



NOTES:

1. When manholes are installed in unimproved areas, the top of the cover shall be a min. of 1 foot above grade.
2. Min. of one 3" grade adjustment ring. Max. height of grade adjustment rings = 20". Alternately, contractor may cast grade adjustment rings in place.
3. Set all barrel sections & taper sections in plastic gasket, Ram-nek or approved alternate. Typical joint use (1) 3/4" x 2-1/2" Ram-nek seal, (2 seals in high water table areas).
4. Cone section (taper) must be concentric for 48"Ø manhole or eccentric for 60"Ø manhole unless otherwise specified and approved by the City
5. After lower ring section is set, break out top half of pipe flush with inside face of M.H. wall and construct shelf and u-shaped channel. Make elevation changes gradually and directional changes with smooth curves. Slope and size of channels shall match upstream and downstream pipes. Manhole channels with a horizontal change in direction of 30' or more shall have a minimum drop of 0.1' across the manhole or shall match the slope of the pipe, whichever is greater.
6. Poured-in-place base shall be poured full thickness on undisturbed soil. Precast base to be from City approved list and placed on 6" minimum of 3/4" drain rock installed against undisturbed earth.
7. Class "A" conc. collar shall be 2" below finished grade.
8. Standard manhole barrel section per ASTM C478.
9. 48"Ø I.D. M.H. to be used for sewer mains less than 18"Ø. 60"Ø I.D. M.H. to be used for all trunk and collector sewers 18"Ø to 48"Ø or where drop fittings are used.
10. Flexible pipe coupling is required on all pipe other than SDR 35 PVC pipe. Flex coupling to be installed in mainline trench and out of manhole excavation.
11. 60" Dia. Manholes are required for main lines 18" or larger in Dia.

Install waterstop for poured in place bases, in accordance with manufacturer's instructions as shown. (typical)

Eccentric manhole taper, cover & grade rings to be located over downstream pipe.

MANHOLE BASE

CHANNELIZATION PLAN AND LOCATION OF ECCENTRIC MANHOLE COVER

City of Lakeport

STANDARD PRECAST CONCRETE MANHOLE for SANITARY SEWER

SCALE: NONE		DATE: Jan. 2003	
DWN:	APPROVED		FILE NO.
CHK:			