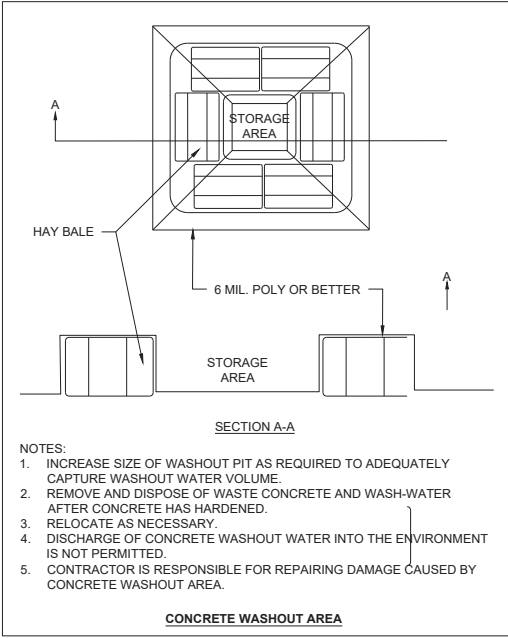
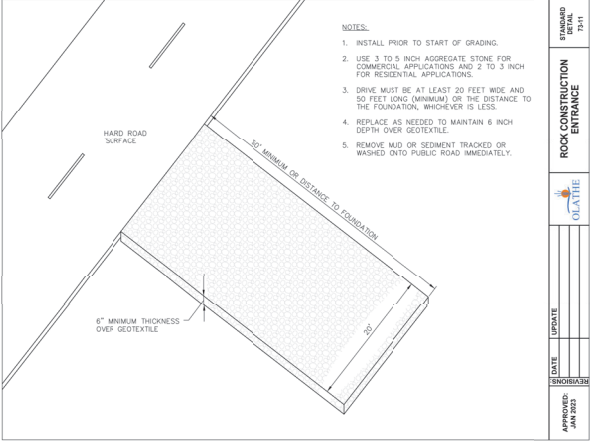
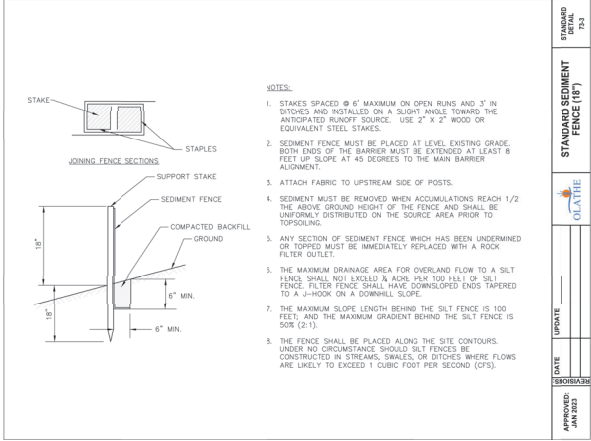
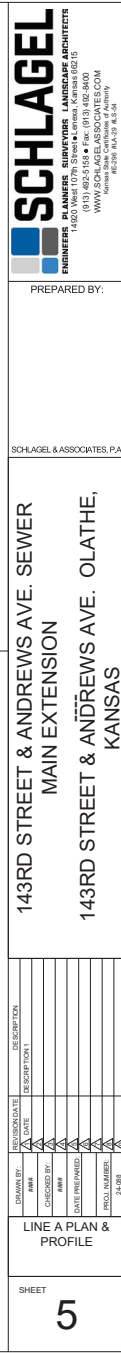








KOH Minimum Flows**											
Residential - Low Density				Residential - High Density				Commercial			
Tri-tributary	Average	Peak	Peak	Tri-tributary	Average	Peak	Peak	Tri-tributary	Average	Peak	Peak
Area	Daily Flow	Daily Flow	Flow	Area	Daily Flow	Daily Flow	Flow	Area	Daily Flow	Daily Flow	Flow
(Acres)	(MGD)	(MGD)	(MGD)	(Acres)	(MGD)	(MGD)	(MGD)	(Acres)	(MGD)	(MGD)	(MGD)
EX-101	10.13	0.0795	0.3877	0.8192	0.00	0.0000	0.0000	0.00	0.0000	0.0000	0.0000
45	0.00	0.0000	0.3867	0.0000	0.00	0.0000	0.0000	0.00	0.0000	0.0000	0.0000
Design Variables:				Design Variables:				Design Variables:			
1000 gallons per day per acre				2000 gallons per day per acre				1800 gallons per day per acre			
Peaking factor of 5				Peaking factor of 5				Peaking factor of 5			
Total				Total				Total			
0.1400				0.1400				0.1400			
0.7540				0.7540				0.7540			
** Per KOH Minimum Standards of Design for Water Pollution Control Facilities, Sec. VI - Sanitary Sewer Design, minimum average design flows											

