

**Application for Design
Review of Commercial Development
on Middlefield Road (North Fair Oaks)
by the County Design
Review Committee**

Permit #: PLN _____

Other Permit #: _____

1. Basic Information

Owner:

Name: _____

Address: _____

Zip: _____

Phone,W: _____ H: _____

Applicant:

Name: _____

Address: _____

Zip: _____

Phone,W: _____ H: _____

Architect or Designer:

Name: _____

Address: _____

Zip: _____

Phone,W: _____ H: _____

2. Project Information

Assessor's Parcel Number(s):

Project location:

Address: _____

Zip: _____

Zoning: _____

Parcel/lot size: _____ sq. ft.

Project Description:

3. Site Description

◆ Existing buildings, structures:

◆ Proposed Landscaping:

◆ Surrounding uses

4. Materials and Finish of Proposed Buildings or Structures

Fill in Blanks:	Material	Color/Finish	Check if matches existing
a. Exterior walls	_____	_____	<input type="checkbox"/>
b. Trim	_____	_____	<input type="checkbox"/>
c. Windows	_____	_____	<input type="checkbox"/>
d. Doors	_____	_____	<input type="checkbox"/>
e. Roof	_____	_____	<input type="checkbox"/>
f. Chimneys	_____	_____	<input type="checkbox"/>
g. Decks & railings	_____	_____	<input type="checkbox"/>
h. Stairs	_____	_____	<input type="checkbox"/>
i. Fences	_____	_____	<input type="checkbox"/>
j. Accessory buildings	_____	_____	<input type="checkbox"/>
k. Garage/Carport	_____	_____	<input type="checkbox"/>

Note: Color and material samples are required to be submitted as part of application (see following section on Materials Required).

5. Required Findings

To approve this application, the County must determine that this project complies with all applicable regulations including the required findings that the project does conform to the standards and guidelines for design review applicable to the location of the project pursuant to Section 6565.10.

6. Signatures

I hereby certify that the information stated above and on forms, plans, and other materials submitted herewith in support of the application is true and correct to the best of my knowledge. It is my responsibility to inform the County of San Mateo through my assigned project planner of any changes to information represented in these submittals.

.....
Owner:

.....
Applicant:

.....
Date:

.....
Date:

Design Review Application Submittal Checklist

During the Design Stage, this checklist is intended to be used by the Applicant up to the time of the submittal of a complete application to the Current Planning Staff. This checklist is used to certify Pre-application Conference Attendance and to help the Applicant compile all the materials and information required for complete application submittal. At the time of project submittal, the Applicant should bring this checklist to the Planning Counter Staff, as this checklist will be used to review the completeness of the application submittal.

DESIGN STAGE

1. DESIGN SHALL CONFORM TO APPLICABLE REGULATIONS AND STANDARDS

The following application materials are enclosed in this packet (see application requirements):

- a. *Maximum Building Heights in Unincorporated San Mateo County*
- b. *Sample Primary Building Elevation (Guidance for Presentation of Color and Exterior Material Samples)*
- c. *Coastside Design Review Committee (CDRC) Policies on Story Pole Installation and Major/Minor Modifications*
- d. *MWELO (Model Water Efficient Landscape Ordinance) Submittal Checklist*
- e. *Requirements for Erosion and Sediment Control*
- f. *County Drainage Policy*

Other regulations and standards are available on the Planning and Building Department's Website and at the Planning Counter:

- a. *Midcoast Design Review Standards*
- b. *Design Review (DR) Zoning District Regulations (includes Bayside DR Standards and Required Findings for Permit Approval)*
- c. *Boundary Survey Sample*

2. PRE-APPLICATION CONFERENCE REQUIREMENT

Prior to finalizing the design of a project in the Design Review District and submitting an application for Design Review, the project designer (which can be the owner) must participate in a pre-application conference with a planner. The purpose of the pre-application conference is to ensure that the designer and owner are aware of the design standards, expectations, and application requirements of the County prior to finalizing the design of a project. Project applications for which the pre-application meeting has not been completed will not be accepted by the Current Planning Section. Pre-application conferences may be arranged by appointment by calling 650/363-1825.

APPLICATION STAGE

3. APPLICATION REQUIREMENTS

The following items are necessary for submittal of a complete application:

- a. Proof of owner's interest in property (copy of deed, tax bill, etc.).
- b. Completed Design Review Application Form.
- c. If the owner is not the applicant, the owner's concurrence (letter of authorization from the owner) shall be provided if owner does not sign application.
- d. C.3 and C.6 Development Review Checklist (if project will result in 2,500 sq. ft. or more of impervious surface).
- e. Model Water Efficient Landscape Ordinance compliance documentation (as required).
- f. Completed Environmental Information Form.
- g. Any required supplemental forms.
- h. Fees as set by resolution of the Board of Supervisors.
- i. A brief written explanation of how the design of the project conforms to the Design Review standards.
- j. Five (5) full-scaled sets of preliminary drawings (not construction plans, minimum 18" x 24" and maximum 24" x 36" paper size).
- k. Four (4) 8 1/2" x 11" color copies of exterior color/material (wall, trim, windows, accent). Include color chips from paint stores or manufacturers. Fire-rated materials are required in State Responsibility Areas (SRA) or Local Responsibility Areas (LRA). If specific materials are proposed, they must comply with this requirement.
- l. One (1) set of 8 1/2" x 11" or 11" x 17" paper reproductions of site plan, floor plans, building elevations and cross section.
- m. Electronic file of plans (prefer PDF of vector drawings) on a USB flash drive or file sharing link.

PLAN SETS SHALL INCLUDE THE FOLLOWING INFORMATION:

SURVEYS

- o A stamped topographical survey prepared by a licensed land surveyor or a registered civil engineer (minimum scale of 1 inch = 10 feet).
 - ◇ A stamped boundary survey is required for additions located less than 5 feet from a minimum setback line.

- o Survey(s) shall show baseline elevation datum point (benchmark) and its elevation as established by a licensed land surveyor or engineer. This datum point shall be used during construction to verify the elevations of the garage slab, finished first floor, and peak roof elevation relative to the existing natural grade of the site or finished grade depending on the applicable zoning district.

