

Pine Springs Site Compared To Lagoons Treatment System
Municipal Class EA - Part C Municipal Wastewater Projects

Typical Effects on the Environment caused by construction activities
* likely positive or negative effect

	Ponds and Lagoons	Pine Springs Site
AESTHETICS		
removal of vegetation or landscape features	*	negative impact - removal of vegetation
change of compatibility with landscape residents, non-residents, recreationalists and tourists exposed to new view	*	negative impact - will work with existing landscape
	*	negative - minimal - far enough way for existing residents that exposure would be minimal
CLIMATIC EFFECTS		
vegetation removal or snow accumulation, windscreening and shade on adjacent buildings and activities	*	negative - minimal - will have to remove vegetation which will cause snow accumulation however adjacent building and activities are far enough away there should be no impact
change in air quality	*	negative - moderate - odours
ECONOMIC AND SOCIAL EFFECTS		
change to tax base	*	negative - potential increase in taxes. Low capital costs approx. \$ 200 K
change in employment opportunities	*	positive - possibility of an employment opportunity
change in tax rate or cost of service	*	negative - potential to increase taxes or to charge for service
GROUNDWATER		
change in quality	*	negative - effluent quality is only fair
interference with flows or levels		none - will not interfere with groundwater flows or levels
HERITAGE RESOURCES		
disruption and/or destruction of sites, cultural heritage landscapes and structures having archaeological, historical, architectural or cultural/heritage significance	*	negative - potential to disrupt a natural heritage wetland area
PUBLIC HEALTH		
effects on quality of life e.g. decreased sewage back-up	*	positive - peace of mind
NOISE & VIBRATION		
changes in existing noise and vibration levels	*	negative - minimal during construction
RESIDENTIAL, COMMERCIAL, INDUSTRIAL, INSTITUTIONAL		
temporary disruption during construction nuisance odours	*	negative minimal - possible industrial impact during construction
	*	negative - odours
SOIL AND GEOLOGY		
erosion or compaction during construction	*	negative - soil will be compacted during construction activities
contamination of soils	*	negative - possibility of soil contamination i.e. spills
mixing of topsoil with subsoil	*	negative - possibility of mixing of soils
scarring of unique landforms	*	negative - possibility to disturb significant wetland
SURFACE DRAINAGE		
increased surface runoff	*	negative - potential for increased surface water runoff
decreased surface water drainage	*	negative - potential for a decrease in surface water drainage
TERRESTRIAL VEGETATION AND WILDLIFE		
mortality/stress of vegetation due to sediment deposition, construction equipment movement or changes in soil moisture conditions resulting in reduction and/or deterioration of wildlife habitat	*	negative - high - vegetation will be impacted due to construction. minimal impact due to increased soil moisture
changes in vegetative composition as a result of environmental changes	*	negative - high - vegetation will be removed resulting in the the reduction of wildlife habitat
removal or disturbance of significant trees and/or ground flora	*	negative - minimal - no significant changes in vegetation composition some wetland vegetation around the lagoons
	*	negative - high - a significant amount of trees and/or ground flora will have to be removed - 2.72 for lagoons and 2.81 for disposal
new or increased exposure of trees leading to increased loss of habitat for wildlife	*	negative - high - new areas of trees will be exposed leading to loss of habitat
effect on wildlife habitat	*	negative - high - some habitat will be lost
effect of contaminants on vegetation and wildlife	*	negative - may still becontaminants may act as a fertilizer for vegetation
UTILITIES		
effects on other utilities e.g. relocations		none - can be run as a gravity feed system

Source: 1993 Class EA for Municipal Water and Wastewater Projects