



Environment One Corporation

**Pressure Sewer Preliminary
Cost and Design Analysis
For
HOLMES DRIVE REV 2.0
Bailey Road, Holden, MA**

Prepared For:
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March 3, 2021

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Notes :

Single Pressure Main in roadway

<<<< END OF NOTES >>>>

PRELIMINARY PRESSURE SEWER - PIPE SIZING AND BRANCH ANALYSIS

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Zone Number	Connects to Zone	Number of Pumps in Zone	Accum Pumps in Zone	Gals/day per Pump	Max Flow Per Pump (gpm)	Max Sim Ops	Max Flow (GPM)	Pipe Size (inches)	Max Velocity (FPS)	Length of Main this Zone	Friction Loss Factor (ft/100 ft)	Friction Loss This Zone	Accum Friction Loss (feet)	Max Main Elevation	Minimum Pump Elevation	Static Head (feet)	Total Dynamic Head (ft)		
This spreadsheet was calculated using pipe diameters for:						SDR11HDPE		Friction loss calculations were based on a Constant for inside roughness "C" of:										150	
1.00	1.00	7	7	200	11.00	3	33.00	2.00	3.57	300.00	2.52	7.56	7.56	785.00	775.00	10.00	17.56		

PRELIMINARY PRESSURE SEWER - ACCUMULATED RETENTION TIME (HR)

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Zone Number	Connects to Zone	Accumulated Total of Pumps this Zone	Pipe Size (inches)	Gallons per 100 lineal feet	Length of Zone	Capacity of Zone	Average Daily Flow	Average Fluid Changes per Day	Average Retention Time (Hr)	Accumulated Retention Time (Hr)
This spreadsheet was calculated using pipe diameters for: SDR11HDPE								Gals per Day per Dwelling		200
1.00	1.00	7	2.00	15.40	300.00	46.21	1,400	30.30	0.79	0.79

