

# Guide

## Applying for a Subdivision (Tentative Parcel Map or Tentative Tract Map)

The regulations covering the submittal and approval of Tentative Parcel Maps or Tentative Tract Maps for Subdivisions may be found in the County Subdivision Ordinance.

### ***What is a Subdivision?***

Subdivision is a procedure used to divide property into smaller areas of land called parcels or lots.

### ***When is a Subdivision required?***

Normally, a Subdivision is needed in order to sell, lease, or finance the newly created parcels.

### ***Who approves a Subdivision?***

The approval of a Subdivision of land is either a two- or three-step process, depending upon the number of lots (parcels) being created:

1. The Planning Department of the Community Development Agency (CDA) handles the first step, processing and approving a preliminary document called either a "Tentative Parcel Map," if the Subdivision will create four or fewer lots, or a "Tentative Tract Map," if the Subdivision will create five or more lots.

2. The Public Works Agency (PWA) processes the next step, which involves the processing and approval of a formal subdivision map called either a "Parcel Map," (four or fewer lots), or a "Tract Map", (five or more lots).

3. Tract Maps require additional approval by the County Board of Supervisors (Board).

The PWA or the Board must approve the Parcel Map/Tract Map if the Subdivision meets all the conditions of the Tentative Parcel or Tract Map approval and all other applicable laws, regulations, and ordinances.

Following approval, the Parcel Map or Tract Map will be certified by the County Surveyor or by the Board and filed (recorded) at the County Recorders Office. Lots may not be leased, sold, or financed, and building permits may not be issued for the new lots, until the Parcel Map or Tract Map is officially recorded.

### ***What is a Tentative Parcel Map/Tentative Tract Map?***

A Tentative Parcel Map or Tentative Tract Map is a map showing the layout of a proposed Subdivision, including the general description of the associated infrastructure. The approved Tentative Parcel Map or Tentative Tract Map also sets conditions such as access,

frontage, grading improvements, stormwater protection, and so forth which must be met before the final Parcel Map or Tract Map can be filed. An approved Tentative Parcel or Tract Map does not divide the property, rather it sets the conditions under which the division can occur. To actually divide the property you must file a Parcel Map or Tract Map.

### ***What is a Parcel Map/Tract Map?***

The Parcel Map or Tract Map is the instrument that actually divides the property. A Parcel Map or Tract Map must conform to and incorporate all of the Tentative Parcel or Tract Map conditions and must also comply with the standards for Parcel Maps or Tract Maps as set forth in the State Subdivision Map Act (Map Act). It must also include plans describing the various improvements to the project site and to all other affected properties, including public roadways and public and private utilities. For further information and guidelines on applying to PWA for a Parcel Map or Tract Map review and approval, read the PWA publication, "Subdivision Design Guidelines," available for sale in the PWA Map and File Room, or contact the PWA Development Section at (510) 670-6601.

### ***How do I apply for a Tentative Parcel Map or Tentative Tract Map?***

1. **Pre-Application** – Talk to a Planning Department staff member at the Zoning Counter in Room 140 at 399 Elmhurst St., Hayward to determine what materials you need to prepare for the initial submittal package.

2. **Intake Meeting and Application Filing** – Once your package is complete, call the Planning Department to set up an intake meeting with a Senior Planner and Public Works Agency staff. At that meeting staff will review the material with you and, if the material is complete, accept your application. If your material is not complete, staff will return it to you and outline what additional material you will need to file your application.

3. **Staff Review** – Planning Department staff will review the materials to ensure that the proposed project meets the minimum zoning requirements, and then refer your application to other public agencies such as PWA and the appropriate school, park, and fire districts. Staff will visit your property, write a staff report and notify

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you when the public hearing will be held. Staff will also determine the scope of the reviews that may be required by the provisions of the California Environmental Quality Act (CEQA), the Seismic Hazard Mapping Act (SHMA), the Alquist-Priolo Earthquake Fault Zoning Act, and other applicable regulations and ordinances.

4. **CEQA Review** – Generally applications of this type are **not** exempt from the California Environmental Quality Act (CEQA). Most Subdivision projects will require the completion of either a negative declaration, or a mitigated negative declaration, but large subdivisions may require an Environmental Impact Report (EIR). The scope of the CEQA review depends on the complexity of the project and the number of potential unavoidable impacts

5. **Public Hearing** – A public hearing is required for all Subdivisions. At this hearing, Planning staff will describe the proposal and may present a preliminary recommendation. Anyone may speak on the application.

The Planning Commission is the hearing body and approval authority for Tentative Tract Maps (five lots or more), and for all Tentative Parcel Maps in the “A” (Agricultural) District (except for those in the area covered by the South Livermore Valley Area Plan). At the end of the Commission’s hearing (which may be continued from an earlier date) the Commission will take an action to approve, approve with modifications, or deny the proposed Subdivision.

The Planning Director is the hearing officer and approval authority for all other Tentative Parcel Maps. However, the Planning Director may, in his or her sole discretion and at any point in the review process, designate the Planning Commission as the hearing body and approval authority for any Tentative Parcel Map. Unlike the Planning Commission, the Planning Director will not take an action at the hearing, but rather will act at a later date, usually within one week of the hearing. Staff will notify you, and any others who may request to be notified, of the action of the Planning Director.

If the project is located in Castro Valley, the Castro Valley Municipal Advisory Council will hold a public hearing on it as well. However, the Council is advisory only; it will make a recommendation to be considered at the Planning Commission or Planning Director’s action. The MAC action is not a final action.

6. **Appeal Period** – There is a 10-day appeal period following the action, after which time the action of the Planning Commission or the Planning Director will be final, unless a written appeal has been filed with the County Board of Supervisors.

7. **Tract Map or Parcel Map** – After the Tentative Parcel Map or Tract Map is approved, the applicant must satisfy all conditions of approval and submit improvement plans and the other materials required for the Tract or Parcel Map to the Public Works Agency. This submittal must be made within three years of the date of approval, or the Tentative Tract or Parcel Map lapses. It is recommended that the applicant and their Civil Engineer meet with the PWA Land Development Division, and the applicant and their Land Surveyor meet with the PWA Survey Department to review the conditions of approval and the submittal requirements once the Tentative Tract or Parcel Map is approved.

### *What must I submit for a Tentative Parcel Map or Tentative Map?*

1. A complete **Standard Application** form signed by the property owner.

2. A complete “**Subdivision Application**” form, signed by the property owner, along with all of the required map copies, plans, study reports, and other documents, as listed therein; see attached.

3. A \$4000 deposit (min.) to cover the costs of the review. Note that the Senior Planner screening your submittal may require additional deposits, if your project requires special reviews.

4. Any additional materials requested by the Planning Department.

5. You may provide additional maps, photographs, exhibits, studies, factual data, or other information depicting the property, its location, and its relationship to surrounding uses, in order to demonstrate that the Subdivision would be in the public interest.

By regulation we cannot consider an application complete until all of the required map copies,

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supplementary materials, and fees are received and accepted by the Planning Department staff.

