

Stormwater Controls for Development Projects



NEW! Check out our two-question survey at www.fremont.gov/SCPsurvey to determine which submittal documents are needed for your project.

# Part ONE Enter Project Data

1	Project Name:						
2	Project Address (include cross street):						
3	APN or parcel/tract #:						
4	Project Watershed (creek or receiving water): Depth to seasonal high groundwater:ft						
5	Property Owner's Nam	ne:					
6	Applicant name and ro	ole:			Owner	Engineer/Architect	Developer
7	Applicant signature (Required): Date:						
8	Applicant Address:						
9	Applicant Phone:		A	pplicar	nt Email	Address:	
10	Development type:						
11	Project Description: (Also note any past or future phases of the project.)						
12	Check box if other	permit applications have been submitt	ed in the past	t year.			
13	Total Area of Site:	acres	14 Slo	pe on s	site:	% (if project is <1 A	Acre)
15	Total Area of land disturbed during construction (include clearing, grading, excavating and stockpile area):acres.						

## Part TWO Impervious Surfaces Table

Enter the amount of impervious surface created and/or replaced by the project:

		а	b	С	d
Type of Impervious Surface		Pre-Project Impervious Surface (sq.ft.)	Existing Impervious Surface to be Replaced (sq.ft.)	New Impervious Surface to be Created (sq.ft.)	Post-project landscaping (sq.ft.), if applicable
16	Roof area(s)				
17	Patios, paths, trails, driveways, decks				
18	Parking lots				NI/A
19	Streets (private)				IN/A
20	Streets (public)				
21	Sidewalks (not associated with an existing street)				
22	Totals:				
23 Area of Existing Impervious Surface to remain in place				N/A	
24	24 Total Impervious Surface Created/Replaced (sum of totals for columns b and c):				

# Part THREE Is the project a "C.3 Regulated Project" per MRP Provision C.3.b?

		Yes	No	N/A
25	Is the total impervious surface created/replaced $\ge$ 5,000 ft. <sup>2</sup> , (reported in row 23 above) AND is the project a gas station, restaurant, automotive facility or parking lot?			
26	Is the total impervious surface created/replaced ≥10,000 ft. <sup>2</sup> (reported in row 23 above)?			
27	If the project is a road project, does it create/replace ≥10,000 ft. <sup>2</sup> of impervious surface AND is the road being widened to add a traffic lane?			
28	If the project is a new road project, does it create/replace ≥10,000 ft. <sup>2</sup> of impervious surface?			
29	If the project includes a trail, is it greater than 10 feet wide or creekside?			
30	If the answer to any question above is yes, then the project is a <b>C.3 Regulated Project</b> . Mark YES and answer <i>question 30; if NO, continue to question 31.</i>			
31	Is the total amount of replaced impervious surface $\geq$ 50 percent of the pre-project impervious surface (reported in row 22 above)? If YES, stormwater treatment requirements apply to the entire site; if NO, these requirements apply only to the impervious surface created and/or replaced.			
32	Is the project installing a total of 3,000 sq. ft. or more (excluding private-use patios in single family homes, townhomes, or condominiums) of new pervious pavement systems? (Pervious pavement systems include pervious concrete, pervious asphalt, pervious pavers and grid pavers etc. and are described in the C.3 Technical Guidance at www.cleanwaterprogram.org.) If YES, stormwater treatment system inspection requirements (C.3.h) apply. If NO, inspection requirements only apply if there are other treatment systems installed on the project.			