SITE PLAN (based on survey)

- o Information Table on Title Sheet showing: Assessor's Parcel Numbers/Address, Zoning District, parcel size, square footage of structures (existing and proposed), lot coverage with calculations (maximum allowed and proposed), floor area ratio (FAR) with calculations (maximum allowed and proposed), and square footage of landscaping (new and rehabilitated).
- o Property Lines: Clearly defined and accurate, including their respective linear lengths.
- o All existing and proposed improvements (clearly differentiated), including buildings, structures, decks, paving, fences, walls, etc. If, in the case of additions, minimum setback compliance is proposed, a focused boundary survey shall be submitted confirming the exact location of the existing and proposed addition's distance to the closest property line.
- o Clarify all structures (not fences) greater than 18" above grade.
- o Dimensions of all setbacks from the structure to the property line.
- o Any easements (public and private) and utility lines. Access easement should be deducted from lot area for purposes of lot coverage and floor area ratio (FAR).
- o Existing grade and proposed grade contour lines as they relate to finished floor levels. Define grading and areas of disturbance by shading.
- o Height and location of all existing and new fences and walls.
- o Location and type of new and existing utility lines (this may be provided on a separate Utility Plan).
- o New houses in Emerald Lake Hills: The location of two (2) guest parking stalls is required. Guest parking stalls are recommended elsewhere. If the garage/carport is located less than 20 feet from front property line, site plan shall be expanded to show how guest parking will be accommodated on- and/or off-site to the satisfaction of the Department of Public Works.

BUILDING ELEVATION DRAWINGS

- o Minimum scale of 1/4 inch = 1 foot.
- o Natural grade clearly indicated on elevation plans in relation to all exterior walls.
- o Height of elevations consistent with survey, including garage, first floor and roof ridgelines.
- o Front, sides, and rear building elevation drawings: in cases of additions/alterations to existing buildings, the existing and proposed development shall be clearly differentiated.

- o Show decks, exterior light fixtures, and other structures or fixtures.
- o Daylight Planes.
- o Identify type of roof and exterior materials to be used. Include manufacturer's brochure, if available. Fire-rated materials are required in fire hazard severity zones (a list of approved materials is available at the Planning Counter).

FLOOR PLANS

- o Show dimensions and floor area calculations of each floor.
- o In cases of additions/alterations to existing buildings, the existing and proposed development shall be clearly differentiated.

BUILDING CROSS SECTION: Short and long cross sections showing maximum height, with elevation callouts of first floor, finished grade, and ridge height. Elevation callouts shall be consistent with the datum point provided on survey.

ROOF PLAN: Include ridgeline elevations at the highest point and/or locations within 1 foot of the maximum height of the zoning district.

GRADING PLAN (required if grading is proposed)

- o Natural and finished grade contours based on a topography survey.
- o Include amounts of cut and fill in cubic yards. Total = Cut + Fill.

ACCESS AND DRAINAGE PLANS (required by the Department of Public Works):

- o Driveway profile (stipulating driveway slope) from centerline of roadway to garage slab: minimum 20-foot wide access from the public road and driveway profile with a maximum slope of 20%.
- o Site Distance Study by civil engineer (required on a case-by-case basis).
- o Drainage Plans and Calculations.

EROSION AND SEDIMENT CONTROL PLAN (required for all projects needing a Grading Permit, on slopes of 20% or greater, or located adjacent to a creek)

- o For projects (including those requiring a Grading Permit), separate erosion and sediment control plans are required to show the measures to be implemented at the grading stage (e.g., grading, foundation/retaining walls) and at the construction stage of the project.
- o The plan requirements can be found on the Requirements for Erosion and Sediment Control checklist.

SOILS REPORT (required for all Grading Permits and projects located in the GH zoning district or on a coastal bluff)

TREE PLAN

- o The locations of existing trees or groups of trees both on-site and adjacent to the project site. Number trees on plans and identify type, dripline, and trunk size at diameter at breast height
- o A table listing each tree by number corresponding to the plans, trunk size (DBH), genus, species, and common name.
- o Trees to be removed, marked with an "X" on the plans.
- o Property lines and easements.
- o The footprint of any existing or new structures, including additions.
- o The location of existing and proposed site utilities, including water, sewer, drainage, gas, underground electrical, voice/data, septic field, well head, or other.
- o An Arborist's report is required for significant and heritage trees proposed for removal on the basis of poor health, potential hazard, or when a significant or heritage tree is proposed to remain, but new development would encroach within the dripline of the tree.
- o The Arborist's report shall assess the tree condition for all significant and heritage trees, and any measures necessary to protect trees on-site during demolition or construction. Tree protection measures shall comply with San Mateo County's tree protection requirements.
- o For development within a tree dripline, the report shall assess potential tree survival and longevity, and special measures needed to protect any such trees during construction.
- o Demonstrate tree protection measures on the plan.

LIGHTING

- o Exterior lighting shall be minimized and designed with a specific activity in mind so that outdoor areas will be illuminated no more than necessary to support the activity designed for that area.
- o Include manufacturer's brochure(s) of all exterior light fixtures: exterior lighting should be subdued and indirect, and glaring fixtures should be avoided. Low-level lighting directed at the ground is preferred.

LANDSCAPE PLAN (required for all new homes or other projects involving new landscaping)

- o Landscape/tree replacement plan, including the location, size and type of replacement trees to be planted. (Removal of any significant tree shall be replaced at a 1:1 ratio on the Coastside and up to 3:1 for native trees in the Bayside Design Review Districts.)
- o Total landscape area (square feet)

- o Breakdowns of 1) new and rehabilitated landscape area and 2) turf and plant material area.
- o Project type (e.g., new dwelling, commercial, rehabilitated).
- o Water supply type (e.g., potable, recycled, well) and identify the local retail water purveyor if the applicant is not served by a private well.
- o For projects incorporating landscaping that is between 500 and 2499 sq. ft., the Prescriptive Approach (MWELo) may be selected. The requirements listed in the MWELo Submittal Checklist must be demonstrated on the landscape plan and the Model Water Efficient Landscape Ordinance (MWELo) Prescriptive Compliance Short form must be completed.
- o For projects incorporating landscaping equal to or greater than 2500 sq. ft. or less than 2500 sq. ft. when the Performance Approach is voluntarily selected, the requirements listed in the Performance Approach of the MWELo Submittal Checklist must be demonstrated in the Landscape Documentation Package, which includes the Water Efficient Landscape Worksheet, a landscape design plan, and an irrigation design plan (if necessary).
- o Coastside Design Review Districts: All landscaping shall be drought-tolerant, and either native or non-invasive plant species. This requirement does not apply to fruit or vegetable gardens. Landscape plans shall include provisions for watering plants as needed to ensure initial plant growth. Plantings appropriate for the coastal climate should be selected. Placement of landscaping shall present a natural appearance (e.g., avoid linear configurations) and provide a smooth transition between development and open areas (e.g., planting of various heights).