### ***How long is the review and approval process?***

In most cases, the Tentative Tract or Parcel Map review and approval process will take three to four months, depending on the proposed use and the complexity of the project. Some applications, particularly those that require an Environmental Impact Report or the review of special studies or plans, may require significantly more time to process. Appeals will add at least two months to the processing time.

Consult with a Planning Department staff member to determine the estimated time period for the review of your particular project.

### ***Is there a requirement to notify the neighbors of the proposed Subdivision?***

Yes, the Planning staff is required to notify the owners of all properties located within a 500 foot radius from the outside perimeter of the proposed subdivision.

### ***What if my application is denied? Can someone else appeal if my application is approved?***

You or any other person may appeal the Planning Director's or Planning Commission's action to the County Board of Supervisors by filing a written appeal with the Clerk of the Board and paying the required fee in accordance with the requirements of Section 16.08.100 of the County Code. Consult with the Planning Department to determine the appropriate fee and other requirements of the appeal process.

An appeal to the Board will add at least two months to the time span of the approval process.

### ***If my application is approved with conditions, can I request a change to one or more of those conditions?***

You may apply to modify a condition of the approved Tentative Tract or Parcel Map by filing a written request with the Planning Department. An additional fee deposit will be required, and the request will follow the same process as the original subdivision application.

### ***What is the expiration period for a Tentative Tract or Parcel Map, and what can I do if the Map expires?***

The normal expiration period is three years after approval, but certain types of projects could have

different periods. Check with the Planning Department to determine your particular expiration period.

If your approved tentative map has expired, you can submit a new Subdivision application. To re-apply, you must resubmit all required fees and materials. The new application will be reviewed under the requirements and circumstances that are in place at the time of re-application. There is no guarantee that the application will be approved, or that it will be approved under the same conditions as the original application.

### ***Is it possible to extend the expiration date of an approved Tentative Tract or Parcel Map, and if so, how do I apply for such an extension?***

The effective period of a map may be extended at the discretion of the approval authority (Planning Director or Planning Commission), provided that the request is made prior to the expiration date. To request an extension, submit a written request and a \$450 extension fee to the Planning Department.

### ***Where are the public hearings held?***

**Castro Valley Municipal Advisory Council** hearings are held on the 2<sup>nd</sup> and 4<sup>th</sup> Mondays of the month at 6:00 p.m. The Council meets in the Boardroom of the Castro Valley Unified School District offices at 4400 Alma Avenue in Castro Valley.

**Planning Director's Staff** public hearings are held on Tuesday mornings at 9:00 a.m., in room 160 of the Alameda County Community Development Agency offices at 224 West Winton Avenue in Hayward.

**The Alameda County Planning Commission** hearings are held on the 1<sup>st</sup> and 3<sup>rd</sup> Mondays of the month at 6:00 p.m. (1<sup>st</sup> Monday) and 1:30 p.m. (3<sup>rd</sup> Monday). The Commission meets in room 160 of the Alameda County Community Development Agency offices at 224 West Winton Avenue in Hayward.

**The Alameda County Board of Supervisors** holds hearings on planning and zoning matters on the 2<sup>nd</sup> Tuesday of the month at 1:00 p.m. in the Board of Supervisors chambers, 5<sup>th</sup> floor, 1221 Oak Street in Oakland.

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**PM-  
TR-**

## SUBDIVISION APPLICATION

- Read the handout, “*Applying for a Subdivision (Tentative Parcel Map & Tentative [tract] Map)*,” before filling out this form.
- Submit this application at the Zoning Counter in Room 140 at 399 Elmhurst St., Hayward . Call (510) 670-5410 to make an appointment.

Application Received:

By: \_\_\_\_\_

Date: \_\_\_\_\_

Appl. #: \_\_\_\_\_

**The contact information and signatures on this page and Items 1 – 3 on the next page must be provided. Items 4 – 15 on the subsequent pages may also be required; see Item 1, Note 1 and the explanation following Item 3.**

- **Property Address:** \_\_\_\_\_ **Assessor’s Parcel No.(s):** \_\_\_\_\_  
\_\_\_\_\_
- **Owner’s Name:** \_\_\_\_\_ **Owner’s Phone No.:** \_\_\_\_\_
- **Owner’s Address:** \_\_\_\_\_ **Owner’s e-mail:** \_\_\_\_\_  
\_\_\_\_\_
- **Applicant’s Name:** \_\_\_\_\_ **Applicant’s Phone No.:** \_\_\_\_\_
- **Applicant’s Address:** \_\_\_\_\_ **Applicant’s e-mail:** \_\_\_\_\_  
\_\_\_\_\_
- **Civil Engineer’s Name:** \_\_\_\_\_ **Civil Engr’s Phone No.:** \_\_\_\_\_
- **Civil Engr’s Address:** \_\_\_\_\_ **Civil Engr’s e-mail:** \_\_\_\_\_  
\_\_\_\_\_
- **Land Surveyor’s Name:** \_\_\_\_\_ **Surveyor’s Phone No.:** \_\_\_\_\_
- **Land Surveyor’s Address:** \_\_\_\_\_ **Surveyor’s e-mail:** \_\_\_\_\_  
\_\_\_\_\_
- **Architect’s Name:** \_\_\_\_\_ **Architect’s Phone No.:** \_\_\_\_\_
- **Architect’s Address:** \_\_\_\_\_ **Architect’s e-mail:** \_\_\_\_\_  
\_\_\_\_\_
- **Other Contact Person’s Name:** \_\_\_\_\_ **Contact Person’s Phone No.:** \_\_\_\_\_
- **Contact Person’s Address:** \_\_\_\_\_ **Contact Person’s e-mail:** \_\_\_\_\_  
\_\_\_\_\_

### AFFIDAVIT

1. I attest, under penalty of perjury, to the truth and correction of all the facts, exhibits, maps, plans, study reports, and other attachments presented with and made a part of this application.
2. I authorize the Planning staff and other County review bodies permission to enter upon the private property listed above in order to verify and/or obtain information as required to complete the review of this application.
3. I agree to pay all fees and costs needed to process this application.

\_\_\_\_\_  
Property Owner’s Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Applicant’s Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Contact Person’s Signature

\_\_\_\_\_  
Date

# Subdivision Application

## Attach or enclose the following:

1.  **Initial Filing Deposit: \$4,000 (min.)**. Make check payable to “**Treasurer, County of Alameda.**”  
Notes:
  1. The Senior Planner may require an additional deposit if your project requires special review.
  2. If this fee deposit is depleted, the Planning Staff will advise you that additional funds must be deposited to continue the processing of this application. Any remaining unexpended money will be refunded.
  
2.  **Tentative Parcel Map or Tentative Map**, prepared in accordance with the requirements of **Attachment A**. This Map must be submitted in the following quantities and formats:
  - For subdivisions in Castro Valley, 27 black line prints of each sheet, folded to 8.5" x 11"
  - For subdivisions elsewhere in the County, 20 black line prints of each, folded to 8.5" x 11"
  - 1 - 11" x 17" photo reduction.
  - 1 - 8.5" x 11" photo reduction.
  - 1 - 8.5" x 11" clear transparency.
  
3.  **Impervious Surface Form**, prepared in accordance with the requirements of **Attachment B**.

