RECOMMENDED ACTION AND JUSTIFICATION: (Policy Item: Yes ___ No X ___)

Request for variance from statutory setback distance of 100 feet between well and septic system leach field for APN 06-160-013, Robert and June Manly recommend variance based upon uniqueness of property regarding geology and hydrology; recommend resolution authorizing variance from statutory setback distance between well and leach field for APN 06-160-013, Robert and June Manly, owners, with the following conditions:
1. Setback distance to encroach no closer than seventy (70) feet.
2. Quarterly bacteriological testing to be performed by the property owner, on water from private well on said APN, to include Coliform count and Heterotrophic Plate Count. Copy of results to be sent to Health Department.
3. In the case of any bacteriological test of water demonstrating presence of Coliform organisms, or a significant increase in the Heterotrophic Plate Count, the County Health Department to be immediately notified and the drinking of raw water from that well to be immediately suspended.
4. In the event that the water from said well should demonstrate bacteriological contamination and that standard and reasonable attempt to decontaminate the well fail, after three such attempts, the land owner will destroy the well.

BACKGROUND AND HISTORY OF BOARD ACTIONS:
N/A

LIST ALTERNATIVES AND CONSEQUENCES OF NEGATIVE ACTION:
Do not approve variance — owner will be required to comply with condition of Planning Commission Resolution 92-20 and develop property utilizing other alternatives.

COSTS: ( ) Not Applicable
A. Budgeted current FY $________
B. Total anticipated costs $________
C. Required additional funding $________
D. Internal transfers $________

SOURCE: ( ) 4/5ths Vote Required
A. Unanticipated revenues $________
B. Reserve for contingencies $________
C. Source description:
Balance in Reserve for Contingencies, if approved: $________

SPECIAL INSTRUCTIONS:
List the attachments and number the pages consecutively:

CLERK'S USE ONLY:
Res. No.: 93-603 Ord. No. ______
Vote - Ayes: 5 Noes: ______
Absent: ______ Abstained: ______
Approved: ______ Denied: ______
( ) Minute Order Attached ( ) No Action Necessary

The foregoing instrument is a correct copy of the original on file in this office.
Date: ______
ATTEST: MARGIE WILLIAMS, Clerk of the Board
County of Mariposa, State of California
By: Deputy

ADMINISTRATIVE OFFICER'S RECOMMENDATION:
This item on agenda as:
( ) Recommended
( ) Not Recommended
( ) For Policy Determination
( ) Submitted With Comment
( ) Returned for Further Action
Comment: ______

A.O. Initials: ______

Action Form Revised 5/92
November 30, 1993

TO : Board of Supervisors
FROM : Charles B. Mosher, MD, Health Officer
SUBJECT : Variance Request on Manly Property, APN 06-160-013

BACKGROUND:

In December of 1990, the owner drilled a well on his lot under permit from the County Health Department. At that time he was given permission to utilize a portable chemical toilet on a temporary basis. On subsequently applying for an on-site sewage disposal system, he was granted a variance from the Planning Commission, (Resolution 92-20, copy enclosed) which applied to setbacks from property lines. One of the conditions of this variance was that the existing on-site well should be abandoned or destroyed (condition #2) inasmuch as the statutory 100 foot setback between well and septic leach field could not be obtained on the 50 X 100 foot lot.

As with other lots in Foresta, alternatives that would allow rebuilding on the lot were explored and presented to the owner, including installation of a tank for potable water, and swapping property with the Park Service to allow two adjoining lots to cooperate with sewage and water.

The owner subsequently requested consideration of a variance from the 100 foot setback (maintained for public health reasons in County Code and state guidelines) based upon unique conditions of his lot. It was determined that the Health Officer did not have the authority to grant such a variance and discussion was held with County Counsel and Supervisor Art Baggett regarding the appropriate process in this regard (during the tenure of the present Health Officer, no such variance has ever been previously requested). The process outlined has been fully complied with by the owners and the Health Department and is as follows:
1. The owner retained a professional geologist to document the geological findings of the lot which are the basis of the premise by the owner that a closer encroachment than 100 feet would be unlikely to result in contamination of the underground water supply.