PROJECT NOTICING STAGE (10 DAYS PRIOR TO HEARING)

4. NOTICING REQUIREMENTS

Applicant will be mailed a “NOTICE OF DESIGN REVIEW” cards which SHALL be posted at eye level on your parcel, visible from the street beginning ten (10) calendar days prior to and remaining posted through the date of your confirmed Design Review Committee hearing.

Party responsible for posting on site if not the applicant/owner: _____

5. STORY POLES

Story Poles are required for Coastside projects and shall be erected at least 10 calendar days prior to the date of your confirmed Design Review Committee hearing. See “*Coastside Design Review Committee (CDRC) Policies on Story Pole Installation and Major/Minor Modifications*,” which outlines story pole requirements.

Maximum Building Heights in Unincorporated San Mateo County

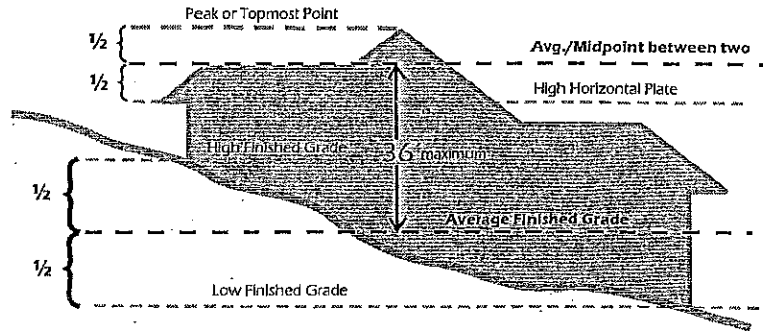
Heights Verification, per County procedures, is required for all homes, designed within 2 feet of the maximum height limit, and is required for all homes in Design Review Districts, regardless of proposed height. See Planner for additional information.

NOTE: All elevation exhibits shown below are intended only as examples to illustrate how height is generally calculated for the cited zoning districts; height compliance confirmation is applicable to all elevation plans (critical with variable topography). Always refer to the respective building height regulations for the applicable zoning district.

Zoning/Combining Districts: S-1 thru S-11, S-81, S-83, SS-103, S-108, RM RM-CZ, TPZ, TPZ-CZ, PAD:

35 ft./36 ft. Height Limit

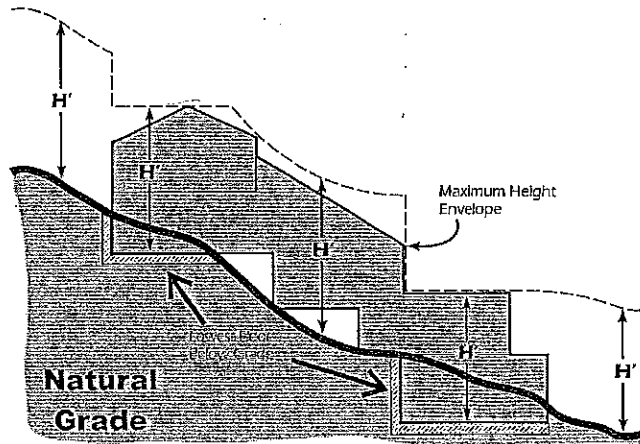
(Average Finished Grade to Average Roofline)



Zoning/Combining Districts: S-71, S-91, S-102, RH

28 ft. to 30 ft. Height Limit

(Natural Grade² (or lowest floor below grade) to topmost point of the building immediately above).



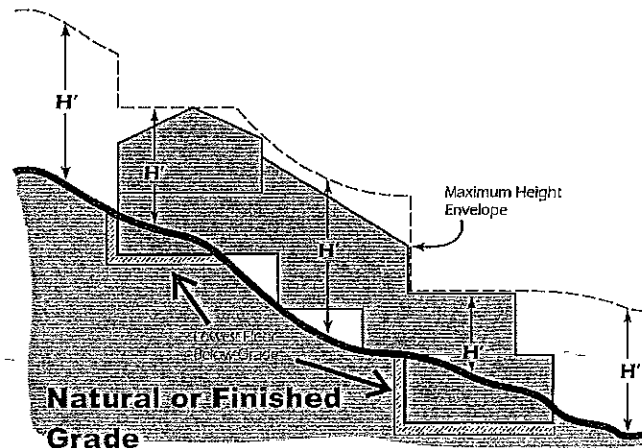
Zoning/Combining Districts: S-17, S-50, S-72 thru S-74, S-82, S-90, S-92 thru S-94, S-100, S-105

(Natural Grade² to topmost point of building immediately above).

28 ft. to 33 ft. Height Limit

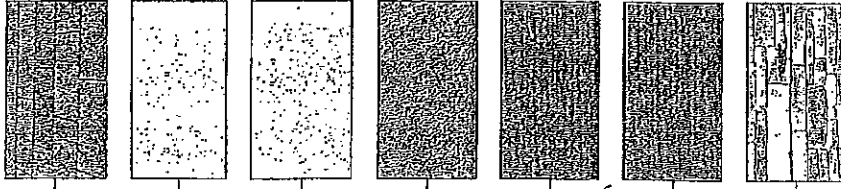
Zoning/Combining Districts: S-95, S-101, S-104, S-106, S-110

(Natural Grade² or Finished Grade¹ to topmost point of building immediately above, whichever is lower).



28 ft. to 30 ft. Height Limit

¹ Finished Grade (pursuit to sec. 6102.14) is defined as the topographic contours which result after completion of construction on the site. Average finished grade is the average level of the finished grade adjacent to building walls. The outer edges of projecting decks & balconies shall not be counted as "walls" if they are unenclosed below (supporting posts OK) & uncovered above. The average grade shall be calculated by topographic elevations noted at all building wall corners, noted both on the site plan & corresponding elevation plans.
² Natural Grade is defined as the topographic contours which exist prior to any disturbance related to construction on the site.