The following items 4 – 15 may be required in support of your application. Read the submittal criteria in the applicable reference for items 4 - 8 and check the “yes” or “no” box in front of each of these items to indicate if your project is affected. The applicability of Items 9 – 15 will be determined by the Senior Planner during your screening review.

**If you wish to provide an explanation of why an item shouldn't apply, or if an item is required but you have not included it in your package, provide that explanation in writing on the lines behind each item; you may attach additional sheets or other information as necessary.** Planning staff will review each item to make a determination of whether your package can be “deemed complete.”

**FAILURE TO PROVIDE A REQUIRED SUPPORTING PLAN OR STUDY WILL DELAY THE PROCESSING OF YOUR APPLICATION.**

4.  **Yes** ;  **No** **Preliminary Grading Plan**. (Required only if the project will eventually require a Grading Permit from PWA; see **Attachment C**.) Explanation (optional): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  
5.  **Yes** ;  **No** **Soils/Geologic Investigation Report**. (Required only if this application is for a Tentative (tract) Map or if there is a known geological hazard on the property; see **Attachment E**.) Explanation (optional): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  
6.  **Yes** ;  **No** **Preliminary Stormwater Protection Plan**. (Required only if the project involves the construction or reconstruction of 10,000 sq. ft or more of impervious surface; see **Attachment F**.) Explanation (optional): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Subdivision Application

7.  Yes ;  No **Preliminary Floodplain Management Plan.** (Required only if the project is located within a designated floodplain; see *Attachment G.*) Explanation (optional): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
8.  Yes ;  No **Preliminary On-Site Storm Runoff Detention Plan.** (Required only if the post-construction stormdrain runoff rate from the site is predicted to be > 5 cubic ft./sec. or if the project includes a storm runoff treatment detention basin; see *Attachment H.*) Explanation (optional):  
\_\_\_\_\_  
\_\_\_\_\_
9.  Yes ;  No **Traffic Study,** if required by the Planning Staff. If required, this study must be prepared by a licensed traffic engineer and 5 copies submitted. Explanation (optional): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
10.  Yes ;  No **Visual Analysis,** if required by the Planning Staff. If required, this analysis must be prepared by a qualified consultant, and as directed by Planning. Explanation (optional): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
11.  Yes ;  No **Building Elevations, Parking Plan, & Landscape Plan,** if required by the Planning Staff in conjunction with the conversion of multiple rental units to ownership. Refer to *Attachment I* for additional information and the guidelines for the preparation of this plan. Explanation (optional):  
\_\_\_\_\_  
\_\_\_\_\_
12.  Yes ;  No **Plan showing the individual lot building pad and driveway locations,** if required by the Planning Staff. Explanation (optional): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
13.  Yes ;  No **Noise Study,** if required by the Planning Staff. If required, this analysis must be prepared by a qualified consultant, and as directed by Planning. Explanation (optional):  
\_\_\_\_\_  
\_\_\_\_\_
14.  Yes ;  No **Building Floor Plans,** if required by the Planning Staff. Explanation (optional):  
\_\_\_\_\_  
\_\_\_\_\_
15.  Yes ;  No **Permits or other Approvals from other Agencies, or Other Supporting Documents,** if required by the Planning Staff and as listed below:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Subdivision Application

16.  Call for appointment to meet with a Senior Planner for submittal.

**Do not forget to make an appointment with a Senior Planner to review this submittal. The Planning Department staff will not process a tentative map/tentative parcel map application package that has not been screened by a Senior Planner.**

17.  Applicant Signature verifying that the applicant understands the application process:

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Applicant Signature

Date

Attachments:

- *Attachment A, Requirements for a Tentative Parcel Map or Tentative(Tract) Map*
- *Attachment B, Impervious Surface Form*
- *Attachment C, Sections 15.36.040 and .050 of the County Grading Ordinance*
- *Attachment D, Preparation Guidelines for a Preliminary Grading Plan*
- *Attachment E, Preparation Guidelines for a Preliminary Soil/Geologic Report*
- *Attachment F, Preparation Guidelines for a Preliminary Stormwater Protection Plan*
- *Attachment G, Preparation Guidelines for a Preliminary Floodplain Management Plan*
- *Attachment H, Preparation Guidelines for a Preliminary On-Site Storm Runoff Detention Plan*

# Subdivision Application

*Attachment "A"*

## **REQUIREMENTS FOR A TENTATIVE PARCEL MAP OR TENTATIVE (TRACT) MAP**

- The Tentative Parcel Map/Tentative Map must be accompanied by those items determined to be required following completion of the "Subdivision Application." Unless otherwise specified in the applicable preparation guidelines, the necessary information may be incorporated directly on the Map or may be shown on a separate plan or plans referenced on the Map.
- All graphic information shown on the Map must be drawn to scale and must be legible on both the originals and on any print reductions.
- The Planning Department may request more information if needed to fully review the application package.

**Each of the following information items/design elements must be shown clearly on the map (or in a map attachment), if applicable. Check the block in front of each item to verify that it is included, or write "n/a" to indicate that it is not applicable to your project.**

**Tentative Parcel Map/Tentative Map Number:** Reserve this number with the County Recorder at (510) 272-6362. Tell the Recorder's Office whether you are applying for a *Tentative Parcel Map* (if subdividing land into 2, 3, or 4 lots or parcels) or a *Tentative (tract) Map* (if subdividing land into 5 or more lots or parcels).

**Applicant:** Name, address, signature and phone number.

**Property Owner** (if different from applicant): Name, address, signature and phone number.

**Engineer or Land Surveyor:** Name, address, signature and phone number, license and seal.

<p><b>Note that all tentative parcel maps or tentative maps must be signed and stamped by a licensed land surveyor or a registered civil engineer.</b></p>
--

**Assessor's Parcel Number(s)** of property to be subdivided.

**Address** (if any) of property to be subdivided.

**Date** map was prepared.

**North Arrow and Scale:** Minimum scale is 1" = 100'.

**Area** of the total property to be divided.

**Use and Zoning of Property (present and proposed),** including present deed restrictions, if any.

**Existing Off-site and On-site Utilities,** including power poles, fire hydrants, service cabinets, water and sewer mains and laterals, stormdrain channels and culverts, natural gas mains and laterals, electric ducts and conduits, telephone service points, etc.



# **Subdivision Application**

## *Attachment "A" (cont.)*

**Proposed Utilities:** Specify which agency, district, or company will provide each of the following services, including any proposed service system improvements. Specify the date that services and improvements will be provided.

- (a) Proposed water system to be installed, including fire lines if any.
- (c) Proposed sewage disposal system or connection. If an on-site system is proposed, show the approximate location of proposed storage tank and leach field(s) and describe type of system. Proposed gas and electric service lines, including overhead lines and on-site utility poles, if any.
- (d) Water wells, if any.
- (e) Telephone service.
- (f) Fire protection.

**Boundaries** (dimensions and bearings) of total property to be divided.

**Proposed Layout:** Show location, dimensions and area of each lot. Designate each lot **by number** and each block **by letter**. Show building envelope and setback lines.

**Existing Buildings and Structures** intended to stay in place after land division. Show the outline dimensions and locations for all such buildings and structures.