# Part FOUR Identify C.6 Construction-Phase Stormwater Requirements

		Yes	No
33	Does the project disturb 1.0 acre (43,560 sq.ft.) or more of land? (Reported in row 14 above). If Yes, obtain coverage under the state's Construction General Permit		
	at <u>https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.jsp</u> . Submit your WDID# and evidence of Notice of Intent coverage before grading or building permits are issued.		
34	Does the project disturb less than 1.0 acre of land?		
35	Include the Clean Bay Blueprint ( <u>https://fremont.gov/CleanBayBluePrint</u> ) or the Construction Phase Stormwater BMPs ( <u>www.fremont.gov/constructionphaseBMPs</u> ), whichever is most applicable, in plan set (all projects).	$\boxtimes$	
36	Include an erosion/sediment control plan sheet in plan set if the project scope includes land disturbing activities (clearing, grading, excavating or material stockpiling).		
37	Is the site a "High Priority Site" that disturbs less than 1.0 acre (43,560 sq.ft.) of land? (Municipal staff will make the final determination.) "High Priority Sites" are sites having any of the following criteria: -that require a grading permit, -are adjacent to a creek, -or are otherwise high priority for stormwater protection during construction (see MRP 2.0 Provision C.6.e.ii.(2)(c))		
38	Is the site a "Hillside Site" that disturbs 5,000 sq.ft. or more, but less than 1.0 acre (43,560 sq.ft.) of land? (Municipal staff will make the final determination.) -"Hillside Sites" are located on hillsides, as indicated on a jurisdictional map of hillside development areas or as indicated by meeting jurisdictional hillside development criteria. -If no map or criteria exist, then Hillside Sites are sites with a slope of 15% or more (see I.A.13 above and MRP 2.0 Provision C.6.e.ii.(2)(b)).		

### Part FIVE Select Appropriate Site Design Measures

- Any project that creates and/or replaces greater than 2,500 square feet of impervious surface, including standalone single family homes, must include at least one of site design measures a through e listed below.
- C.3 regulated projects (determined in Part THREE above) must include all site design measures applicable to the particular project.

Mark the site design measures included in the project plans.

Yes	No	
		a. Direct roof runoff onto vegetated areas via disconnected downspouts (all projects per FMC 18.210.110(e)), unless it is a C.3 regulated project discharging runoff to a low impact development treatment measure).
		b. Direct roof runoff into cisterns or rain barrels and use rainwater for irrigation or other non-potable use.
		c. Direct runoff from sidewalks, walkways, and/or patios onto vegetated areas.
		d. Direct runoff from driveways and/or uncovered parking lots onto vegetated areas.
		e. Construct sidewalks, walkways, patios, driveways, bike lanes and/or parking lots with permeable surfaces.Use the specifications in the C3 Technical Guidance (Version 4.1) or for small projects see the BASMAA Pervious Paving Factsheet. For these documents and others go to www.cleanwaterprogram.org and click on "Resources."
		f. Minimize land disturbance and impervious surface creation (especially parking lots).
		g. Maximize permeability by clustering development and preserving open space.
		h. Use micro-detention, including distributed landscape-based detention.
		i. Protect sensitive areas, such as wetland and riparian areas; minimize changes to the natural topography.
		j. Use self-treating area (see Section 4 of C.3 Technical Manual at http://fremont.gov/stormwater)
		k. Use self-retaining area(s) (see Section 4.2 of the C.3 Technical Manual)
		I. Plant or preserve interceptor trees (Section 4.5, C.3 Technical Manual)

#### Part SIX Select Stormwater Source Controls

> All projects must include the relevant stormwater source controls.

Features that Require source controls	Source Control Included? Mark Yes, No, or Not Applicable (N/A)	Yes	No	N/A
Storm Drains	Mark public and private storm drain inlets with the "No Dumping! Drains to Bay" medallions.			
(excluding single family homes)	Mark stormwater treatment measures located in the public right-of-way with stencils that read "Stormwater Treatment Area – Do not alter landscape." > Both the medallion and stencil may be obtained from the City of Fremont Environmental Services Division located at 39550 Liberty Street			
Parking garage	Enclosed parking garages shall be designed such that floor drains are not required.			
Pool/Spa/ Fountain	Provide a sanitary sewer clean out within 10 feet of pool, spa or fountain to facilitate draining. Contact Union Sanitary District for connection requirements.			

## Part SIX Select Stormwater Source Controls Continued

> All projects must include the relevant stormwater source controls.

