

ESD ID	TYPE	DESIGN CONSTRAINTS	SUITABLE FOR SITE?	REASON FOR REJECTION	APPLICATION TO THIS SITE
ALTERNATIVE SURFACES					
A-1	GREEN ROOFS	ROOF INFRASTRUCTURE	?		THIS IS A PAD SITE DESIGN WHERE THE BUILDING WILL BE DESIGNED AT A LATER DATE. THE DESIGNER SHALL CONSIDER THIS OPTION FULLY IN DEVELOPMENT OF THE BUILDING. COST ALONE IS NOT A SOLE REASON FOR DISCOUNTING THIS OPTION. HOWEVER, THIS MAY NOT BE NECESSARY IF PE CAN BE ACCOMPLISHED BY OTHER MEANS.
		STRUCTURE	?		
		WATERPROOFING	?		
		DRAINAGE	?		
A-2	PERMEABLE PAVEMENTS	SPACE: NO ADJACENT STRUCTURES	POSSIBLE	DEPENDANT UPON BUILDING FOUNDATION	PERMEABLE PAVEMENTS CAN BE USED FOR SIDEWALKS AND FOR THE PARKING LOTS. THE ACCESS ROAD AND DRIVE AISLES HAVE TOO MUCH TRAFFIC FOR THIS OPTION TO BE VIABLE.
		TOPOGRAPHY: LESS THAN 5%	POSSIBLE	ACCESS ROAD TOO STEEP	
		SOILS: HSG A, B OR C	YES		
		DRAINAGE AREA	YES		
		HOTSPOT RUNOFF: NOT PERMITTED	YES		
		STRUCTURE	POSSIBLE	ACCESS ROAD AND DRIVE LANES ARE TOO HEAVILY TRAVELLED. POSSIBLE PARKING STALLS ONLY	
		OPERATION:	NO	LOCATION DUE TO GRADES AND USE OF ANTI-SKID WILL PRECLUDE USE	
A-3	REINFORCED TURF	SPACE: NARROW STRIPS REQUIRED	YES		REINFORCED TURF IS NOT A PRACTICAL SOLUTION IN OUR ENVIRONMENT GIVEN THE AMOUNT OF TRAFFIC ANTICIPATED FOR THE PARKING AREAS.
		TOPOGRAPHY: LESS THAN 5%	POSSIBLE	ACCESS ROAD GRADES TOO STEEP	
		SOILS: ALL BUT SANDY SOILS ARE PREFERRED	NO	SOIL IS CLAYEY	
		DRAINAGE AREA	YES		
		HOTSPOT RUNOFF: NOT PERMITTED	YES		
		STRUCTURE	POSSIBLE	ACCESS ROAD AND DRIVE LANES ARE TOO HEAVILY TRAVELLED. POSSIBLE PARKING STALLS ONLY	
NONSTRUCTURAL PRACTICES					
N-1	DISCONNECTION OF ROOFTOP RUNOFF	SPACE: REQUIRES TREATMENT LENGTH EQUAL TO FLOW PATH	NO	NOT PRACTICAL FOR LARGE BIG BOX STRUCTURES DUE TO ROOF DESIGN	DUE TO THE PLANNED SURFACES AROUND THE BUILDING, THE DISCONNECTION IS NOT PRACTICAL
		TOPOGRAPHY: LESS THAN 5% OR TERRACES	YES		
		SOILS:	POSSIBLE	AMENDMENTS TO SOIL MAY BE NECESSARY	
		DRAINAGE AREA 500 SF/ DOWNSPOUT	NO	NOT PRACTICAL FOR LARGE BIG BOX STRUCTURES DUE TO ROOF DESIGN	
		RECONNECTIONS:	NO	DOWNSTEAM AREAS ARE ALMOST ALL PAVED	
N-2	DISCONNECTION OF NON-ROOFTOP RUNOFF	SPACE: REQUIRES TREATMENT LENGTH EQUAL TO FLOW PATH	YES		THIS IS UTILIZED IN PARKING AREAS WHERE THE GRADING CAN BE PERFORMED IN A MANNER THAT FACILITATES SHEET FLOW.