**Significant Features:** Show any embankment, creek wall, significant trees, pond, well, etc. to be retained or removed.

**Easements:** Show location, width, and purpose of all existing and proposed easements lying within the Subdivision.

**Retaining Walls:** Show both existing and proposed retaining walls including type, height, and cross-section

**Areas proposed for public uses.**

**Proposed Landscaped Area.** Show location and types of trees, shrubs and ground cover that are proposed. Identify the portion of the landscaping (if any) to be used for stormwater treatment.

**Topography:** Show existing and proposed contour lines on the property and extended 100 feet beyond the property lines as follows: For slopes less than 5%, use 1 foot contours. For slopes in excess thereof, use 2 foot contours. Where no graded building sites or roads are proposed, use 5 foot contours. Where the design provides stubs for future roadway extensions, extend the contours 300 feet beyond the property limits for at least 125 feet from each side of the centerline of the future roadway alignment. Refer elevations to County Surveyor's bench marks.

**Nearest County Roadway intersection:** Show key map or graphic reference.

**Existing and Proposed Roadways:** Show location width and name of existing and proposed roadways lying within and adjacent to the Subdivision. Indicate whether roadway is or will be public or private. Indicate proposed roadway improvements, including dedications or reservations for future roadway widening or extension. Show structural and geometric cross-sections for any proposed new roadways and roadway extensions.

**Roadway and Flood Control Right of Way:** Show all existing rights-of-way, and any future width lines and/or proposed dedications of the property to the roadway or flood control district rights-of-way.

# Subdivision Application

## *Attachment “A” (cont.)*

**Frontage Improvements:** Show location of proposed frontage improvements to the public roadway, including the installation and/or replacement of drainage inlets, culverts, conduits, or manholes, traffic control signs or markings, etc. Show structural and geometric cross-sections for any proposed roadway widening or realignment.

**Parking and Turnaround:** Show location and sizing of all required off-street parking areas and vehicle/fire engine turnaround.

**Proposed Roadway Names:** Submit three alternatives for each new proposed roadway name needed.

**Radii of all Roadway Curves and Curb Returns.**

**Proposed Street Lighting:** Show location and type of all new or replacement street lights.

**Water Drainage:** Show location of all submerged areas and areas subject to inundation or stormwater overflow. Show the location, width, and the direction of flow of all watercourses within or adjacent to the Subdivision. Indicate the method proposed for control of final drainage and disposition of storm water and flow of water on lots, including sizes of pipes and channels required for such control. Identify any required on-site detention facilities.

**Stormwater Protection Measures:** If the project is required to provide stormwater protection, show or describe the proposed method or methods of stormwater protection (site design, source control, stormwater treatment, and/or hydromodification management measures).

**Creek Setback:** Show the “watercourse setback”, as defined in the County Watercourse Ordinance, from any creeks or other watercourses on the site and any improvements or other proposed changes within the setback area. Provide cross-sections of the watercourse at 50’ intervals and at any proposed bridge crossing or storm drain outfall structures.

**Stormwater Collector:** If applicable, show the zone and line of the Alameda County Flood Control and Water Conservation District facility that the site drains to, either directly or indirectly, and the creek name, if any.

**Limit of any Geotechnical or Geologic Hazards:** Show type and location of hazard (earthquake fault trace or zone, seismically-induced landslide, seismically-induced liquefaction, etc.) existing on or adjacent to the site and the proposed mitigation measures, if any. Identify any areas of undocumented fill and the proposed mitigation.



**SUBDIVISION APPLICATION - "ATTACHMENT B"**  
**Development and Building Application Information:**  
**Impervious Surface Form**

Complete at the development application stage (to encourage minimizing impervious surface) and at the building application stage (to document what will be constructed) for all projects on lots 10,000 square feet or greater. **Projects that receive permit approvals on or after December 1, 2011, may be subject to new requirements** – summary of new requirements on Page 2.

**Date of Application:** \_\_\_\_\_ **Type of application:**  Site development review  Building permit  
 Parcel/tentative/vesting/tract map  This is an updated form

**Project Location or Address:** \_\_\_\_\_, CA \_\_\_\_\_

**Project watershed** (name of creek or other receiving water): \_\_\_\_\_

**Project Name** (if applicable): \_\_\_\_\_

**Project Type:**  Commercial/Industrial  Residential Subdivision  Single family residence  Mixed Use  
 Auto-service Facility  Retail Gasoline Outlet  Restaurant  Parking lot  Public Agency

**Property Owner's Name:** \_\_\_\_\_

**Applicant's Name:** \_\_\_\_\_  
 Owner  Contractor  Engineer/Architect  Developer

Applicant's Address: \_\_\_\_\_

Applicant's Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

Parcel/Tract No.: \_\_\_\_\_ Lot No.: \_\_\_\_\_ APN # \_\_\_\_\_

Total Lot (or Parcel/Tract) Area: \_\_\_\_\_ Sq.Ft. Total Area Disturbed: \_\_\_\_\_ Sq.Ft.

Type of Impervious Surface <sup>1</sup>	Pre-Project Condition (sq. ft.), if applicable	Proposed Impervious Surface (IS), in sq. ft.	
		Replaces IS	New IS
Building(s) footprint, Driveway(s), Patio(s), Impervious deck(s)			
Uncovered parking lot (including top deck of parking structure)			
Impervious trails, Miscellaneous paving or structures			
Off-lot Impervious Surface (Streets, Sidewalks and/or Bike lanes built as part of new street)	N/A		
<b>Total Impervious Surface in Square Feet</b>			

- Check box if project plans showing changes in impervious area are attached (may be required by municipality).
- Check box if stormwater treatment measures or flow duration controls are located on public property or right of way.
- Check box if this is part of a phased project or plan.

Is total uncovered impervious parking, plus impervious surface for auto-service facility, retail gasoline outlet, and/or restaurant <b>≥ 5,000 sq. ft.?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, see Notice to Applicants (page 2)
Is the total proposed impervious surface <b>≥ 10,000 sq. ft.?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, stormwater treatment, site design and source control measures are required. See Notice to Applicants (pg.2)
Is the total proposed impervious surface <b>≥ 43,560 sq. ft.?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, complete HM Applicability Form.

I declare under penalty of perjury, that to the best of my knowledge, the square footage presented herein is accurate and complete. Incorrect impervious area calculations may delay your project application(s) and/or permit(s).

\_\_\_\_\_  
Signature of Applicant Date

<sup>1</sup> Pervious pavement underlain with pervious soil or pervious storage material, such as a gravel layer sufficient to hold at least the volume of rainfall runoff specified in Provision C.3.d of the Municipal Regional Stormwater Permit (MRP), are not impervious surfaces. The MRP may be downloaded at [www.cleanwaterprogram.org](http://www.cleanwaterprogram.org).

## Notice to Project Applicants

### **Additional, New Stormwater Use and Treatment Requirements Will Go Into Effect December 1, 2011**

Additional, new, regional requirements mandated by the Regional Water Quality Control Board will affect private development projects beginning December 1, 2011. The following is a summary of applicable new requirements in Provisions C.3.b.ii and C.3.c.i.2 of the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit ("Municipal Regional Permit" or "MRP"). The full text of the MRP may be downloaded at [www.cleanwaterprogram.org](http://www.cleanwaterprogram.org).