Features that Require source controls	Source Control Included? Mark Yes, No, or Not Applicable (N/A)	Yes	No	N/A			
Floor Drains	Plumb interior floor drains to sanitary sewer. Applicant must contact Union Sanitary District for connection requirements ( <u>www.unionsanitary.com</u> or 510-477-7500).						
Landscaping	<ul> <li>Retain as practicable.</li> <li>Select diverse species appropriate to the site. Select plants that are pest and/or diseases-resistant, drought tolerant, and/or attract beneficial insects.</li> <li>Minimize use of pesticides and quick-release fertilizers.</li> <li>Use efficient irrigation system; design to minimize runoff.</li> </ul>						
Food Service Equipment (non- residential)	<ul> <li>Provide sink or other area for equipment cleaning, which is:</li> <li>Connected to an oil-water separator prior to discharge to sanitary sewer.</li> <li>Large enough for the largest mat or piece of equipment to be cleaned.</li> <li>Indoors or in an outdoor roofed area designed to prevent stormwater run-on and run-off, and signed to require equipment washing in this area.</li> <li>Contact Union Sanitary District for connection requirements.</li> </ul>						
Refuse Areas	<ul> <li>Provide a roofed and enclosed area for dumpsters, recycling containers, etc. designed to prevent stormwater run-on and run-off.</li> <li>Connect any drains in or beneath dumpsters, compactors, and tallow bin areas serving food service facilities to the sanitary sewer.</li> </ul>						
Outdoor Process Activities	Perform process activities either indoors or in roofed outdoor area, designed to prevent stormwater run-on and runoff, and to drain to the sanitary sewer. Contact Union Sanitary District for connection requirements.						
Outdoor Equipment/ Materials Storage	<ul> <li>Cover the area or design to avoid pollutant contact with stormwater runoff.</li> <li>Locate area only on paved and contained areas.</li> <li>Process equipment areas must not discharge to the storm drain system. Union Sanitary District may accept discharges from some process equipment areas depending on the process. Contact Union Sanitary District for connection requirements.</li> </ul>						
Vehicle/ Equipment Cleaning	<ul> <li>Roof, pave and berm wash area to prevent stormwater run-on and runoff, plumb to the sanitary sewer, and sign as a designated wash area.</li> <li>Commercial car wash facilities shall discharge to the sanitary sewer.</li> <li>Contact Union Sanitary District for connection requirements.</li> </ul>						
Vehicle/ Equipment Repair and Maintenance	<ul> <li>Designate repair/maintenance area indoors, or an outdoors area designed to prevent stormwater run-on and runoff and provide secondary containment. Do not install drains in the secondary containment areas.</li> <li>Tanks, containers or sinks used for parts cleaning/rinsing shall not connect to the storm drain system. These units/sinks may only connect to the sanitary sewer system if allowed by an industrial waste discharge permit. Contact Union Sanitary District for discharge requirements.</li> </ul>						
Metal roofs	Coat all metal roofs, including galvanized roofs, with rust-inhibitive paint.						
Fire Sprinklers	<ul> <li>Design for discharge to landscape area or sanitary sewer. Contact Union Sanitary District for connection requirements.</li> </ul>						
Miscellaneous Drain or Wash Water	<ul> <li>Drain condensate from air conditioning units to appropriately sized landscaping area.</li> <li>Discharge boiler drain lines, roof top equipment, and all wash water to the sanitary sewer. Contact Union Sanitary District for connection requirements.</li> </ul>						
Architectural Copper	<ul> <li>Discharge rinse water to sanitary sewer, or collect and dispose properly offsite.</li> </ul>						

## Part SIX Select Stormwater Source Controls Continued

> All projects must include the relevant stormwater source controls.

