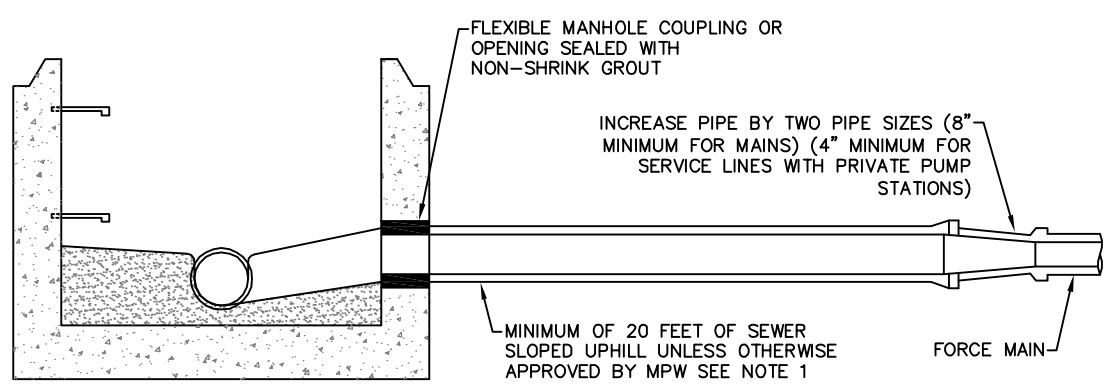


SECTIONAL PLAN



SECTION A-A

1. THIS DETAIL DEPICTS THE TYPICAL ACCEPTABLE METHOD FOR CONNECTING FORCE MAINS TO EXISTING OR NEW MANHOLES ON THE GRAVITY PORTION OF THE SYSTEM. THE LAST 20 FEET (MINIMUM) OF SEWER (INCREASED 2 PIPE SIZES FROM THE FORCE MAIN DIAMETER) SHALL BE SLOPED UPHILL UNLESS OTHERWISE APPROVED BY MPW. THE REVERSE-GRADE SLOPE SHALL BE DETERMINED BY THE ENGINEER WITH THE INTENT OF KEEPING THE FORCE MAIN FULL DURING ALL OPERATING CONDITIONS AND SLOWING THE WASTEWATER PRIOR TO ENTERING THE MANHOLE TO REDUCE TURBULENCE AND TO FACILITATE A SMOOTH, UNIFORM FLOW PASSING THROUGH THE MANHOLE AND JOINING ANY OTHER GRAVITY FLOW.
2. FOR SMALLER FORCE MAINS WITH LITTLE FLOW, IT MAY BE NECESSARY TO PROVIDE A POSITIVE SLOPE TO THE MANHOLE TO MAKE SURE THAT SOLIDS WILL PASS TO THE MANHOLE AND NOT SETTLE OUT. IN THESE CASES, THE ENGINEER SHALL PROVIDE MPW WITH DETAILS OF THE DESIGN FOR REVIEW.
3. OTHER ALTERNATE DESIGNS FOR CONNECTING FORCE MAINS TO RECEIVING MANHOLES MAY BE SUBMITTED TO MPW FOR REVIEW AND CONSIDERATION. ANY SUCH ALTERNATE SHALL MINIMIZE TURBULENCE THROUGH THE MANHOLE AND PROVIDE FOR A SMOOTH, UNIFORM FLOW PATH.
4. SEE DETAIL WW-16. THE HEIGHT OF THE BENCHING SHALL BE INCREASED FROM THE SPECIFIED CROWN OF THE PIPE AS NECESSARY AND/OR AS REQUIRED BY MPW TO KEEP ALL WASTEWATER IN THE INVERT CHANNEL AS IT PASSES THROUGH THE MANHOLE. THE HEIGHT OF THE BENCH/INVERT CHANNEL MAY HAVE TO BE UP TO 2 TIMES THE LARGEST PIPE CONNECTING TO THE MANHOLE.

MOUNT PLEASANT WATERWORKS			
TYPICAL FORCE MAIN DISCHARGE TO RECEIVING MANHOLE			
APPROVED BY:	MPW	DATE:	OCT 2013
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		DRAWING NO.	WW-19