ROOFING: Asphalt composition shingles
Elk Presique II-Weathered wood color

EXTERIOR TRIM: Painted wood
Kelly Moore "Graystone" RM-230

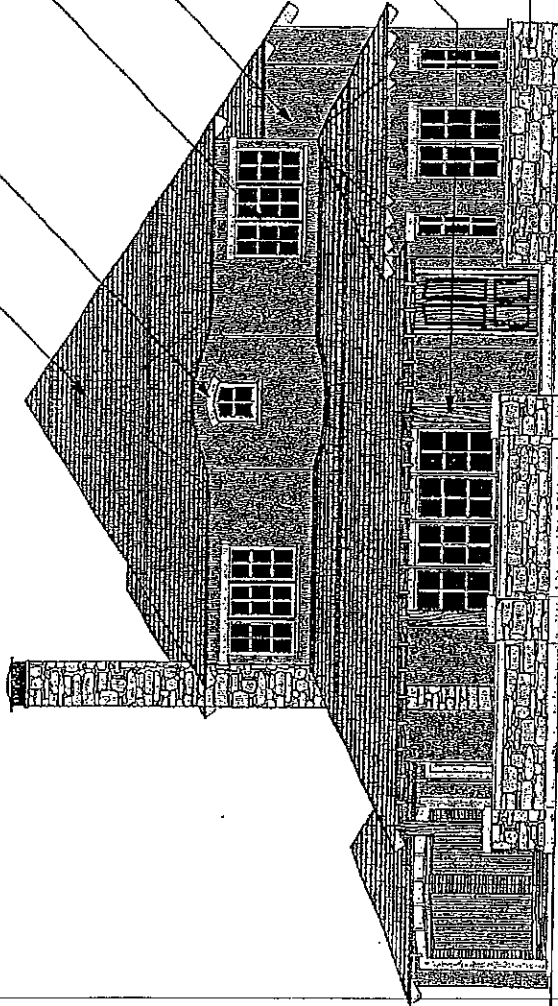
WINDOWS: Painted wood sash casements
Kobe/Kobe Heritage series-Kelly Moore "Graystone" RM-230

EXTERIOR WALLS: Cement Plaster-smooth finish
Western Blended Products, Sacramento-Sitoco - "Prairie Sage" #1017

GARAGE DOORS: Natural wood roll-up doors
Douglas Fir roll up door - Clear polyurethane finish

PORCH POSTS: Natural wood
12X12 Douglas Fir #1-Watson natural linseed oil finish

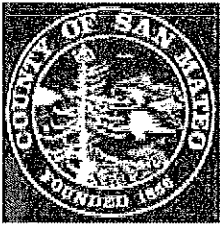
CHIMNEY/MASONRY BASE: Natural stone veneers
Boquet Canyon Ledgerstone-Peninsula Building Materials



SAMPLE PRIMARY BUILDING ELEVATION: Project Location

ABC Architects, Any Town, CA (650) 123-4567

The colors and materials represented here have been approved by the San Mateo County Design Review Board. Please call (650) 353-4161 with any questions, comments, or concerns. This is project #2003-0001. (psd/design review colors (dark wood), pad 7-12-04 ss)



County of San Mateo

Planning & Building Department

455 County Center, 2nd Floor
Redwood City, California 94063
650/363-4161 Fax: 650/363-4849

Mail Drop PLN122

plnbgldg@co.sanmateo.ca.us

www.co.sanmateo.ca.us/planning

COASTSIDE DESIGN REVIEW COMMITTEE (CDRC) POLICIES ON STORY POLE INSTALLATION AND MAJOR/MINOR MODIFICATIONS

The following policies shall apply to new residential development and additions to existing residences submitted for consideration by the CDRC on or after June 1, 2007, in all areas zoned "Design Review"(DR) within the urban Midcoast communities of El Granada, Miramar, Moss Beach and Montara:

Story Poles (Pre-Approval)

Policy 1: Require story poles to be erected, including netting, for all additions and new construction projects at least ten days prior to scheduled hearing date. The lowest finished floor and highest ridge shall be visibly marked on the pole.

Procedures:

- Story poles must be placed at all outside building corners and along the highest roof ridgeline. In order to identify the building envelope and the ridgeline, netting shall be extended on grade, from one corner pole to the other and atop one pole to another along the direction of the ridgeline, respectively.
- The story pole material shall be constructed of 2"x4" lumber or other sturdy material and should be properly braced and supported to ensure the health, safety and general welfare of the public. The netting shall be of orange snow fencing material, or anything comparable, measuring at least twenty-four (24) inches in width.
- In the event that a project is continued to a date uncertain, beyond the next regularly scheduled public hearing date, the story poles must be removed and re-installed prior to the next public hearing for that project.
- The story poles must remain in place until expiration of the appeal period, with removal to be completed within one week thereafter.
- In the event the required story poles are not installed, or are inadequate, the applicant will be requested to install or improve the story poles, resulting in the project being continued to a future date to allow time for the CDRC members to complete their site visits to view the installed/corrected poles.

- Upon determination that the installation of story poles is not practicable due to site constraints and/or environmental concerns, the applicant may be required to submit graphics including but not limited to digital imaging simulations, computer modeling and/or other visual techniques in lieu of the story poles.

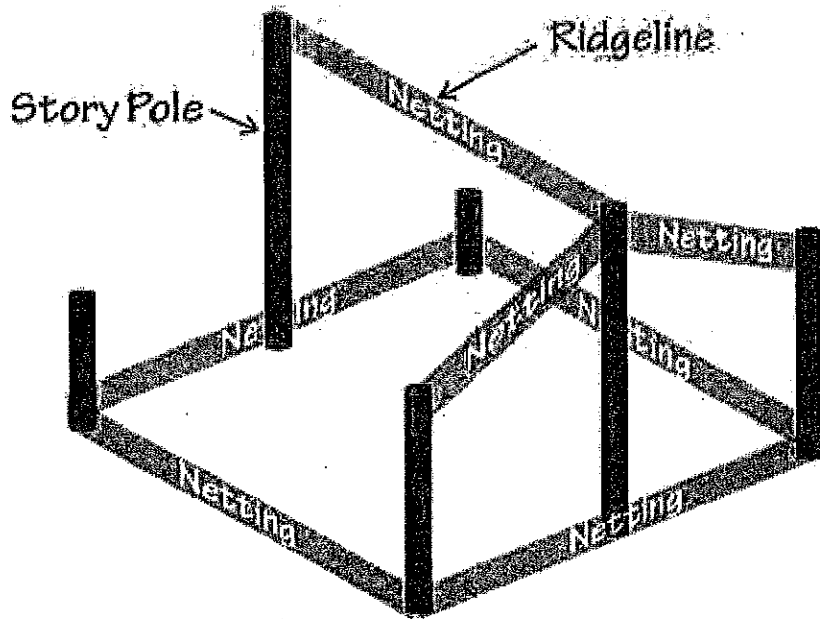
Major/Minor Modifications (Post-Approval)

Policy 2: The following are deemed major modifications to approved projects that require review by the CDRC for approval:

- a) Any approved project that deviates from the CDRC approved finished floor height by at least three (3) inches.
- b) Fluctuation in CDRC approved roof pitch greater than 1:12.
- c) Any changes that vary by more than three (3) inches from the CDRC approved building envelope.