Features that Require source controls	Source Control Included? Mark Yes, No, or Not Applicable (N/A)	Yes	No	N/A
Fuel	Fueling areas must be Portland cement concrete or equivalent smooth impervious surface			
Dispensing Areas	<ul> <li>Graded at the minimum slope necessary to prevent ponding, and separated from the rest of the site by a grade break that prevents run-on of stormwater to the maximum extent practicable.</li> </ul>			
	<ul> <li>The fueling area is defined as the area extending a minimum of 6.5 feet from the corner of each fuel dispenser or the length at which the hose and nozzle assembly may be operated plus a minimum of one foot, whichever is greater.</li> </ul>			
	<ul> <li>Must be covered by a canopy that extends a minimum of ten feet in each direction from each pump. The canopy must not drain onto the fueling area. Rainwater from the canopy must be discharged to a landscaped area or to a stormwater treatment measure prior to discharge to the storm drain system.</li> </ul>			
	<ul> <li>Design the fuel dispensing and transfer area pads with no slope (flat), if possible.</li> </ul>			
	<ul> <li>Do not place a storm drain inlet in or near the fuel dispensing area.</li> </ul>			
	<ul> <li>Hydraulically isolate the fuel dispensing and transfer areas from the rest of the site to contain spills, prevent run-on, and prevent stormwater runoff from carrying pollutants away. Locate drains around the perimeter of the pad, and drain accumulated water to an on-site containment system (for eventual pump-out and off-site disposal).</li> </ul>			
	<ul> <li>Post signs explaining the operation of shut-off valves to employees, if applicable.</li> </ul>			
	<ul> <li>The fueling station must have a spill cleanup plan and all employees must be trained on proper spill response procedures. Dispensing equipment must be inspected routinely for proper functioning and leak prevention.</li> </ul>			
Loading Docks	<ul> <li>Pave the loading area with an impervious paving that is compatible with materials that will be loaded/unloaded. For example, use Portland Cement Concrete if gasoline or other materials that react with asphalt will be loaded/unloaded.</li> </ul>			
	<ul> <li>Cover. Implement one of the following methods:</li> </ul>			
	a If feasible, design the facility so loading/unloading occurs in an indoor loading bay. Provide a 10-foot no obstruction zone within the building to allow trucks to extend inside and to provide a staging area. Clearly identify the no obstruction zone on the building plan. Clearly mark the no obstruction zone at an interior transfer area using bright floor paint.			
	b For buildings with less than 10 bays, provide a roof overhang that extends at least 10 feet beyond the loading dock (or building face if there isn't a loading dock). If the building includes 10 or more bays, or a cover is deemed otherwise infeasible, consider the next option.			
	c Install door skirts between the trailers and the building.			
	<ul> <li>Position roof downspouts to direct stormwater away from the loading area.</li> </ul>			
	<ul> <li>Hydraulically separate stormwater runoff from loading dock and direct to a stormwater treatment measure prior to discharge to the storm drain system.</li> </ul>			
	<ul> <li>Equip the drainage system with an emergency spill shut-off diversion valve. The bypass on the shut-off valve must flow to an adequately-sized spill containment vault. The size of the spill containment vault should be equal to 125% of the volume of the largest container handled at the facility.</li> </ul>			
	<ul> <li>Post signs explaining the location and operation of shut-off valves to employees.</li> </ul>			
Conditionally Exempted Non-	Certain discharges are exempt from stormwater discharge requirements if it is determined the non-stormwater discharge is not polluted. Refer to the Municipal Regional Permit Provision C15 for specific requirements for the following discharges:			
Stormwater	<ul> <li>pumped groundwater, water from foundation drains/crawl space pumps/footing drains</li> </ul>			
Discharges	<ul> <li>pumped groundwater from non-drinking water aquifers</li> </ul>			
	<ul> <li>planned, unplanned, and emergency discharges of the potable water system</li> </ul>			

### Part SEVEN Implement Construction Best Management Practices (BMPs)

(Applies to all projects - see Provision C.6 for more details.)