#### **New Restrictions on Methods of Stormwater Treatment**

Beginning December 1, 2011, all projects that are required to treat stormwater will need to treat the permit-specified amount of stormwater runoff with the following low impact development methods: rainwater harvesting and reuse, infiltration, evapotranspiration, or biotreatment. However, biotreatment (filtering stormwater through vegetation and soils before discharging to the storm drain system) will be allowed only where harvesting and reuse, infiltration and evapotranspiration are infeasible at the project site. Criteria for determining infeasibility are scheduled to be developed by May 1, 2011. ***Vault-based treatment may not be allowed as a stand-alone treatment measure.*** Where stormwater harvesting and reuse, infiltration, or evapotranspiration are infeasible, vault-based treatment measures may be used in series with biotreatment, for example, to remove trash or other large solids. (See Provision C.3.c.i.2 of the MRP.)

#### **New Rules for Auto Service Facilities, Retail Gasoline Outlets, Restaurants, and Uncovered Parking**

Beginning December 1, 2011, projects that create and/or replace 5,000 square feet or more of impervious surface related to auto service facilities<sup>1</sup>, retail gasoline outlets, restaurants<sup>2</sup>, and/or surface parking will be required to provide low impact development treatment of stormwater runoff. ***This requirement will apply to uncovered parking that is stand-alone, or included as part of any other development project,*** and it applies to the top uncovered portion of a parking structure, unless drainage from the uncovered portion is connected to the sanitary sewer (see Provision C.3.b.ii.1 of the MRP). For all other land use categories, 10,000 square feet will remain the regional threshold for requiring low impact development, source control, site design, and stormwater treatment, although municipalities have the authority to require treatment to the maximum extent practicable for smaller projects.

#### **Will These Requirements Affect My Project?**

- If you submitted a development application that was deemed complete before December 1, 2009, and you "diligently pursue"<sup>3</sup> the project, the additional, new requirements will not affect your project.
- If you submit a development application that is deemed complete after December 1, 2009, the additional, new requirements will not apply if the development application has received final discretionary approval before December 1, 2011.
- In all other cases, the additional, new requirements will apply.

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<sup>1</sup> Auto service facilities, described by the following Standard Industrial Classification (SIC) codes:

- 5013: Establishments primarily engaged in wholesale distribution of motor vehicle supplies, accessories, tools, equipment, and parts.
- 5014: Establishments primarily engaged in wholesale distribution of tires and tubes for passenger and commercial vehicles.
- 5541: Gasoline service stations primarily engaged in selling gasoline and lubricating oils.
- 7532: Establishments primarily engaged in the repair of automotive tops, bodies, and interiors, or automotive painting and refinishing.
- 7533: Establishments primarily engaged in the installation, repair, or sale and installation of automotive exhaust systems.
- 7534: Establishments primarily engaged in repairing and retreading automotive tires.
- 7536: Establishments primarily engaged in the installation, repair, or sales and installation of automotive glass
- 7537: Establishments primarily engaged in the installation, repair, or sales and installation of automotive transmissions.
- 7538: Establishments primarily engaged in general automotive repair.
- 7539: Specialized automotive repair such as fuel service (carburetor repair), brake relining, front-end and wheel alignment, and radiator repair.

<sup>2</sup> Restaurants described by SIC code 5812: Retail sale of prepared food and drinks for on-premise or immediate consumption.

<sup>3</sup> Diligent pursuance may be demonstrated by the project applicant's submittal of supplemental information to the original application, plans, or other documents required for any necessary approvals of the project.

# Subdivision Application

*“Attachment C”*

## **PERMIT REQUIREMENTS FOR A COUNTY GRADING PERMIT**

- The following permit requirements are reprinted from the County Grading Ordinance:

### **“15.36.040 Grading permit required.**

Except for the specific exceptions listed hereinafter, no person shall do or permit to be done any grading on any site in the unincorporated area of this county without a valid permit obtained from the director of public works.

### **15.36.050 Exemptions.**

The following grading may be done without obtaining a permit:

A. Minor projects which have cuts or fills, each of which is less than five feet in vertical depth at its deepest point measured from the existing ground surface, and which include all of the following:

1. Less than one hundred fifty (150) cubic yards of graded material,
2. The removal, plowing under or burial of less than ten thousand (10,000) square feet of vegetation on slopes ten percent or greater or any amount of vegetation on slopes less than ten percent,
3. Do not create unstable or erodible slopes;

B. Grading done by or under the supervision or construction control of a public agency that assumes full responsibility for the work;

C. Excavations in connection with a building, swimming pool, retaining wall, or other structure authorized by a valid building permit;

D. Grading necessary for agricultural operations unless such grading will create a cut or fill whose failure could endanger any structure intended for human or animal occupancy or any public road, or could obstruct any watercourse or drainage conduit;

E. Trenching and grading incidental to the construction or installation of approved underground pipe lines, septic tank disposal fields, conduits, electrical or communication facilities, and drilling or excavation for approved wells or post holes. Such work shall be backfilled and the surface restored to its original condition, including reseeding or otherwise restoring vegetation on all disturbed earth surfaces if slopes exceed two percent, as soon as possible after such grading work is completed;

F. Excavations for soil or geological investigations by a geotechnical engineer or engineering geologist. Such work shall be backfilled and shaped to the original contour of the land under the direction of the geotechnical engineer or engineering geologist as soon as possible after the investigation;

G. Grading in accordance with plans incorporated in an approved surface mining permit, reclamation plan or sanitary landfill;

H. Maintenance of existing firebreaks and roads to keep the firebreak or road substantially in its original condition;

I. Routine cemetery excavations and fills;

J. Performance of emergency work necessary to protect life or property when an urgent necessity therefore arises. The person performing such emergency work shall notify the director of public works promptly of the problem and work required and shall apply for a permit there for within ten calendar days after commencing said work.”

# **Subdivision Application**

## ***Attachment "D"***

### **PREPARATION GUIDELINES FOR A PRELIMINARY GRADING PLAN**

- A preliminary grading plan prepared by a registered civil engineer (RCE) is required to be submitted as part of the application for all Tentative Maps (Subdivisions that create five or more lots).
- The Planning Department, in consultation with the Public Works Agency, has the authority to require that a preliminary grading plan be submitted in conjunction with a Tentative Parcel Map (Subdivisions that create four or less lots); this requirement would typically be imposed when the proposed development would require the issuance of a County Grading Permit.
- All such plans should be consistent with the plan preparation provisions of the County Grading Ordinance, reprinted below for reference.
- In the event of a conflict between the requirements of the Grading Ordinance and other regulations of the Planning Department or the Public Works Agency, the most stringent shall prevail.