2. The County Health Department retained the services of a hydrogeologist knowledgeable in California underground water supplies to review the findings from the property owner's privately retained consultant. (The owner had agreed to pay for this review. The Health Department, however, obtained services of a State employee from the Department of Water Resources at no expense to the owner).

3. The Health Department formulated a recommendation based upon the findings.

4. The request for variance is submitted to the Board of Supervisors for action.

APPLICABLE CODE:

1. County Code Section 13.08.090, Rules and Regulations, Section .070 "Minimum Setbacks" (Exhibit A).

2. County Well Ordinance 13.16.090, Required Setbacks, refers to Department of Water Resources Bulletin 74-81 (Exhibit B).


4. Regional Water Quality Control Board Guidelines for On-Site Sewage Disposal (Exhibit D).


ANALYSIS OF REQUEST:

Health Department staff analysis, based upon specialist review of privately retained geologist's report indicates the following findings:

1. Reasonable evidence that there is a solid slab of granite separating the proposed leach field and the existing well.

2. Documentation from the well driller's log that there was minimal fracture activity encountered in the granite slab until approximately 80 feet.

3. Reasonable evidence that water inflow into the well comes from the opposite direction of the site of the potential leach field (south or southeast).
4. A properly constructed well including annular seal.

5. Adequate soil at the site of the proposed leach field.

6. Mr. Manly's offer and agreement to monitor the quality of the water with periodic bacteriological testing.

Staff finds that the geological conditions on this lot are unique and sufficient to reasonably allow a closer encroachment between leach field and well than the 100 foot minimum established by County Code and generally accepted local practice.

RECOMMENDATION:

1. Setback distance to encroach no closer than seventy (70) feet.

2. Quarterly bacteriological testing to be performed by the property owner on water from private well on said APN, to include Coliform count and Heterotrophic Plate Count. Copy of results to be sent to Health Department.

3. In the case of any bacteriological test of water demonstrating presence of coliform organisms, or significant increase in the Heterotrophic Plate Count, the County Health Department to be immediately notified and the drinking of raw water from that well to be immediately suspended.

4. In the event that the water from said well should demonstrate bacteriological contamination and that standard and reasonable attempts to decontaminate the well fail, after three such attempts, the land owner will destroy the well.
.070 Minimum Setbacks. Minimum setbacks are shown in the table below:

<table>
<thead>
<tr>
<th>Facility</th>
<th>Domestic Well</th>
<th>Public Well</th>
<th>Flowing Stream 1</th>
<th>Drainage Course or Ephemeral Stream 2</th>
<th>Cut or Fill Bank</th>
<th>Property Line</th>
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<td>4h</td>
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<td>200</td>
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1. As measured from the line which defines the limit of a 10-year frequency flood.
2. As measured from the edge of the drainage course or stream.
3. Distance in feet equals four times the vertical height of the cut or fill.
4. This distance shall be maintained when individual wells are to be installed and the minimum distance between waste disposal and wells cannot be assured.
5. As measured from the high water line.
6. Leach fields must be located in areas of less than 30% slope.

.080 Minimum Requirements.

A. Septic Tank:

1. Minimum septic tank is as follows:

   **Capacity of Septic Tanks**

<table>
<thead>
<tr>
<th>Number of Bedrooms</th>
<th>Liquid Capacity in Gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3</td>
<td>1000</td>
</tr>
<tr>
<td>4</td>
<td>1200</td>
</tr>
<tr>
<td>5</td>
<td>1500</td>
</tr>
</tbody>
</table>

   Tank capacity shall be three hundred (300) gallons per bedroom for each additional bedroom over 5.
set out in the permit. If there have been exceptional circumstances, the health department may grant the applicant an extension. Upon the expiration of the permit, no further work shall be done unless and until the applicant has received an extension or a new permit. (Ord. 802, Sec.I, 1991)