Best Management Practice (BMP)	Yes	No
Temporary erosion controls to stabilize all denuded areas until permanent erosion controls are established.		
Delineate with field markers clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses.		
<ul> <li>Provide notes, specifications, or attachments describing the following:</li> <li>Construction, operation and maintenance of erosion and sediment controls, include inspection frequency;</li> <li>Methods and schedule for grading, excavation, filling, clearing of vegetation, and storage and disposal of excavated or cleared material;</li> <li>Specifications for vegetative cover &amp; mulch, include methods and schedules for planting and fertilization;</li> <li>Provisions for temporary and/or permanent irrigation.</li> </ul>		
Perform clearing and earth moving activities only during dry weather.		
Use sediment controls or filtration to remove sediment when dewatering and obtain all necessary permits.		
Protect all storm drain inlets in vicinity of site using sediment controls such as berms, fiber rolls, or filters.		
Trap sediment on-site using BMPs such as sediment basins or traps, earthen dikes or berms, silt fences, check dams, soil blankets or mats, covers for soil stock piles, etc.		
Divert on-site runoff around exposed areas; divert off-site runoff around the site (e.g. swales and dikes).		
Protect adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.		
Limit construction access routes and stabilize designated access points.		
No cleaning, fueling, or maintaining vehicles on-site, except in a designated area where washwater is contained and treated.		
Store, handle, and dispose of construction materialsLwastes property to prevent contact with stormwater.		
Contractor shall train and provide instructions to all employees/subcontractors re: construction BMPs.		
Control and prevent the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, washwater or sediemtns, rinse water from architectural copper, and non-stormwater discharges to storm drains and watercourses.		

# PROJECTS THAT ARE NOT C.3 REGULATED PROJECTS STOP HERE!

(Projects that had all "No's" in Part THREE above)

## ONLY C.3 REGULATED PROJECTS MUST COMPLETE THE REMAINDER OF THIS DOCUMENT.

#### Part EIGHT Biotreatment, Infiltration and Rain Water Harvesting and Use

MRP 2.0 no longer requires that a feasibility analysis of infiltration and rainwater harvesting be conducted. However, applicants using biotreatment are encouraged to maximize infiltration of stormwater if site conditions allow. If feasible and desired, infiltration and rainwater harvesting may be cost effective solutions depending on the project.

#### Part NINE Proposed Stormwater Treatment Measures and Hydraulic-Sizing (Applies to C.3 Regulated Projects)

Complete the table below & provide a <u>Stormwater Management Plan</u> in the plan set.

Yes 🗌	<b>No</b> Is the project using infiltration or rainwater harvesting/use?         If YES, indicate the measures to be used, and hydraulic sizing method below:					
LID Treat	ment Mea	asure (non-biotreat	ment)	Hydraulic	sizing method <sup>2</sup>	
🗌 Rainv	water Har	vesting and Use				
	ation tren	ch				
Othe	r (specify	):				
Yes 🗌	Yes       Is the project using biotreatment to treat the C.3.d amount of runoff?         If YES, indicate the biotreatment measures to be used, and the hydraulic sizing method below:					
Biotreatm	ent Meas	ures		Hydraulic sizing method <sup>2</sup>		
Biore	tention a	rea				
☐ Flow-	-through	olanter				
Tree	Well Filte	er (non-proprietary)				
Othe	r (specify	):				
Yes       Is the project a Special Project? (See Appendix K of the C.3 Technical Guidance for criteria.)         If YES, complete the City of Fremont Special Projects Worksheet and Narrative downloadable at:         http://fremont.gov/stormwater. Indicate the type of non-LID treatment to be used, the hydraulic sizing method, and percentage of the amount of runoff specified in Provision C.3 that is treated.						
Non-LID T	reatment		Hydraulic sizing metho	ď	% of C.3.d amount of runoff treated	
Media	a filter					
Tree Well Filter						

<sup>&</sup>lt;sup>2</sup> Hydraulic Sizing Method: Indicate which of the following MRP Provision C.3.d.i hydraulic-sizing methods were used:

<sup>1. &</sup>lt;u>Volume based approach</u> – 80% capture approach (recommended volume-based approach. See C.3 Technical Manual Chapter 5).