#### **"15.36.240 Preliminary grading plans.**

Preliminary grading plans provide for review and determination of grading permit requirements prior to approval of final plans and issuance of a grading permit. Precise design at this stage is not required. The plans shall be clearly and legibly drawn, entitled "preliminary grading plans," shall contain a statement of the purpose of the proposed grading, and shall include the following, unless waived by the director of public works:

- A. On a map of appropriate scale, but not smaller than one inch equals one hundred (100) feet:
  1. A plan entitled "preliminary grading plan" and the name and signature of preparer and date of preparation,
  2. A vicinity sketch (not at map scale) indicating the location of the site relative to the principal roads, lakes and watercourses in the area,
  3. A site plan indicating the site of the work and any proposed divisions of land,
  4. The complete site boundaries and the locations of any easements and rights-of-way traversing and adjacent to the property, appropriately labeled and dimensioned,
  5. The location of all existing and proposed roads, buildings, wells, pipelines, watercourses, and other structures, facilities, and features of the site, and the location of all improvements on adjacent land within fifty (50) feet of the proposed work,
  6. Location and nature of known or suspected soil or geologic hazard areas,
  7. Contour lines of the existing terrain and proposed approximate finished grade at intervals not greater than five feet, showing all topographic features and drainage patterns throughout the area where proposed grading is to occur. The contour lines shall be extended to a minimum of fifty (50) feet beyond the affected area, and further if needed to define intercepted drainage, and shall be extended a minimum of one hundred (100) feet outside of any future road rights-of-way,
  8. Approximate location of cut and fill lines and the limits of grading for all of the proposed grading work, including borrow and stockpile areas. A written description of offsite locations of said areas fill [*sic*] suffice,
  9. Location, width, direction of flow and approximate location of tops and toes of banks of any watercourses,
  10. Approximate boundaries of any areas with a history of flooding,
  11. Proposed provisions for storm drainage control and any existing or proposed flood control facilities or septic tank disposal fields in the vicinity of the grading,

# Subdivision Application

## *Attachment “D” (cont.)*

12. A conceptual plan for erosion and sediment control including both temporary facilities and long-term stabilization features such as planting or seeding for the area affected by the proposed grading. This requirement may be waived by the director of public works for sites having no slopes greater than five percent unless the large size of the site, its proximity to sensitive areas or other conditions make an erosion or sediment discharge hazard possible.
13. North arrow and scale;
14. General location and character of vegetation covering the site and the locations of trees with a trunk diameter of twelve (12) inches or more, measured at a point three feet above average ground level, within the area to be disturbed by the proposed grading. The plans shall indicate which trees are proposed to remain and how they are to be protected:
  - B. Typical cross sections (not less than two) of all existing and proposed graded areas taken at intervals not exceeding two hundred (200) feet and at locations of maximum cuts and fills;
  - C. An estimate of the quantities of excavation and fill, including quantities to be moved both on- and off-site;
  - D. The estimated starting and completion dates of grading;
  - E. Such supplemental information as required for processing and approval of the design concept and the application as required by the director of public works.”

**Call the Public Works Agency (PWA) Grading/Permit Section at (510) 670-5868 if you have any questions about the preparation of preliminary grading plans or the requirements for a County Grading Permit.**

# Subdivision Application

## *Attachment “E”*

### **PREPARATION GUIDELINES FOR A PRELIMINARY SOIL/GEOLOGIC INVESTIGATION REPORT**

- A preliminary soil/geologic investigation report prepared by a qualified professional (geotechnical engineer/geologist) is required to be submitted as part of the application for all Tentative Maps (Subdivisions that create five or more lots).
- The Planning Department, in consultation with the Public Works Agency, has the authority to require that a preliminary soil/geologic investigation report be submitted in conjunction with a Tentative Parcel Map (Subdivisions that create four or less lots); this requirement would typically be imposed when the proposed development would require the issuance of a County Grading Permit or when the site conditions would require such a report under the provisions of the County Grading Ordinance.
- All such plans should be consistent with the report preparation provisions of the County Grading Ordinance, reprinted below for reference; however, these provisions should be regarded as the minimum standards for the report. If other conditions warranting study exist on the site, such as the determination of soil percolation rates or the location of suspected earthquake faults, such information should be appended or referenced.
- The following section of the Grading Ordinance is provided for reference only; call (510) 670-5868 if you have any questions about the interpretation of the Grading Ordinance or the requirements for a Grading Permit.
- In the event of a conflict between the requirements of the Grading Ordinance and the regulations of the Planning Department or the Public Works Agency, the most stringent shall prevail.

#### “15.36.350 Soil/geologic investigation report.

The soil or geologic investigation report shall contain all of the following as they may be applicable to the subject site:

- A. An index map showing the regional setting of the site;
- B. A site map showing the topographic features of the site and locations of all soil borings and test excavations;
- C. A classification of the soil types (unified soil classification); pertinent laboratory test data; and consequent evaluation regarding the nature, distribution and strength of existing soils;
- D. A description of the geology of the site and the geology of the adjacent areas when pertinent to the site;
- E. A suitably scaled map and cross sections showing all identified areas of land slippage;
- F. A description of any encountered groundwater or excessive moisture conditions;
- G. A description of the soil and geological investigative techniques employed;
- H. A log for each soil boring and test excavation showing elevation at ground level and depth of each soil or rock strata;
- I. An evaluation of the stability of pertinent natural slopes and any proposed cut and fill slopes;
- J. An evaluation of settlement associated with the placement of any fill;
- K. Recommendations for grading procedures and specifications, including methods for excavation and subsequent placement of fill;
- L. Recommendations regarding drainage and erosion control;
- M. Recommendations for mitigation of geologic hazards.”

**Call the Public Works Agency (PWA) Grading/Permit Section at (510) 670-5868 if you or your geologist/geotechnical engineer have questions about the preparation of a preliminary soils/geological investigation report.**



# Subdivision Application

## Attachment “F”

### PREPARATION GUIDELINES FOR A PRELIMINARY STORMWATER PROTECTION PLAN

- All subdivision designs must incorporate appropriate stormwater protection measures so as to minimize the post-construction discharge of stormwater pollutants to the County stormdrain system.
- The purpose of the preliminary stormwater protection plan is to demonstrate the general feasibility of the selected protection systems and facilities within the space, soil type, and drainage constraints at the subdivision site.
- Acceptable stormwater protection measures are generally described in the “*C.3 Stormwater Technical Guidance*,” published by the Alameda Countywide Clean Water Program and downloadable from their website at <http://cleanwaterprogram.org/indexHTML.htm>.
- Protection measures fall into one of the following four categories:
  - “**Site Design**” generally means site-related design solutions that preserve existing beneficial areas and/or reduce impervious surfaces; see **Attachment F-1** for additional information and descriptions.
  - “**Source Control**” generally means building-related design solutions that reduce the exposure of stormwater runoff to sources of pollution; see **Attachment F-2**.
  - “**Treatment**” means on-site facilities intended to remove pollutants from the stormwater runoff; see **Attachment F-3**.
  - “**Hydromodification Management**” means controlling runoffs from the site so as to reduce erosion and other damage to the County stormdrain system; see **Attachment F-4**.
- In general, subdivision designs should incorporate Site Design measures to the maximum feasible extent and Source Control measures to the extent required by the County building code. Additional Treatment and Hydromodification Management measures will have to be included in the design if the subdivision meets the following criteria:

Measure	Inclusion Criteria
Treatment	Must be included if the development creates or replaces 10,000 sq. ft. or more of impervious surface.
Hydromodification Management	Must be included if the development creates or replaces 1 acre or more of impervious surface and the development is located within a “susceptible area.” (Contact the PWA Development Section at (510) 670-6601 for information on susceptible areas.)