		TOPOGRAPHY: LESS THAN 5% OR TERRACES	YES		
		SOILS:	POSSIBLE	AMENDMENTS TO SOIL MAY BE NECESSARY	
		DRAINAGE AREA 1000 SF/ AREA	YES		
N-3	SHEET FLOW TO CONSERVATION AREAS	SPACE: MUST BE WIDE ENOUGH TO TREAT RUNOFF AND PROTECT NATURAL RESOURCES			CONSERVATION AREAS WILL BE UTILIZED WHERE POSSIBLE. SHEET FLOWS TO THESE AREAS MAY NEED TO BE FORCED THROUGH A SERIES OF OTHER BMP'S
		TOPOGRAPHY: LESS THAN 5% OR TERRACES	YES		
		HOTSPOT RUNOFF: NOT PERMITTED	YES		
		EASEMENTS	YES		
MICRO SCALE PRACTICES					
M-1	RAINWATER HARVESTING	SPACE: REQUIRES COORDINATION WITH LANDSCAPING	MAYBE	DEPENDANT UPON TENNANT	RAINWATER HARVESTING IS POSSIBLE, ALTHOUGH IT REQUIRES A CONSIDERABLE INVESTMENT FOR A BUILDING OF THIS SIZE. IN ADDITION, THE PLANNED LANDSCAPE INFILTRATION AROUND THE BUILDING DOES NOT READILY BENEFIT FROM HARVESTING.
		TOPOGRAPHY: PUMPS MAY BE REQUIRED	YES		
		DRAINAGE AREA	YES		
		OPERATION: SUBJECT TO NEGLECT	YES		
M-2	SUBMERGED GRAVEL WETLANDS	SPACE: REQUIRES PRE-TREATMENT	YES		SLOPES ARE GENERALLY TOO STEEP FOR THIS ESD
		TOPOGRAPHY: RELATIVELY FLAT 2% OR LESS	NO	SURROUNDING GRADES TOO STEEP	
		SOILS: HSG C OR D	YES		
		DRAINAGE AREA: MINIMUM 1 ACRE	YES		
		HOTSPOT RUNOFF: REQUIRES LINER	YES		

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M-3	LANDSCAPE INFILTRATION	SPACE: MUST BE KEPT FROM BASEMENTS	YES		THIS WILL BE USED IN AREAS WHERE SHEET FLOW CAN BE DIRECTED ACROSS IT. ROOF DRAINAGE WILL DISCHARGE INTO THE AREA AND SHEET FLOW ENCOURAGED THROUGH THE USE OF LEVEL SPREADERS. ALTERNATIVE MULCHING MEANS OR DISSIPATION WILL BE REQUIRED.
		TOPOGRAPHY: TERRACES MAY BE NECESSARY	YES		
		SOILS: HSG A AND B PERMITTED, C AND D MAY REQUIRE UNDERDRAINS	YES	UNDERDRAINS REQUIRED	
		DRAINAGE AREA LESS THAN 10,000 SF	YES		
		HOTSPOT RUNOFF: NOT PERMITTED	YES		
		INFRASTRUCTURE	YES		
M-4	INFILTRATION BERMS	SPACE: THREAD THROUGH WOODED AREAS	YES		INFILTRATION BERMS WILL BE USED IN CONNECTION WITH OTHER ESD PRACTICES TO PROVIDE THE NECESSARY TREATMENT. GRADES WILL PREVENT THESE FROM BEING USED IN ALL AREAS OF THE SITE.