<sup>2. &</sup>lt;u>Flow-based approach</u> – 0.2-Inch-per-hour intensity approach (this is the recommended flow-based approach AND the basis for the 4% rule of thumb described in Chapter 5 of the C.3 Technical Guidance).

<sup>3. &</sup>lt;u>Combination hydraulic sizing approach</u> – See Chapter 5 of the C.3 Technical Manual.

#### Part NINE Hydromodification Management (HM) Project? (Applies to C.3 Regulated Projects)

39	Does the project create and/or replace 1 acre (43,560 sq. ft.) or more of impervious surface? (Refer to Question 23)
	Yes. Continue to Question 40.
	No. The project is NOT required to incorporate HM measures. Skip to Question 44 and check "No."
40	Is the total impervious area increased over the pre-project condition?
	Yes. Total post-project impervious surface area (Question 24) is <u>greater</u> than pre-project impervious surface area (Question 22.a.) Continue to Question 41.
	☐ No. Total post-project impervious surface area (Question 24) is the same as or less than pre-project impervious surface area (Question 22.a.). The project is NOT required to incorporate HM measures. Skip to Line 44 and check "No."
41	Is the site located in a tidally influenced area? (See HM Susceptibility Map in Appendix I of the C.3 Technical Guidance.)
	Yes. Project is exempt from HM requirements. Attach map indicating project location. Skip to Line 44 and check "No".
	□ No. Continue to Question 42.
42	Is the site located in a high slope zone or special consideration watershed, as shown on the HM Susceptibility Map?
	Yes. Project is subject to HM requirements. Attach map indicating project location. Skip to Question 44 and check "Yes."
	No. Continue to Question 43.
43	For sites located in a white area on the HM Susceptibility Map, has an engineer or qualified environmental professional determined that runoff from the project flows only through a hardened channel or enclosed pipe from the point of discharge all the way to the tidally influenced area?
	Yes. Project is exempt from HM requirements. Attach signed statement by qualified professional. Go to Question 44 and check "No."
	□ No. Project is subject to HM requirements. Attach map indicating project location. Go to Item 44 and check "Yes."
44	Is the project a Hydromodification Management Project?
	Yes. The project is subject to HM requirements in Provision C.3.g of the Municipal Regional Stormwater Permit.
	□ No. The project is EXEMPT from HM requirements.

If the project is subject to the HM requirements, incorporate in the project flow duration control measures designed such that post-project stormwater discharge rates and durations match pre-project discharge rates and durations. The Bay Area Hydrology Model (BAHM) has been developed to size flow duration controls. See <u>www.bayareahydrologymodel.org</u>. Guidance is provided in Chapter 7 of the C.3 Technical Guidance.

# Part TEN Stormwater Treatment Measure and Flow Duration Control Maintenance Agreement (Applies to C3 Regulated Projects)

45	A Stormwater Management Measures Maintenance Agreement (O&M Agreement) and O&M Manual between the property owner and the City is required for all projects incorporating stormwater treatment and/or flow duration controls. The O&M Agreement runs with the land and must be recorded with Alameda County Recorder's Office.					
		An approved, notarized O&M Agreement and Manual must be received with the final tract map or prior to permit issuance, whichever comes first (as applicable).				
	۶	Template documents may be found at http://fremont.gov/stormwater.				
	۶	Title report must be provided to verify property ownership.				
	≻	Appropriate documents must be provided to verify signing authority of the person executing the O&M Agreement.				
		Check the box to acknowledge that final tract map will not be approved, nor permits issued without an approved O&M Agreement and Manual.				

#### For Completion by Municipal Staff

46	Is the site as a "High Priority Site" that disturbs less than 1.0 acre (43,560 sq.ft.) of land?				
	"High Priority Sites" are sites that require a grading permit, are adjacent to a creek, or are otherwise high priority for stormwater protection during construction (see MRP Provision C.6.e.ii(2))				
47	Documents Provided:  Statement of Stormwater Pollution Prevention  Special Project Wo			ksheet	
	Stormwater Management Plan		Infiltration Workshe	et	