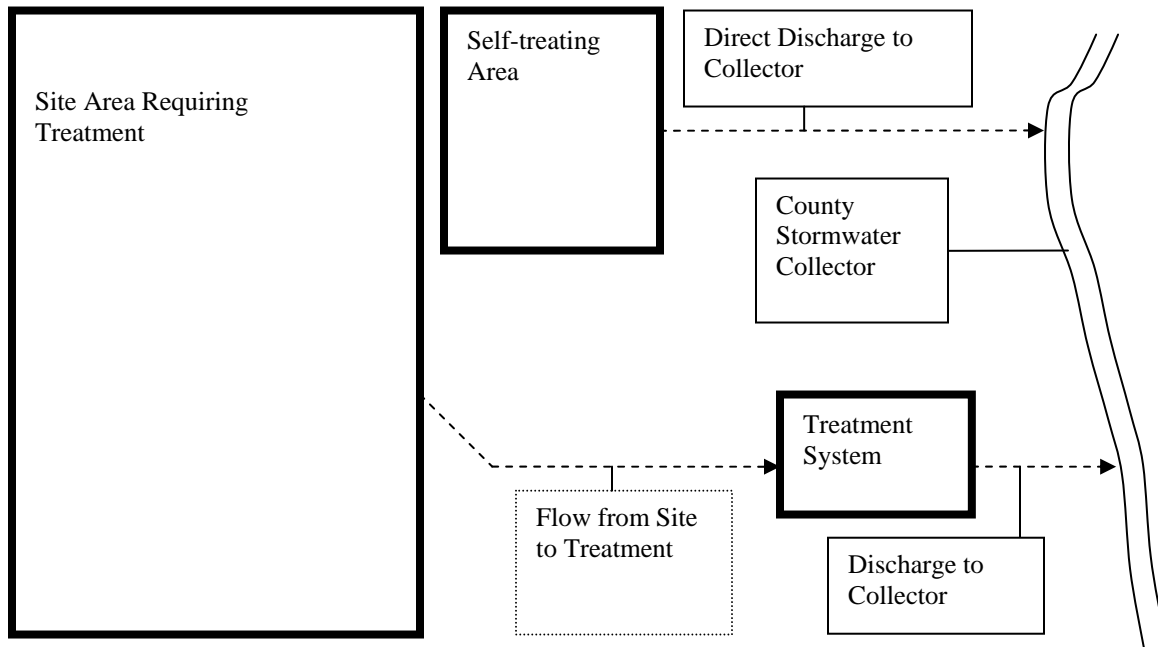
- If Treatment and/or Hydromodification Management measures are required, so-called “simplified” sizing methods are acceptable for the preliminary design, but all treatment facilities must eventually be supported with specific “numeric” sizing calculations.
- The preliminary stormwater protection plan should include the following elements:
  - Schematic drainage plans for the typical building lot, including the collection and conductance of roof runoff.
  - Identification of “self-treating” and “alternative surface” areas.
  - Indication of whether treatment and hydromodification management measures are required, and if so, schematic descriptions of the proposed measures, including the preliminary recommendations of the project geotechnical engineer.
  - General description of the proposed post-construction maintenance plan.
- Call the PWA Development Section at (510) 670-6601 if you have any questions on the application of stormwater protection measures to subdivision design.

# Subdivision Application

“Attachment F-1”

## Stormwater Site Design Measures

- “**Site Design**” means measures intended to minimize the runoff of stormwater from the project site by 1) preserving existing open space and other naturally vegetated areas, and 2) choosing building, infrastructure, and landscaping designs that tend to reduce new impervious surfaces, including the following:
  - Create more “**self-treating**” areas such as lawns, parks, “green” building roofs, turf block, etc. Properly designed self-treating areas need little or no “treatment.”
  - Control the impervious footprint by choosing multi-story or clustered building designs, narrower roadways, fewer sidewalks, smaller patios, etc.
  - Reduce the required parking areas through the use of shared facilities, valet parking, pay-as-you-go, multi-story parking structures, parking strips, interior parking, etc.
  - Collect and store rainwater with cisterns or barrels for reuse.
  - Allow infiltration into the soil through the use of “**alternative surfaces**” such as pervious pavement, crushed aggregate, unit pavers, etc.
- One important aspect of **site design** is to recognize that all surfaces, even self-treating areas, generate runoff following a storm event; however, runoff from a properly designed self-treating area that does not receive runoff from impervious surfaces can be drained directly to the stormwater collector, bypassing the treatment system. See the following schematic:



- 
- “**Alternative surfaces**,” if properly designed, can reduce the amount of flow from the site to the treatment measures by enabling infiltration of some of the stormwater to the underlying soil; however, the use of such designs must be recommended by the project geotechnical engineer in the preliminary

# Subdivision Application

“Attachment F-2”

## Stormwater Source Control Measures

- All new buildings, including subdivision buildings, must comply with the stormwater protection provisions of the County Building and Plumbing Codes; see the following table:

<b>Design Requirement</b>	<b>Reference</b>
<b><u>Exterior Enclosures.</u></b> Separate exterior trash, storage, or recycling enclosures must be “protected;” i.e., covered with an overhanging roof, isolated from surface runoff by grade breaks or berms, and drained to the sanitary sewer system by means of an enclosed floor drain.	County Building Code.
<b><u>Car Wash Areas.</u></b> Residential developments of more than 25 units must: <ul style="list-style-type: none"><li>○ Provide centralized car wash areas, protected as described above; and</li><li>○ Install signage and/or enact provisions in the CC&amp;R’s prohibiting washing of vehicles in driveways.</li></ul>	County Building Code.
<b><u>Building Roofs.</u></b> Unless exempted by the conditions of approval of the Tentative Map or the Tentative Parcel Map, building roofs must discharge runoff via gutters, downspouts, and conductors to a stormwater treatment facility.	County Building Code.
<b><u>Discharge from Pools.</u></b> Unless approved by the Director of Public Works, pools, spas, hot tubs, or fountains may <u>not</u> discharge process water to the County stormdrain system. Unless approved by the applicable Sanitary District, the said discharges may <u>not</u> be made to the sanitary sewer.	County Plumbing Code.
<b><u>Discharge from Roof Top Equipment.</u></b> Roof top equipment may <u>not</u> discharge process water to the County stormdrain system.	County Plumbing Code.
<b><u>Food Handling Cleaning Areas.</u></b> Food handling facilities may be required to incorporate a designated cleaning area, sized to accommodate floor mats and floor mops.	County Building Code.

- In addition to the listed requirements, there are several other stormwater and other pollution prevention provisions in the said Codes, particularly for industrial and commercial development. Contact the County Building Inspection Department at (510) 670-5440 if you have any questions about the requirements of the County Building and/or Plumbing Codes.