Policy 3: Any changes to accommodate the deviations in the floor height should be adjusted within the building prior to consideration of any roof height adjustments.

Policy 4: Verification of final grade elevations at building corners by the project surveyor is required.



MWELO SUBMITTAL CHECKLIST

Submittal Date: _____

Project Address: _____

Applicant Name: _____ Phone: _____

The following checklist provides a list of information that must be included on the plans before your permit application can be processed. This checklist covers both the performance compliance method and the prescriptive compliance method. Please indicate which compliance method is used and provide the appropriate information on the plans.

- Performance Approach Prescriptive Approach (Skip to Page Three)

PERFORMANCE APPROACH

Landscape Documentation Package (Title 23, Chapter 2.7 §492.3)

- The project's address, total landscape area, water supply type, and contacts shall be stated on the plans.
- Add, sign and date the following statement on the plans: "I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package."
- Water Efficient Landscape Worksheet that includes a hydrozone information table and water budget calculations shall be submitted for plan check.
- A landscape design plan and irrigation design plan shall be submitted for plan check.

Water Efficient Landscape Worksheet (Title 23, Chapter 2.7 §492.4 and §492.13)

- Incorporate the Water Efficient Landscape Worksheet into plans. Show that the Maximum Applied Water Allowance (MAWA) meets or exceeds the calculated Estimated Total Water Use (ETWU).
- The evapotranspiration adjustment factor (ETAF) for the landscape project shall not exceed a factor of (0.55 for residential areas) (0.45 for non-residential areas).
- The plant factor used shall be from WUCOLS or from horticultural researchers with academic institutions. WUCOLS plants database can be found on-line at: <http://ucanr.edu/sites/WUCOLS/>
- All water features shall be included in the high water use hydrozone. All temporary irrigated areas shall be included in the low water use hydrozone.
- All Special Landscape areas shall be identified on the plans. The ETAF for new and existing (non-rehabilitated) Special Landscape Areas shall not exceed 1.0.
- For the purpose of calculating ETWU, the irrigation efficiency is assumed to be 0.75 for overhead spray devices and 0.81 for drip system devices.

Landscape Design Plan (Title 23, Chapter 2.7 §492.6)

- The landscape design plans, at a minimum, shall:
 - Delineate and label each hydrozone by number, letter, or other methods.
 - Identify each hydrozone as low, moderate, high water, or mixed water use.
 - Identify recreational areas, areas solely dedicated to edible plants, areas irrigated with recycled water, type and surface area of water features, impermeable and permeable hardscape, and any infiltration systems.
- For hydrozone with a mix of both low and moderate water use plants or both moderate and high water use plants, the higher plant factor or the plant factor based on the proportions of the respective plant water uses shall be used. Hydrozones containing a mix of low and high water use plants is not permitted.

- Turf is not allowed on slopes greater than 25% where the toe of the slope is adjacent to an impermeable hardscape.
- Add note to plans: "Recirculating water systems shall be used for water features"
- Add note to plans: "A minimum 3-inch layer of mulch shall be applied on all exposed soil surfaces of planting areas except turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated."
- Add note to plans: "For soils less than 6% organic matter in the top 6 inches of soil, compost at a rate of a minimum of four cubic yards per 1,000 square feet of permeable area shall be incorporated to a depth of six inches into the soil"

Irrigation Design Plan (Title 23, Chapter 2.7 §492.7)

- The irrigation plans, at a minimum, shall contain the following:
 - Location and size of spate water meters for landscape
 - Location, type, and size of all components of the irrigation system, including controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators, and backflow prevention devices.
 - Static water pressure at the point of connection the public water supply
 - Flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station.
- A dedicated water service meter or private submeter shall be installed for all (non-residential irrigated landscapes of at least 1,000sqft) (residential irrigated landscape areas of at least 5,000sqft).
- Add note to plans: "Pressure regulating devices are required if water pressure is below or exceeds the recommended pressure of the specified irrigation devices."
- Manual shut-off valves shall be required, as close as possible to the point of connection of the water supply, to minimize water loss in case of an emergency or routine repair.
- Add note to plans: "Check valves or anti-drain valves are required on all sprinkler heads where low point drainage could occur."
- Areas less than 10-feet in width in any direction shall be irrigated with subsurface or drip irrigation.
- Overhead irrigation shall not be permitted within 24-inches of any non-permeable surface.

Required Statements and Certification (Title 23, Chapter 2.7 §492.6, §492.7 and §492.9)

- Add the following statement on the landscape and irrigation plans: "I have complied with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plans".
- The final set of landscape and irrigation plans shall bear the signature of a licensed landscape architect, licensed landscape contractor, certified irrigation designer, licensed architect, licensed engineer, licensed land surveyor, or personal property owner.
- Add note to plans: "A diagram of the irrigation plan showing hydrozones shall be kept with the irrigation controller for subsequent management purposes."
- Add note to plans: "A Certificate of Completion shall be filled out and certified by either the designer of the landscape plans, irrigation plans, or the licensed landscape contractor for the project".
- Add note to plans: "An irrigation audit report shall be completed at the time of final inspection."

PRESCRIPTIVE APPROACH
(For landscape areas between 500 and 2,499 square feet)

Plant Material (Title 23, Chapter 2.7, Appendix D (b) (3))

- For residential areas, 75% of landscape, excluding edibles and areas using recycled water, shall consist of plants that average a WUCOLS plant factor of 0.3. WUCOLS plants database can be found online at: <http://ucanr.edu/sites/WUCOLS/>
- For non-residential areas, 100% of the plants, excluding edibles and areas using recycled water, shall consist of plants that average a WUCOLS plant factor of 0.3.
- Add note to plans: "A minimum 3-inch layer of mulch shall be applied on all exposed soil surfaces of planting areas except turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated."

Turf (Title 23, Chapter 2.7, Appendix D (b) (4))

- Turf shall not exceed 25% of the landscape area in residential areas.
- No turf permitted in non-residential areas
- Turf not permitted on slopes greater than 25%.
- Turf is prohibited in parkways less than 10 feet wide.

