- Subgrade shall be compacted to at least 90% of maximum density in the top 6 inches prior to placing base material as specified below.
- 2. Where unsuitable subgrade material is encountered, the City Engineer may require remedial work to be done, including, but not limited to, removing additional soil and placing an additional layer of crushed rock and/or
- geotechnical fabric under the base material.

  3. Base material under curb, gutter, and sidewalk must be Caltrans Class 2 Aggregate Base, compacted to approximately 95% of maximum density. The compacted thickness of base material must not be less than
- 4. Existing concrete shall be removed at expansion joints or shall be saw cut. Saw-cuts in sidewalk or curb
- shall be at an existing score line in the sidewalk.

  5. Concrete thicker than 4 inches must be saw—cut to at least 4 inches deep before chipping out the rest, but if remaining concrete becomes cracked or damaged it shall be replaced as well.
- No utility boxes, cleanouts, poles, or structures of any kind will be permitted in the sidewalk area without the written approval of the City Engineer.
- New work shall reasonably match existing texture and color of adjacent existing concrete.
- Base material shall be moistened immediately prior to placing concrete.
- 9. Concrete shall be designated as 3,000 psi 28—day compressive strength with Type II or V Portland cement and  $\frac{3}{4}$  inch maximum crushed rock aggregate. No admixtures shall be used without the written permission of the City Engineer. For infill or replacement concrete, where adjacent concrete is darkened with age, one pound of lampblack may be added per C.Y.

  10. Concrete shall have a slump of not more than 4 inches.
- 11. New sidewalk, curb or gutter shall be connected to adjacent existing concrete using 12 inch long by  $\frac{1}{2}$  inch diameter steel dowels (#4 rebar is acceptable) in tight fitting holes drilled into the existing concrete (approximately 6 inches into adjacent sidewalk, curb and gutter, or 4" into the back of curb).
- 12. Half inch thick expansion joints shall be placed on both sides of driveway approaches, curb and sidewalk return points, fixed structures (including storm drain inlets), and at approximately 24 feet on center. An expansion joint shall also be placed between the back of sidewalk or driveway approach and any driveway, walkway or foundation poured against it. Weakened plane joints shall be placed at all inside corners (including tree wells and parkway strips), both sides of utility boxes and wherever shrinkage would concentrate stresses, and otherwise at no more than 12 feet on centers. See standard 110 for more. Expansion joint material shall completely separate the concrete all the way to the forms and down to base material, and it shall be cut to match curved surfaces. Expansion joints within sidewalk, curb and gutter shall have steel dowels joining the concrete on both sides of the joint. These dowels shall be smooth, or one side of the joint shall have the dowels wrapped with sleeves to allow them to move.
- 13. One quarter inch deep by one quarter inch radius score lines in sidewalks shall be evenly spaced at approximately 4 feet apart or as directed by the City Engineer. In addition, a similar score mark shall be placed 6 inches back from the face of curb where curb and sidewalk are poured monolithically. See standard 110.
- 14. No concrete shall be placed until the City Engineer has inspected and approved forms, subgrade and base material, and dowels into adjacent existing concrete.
- 15. All exposed edges shall be rounded with a  $\frac{1}{2}$  inch radius tool. Sidewalk shall have a medium broom finish cross—wise to the direction of travel. Curbs and gutters shall have a light wood float finish.
- 16. No voids or rock-pockets shall be present in any exposed surfaces. Any patching done must blend completely with the surrounding surface. If any standing water fails to drain off sidewalk or gutter surfaces, that portion of sidewalk or gutter must be replaced.
- 17. Curbs, sidewalks and driveway approaches shall be backfilled within 7 days after pouring.
- 18. Form faces shall not vary from the dimensions shown by more than  $\frac{1}{4}$  inch.
- 19. Unless otherwise specified on the plans, concrete shall be cured by means of the impervious membrane.

  20. All new sidewalk constructed adjacent to new curbs shall be Type "A" (poured monolithic with curb) unless otherwise approved in writing by the City Engineer. See Standard 101A.
- 21. Whenever a portion of existing curb or gutter needs to be replaced it shall be replaced as a complete, curb—and—gutter unit monolithic with sidewalk if contiguous.
- 22. Saw-cut, remove and replace a section of pavement at least sixteen inches wide by the full depth of the pavement alongside any replaced or new section of concrete curb, gutter or valley gutter, including where new ADA access ramps or driveway approach ramps are installed in existing sidewalk.
- 23. Edges of remaining pavement shall be heavily coated with approved tack—coat material before new asphalt concrete is placed against them. The joint between the old and new pavement shall be sealed with tack-coat and covered with sand.
- 24. Asphalt concrete pavement adjacent to new concrete shall not be installed for at least 7 days after pouring concrete. Concrete shall be heavily coated with approved tack—coat material before asphalt concrete is placed against it.

## CITY OF PACIFICA

Dept. of Public Works **ENGINEERING DIVISION** 

## **STANDARD**

CURB, GUTTER, SIDEWALK AND DRIVEWAY NOTES

			AUG
			2014
			DWG. NO.
REV	DATE	BY:	101A