13.16.070 Permit--Suspension and revocation.
A. Circumstances for such action: The health department may suspend or revoke any permit issued pursuant to this Well Ordinance, whenever it finds that the permittee has violated any of the provisions of this Well Ordinance, or has misrepresented any material fact in his application, or any supporting documents, for such a permit. Prior to ordering any such suspension or revocation, the health department shall give the permittee an opportunity for a hearing thereon, after reasonable notice. The hearing shall be before the health officer or his designated representative. An appeal may be made as set forth below in section 13.16.200 of this Well Ordinance.
B. Consequences: No person whose permit has been suspended or revoked shall continue to perform the work for which the permit was granted until, in the case of suspension, such permit has been reinstated by the health department.
C. Ordered additional work: Upon suspending or revoking any permit, the health department may order the permittee to perform any work reasonably necessary to protect the underground waters from pollution or contamination, if any work already done by the permittee has left a well in such condition as to constitute a hazard to the quality of the underground waters. No permittee or person who has held any permit issued pursuant to the Well Ordinance shall fail to comply with any such order. (Ord. 802, Sec.I, 1991)

13.16.080 Filing fees.
Filing fees may be set by the board from time to time by resolution. (Ord. 802, Sec.I, 1991)

13.16.090 Required setbacks.
As outlined in Department of Water Resources bulletin 74-81 and/or subsequent revisions and the Mariposa County health department rules and regulations. (Ord. 802, Sec.I, 1991)

13.16.100 Well driller's report.
Any person who has drilled, dug, bored, deepened or destroyed a well shall, within thirty (30) calendar days after completion of the work, furnish the health officer with a complete log of the well i.e., Report of Completion (Water Well Driller's Report, Department of Water Resources Form 188) as required by California Water Code section 13751. The log shall contain the following information:
  a. A description of the strata encountered;
  b. The depth of the well;
  c. Depth of the first water encountered and the depth of the water level after development of the well;
  d. Depth of casing or casings including type and location of perforations;
Section 5. Special Standards.

A. In locations where existing geologic or ground water conditions require standards more restrictive than those described herein, such special additional standards may be prescribed by the enforcing agency.

B. Special standards are necessary for the construction of recharge or injection wells, horizontal wells and other unusual types of wells. Design of these wells is subject to the approval of the enforcing agency.

Section 6. Well Drillers.

The construction, alteration, or destruction of wells shall be performed by contractors licensed in accordance with the provisions of the Contractors License Law (Chapter 9, Division 3, of the Business and Professions Code) unless exempted by that act.

Section 7. Reports.

Reports concerning the construction, alteration, or destruction of water wells shall be filed with the California Department of Water Resources in accordance with the provisions of Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code.

Part II. Well Construction

Section 8. Well Location with Respect to Contaminants and Pollutants.

A. All wells shall be located an adequate horizontal distance from potential sources of contamination and pollution.

1/ A program to protect underground drinking water sources from endangerment by the subsurface emplacement of fluids through well injection is required under the Federal Safe Drinking Water Act (Public Law 93-523) signed into law December 16, 1974. On June 24, 1980, the U.S. Environmental Protection Agency issued rules and regulations establishing technical criteria and standards governing the construction of injection wells. Revisions were made August 27, 1981, and October 1, 1981. These regulations are Part 146 of Title 40, Protection of Environment, of the Code of Federal Regulations (40CFR146).


3/ Such potential sources of contamination and pollution include: sewers, both sanitary and storm sewers, leaching fields (from septic tanks), sewage and industrial waste ponds, barnyard and stable areas, feedlots, solid waste disposal sites, tanks and pipelines (both above ground and buried) for storage and conveyance of petroleum products or chemicals, etc.
Most of the factors involved in determining safe distances in a particular area are usually not known. Based on past experience and general knowledge, the following horizontal distances are considered safe where dry upper unconsolidated formations, less permeable than sand, are encountered:

| Sewer, watertight septic tank, or pit privy | 50 feet (15 metres) |
| Subsurface sewage leaching field | 100 feet (30 metres) |
| Cesspool or seepage pit | 150 feet (45 metres) |
| Animal or fowl enclosure | 100 feet (30 metres) |

Where in the opinion of the enforcing agency adverse conditions exist, the above distances shall be increased or special means of protection, particularly in the construction of the well, shall be provided.

B. In addition, if possible, the well shall be located up the ground water gradient (upstream) from the specified sources of contamination. By doing so this provides assurance that potential contamination would be moving naturally away from the area of production. However, in an unconfined aquifer consideration shall also be given to the possibility of reversal of gradient near the well due to pumping (see Figure 3), the pumping of nearby wells, or general decline of the water table.

