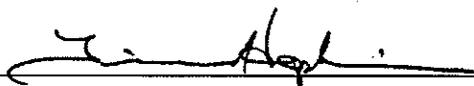


STORM DRAIN DESIGN

- A. HYDROLOGY & HYDRAULIC CALCULATION SHALL BE SUBMITTED PER COUNTY OF ORANGE R.D.M.D. DESIGN MANUALS, CURRENT EDITION.
- B. ALL BUILDINGS SHALL BE PROTECTED FROM FLOODING DURING 100-YEAR FREQUENCY STORM. THE MINIMUM FINISH FLOOR ELEVATION SHALL BE 1' ABOVE 100 YEAR FLOOD LEVEL. CATCH BASINS AND LATERALS SHALL BE DESIGNED TO CONTAIN 10-YEAR FLOWS WITHIN STREET CURBS AND 100 YEAR FLOWS WITHIN STREET RIGHT-OF-WAY.
- C. 1. VELOCITY SHOULD NOT EXCEED 20 FPS IN STANDARD WALL R.C.P.
2. WHERE VELOCITY EXCEEDS 20 FPS, A SPECIAL WALL R.C.P. WITH A MINIMUM OF 1-1/2" STEEL CLEARANCE ON BOTH THE INSIDE AND OUTSIDE SURFACES SHALL BE USED.
3. MAXIMUM VELOCITY IN SPECIAL COVER R.C.P. SHALL BE 45 FPS.
- D. ON ARTERIAL HIGHWAYS, ONE 12' LANE IN EACH DIRECTION SHOULD BE CLEAR OF WATER DURING A 100 YEAR STORM.
- E. MANHOLE SPACING = 350' MAX.
- F. ONCE WATER IS PICKED UP IN A STORM DRAIN, IT SHOULD REMAIN IN THE SYSTEM.
- G. PIPE SIZE MAY NOT BE DECREASED DOWNSTREAM WITHOUT THE CITY'S APPROVAL.
- H. BRANCHING OF FLOW IS NOT ALLOWED.
- I. SUBMIT CALCULATIONS BASED ON ENERGY GRADE LINE. PLOT HYDRAULIC GRADE LINE AND PROVIDE HYDRAULIC DATA ON PLAN.
- J. THE RATIO OF NORMAL VELOCITY TO CRITICAL VELOCITY SHOULD BE LESS THAN 0.9 OR GREATER THAN 1.2.
- K. ALL STORM DRAINS SHALL BE CLOSED CIRCUIT TELEVISION INSPECTED (C.C.T.V.I.) WITHIN 1 HOUR AFTER CLEAR WATER FLUSHING SAID FACILITY, AND A VIDEO RECORD SHALL BE SUBMITTED TO THE PUBLIC WORKS INSPECTOR.

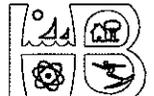
APPROVED:



CITY ENGINEER

CITY OF HUNTINGTON BEACH

DEPARTMENT OF PUBLIC WORKS



REVISION DATE: MAY 2008

STORM DRAIN DESIGN CRITERIA

STANDARD PLAN
300
1 of 2