

THE DESIGN PEAK FLOW RATE IN PIPES 12" AND SMALLER WILL BE LIMITED BY THE DEPTH RATIO OF 'D/d' = 0.5: 15" PIPES 'D/d' = 0.67 AND 18" AND LARGER 'D/d'=0.75, WHERE 'D/d' IS THE RATIO OF CALCULATED FLOW DEPTH TO PIPE INSIDE DIAMETER.

1.4 STANDARD LOCATION AND ALIGNMENT

IN LOCAL RESIDENTIAL AND INDUSTRIAL STREETS, SEWER MAINS ARE TO BE LOCATED 5' NORTH OR EAST OF THE STREET CENTERLINE IN THE CENTER OF THE DRIVING LANE. IN MAJOR, PRIMARY, AND SECONDARY HIGHWAYS, THE SEWER MAINS WILL BE LOCATED IN THE CENTER OF THE DRIVING LANE NEAREST TO THE CENTER OF THE STREET, BUT WILL NOT BE LOCATED IN THE MEDIAN STRIP OR PARKING LANE.

ON CURVED STREETS, SEWER MAINS SHALL BE PARALLEL WITH THE CENTERLINE OF THE STREET BY USE OF HORIZONTAL CURVES FOR THE ALIGNMENT, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

A MAXIMUM HORIZONTAL SEPARATION BETWEEN SEWER AND DOMESTIC WATER MAINS SHALL BE ACHIEVED BY ALIGNING THE SEWER ON THE OPPOSITE SIDE OF THE CENTERLINE FROM THE DOMESTIC WATER MAIN.

1.5 HORIZONTAL CURVE DESIGN CRITERIA

MINIMUM RADIUS OF CURVATURE FOR SEWERS SHALL BE AS FOLLOWS:

VITRIFIED CLAY PIPE (VCP)

PIPE SIZE	MIN. RADIUS
8"-12"	250'
15"-18"	350'
21"-27"	400'
30"-39"	450'
OVER 39"	500'

POLYVINYL CHLORIDE PIPE (PVC)

PIPE SIZE	MIN. RADIUS
8"-10"	350'
12"	420'

LESSER RADIUS OF CURVATURE MAY BE PERMITTED BY THE CITY ENGINEER IN SPECIAL CASES. VERTICAL CURVES ARE NOT ALLOWED. WHEN CURVED SEWERS CAN NOT BE CONCENTRIC WITH STREET CENTERLINE THEN STRAIGHT SECTIONS SHALL BE USED. NO REVERSE CURVES ALLOWED, MUST HAVE A TANGENT IN AND OUT OF CURVE.

1.6 STATIONING PROCEDURE

CENTERLINE STATIONS FOR SEWER MAINS SHALL BE SHOWN AND WILL BE INDEPENDENT OF STREET STATIONING. ALL MANHOLES ARE TO BE NUMBERED AND THE NUMBERS NOTED ON THE PLANS (EXAMPLE: MH #1). SEWER STATIONS START 0+00.00 AT THE DOWNSTREAM POINT OF CONNECTION AND INCREASE UPSTREAM TO THE LAST MANHOLE ON A SEWER LINE. OTHER STARTING STATIONS MAY BE USED WHERE APPROPRIATE. INTERSECTING SEWER LINES WILL BE INDEPENDENTLY STATIONED FROM THEIR DOWNSTREAM POINT OF CONNECTION AND INCREASE UPSTREAM TO THE LAST MANHOLE OR CLEAN-OUT. EACH LINE SHALL BE INDEPENDENTLY LABELED FOR IDENTIFICATION AS "SEWER LINE A", "SEWER LINE B", ETC.

APPROVED:


CITY ENGINEER

CITY OF HUNTINGTON BEACH

DEPARTMENT OF PUBLIC WORKS



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SEWER FACILITY
DESIGN CRITERIA

STANDARD PLAN
500
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