C. The top of the casing shall terminate above grade or above any known conditions of flooding by drainage or runoff from the surrounding land. For community water supply wells this level is defined as above the

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1/ Because of the many variables involved in the determination of the safe horizontal distance of a well from potential sources of contamination and pollution, no one set of distances will be adequate and reasonable for all conditions. In areas where adverse conditions exist, the distances listed should be increased. Conversely, where especially favorable conditions exist or where special means of protection, particularly in construction of the well are provided, lesser distances may be acceptable if approved by the enforcing agency.

2/ If the well is a radial collector well, these distances apply to the furthest extended points of the well.

3/ When water is pumped from a well a drawdown "cone of depression" is formed in the water surface surrounding the well and ground water in the area of the cone flows toward the well. Similar cones formed by nearby wells can influence the shape of the cone or enlarge the area being drawn upon resulting in a change in direction of flow.
Guidelines for Waste Disposal from Land Developments

- Evaluation of the capability of individual waste treatment systems to achieve continuous safe disposal of wastes requires detailed local knowledge of the area involved. The experience and recommendations of local agencies will, therefore, be an important input to the information upon which the Board will base its decision.

- There are many areas within the Central Valley that are not conducive to individual waste treatment and disposal systems. In these areas, connection to an adequate community sewerage system is the most satisfactory method of disposing of sewage. The Board believes that individual disposal systems should not be used where community systems are available and that every effort should be made to secure public sewer extensions, particularly in urban areas. Where connection to a public sewer is not feasible and a number of residences are to be served, due consideration should be given to construction of a community sewage treatment and disposal system.

- The installation of individual disposal systems, especially in large numbers, creates discrete discharges which must be considered on an individual basis. The life of such disposal systems may be quite limited. Failures, once they begin in an area, generally will occur on an area-wide basis. Further, regular maintenance is important to successful operation of individual disposal systems. To assure continued protection of water quality, to prevent water pollution and to avoid the creation of public health hazards and nuisance conditions, a public entity* shall be formed with powers and responsibilities defined herein for all subdivisions having 100 lots or more. Subdivisions with less than 100 lots which threaten to cause water quality or public health problems will also be required to form a public entity.

Criteria for Septic Tank - Leaching Systems

The following criteria will be applied to assure continued preservation and enhancement of state waters for all present and anticipated beneficial uses, prevention of water pollution, health hazards, and nuisance conditions. These

* Public Entity - A local agency, as defined in the State of California Government Code Section 53090 et seq., which is empowered to plan, design, finance, construct, operate, maintain, and to abandon, if necessary, any sewerage system or the expansion of any sewerage system and sewage treatment facilities serving a land development. In addition, the entity shall be empowered to provide permits and to have supervision over the location, design, construction, operation, maintenance, and abandonment of individual sewage disposal systems within a land development, and shall be empowered to design, finance, construct, operate, and maintain any facilities necessary for the disposal of wastes pumped from individual sewage disposal systems and to conduct any monitoring or surveillance programs required for water quality control purposes. (Unless there is an existing public entity performing these tasks.)

19/2/6
Guidelines for Waste Disposal from Land Developments

Criteria prescribe conditions for waste disposal from septic tank-leaching systems for single family residential units or the equivalent and do not preclude the establishment of more stringent criteria by local agencies or the Board. The Board may prohibit the discharge from septic tank-leaching systems which do not conform to these criteria. Systems which cannot meet the following criteria may be allowed in selected areas if they are individually designed. The criteria may not be applicable in all cases to commercial or industrial developments.

The septic tank, absorption systems, and disposal area requirements for other than single family residential units shall be based upon the current edition of the "Manual of Septic Tank Practice" or in accordance with methods approved by the Executive Officer. An adequate replacement area equivalent to at least the initial disposal area shall be required at the time of design of the initial installation and incompatible uses of the replacement area shall be prohibited.

Minimum Distances

The Board has determined the following minimum distances should be followed in order to provide protection to water quality and/or public health:

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(1) As measured from the line which defines the limit of a 10-year frequency flood.

(2) As measured from the edge of the drainage course or stream.

(3) Distance in feet equals four times the vertical height of the cut or fill bank. Distance is measured from the top edge of the bank.

(4) This distance shall be maintained when individual wells are to be installed and the minimum distance between waste disposal and wells cannot be assured.

