

1.10 MANHOLE TYPE AND SIZE

MANHOLES SHALL BE PRECAST REINFORCED CONCRETE WITH ECCENTRIC CONE IN ACCORDANCE WITH CITY STD. PLANS 504 AND 505. MINIMUM DIAMETER SHALL BE 48" AND LARGER SIZES MAY BE REQUIRED AS SHOWN IN THE FOLLOWING TABLE.

MANHOLE SIZES

SEWER MAIN	MAXIMUM BRANCH SIZE	MH SIZE	FRAME AND COVER
8"-15"	10"	48"	24"
18"-24"	12"	60"	24"/36"
27"-36"	15"	72"	36"

EXTRA DEPTH REQUIREMENT

DEPTH OF COVER	MH SIZE
0'-15'	48"
15.5'-22'	60"
22.5' AND GREATER	72"

1.11 MANHOLE COVERS

MANHOLE COVERS SHALL BE CAST-IRON IN ACCORDANCE WITH CITY STD. PLAN 513. THE SIZE SHALL BE DETERMINED FROM THE TABLE IN SECTION 1.10. TEMPORARY COVERS MAY BE NECESSARY IN NEW STREETS. IN THESE CASES, THE MANHOLE SHAFT SHALL BE LEFT 6", MINIMUM, BELOW SUBGRADE. A HEAVY METAL PLATE ACCEPTABLE TO THE CITY INSPECTOR SHALL BE PROVIDED TO COVER THE MANHOLE OPENING. CLEATS SHALL BE PROVIDED IN AT LEAST FOUR POINTS FOR THE UNDERSIDE OF THE TEMPORARY COVER TO PREVENT THE TEMPORARY COVER FROM MOVING. THESE CLEATS SHALL EXTEND A MINIMUM OF 3" FROM THE COVER PLATE AND SHALL BE WELDED TO THE PLATE.

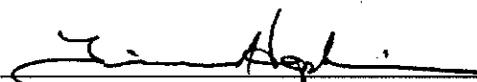
PLYWOOD SHALL BE CUT TO THE SHAPE AND SIZE OF THE MANHOLE BASE AND PLACED IN THE BASE BEFORE THE TEMPORARY COVER IS PLACED ON THE SHAFT. AT THE COMPLETION OF FINAL PAVING, EACH MANHOLE SHALL BE RAISED TO FINAL GRADE BY THE INSTALLATION OF GRADE RINGS, AS NECESSARY, AND THE INSTALLATION OF THE PERMANENT FRAME AND COVER ASSEMBLY.

1.12 CLEAN OUTS

USE OF CLEAN-OUTS AS SHOWN IN CITY STD. PLAN 508 SHALL BE LIMITED TO THE FOLLOWING INSTANCES UNLESS APPROVED OTHERWISE BY THE CITY ENGINEER.

- A. SHORT SECTIONS OF SEWER MAIN, LESS THAN 250', WHICH WILL BE EXTENDED.
- B. ALL COMMERCIAL AND INDUSTRIAL SEWER LATERAL INSTALLATIONS AT THE PROPERTY LINE.
- C. BETWEEN MANHOLES, IF THERE IS A REVERSE CURVE IN THE SEWER MAIN, TO FACILITATE CLEANING OF THE MAIN LINE.
- D. SPECIAL INSTANCES SUCH AS ON A SEWER LATERAL TO A SINGLE FAMILY RESIDENTIAL LOT WHERE THE DWELLING UNIT IS SET BACK MORE THAN 100' FROM THE PROPERTY LINE, WHERE THERE IS A LARGE SLOPE UP TO THE BUILDING PAD FROM THE PROPERTY LINE AND A GRADE CHANGE IN THE LATERAL IS NECESSARY, OR WHERE THE SEWER LATERAL ENTERS THE REAR OF THE LOT FROM A PUBLIC RIGHT-OF-WAY.
- E. ON A LATERAL WHERE THE OVERFLOW LEVEL OF THE LOWEST WASTEWATER FIXTURE IN THE BUILDING IS BELOW THE RIM ELEVATION OF THE UPHILL SEWER MANHOLE ON THE MAIN LINE. IN THIS SITUATION THE RIM ELEVATION OF THE CLEAN-OUT INSTALLED AT THE PROPERTY LINE SHALL BE AT LEAST 6" BELOW THE OVERFLOW ELEVATION OF THE LOWEST WASTE WATER FIXTURE ON THE LATERAL. A BACKFLOW PREVENTION DEVICE IS REQUIRED ON THE LATERAL.

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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