# Subdivision Application

*“Attachment F-3”*

## Stormwater Treatment Measures

- Other than those areas designated on the site plan as “self-treating,” the entire project site must be drained to and treated by the on-site treatment system.
  - EXCEPTION: Projects located on a previously-developed site and that will involve the replacement of less than 50 percent of the previously installed impervious surfaces, need only treat that portion of the site that is to be redeveloped.
- County guidelines require that treatment systems be sized to treat runoff from “relatively small-sized storms.” However, these systems must also be designed to accommodate larger storm events by means of overflow and bypass features that do not erode or damage the site.
- Treatment systems are generally classed as either “flow-based,” wherein the pollutants are removed from a flowing stream of runoff and the treatment device is sized based upon hourly or peak flow rates, or “volume-based,” where the runoff is stored for a period of time and the pollutants are removed either by treatment measures or infiltration into the ground.
- The “C.3 Stormwater Technical Guidance” handbook describes several standard treatment designs, both flow-based and volume-based. The following table lists some of these designs along with their typical usages and limitations:

Treatment Measure	Typical Usage	Limitations
Vegetated Swale	Part of drainage system, integrated with landscape design. Can be designed to accept concentrated discharge or transverse sheet flow from parking lot or driveway.	Not appropriate for slopes > 8% or where runoff flow rates are > 4%. Should be at least 7' wide. Requires regular mowing and trash removal.
Vegetated Buffer Strip	Buffer next to parking lot or driveway. Designed to accept transverse sheet flow.	Not appropriate for slopes > 15%. Should be at least 15' wide and full length of parking lot or driveway. Requires regular mowing and trash removal.
Media Filter	Underground, installed in racks inside of vault or manhole-type structures.	Higher installation and maintenance costs than landscaped-based designs.
Flow-through Planter	Above-ground, installed next to buildings and structures to treat roof runoff.	Requires irrigation system. Higher installation and maintenance costs than landscaped-based designs.
Bioretention Area	Integrated with landscape design.	Not appropriate for slopes > 5%. Requires irrigation to support planting.
Infiltration Trench	Similar to vegetated swale.	Suitable only where the native soils have a percolation rate of 0.5 inches per hour or more. Not appropriate for sloped areas.
Extended Detention Basin	Larger sites, particularly where hydraulic detention is required.	Typically applicable only to larger sites (> 5 acres).

- Chapter 6 of the C.3 handbook provides additional detailed guidelines for the sizing, usage, and maintenance of each of the above standard designs. Note that these designs can be used in combination, either in parallel or in series as a “treatment train.”
- Other designs may be acceptable, but County guidelines limit applications that require more than annual maintenance intervals.

# Subdivision Application

## *“Attachment F-3”(cont.)*

- For preliminary design purposes, the County allows the usage of the following simplified sizing methods:
  - **Vegetated swales, bio-retention areas, and flow-through planter boxes** can be conservatively sized as being equal to 4 percent of the impervious surface area drained to those facilities, provided that the treatment area is relatively flat (< 5% slope); i.e., 400 sq. ft. of treatment facility for every 10,000 sq. ft. of impervious surface, or 1750 sq. ft. of treatment area for every acre of impervious surface.
  - The minimum width of a **vegetated swale** is about 7 feet, so it is useful to think of the required swale size for each 10,000 sq. ft. impervious surface as an area 7' x 57' or 8' x 50'.
  - **Extended detention basins** can be conservatively sized as 1 acre for a drainage area of 100 acres.

# **Subdivision Application**

*“Attachment F-4”*

## **Hydromodification Management Measures**

- Hydromodification Management Measures (HMM) are intended to protect natural waterways that would otherwise tend to be damaged by the increase in runoff from a typical development.
- HMM can include 1) additional source control and/or site design measures intended to reduce the amount of runoff generated by the development, 2) on-site and off-site features and facilities intended to control the flow rate, concentration, and timing of the discharge from the site into the waterway, and 3) in-stream improvements intended to provide direct erosion protection and bank stabilization of the waterway.
- Because the application of HMM is site-specific, you should contact the PWA Development Section at (510) 670-6601 for additional information before you begin the design of such measures.

# **Subdivision Application**

*“Attachment G”*

## **PREPARATION GUIDELINES FOR A PRELIMINARY FLOODPLAIN MANAGEMENT PLAN**

- All Tentative Maps or Tentative Parcel Maps that involve property within, or adjacent to, a Special Flood Hazard Area (SFHA), as defined on the most recent FEMA Flood Insurance Rate Maps (FIRM's), must clearly indicate the FIRM flood boundary and elevation/depth information either on the map or in a separate plan.
- FIRM's can be downloaded from the FEMA website ([www.fema.gov](http://www.fema.gov)) by entering the property address.
- County floodplain design regulations require that most new buildings, structures, and facilities be designed to withstand a flood that is at least one foot higher or deeper than the “base” flood shown on the FIRM.
- If your proposed subdivision is within (or adjacent to) a SFHA, your project engineer should prepare and submit a preliminary floodplain management plan describing the general methods of protecting against the predicted flood hazard. This plan could include, but not be limited to, a discussion of the following:
  - The possibility of removing the buildings and structures from the SFHA by establishing a “building limit line” on the property. This would typically require the approval of a Letter of Map Amendment (LOMA) in accordance with the FEMA regulations.
  - The removal of the property from the SFHA by raising the elevation through the addition of fill. This would typically require the approval of a Letter of Map Revision Based on Fill (LOMR-F) in accordance with the FEMA regulations.
  - The design of buildings, structures, and facilities in accordance with the flood-resistant design provisions of the County Building Code.
- A special flood hazard condition arises when a new development is proposed for those areas within SFHA's that are designated on the FIRM's as “floodways.” County regulations limit construction within floodways to those improvements that would not adversely effect the predicted flood elevations, so that any proposal for a subdivision would have to be accompanied with a drainage study demonstrating “no-rise” to the water surface elevation of the base flood. It is very important that any proposed development of floodway areas be fully described in the subdivision application.

# **Subdivision Application**

*“Attachment H”*

## **PREPARATION GUIDELINES FOR A PRELIMINARY ON-SITE STORM RUNOFF DETENTION PLAN**

- County Public Works Agency (PWA) guidelines require that development projects that could result in a post-construction stormwater runoff rate of 5 cubic feet per second (cfs) or more should be required to detain the increased runoff using on-site detention ponds or equivalent if: 1) the development project is located upstream of an existing Alameda County Flood Control & Water Conservation District (District) facility that is not designed to carry a 100-year discharge, or 2) the post-construction runoff would increase the elevation or depth of the “base flood” within a FEMA-designated “Special Flood Hazard Area (SFHA),” or the post-construction runoff would cause the capacity of the downstream storm drain facility to be exceeded.
- The guidelines also specify that if detention is necessary, the detaining facility must be designed so that post-development runoff flow rates do not exceed pre-development rates for both the 100-year and the 15-year storm event.
- Moreover, the holding facility must be covered with a post-construction maintenance plan to assure that it will continue to function as designed and built.
- If your proposed subdivision improvements could theoretically cause a post-construction storm runoff of more than 5 cfs, your project engineer must prepare and submit a preliminary on-site detention plan describing the design of the required mitigation facility and the associated maintenance procedures. This plan should be supported with preliminary drainage calculations demonstrating compliance with the 15 and 100 year discharge criteria, as described above.