STATE OF CALIFORNIA – THE RESOURCES AGENCY GRAY DAVIS, *GOVERNOR*

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Hearing Opened:	May 10, 2002
Staff:	Jim Baskin
Staff Report:	October 23, 2003
Hearing Date:	November 6, 2003
Commission Action:	

STAFF REPORT: APPEAL

DE NOVO HEARING

APPEAL NO.:	**A-1-MEN-02-019**
APPLICANT:	**Torben Moller & Laura Jean Spurrier**
AGENT(S):	Bud Kamb
LOCAL GOVERNMENT:	County of Mendocino
DECISION:	Approval with Conditions
PROJECT LOCATION:	44696 Crestwood Drive (and adjoining forest land), approximately ¼ mile east of its intersection with Highway One, Mendocino (APN 119-370-10 and 104-012-04).
PROJECT DESCRIPTION:	Construct a 1,680-square-foot single-family residence with an average maximum height of 28 feet above finished grade, install a driveway, Wisconsin mound septic system with a curtain drain, and connect to the Big River Vista Mutual Water Company.
APPELLANT:	**Sierra Club, Redwood Chapter – Attn: Dr. Hillary Adams**
SUBSTANTIVE FILE: DOCUMENTS	1) Mendocino County CDP No. 39-00; and 2) County of Mendocino Local Coastal Program.

STAFF NOTES:

1. Procedure.

On May 10, 2002, the Coastal Commission found that the appeal of the County of Mendocino's approval raised a substantial issue with respect to the grounds on which the appeal had been filed, pursuant to Section 30625 of the Coastal Act and Section 13115 of Title 14 of the California Code of Regulations. As a result, the County's approval is no longer effective, and the Commission must consider the project *de novo*. The Commission may approve, approve with conditions (including conditions different than those imposed by the County), or deny the application. Since the proposed project is within an area for which the Commission has certified a Local Coastal Program (LCP) and is within the area between the first public road and Big River, an arm of the sea, the applicable standard of review for the Commission to consider is whether the development is consistent with the County's certified LCP and the public access and public recreation policies of the Coastal Act. Testimony may be taken from all interested persons at the *de novo* hearing.

2. Submittal of Additional Information by the Applicant.

For the purposes of *de novo* review by the Commission, the applicant has provided Commission staff with supplemental information consisting of: 1) a riparian ESHA width evaluation prepared by a consulting biologist with recommendations for ESHA protection; 2) a wetlands delineation and ESHA width evaluation prepared by a consulting biologist with recommendations for ESHA protection; and 3) information regarding the scale and bulk of other development in the Big River and Van Meter Subdivisions neighborhood area. The applicants have also amended their project description by revising their site plan to: 1) move the house approximately 50 feet toward the north to conform to the minimum 50-foot-wide wetlands buffer setback required by the LCP; 2) move the parking area approximately 25 feet toward the east to conform to the minimum 50-foot-wide wetlands buffer setback required by the LCP; and 3) include a proposal to protect all remaining Bolander's Reed Grass outside of the approved building envelope.

The supplemental information addresses issues raised by the appeal and provides additional information that was not a part of the record when the County originally acted to approve the coastal development permit

3. Change in Rare Plant Status.

Portions of the project site are covered by Bolander's Reed Grass (Calamagrostis bolanderi). At the time of the Commission's action on the appeal of the County's conditional approval of the project, Bolander's Reed Grass appeared on the California Native Plants Society's (CNPS) "List 1B," as a rare plant species vulnerable under present circumstances or to have a high potential for becoming so because of its limited or vulnerable habitat, its low numbers of individuals per population (even though they may be wide ranging), or its limited number of populations. Consequently, the plant met the definition as a "threatened" or "endangered" species and at that time was eligible for listing as such under the California Endangered Species Act (CESA).

Additionally, given this status, the plant and the area in which it grows also met the definition within the County of Mendocino's LCP as an "environmentally sensitive habitat area," and was subject to the protections enumerated therein (i.e., providing adequately wide buffer areas from development and other similar preclusions).

Since the Commission's Substantial Issue determination in May 2002, Bolander's Reed Grass has been downgraded by the CNPS to "List 4" status, reflecting the receipt of additional botanical field data that found the plant to be in greater population occurrence and range than had been previously thought. CNPS List 4 is effectively a "watch list," comprising those rare plants which are of limited distribution or infrequent throughout a broader area in California, and their vulnerability or susceptibility to threat appears relatively low at this time. These plants cannot be considered "rare" from a statewide perspective and therefore are not eligible for CESA candidacy as a "threatened" or "endangered" species. As a result, with the re-listing of Bolander's Reed Grass from a designation associated with critical concerns regarding possible and eventual extirpation to one which is effectively an advisory ranking, the plant and its habitat no longer meet the LCP's definition of a "environmentally sensitive habitat area" for purposes of implementing the LCP's ESHA policies (i.e., restrictions on development within ESHAs, provision of adequately-wide buffer areas between development and ESHAs).