		TOPOGRAPHY: LESS THAN 10% OR TERRACES	MAYBE	SOME SITE AREAS EXCEED 10%	
		SOILS: NOT PERMITTED ON SOILS WITH LOW SHEAR STRENGTH (LANDSCAPE PRONE)	YES		
		DRAINAGE AREA: SMALL ENOUGH TO PREVENT FLOW CONCENTRATION	MAYBE	DEPENDS ON LOCATION	
		HOTSPOT RUNOFF: NOT PERMITTED	YES		
M-5	DRY WELLS	SPACE: MUST BE KEPT FROM BASEMENTS	YES		REQUIRES INFILTRATION TESTING AT POINT OF INSTALLATION. CANNOT BE USED ON FILL. DUE TO LIMITATION ON CONTRIBUTORY AREA, INSTALLATION MAY BE PROHIBITIVE. SUGGESTED THAT ISOLATED VESTIBULES OR PROJECTIONS ON BUILDING CONSIDER THIS AS TREATMENT. DESIGN REQUIRES DEPTH TO BEDROCK TO BE A MINIMUM OF 4 FEET
		TOPOGRAPHY: SLOPE LESS THAN 20%	YES		
		SOILS: HSG A AND B PERMITTED, C AND D MAY REQUIRE UNDERDRAINS. 4 FT CLEAR TO BEDROCK AND WATER TABLE	MAYBE	CANNOT BE USED ON COMPACTED SOILS OR IN PLACES ROCK IS ENCOUNTERED	
		DRAINAGE AREA: LESS THAN 500 SF	NO	NOT PRACTICAL GIVEN DEVELOPMENT	
		HOTSPOT RUNOFF: NOT PERMITTED	YES		
		OPERATION	YES		
M-6	MICRO BIORETENTION	SPACE: MUST BE INTEGRATED INTO PARKING AREAS	YES		CAN BE USED IN ISLAND ENDS WHERE M-8 PRACTICE IS ALSO PLANNED. AND FLOW IS NOT CONCENTRATED. MAY PROVIDE COST ALTERNATIVE FOR GRASS SWALES
		TOPOGRAPHY: LESS THAN 5% OR TERRACES	MAYBE	ACCEPTABLE FOR PAD AREA	
		SOILS: REQUIRE SPECIAL SOILS	YES		
		DRAINAGE AREA: LIMITED TO 1/2 ACRE	MAYBE	DEPENDS ON LOCATION	
		HOTSPOT RUNOFF: NOT PERMITTED	YES		
		INFRASTRUCTURE	YES		
M-7	RAIN GARDENS	TOPOGRAPHY: LESS THAN 5%	MAYBE	PAD SITE ONLY	COULD BE USED IN LIEU OF M-8 SWALES WHERE CONVEYANCE IS NOT A CONCERNED. NOT USED IN THIS APPLICATION AS THE AREA NECESSARY IS TO IMPLEMENT IS ALREADY BING USED BY A DIFFERENT ESD PRACTICE.
		SOILS: COMPACTED SOILS NOT PERMITTED	YES		
		DRAINAGE AREA LESS THAN 2,000 SF	NO	MOST DRAINAGE AREAS EXCEED 2000 SF	
		INFRASTRUCTURE			
M-8	SWALES	TOPOGRAPHY: SLOPES MUST BE KEPT TO A MINIMUM TO PROMOTE LOWER VELOCITIES. CHANNEL SLOPES LESS THAN 4%	MAYBE	REQUIRES USE OF CHECK DAMS IN ROADSIDE APPLICATION DUE TO ROAD SLOPE (10%)	USED EXTENSIVELY FOR THE ROADWAYS. TYPE (GRASS VS WET SWALE) UNDETERMINED AND WILL NEED TO BE EXAMINED DURING DD PHASE. IN THE MEANTIME, GRASS SWALES WERE USED TO DETERMINE SUITABILITY OF THE ESD
		SOILS: GRASS SWALE WORK BEST IN HSG A, B OR C SOILS, WET SWALES SHOULD BE USED IN C AND D SOILS, BIOSWALES CAN BE USED IN ALL TYPES	YES		
		DRAINAGE AREA: LIMITED TO 1 ACRE	MAYBE	MULTIPLE DISCHARGES ARE REQUIRED	
		HOTSPOT RUNOFF: NOT PERMITTED	YES		
		LOCATION: MUST NOT BE ADJACENT TO RESIDENTIAL AREAS	YES		
M-9	ENHANCED FILTERS	SPACE: MUST BE INTEGRATED INTO PARKING AREAS	YES		SUITABLE FOR SITE BUT AREAS WHERE USABLE DIFFERENT ESD ARE ALREADY BEING CONSIDERED.
		SOILS: REQUIRE SPECIAL SOILS	YES		
		DRAINAGE AREA: LIMITED TO 1/2 ACRE	YES		
		HOTSPOT RUNOFF: NOT PERMITTED	YES		
		INFRASTRUCTURE:	YES		