Irrigation (Title 23, Chapter 2.7, Appendix D (b) (5))

- Automatic weather-based or soil-moisture based irrigation controllers shall be installed on the irrigation system.
- Pressure regulators shall be installed on the irrigation system to ensure dynamic pressure of the system is within the manufacturer's recommended pressure range.
- Manual-shut-off valves shall be installed as close as possible to the point of connection of the water supply.
- Areas less than 10-feet in width in any direction shall be irrigated with subsurface irrigation or other means that produces no runoff or overspray.
- For non-residential projects with landscape areas of 1,000sqft or more, private sub-meter(s) to measure landscape water use shall be installed.
- Add note to plans: "At the time of final inspection, the permit applicant must provide the owner of the property with a certificate of completion, certificate of installation, irrigation schedule of landscape and irrigation maintenance."
- Add note to plans: "Unless contradicted by a soils test, compost at a rate of a minimum of four cubic yards per 1,000 square feet of permeable area shall be incorporated to a depth of six inches into the soil"

**County of San Mateo
Planning and Building Department**

General Erosion and Sediment Control Plan Guidelines
(Best Management Practices to be used during Site Preparation and Construction)

A complete Erosion and Sediment Control Plan (EC Plan) should include the following (as applicable to the site and project):

1. Delineation of Area of Work
a. For projects, including those requiring a Grading Permit, separate erosion and sediment control plan sheets are required to show the measures to be implemented at the grading stage (e.g., grading, foundation/retaining walls) and at the construction stage. For difficult projects only, additional plan sheets are required for each of the following phases: Grading and retaining wall phase, foundation and construction phase.
b. Show all areas of construction, including but not limited to: areas to be graded as shown on a grading plan, areas to be cleared, as well as structures, retaining walls, roads, drives, utilities, trenches, scaffolds, catch basins, etc. These areas should be consolidated and located outside steep or sensitive areas.
c. Protect surface water locations, providing primary control measures (e.g., silt fence along outer buffer zone of creek; do not disturb riparian areas) and secondary control measures (e.g., fiber rolls) in disturbed areas sloping toward the creek/ocean.
d. Protect storm drain inlets using fiber rolls, permeable rock sacks, or other measures that keep sediment from entering the drain. Show inlet locations and protection measure details on the EC Plan. Include on the EC Plan that filter fabric or filter baskets shall be installed in the drains and cleaned out after each rain event, or as needed to function properly. Do not use sand bags as these tear and can result in sand entering the storm drains.
e. Maximize and protect areas to be undisturbed (including sensitive areas and buffer zones), using a vegetative buffer strip or 6 ft. fence/barrier. Show the "limits of work" on the EC Plan and barriers along the "limit". Forbid work, storage, earth moving, vegetation clearing, and other disturbances outside of the "limit". Do not use hay bales as these can easily fall apart.
f. Provide a separate Tree Protection Plan to identify and protect trees, using fencing placed along driplines. An arborist report is required for those trees where work will encroach into the dripline. See separate Tree Protection Plan Guidelines.
g. Prevent runoff to off-site areas using perimeter controls (diversion berms, silt fencing, and/or fiber rolls). Silt fencing is preferred, but fiber rolls may work in some instances. Where the site is flat or the slope is gentle, installing these measures on the property line should be adequate. On slopes greater than 3:1, the measures must be installed along contour lines.
2. Prevent Erosion of Unstable or Denuded Areas
a. Show all proposed retaining walls in the EC Plan, including areas that will be used for stockpiling earth and storing construction materials
b. Indicate the location and method for stabilizing disturbed bare earth areas. Use seeding and/or mulching and the following, as necessary: i) For slopes less than 3:1, provide silt fencing or fiber rolls along contour lines. ii) For slopes greater than 3:1, anchored erosion blankets (rice, straw, or coconut) and fiber rolls or silt fencing at the crest are required. Jute netting is preferred when used with seeding.
c. Use diversion berms to divert water from unstable or denuded areas (e.g., top and base of a disturbed slope, grade breaks where slopes transition to a steeper slope).
d. Direct water from construction areas to designated temporary filtration/detention areas. Show any temporary detention areas for stormwater and stabilization of those areas.
3. Show Locations of Logistics Areas
a. Show location of office trailer(s), storage sheds, temporary power pole, scaffold footprint, and other temporary installations on the EC Plan. Show how they will be accessed and show protection of the access routes.
b. Show location of utility trenches, indicate utility types, and identify timing of installation.

4. Construction Access Routes

- a. Use stabilized designated access points for entrance onto the property using 3" - 6" fractured aggregate over geo-textile fabric over the first 20 feet of the property. If using an existing paved driveway, identify on EC Plan. Where vehicles or equipment will travel from an existing paved driveway to unpaved areas within the property, a stabilized transition point is required that meets the above standards.
- b. Provide designated area(s) for parking of construction vehicles, using aggregate over geo-textile fabric.
- c. Show all access roads/ramps and access points used by excavation equipment, trucks, or fork lifts/crane access (second floor construction). For unpaved routes, use ridges running diagonally across the road that run to a stabilized outlet. The type of materials used for stabilization and their locations shall be indicated on the EC Plan. Materials for this purpose are required to be stored on-site.

5. Containment of Construction Materials and Waste

- a. Show location, installation and maintenance of a concrete/stucco mixer, washout, and pits. No concrete, mortar, or stucco washout is allowed to be placed directly on the soil/ground. Specify the method used to contain the washout.
- b. Show location of portable toilets away from surface water locations and storm drain inlets.
- c. Show storage location and containment of construction materials during work, as well as afterhours/weekends. Show the location of lumber, gravel, and materials storage areas on the EC Plan. Show how they will be accessed and show protection of the access routes.
- d. Show areas and proposed protection of temporary stockpiles using anchored-down plastic sheeting in dry weather. The use of plastic sheeting during the wet season, Oct 1 through April 30, is not allowed, unless the stockpile is also protected with fiber rolls containing the base of the stockpile. Alternatively, in wet weather, or for longer storage, use seeding and mulching, soil blankets or mats.
- e. Indicate the location of refuse piles and debris box locations on the EC Plan. Show how they will be accessed and show protection of the access routes.

6. Construction Schedule

- a. Provide an anticipated construction schedule and/or construction duration (in weeks or months).

7. Other Required Permits/Inspections

- a. Does the project require a County Grading Permit? Check with Planning staff to verify. For County Grading Permits (only): Grading associated with a County Grading Permit is prohibited during the Winter Grading Moratorium (Oct. 1 through April 30).
- b. Does the project disturb 1 acre (43,560 sq. ft.) of area or more? If Yes:
 Applicant shall file Notice Of Intent (NOI) with State Water Resources Control Board for State General Construction Activity NPDES Permit. (Prior to issuance of the building permit, applicant must submit WDID Number to Planning).
- c. A Pre-Site EC and/or Tree Protection Inspection may be required prior to the issuance of a building, grading, or demolition permit.

