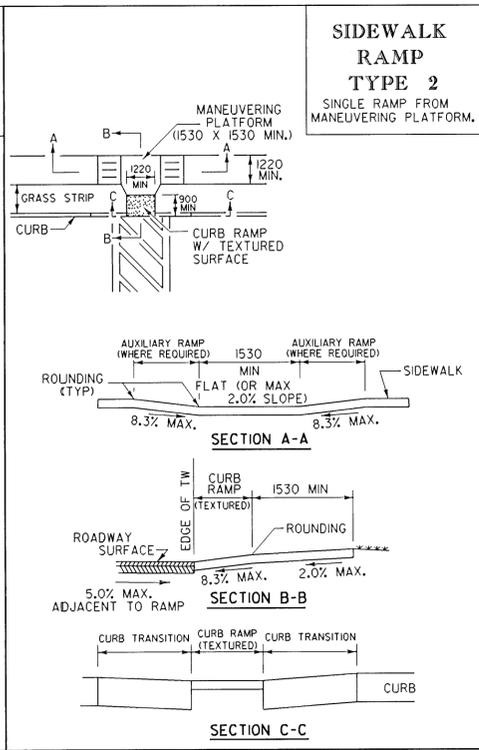
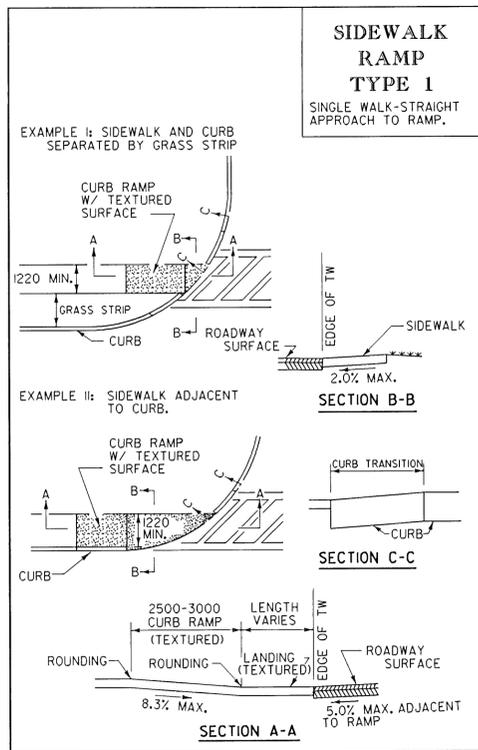
REVISIONS AND CORRECTIONS
JUNE 13, 1997 - ORIGINAL APPROVAL DATE

APPROVED
Paul Chou
DIRECTOR OF ENGINEERING
Robert Smith
DESIGN ENGINEER

PORTLAND CEMENT CONCRETE SIDEWALK
DRIVE ENTRANCES WITH
PRECAST REINFORCED CONCRETE CURB OR
CAST-IN-PLACE CONCRETE CURB



Metric
STANDARD
C-2AM



GENERAL NOTES:

- THE DIMENSIONS AND GRADES SHOWN ON THIS STANDARD WILL BE ADHERED TO IN THE DESIGN AND THE CONSTRUCTION OF SIDEWALK RAMP. WHERE SIDEWALKS RUN ADJACENT TO ROADWAYS ON STEEP (5.0% OR GREATER) GRADES, RAMP GRADES WILL BE AS FLAT AS POSSIBLE. (ON LOW SIDE OF DRIVES AND INTERSECTING SIDE STREETS, RAMP SHALL SLOPE TOWARDS DRIVE OR SIDE STREET @ 2.0%).
- MINIMUM RAMP WIDTH:
 - 1220 mm WHERE RAMP MAY BE APPROACHED DIRECTLY.
 - 1530 mm WHERE THE RAMP MUST BE (OR OFTEN WILL BE) APPROACHED FROM THE SIDE, TO PROVIDE MANEUVERING ROOM FOR WHEELCHAIRS.
- ALLOWABLE GRADES ON RAMP:
 - 8.3% MAXIMUM WHERE RAMP IS APPROACHED DIRECTLY.
 - 2.0% WHERE RAMP IS APPROACHED FROM THE SIDE.
 - FLATTER GRADES WILL BE PROVIDED WHERE FEASIBLE.
- ALLOWABLE GRADES ON FLARES ADJACENT TO RAMP:
 - 10.0% MAXIMUM WHEN DIRECTLY IN PATH THAT PEDESTRIANS MUST USE.
 - 8.3% MAXIMUM WHEN NORMALLY USED BY WHEELCHAIRS TO ENTER OR EXIT RAMP.
 - FLATTER GRADES WILL BE PROVIDED WHERE FEASIBLE.
- CROSS SLOPES ON RAMP SURFACES SHALL NOT EXCEED 2.0%.
- AN OVERRUN DISTANCE OF 1530 mm MINIMUM SHOULD BE PROVIDED AT THE TOP AND BOTTOM OF SIDEWALK RAMP TO ALLOW FOR STOPPING AND MANEUVERING OF WHEELCHAIRS.
- TRANSITIONS (GRADE CHANGES) AT TOPS AND BOTTOMS OF RAMP AND FLARES SHOULD BE ROUNDED.
- VERTICAL DROP-OFF EDGES TO RAMP WILL NOT BE BUILT UNLESS THE RAMP ABUTS AN AREA WHICH WILL NOT BE USED BY PEDESTRIANS.
- NO VERTICAL 'LIP' OR 'CURB REVEAL' WILL BE PROVIDED WHERE THE RAMP ADJOINS THE ROADWAY.
- RAMP SHALL IN ALL CASES DIRECT USERS INTO THE CROSSWALK AREA.
- WHERE POSSIBLE, SIDEWALK RAMP AND FLARES SHOULD BE LOCATED OUTSIDE THE DIRECT LINE OF TRAVEL MOST LIKELY TO BE FOLLOWED BY THE VISUALLY IMPAIRED.
- SIDEWALK RAMP SHOULD NOT BE LOCATED WHERE THEIR USE MAY BE PREVENTED BY SIGNS, POLES, PLANTERS, MAILBOXES, ETC.
- WHERE POSSIBLE, SIDEWALK RAMP SHOULD NOT BE LOCATED WHERE USERS MUST CROSS DROP INLET GRATES, MANHOLE COVERS OR OTHER ACCESS LIDS; IF THIS CANNOT BE AVOIDED THEN GRATE DESIGN AND PLACEMENT SHALL CONFORM TO ADA REQUIREMENTS.
- CURB DRAINAGE SHOULD BE CONSTRUCTED SO AS TO PRECLUDE THE FLOW OF WATER PAST THE SIDEWALK RAMP.
- WHERE CURB CORNER RADIUS EXCEEDS 7.5 m, TWO SIDEWALK RAMP ARE RECOMMENDED IN PREFERENCE TO A SINGLE RAMP.
- JOINTS WILL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT SIDEWALK SPECIFICATIONS, HOWEVER EXPANSION JOINTS WITHIN THE SIDEWALK RAMP AREA WILL BE AVOIDED WHEREVER POSSIBLE.
- SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE CURB RAMP SHALL NOT EXCEED 5.0%. NO LIP IS ALLOWED WHERE SIDEWALK RAMP MEETS THE GUTTER.
- THIS DIMENSION SHALL BE ATTAINED WHERE POSSIBLE TO AVOID THE ROLLER COASTER EFFECT.
- SIDEWALKS THAT ARE LESS THAN 1530 mm WIDE MAY REQUIRE PASSING AREAS. SEE THE VAOT ROAD DESIGN MANUAL.

TEXTURING NOTES:

- ALL SIDEWALK RAMP PROVIDING ACCESS TO AN ADJACENT ROADWAY SHALL RECEIVE AN APPROVED TEXTURED TREATMENT WHICH SHALL BE SLIP-RESISTANT AS WELL AS DETECTABLE BY CANE BY THE VISUALLY IMPAIRED.
- TEXTURING SHALL EXTEND THE FULL WIDTH AND DEPTH OF THE RAMP.
- TEXTURES SHALL CONTRAST WITH THAT OF THE SURROUNDING SURFACE. APPROVED TEXTURED TREATMENTS ARE AS FOLLOWS:
 - FOR PORTLAND CEMENT CONCRETE RAMP: EXPOSED AGGREGATE SURFACE. THE METHOD FOR ACHIEVING THE EXPOSED AGGREGATE SURFACE SHALL COMPLY WITH PROCEDURES SPECIFIED BY APPROVED VENDORS OF CONCRETE RETARDING ADDITIVES USED FOR THIS PURPOSE.
 - BRICK SURFACES MAY BE USED FOR BOTH BITUMINOUS CONCRETE AND PORTLAND CEMENT CONCRETE RAMP.
- TEXTURING, INCLUDING NECESSARY MATERIALS, TOOLS, EQUIPMENT AND LABOR, SHALL BE CONSIDERED SUBSIDIARY TO THE SIDEWALK PAY ITEM.

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm) EXCEPT WHERE NOTED.

REVISIONS AND CORRECTIONS

JUNE 13, 1997 - ORIGINAL APPROVAL DATE

APPROVED

[Signature]
DIRECTOR OF ENGINEERING

[Signature]
DESIGN ENGINEER

SIDEWALK RAMPS