(5) As measured from the highwater line.
MARIPOSA COUNTY PLANNING COMMISSION

RESOLUTION NO. 92-20

A RESOLUTION APPROVING VARIANCE APPLICATION NO. 92-10

ROBERT M. MANLY, APPLICANT.

WHEREAS, the Mariposa County Planning Commission has received an application for a variance to reduce the public street frontage and front property line setback requirements as contained in Section 17.108.130 (A) of the Mariposa County Zoning Ordinance to allow for the installation of a septic leach field ten (10') feet from the front property line and forty (40') feet from the centerline of Muir Way; and

WHEREAS, Section 2.52.180 and Chapter 17.120 of County Code charges the Planning Commission with the responsibility of acting on such variance applications; and

WHEREAS, the Planning Commission has held a duly noticed public hearing in accordance with County Code and State Law; and

WHEREAS, environmental review has been performed on the project in accordance with the California Environmental Quality Act and County Environmental Review Policies and Procedures.

NOW THEREFORE BE IT RESOLVED, that the Planning Commission hereby has determined the project is categorically exempt from the requirements of the California Environmental Quality Act (Class 5 exemption, Section 15305(a) CEQA Guidelines) and approves Variance Application No. 92-10,
specifically providing for a reduction of the public street frontage and front property line setback requirement of the Mariposa County Zoning Ordinance to allow for the installation of a septic leach field ten (10') feet from the front property line and forty (40') feet from the centerline of Muir Way, subject to the following conditions:

1. The design of the proposed on-site septic disposal system shall be approved by the County Sanitarian prior to installation and the system shall meet all County Health department standards and regulations.

2. The existing on-site well shall be abandoned, or destroyed for public and private drinking water purposes according to the discretion of the Mariposa County Health Department and must meet all County Health Department standards and regulations prior to the installation and approval of the on-site septic disposal system. The Mariposa County Health Department shall oversee the abandonment or destruction of the well on the property and any newly proposed well or water source must meet County Health Department standards and regulations.

BE IT FURTHER RESOLVED that the approval of this variance is based on the following findings as required by Section 17.120.050 of the Mariposa County Zoning Ordinance and State law:

1. The small size of the parcel, established Health Department setback requirements from a septic leach field to a well, the required public street frontage and front property line setback requirement, placement of the existing
and proposed improvements on the parcel, and the limited area
for septic disposal on the 5,000 square foot lot, are
exceptional and extraordinary circumstances and conditions
that are unique only to the subject property, and are
generally not applicable to other properties in the adjacent
area and zone. In addition, development of an approved on-
site septic disposal system could not occur without
encroaching into required Health Department setback areas
without approval of the variance.

2) The granting of the variance will not significantly
affect adjoining property owners as a safe and adequate
distance from existing residences adjoining the subject
property will be available from the proposed engineered
septic system and the proposed location is in the best
location to ensure public health and safety. The County
Sanitarian stated that the proposed location will meet
County Health Department standards and will not adversely
impact adjoining properties upon the development of the
construction easement. As such, the granting of the variance
will not have a detrimental effect on the public welfare or
be injurious to property or improvements in the surrounding
area.

3) The granting of the variance to reduce the required
public street frontage and front property line setback
distance will not adversely affect the goals, objectives and
standards of the Mariposa County Zoning Ordinance or the
General Plan.
4) The small size of the parcel, location of the existing and proposed improvements, required Health Department setback requirements in addition to County Zoning Ordinance setback requirements, are special circumstances applicable to the property to which strict application of the County Zoning Ordinance setback requirements would not allow the property owner to develop a replacement on-site septic system meeting County Health Department requirements, and would deprive the property owner of privileges enjoyed by surrounding property owners.

5) The granting of the variance to allow for the installation of the on-site septic system to serve the proposed development on the parcel will not constitute a grant of special privilege or be inconsistent with the limitations upon other properties which do not meet minimum parcel size in the vicinity.
PASSED AND ADOPTED by the Mariposa County Planning Commission on the 20th day of November, 1992 by the following vote:

AYES: Cromell, Eskra, Reilly, Swift

NOES: None

ABSTAINED: None

EXCUSED: Brown

NOT VOTING: None

Charles R. Fall, Chairman
Mariposa County Planning Commission

ATTEST:

Susan M. Menje, Secretary
Mariposa County Planning Commission