8. Add the Following Standard Comments on the EC Plan:

Erosion Control Point of Contact. (Please provide an Erosion Control Point of Contact including name, title/qualification, email, and phone number. The EC Point of Contact will be the County's main point of contact if Erosion Control or Tree Protection corrections are required).

Perform clearing and earth-moving activities only during dry weather. Measures to ensure adequate erosion and sediment control shall be installed prior to earth-moving activities and construction.

Measures to ensure adequate erosion and sediment control are required year-round. Stabilize all denuded areas and maintain erosion control measures continuously between October 1 and April 30.

Store, handle, and dispose of construction materials and wastes properly, so as to prevent their contact with stormwater.

Control and prevent the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges to storm drains and watercourses.

Use sediment controls or filtration to remove sediment when dewatering site and obtain Regional Water Quality Control Board (RWQCB) permit(s) as necessary.

Avoid cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated.

Limit and time applications of pesticides and fertilizers to prevent polluted runoff.

Limit construction access routes to stabilized, designated access points.

Avoid tracking dirt or other materials off-site; clean off-site paved areas and sidewalks using dry sweeping methods.

Train and provide instruction to all employees and subcontractors regarding the Watershed Protection Maintenance Standards and Construction Best Management Practices.

Placement of erosion materials at these locations are required on weekends and during rain events: (List locations)

The areas delineated on the plans for parking, grubbing, storage, etc., shall not be enlarged or "run over."

Construction sites are required to have erosion control materials on-site during the "off-season."

Dust control is required year-round.

Erosion control materials shall be stored on-site.

Use of plastic sheeting between October 1 and April 30 is not acceptable, unless for use on stockpiles where the stockpile is also protected with fiber rolls containing the base of the stockpile.

Tree protection shall be in place before any demolition, grading, excavating or grubbing is started.

Sources: Watershed Protection Maintenance Standards (County of San Mateo Department of Public Works, Watershed Protection website); SMCWPP's Erosion and Sediment Control Field Manual (Planning Counter)

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SAN MATEO COUNTY
GUIDELINES FOR DRAINAGE REVIEW

The following is intended to summarize the San Mateo County Policy on Storm Drainage to guide the applicant and the civil engineer when preparing a drainage analysis as a required "Condition of Approval" for proposed development.

SAN MATEO COUNTY DRAINAGE POLICY:

1. Post-development peak flow (runoff) and velocity must be less than or equal to pre-development peak flow and velocity in areas where there are no existing down stream storm drain systems. No additional runoff, caused by development, can cross property lines. In areas where there are existing storm drain systems, those systems must be of adequate size to accept the increased runoff, or, mitigation procedures must be taken. Mitigation procedures may include on-site storm drain detention or off-site storm drain improvements.
2. If permanent structures are to be built over existing drainage courses or drainage facilities courses or drainage facilities.
 - a. adequate drainage facilities must be provided to protect the proposed development and existing downstream development.
 - b. A means of adequate access must be provided for maintenance
 - c. An alternate system for drainage must be provided in the event the primary system becomes plugged or otherwise inoperable.
3. The use of dry wells to dispose of surface runoff may be allowed.
4. Drainage systems that are designed to rely on pumps may not be allowed.

To comply with County Policy, the applicant's civil engineer must submit a drainage report, hydrologic study, hydraulic calculations, and drainage improvement plans. The following sections present general guidelines for these items.

DRAINAGE REPORT:

A drainage report (written narrative) must be submitted to the County for review and include the following:

1. Delineation of drainage basins and subbasins.
2. Description of proposed drainage system.
3. Discussion of rationale used to design system
4. Discussion of methods and/or calculations.
5. Description of how excess drainage will be detained.
6. Description of how discharge will be controlled to comply with County Policy.

HYDROLOGIC ANALYSIS:

The hydrologic calculations must be based on an appropriate design storm for the specific site conditions and project. For projects located within a floodplain or bounding an existing drainage course located on or adjacent to the property, the design shall be based upon a design storm of no less than a 100 year recurrence interval may be used.

The hydrologic analysis must include the following:

1. ANALYSIS/CALCULATIONS MUST BE SIGNED AND STAMPED BY A REGISTERED CIVIL ENGINEER. WITHOUT THIS REQUIREMENT BEING MET, NO FURTHER REVIEW OF THE DRAINAGE ANALYSIS WILL BE PERFORMED.
2. All drainage basins and/or subbasins clearly shown on a map plan.
3. A clear description of the method used to determine peak flows.
4. If the rational method ($Q = C I A$) is used;
 - a. provide a clear statement of the basis for the runoff coefficient, (C) rainfall intensity (I), time of concentration (T), and duration, etc., and
 - b. a clear description showing the areas used in the formula.
5. If another method is used, provide a statement of method, a clear description of the basis for all assumptions and the source of all information used in the particular method.
6. Calculations for pre-development peak flow AND velocity.
7. Calculations for post-development peak flow AND velocity.
8. Calculations for detention basin design and a determination of the required volume of storage to comply with a County Policy.

HYRAULIC ANALYSIS:

ANALYSIS/CALCULATIONS MUST BE SIGNED AND STAMPED BY A REGISTERED CIVIL ENGINEER. WITHOUT THIS REQUIREMENT BEING MET, NO FURTHER REVIEW OF THE DRAINAGE ANALYSIS WILL BE PERFORMED.

The hydraulic analysis must include calculations that clearly demonstrate:

1. that the post-development discharge will be controlled, and peak flow and velocity will not exceed pre-development values

2. that all storm drainage facilities have sufficient capacity to carry the anticipated peak flows. These facilities include, but are not necessarily limited to:
 - a. pipes
 - b. culverts
 - c. swales
 - d. ditches
 - e. valley gutters, etc.

PLANS:

The plans must incorporate the following items:

1. PLANS MUST BE SIGNED AND STAMPED BY A REGISTERED CIVIL ENGINEER. WITHOUT THIS REQUIREMENT BEING MET, NO FURTHER REVIEW OF THE DRAINAGE ANALYSIS WILL BE PERFORMED.
2. All proposed storm drainage contours and/or spot elevations clearly indicated.
3. Existing and proposed contours and/or spot elevations clearly indicated.
4. All flow patterns clearly shown.
5. Profiles of all storm drain lines including all crossings of other utilities. A minimum one (1) foot clearance between utility lines is required.
6. Construction details must be shown, including but not necessarily limited to:
 - a. specific locations of all storm drainage facilities specified (i.e. stations, dimensions from property lines, etc.),
 - b. dimensions of all storm drainage facilities, including Standard County Drawings where applicable,
 - c. pipe/swale slopes, pipe sizes, etc.,
 - d. invert elevations, and
 - e. construction materials must be specified (i.e. RCP, PVC, DIP, etc.).