Olathe Minimum Flows															
Residential - Single Family				Residential - Multi-Family				Residential - Low Density				OFFSPR			
Tri-tributary	Average	Peak	Peak	Tri-tributary	Average	Peak	Peak	Tri-tributary	Average	Peak	Peak	Tri-tributary	Average	Peak	Peak
Area	Daily Flow	Daily Flow	Flow	Area	Daily Flow	Daily Flow	Flow	Area	Daily Flow	Daily Flow	Flow	Area	Daily Flow	Daily Flow	Flow
(Acres)	(MGD)	(MGD)	(MGD)	(Acres)	(MGD)	(MGD)	(MGD)	(Acres)	(MGD)	(MGD)	(MGD)	(Acres)	(MGD)	(MGD)	(MGD)
EX-101	121.00	0.0279	0.1242	0.5860	0.00	0.0000	0.0000	0.0000	0.00	0.0000	0.0000	0.00	0.0000	0.0000	0.0000
45	0.0000	0.0000	0.1232	0.3310	0.00	0.0000	0.0000	0.00	0.0000	0.0000	0.0000	0.00	0.0000	0.0000	0.0000
Design Variables:				Design Variables:				Design Variables:				Design Variables:			
Peaking factor of 3.7				Peaking factor of 3.7				Peaking factor of 3.7				Peaking factor of 3.7			
Peak Rates per Table DCO03-0-1				Peak Rates per Table DCO03-0-1				Peak Rates per Table DCO03-0-2				Peak Rates per Table DCO03-0-2			

Olathe Minimum Flows																					
ON-SITE FLOWS								OFF-SITE FLOWS													
Residential - Single Family				Residential - Multi-Family				Residential - Low Density				Commercial									
Manhole	Lot Count	Average Daily Flow	Peak Daily Flow	Peak Flow	Lot Count	Average Daily Flow	Peak Daily Flow	Peak Flow	Tri-tributary Area	Average Daily Flow	Peak Daily Flow	Peak Flow	Tri-tributary Area	Average Daily Flow	Peak Daily Flow	Peak Flow	Average Daily Flow	Peak Daily Flow	Peak Flow	Design Peak Flow	
EX-101	10.13	0.0795	0.2142	0.3862	0.00	0.0000	0.0000	0.0000	0.00	0.0000	0.0000	0.0000	0.00	0.0000	0.0000	0.0000	0.00	0.0115	0.2647	0.4000	0.4000
	45	0.0000	0.0000	0.0000	0.00	0.0000	0.0000	0.0000	0.00	0.0000	0.0000	0.0000	0.00	0.0000	0.0000	0.0000	0.00	0.0000	0.0000	0.0000	0.0000
Design Variables:				Design Variables:				Design Variables:				Design Variables:				Design Variables:					
Peaking factor of 3.7				Peaking factor of 3.7				Peaking factor of 3.7				Peaking factor of 3.7				Peaking factor of 3.7					
Peak Rates per Table DCO03-1				Peak Rates per Table DCO03-1				Peak Rates per Table DCO03-2				Peak Rates per Table DCO03-2				Peak Rates per Table DCO03-2					
0.1400				0.1400				0.1400				0.1400				0.1400					
0.7540				0.7540				0.7540				0.7540				0.7540					
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0.0000																					

PIPE CAPACITY CALCULATION											
LINE "A"	PIPE DEPTH	FL. HGT.	T. H. HGT.	DEPTH	LENGTH	PIPE	SLOPE	VELOCITY	Q (MGD)	Q (MGD)	Q (MGD)
EX-101	10.13	0.0795	0.3877	0.8192	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
B1	0.00	0.0000	0.0000	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
B2	0.00	0.0000	0.0000	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
B3	0.00	0.0000	0.0000	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
B4	0.00	0.0000	0.0000	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
B5	0.00	0.0000	0.0000	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Design Variables:											
1. Manning "n" value of 0.013 has been assigned to all pipes											

SCHLAGEL

PLANNERS ENGINEERS LANDSCAPE ARCHITECTS

143RD STREET & ANDREWS AVENUE
MAIN EXTENSION
143RD STREET & ANDREWS AVENUE
OLATHE, KANSAS

PREPARED BY:

SCHLAGEL & ASSOCIATES P.A.

DESIGNER DATE: 10/1/2017

CHECKED BY: JAW

DATE PREPARED: 10/1/2017

PROJECT NUMBER: 24-008

TRIBUTARY MAP

SHEET 6