SUMMARY:

The above is intended only to provide the applicant and the applicant's civil engineer with minimum guidelines when preparing a drainage analysis. The County does not specify the design method that the applicant's engineer uses to prepare the drainage analysis. It is incumbent on the engineer to select a design method that is appropriate for the specific project and site accepting responsibility for the design. The County reviews the design as to concept and to see that the design adequately reflects County policy. The County's review does not include checking the calculations for accuracy nor making assumptions regarding the analysis.

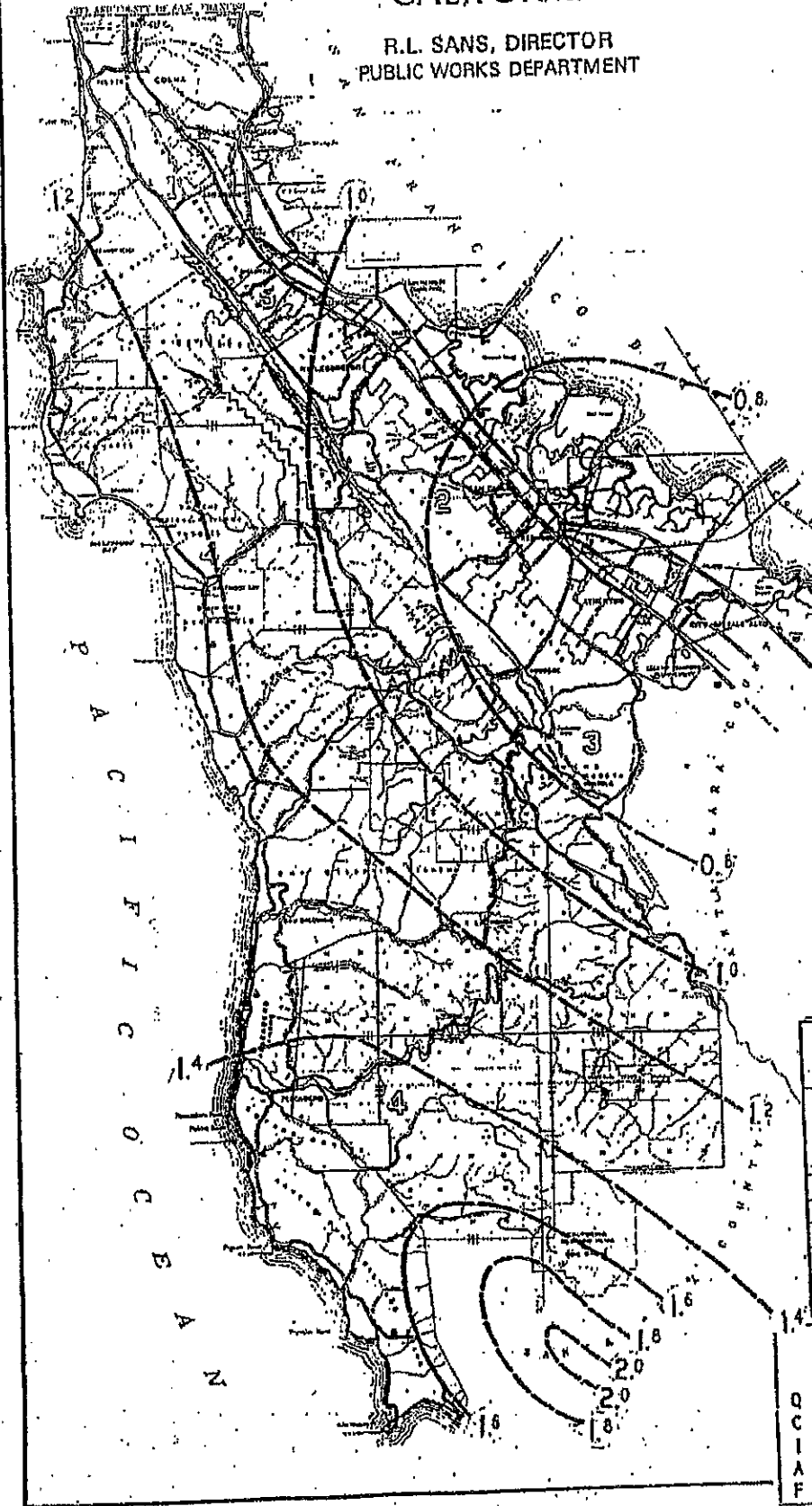
It is to the applicant's advantage to clearly show what is being recommended for construction. Mistakes, ambiguities, incomplete information, and poor preparation of the analysis only serve to delay the review and approval process.

RAINFALL RUNOFF DATA

SAN MATEO COUNTY

CALIFORNIA

R.L. SANS, DIRECTOR
PUBLIC WORKS DEPARTMENT



RAINFALL			
TIME OF CONCENTRATION		INTENSITY INCHES PER HOUR	
HRS.	MIN.	10 YR.	100 YR.
0	10	2.45	3.60
0	15	2.05	3.00
0	20	1.73	2.55
0	25	1.50	2.22
0	30	1.33	1.95
0	35	1.20	1.75
0	40	1.10	1.61
0	45	1.02	1.49
0	50	0.95	1.37
0	55	0.90	1.28
1	00	0.86	1.21
1	15	0.75	1.07
1	30	0.67	0.95
1	45	0.61	0.87
2	00	0.56	0.80
2	30	0.49	0.70
3	00	0.44	0.63
3	30	0.40	0.57
4	00	0.37	0.53
4	30	0.34	0.49
5	00	0.32	0.45
6	00	0.29	0.41
7	00	0.26	0.38
8	00	0.24	0.35
9	00	0.23	0.33
10	00	0.21	0.30
12	00	0.19	0.27
24	00	0.13	0.18

RUNOFF COEFFICIENTS	
TYPE OF DEVELOPMENT	COEF.
PARKS AND CEMETERIES	0.30
RESIDENTIAL - ACRES	0.40
RESIDENTIAL - REGULAR	0.50
INDUSTRIAL	0.65
COMMERCIAL	0.75
PAVED AREAS	0.85

RATIONAL FORMULA
 $Q = C I A F$
 Q - RUNOFF - CUBIC FEET PER SECOND
 C - RUNOFF COEFFICIENT - PER CENT
 I - RAINFALL INTENSITY - INCHES PER HOUR
 A - DRAINAGE AREA - ACRES
 F - INTENSITY FACTOR (FROM MAP)

Dr. 22-1846