SUMMARY OF STAFF RECOMMENDATION *DE NOVO*: APPROVAL WITH CONDITIONS

The staff recommends that the Commission approve with conditions the coastal development permit for the proposed project on the basis that, as conditioned by the Commission, the project is consistent with the County of Mendocino certified LCP and the access policies of Chapter 3 of the Coastal Act.

Since the May 2002 hearing on the Substantial Issue determination, the applicant has provided considerable additional information on the effects of the project on coastal resources. Further biological assessments have been presented. Furthermore, the applicant has provided information as to the development pattern within the areas adjoining the project site to assist staff in assessing the consistency of the proposed development's scale and scope with the character of its surroundings. Moreover, based upon the findings of the recent biological investigations, the applicants have amended the permit application, for purposes of the Commission's hearing *de novo* on the project to relocate all of the proposed development out of the currently existing environmentally sensitive habitat areas (ESHAs) on the parcel and provide appropriate buffers between the site improvements and these sensitive areas, as required by the County LCP.

Two types of environmentally sensitive habitat areas (ESHAs) are found on the proposed development site, including a riparian drainage corridor and a small isolated wetland. In addition, though not meeting the definition of a "threatened" or "endangered" species and, therefore, not an ESHA, an outcropping of rare Bolander's Reed Grass also flanks one side of the property. The parcel's irregular parcel shape, together with the extent and location of the two environmentally sensitive habitat areas and their buffer areas and other encumbered portions of

the property significantly reduce the potential structural building envelope of this nearly 1¼-acre parcel to a roughly triangular 3,700-square-foot area at the mid-center of the parcel (see Exhibit No. 3). The staff has determined that the proposed project, as amended for purposes of the Commission's hearing *de novo* review, to relocate all of the proposed development out of the ESHAs on the property and provide appropriate buffers, would be consistent with the habitats and natural resources policies and provisions of the certified LCP requiring that new development establish buffer areas adjacent to all environmentally sensitive habitat areas to provide for a sufficient area to protect the environmentally sensitive habitat from significant degradation resulting from future developments.

Staff is recommending other special conditions to ensure the project's consistency with all other applicable policies of the County's certified LCP and the Coastal Act. The principal recommended conditions would require the applicant to construct the proposed site improvements consistent with an approved final development plan, incorporating appropriate erosion control and runoff best management practices to protect water quality. Restrictions on the choice of exterior building materials, colors, and lighting elements have also been recommended to ensure that the exterior appearance of the development is compatible with the project's surrounding.

Special Condition No. 1 requires the submittal of final site plans showing the proposed development setback a minimum of 50 feet from the outer edge of riparian corridor vegetation and wetlands on the parcel. In addition, the routing of the driveway to avoid certain environmentally sensitive areas and their buffer areas and provisions for implementing the applicants' rare plant conservation plan have been specified to be detailed on the final plans. These final construction and site drainage plans shall incorporate all recommendations of the submitted biological study intended to avoid creating or contributing impacts to ESHAs and implement the conservation measures proposed by the applicants to protect rare plants on the site and identify appropriate construction phase and long-term best management practices for reducing significant adverse impacts to the water quality impacts of adjoining coastal waters.

Special Condition No. 2 requires the applicants to submit for the approval of the Executive Director, a landscaping and vegetation maintenance plan requiring the applicant to maintain the patches of rare plants they intend to conserve in the areas outside of the approved building envelope and ensure that no invasive exotic vegetation is planted on the parcel that could spread into and significantly disrupt the value of the protected wetland and riparian ESHAs or further reduce the presence of rare plants being conserved on the site. In addition, the condition calls for the planting of native vegetation within the reduced-width wetlands ESHA buffer to further insulate the resource area from impacts from the residential uses on the parcel.

Special Condition No. 3 sets design standards for the exterior building materials and lighting to ensure that the development is compatible with the character of its surroundings and subordinate to its setting such that coastal visual resources are protected.

Special Condition No. 4 requires that all terms and conditions of the permit be recorded as deed restrictions.

Staff recommends that the Commission find the project, as conditioned, is consistent with the policies contained in the County's certified LCP and the Coastal Act public access and recreation policies.

MOTION, STAFF RECOMMENDATION *DE NOVO*, AND RESOLUTION:

Motion:

I move that the Commission approve Coastal Development Permit No. A-1-MEN-02-019 pursuant to the staff recommendation.

Staff Recommendation of Approval:

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution to Approve Permit:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development, as conditioned will be in conformity with the certified County of Mendocino LCP, is located between the sea and the nearest public road to the sea and is in conformance with the public access and public recreation policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

I. STANDARD CONDITIONS: See attached.

II. SPECIAL CONDITIONS:

1. Revised Site and Erosion & Runoff Control Plans

A. **PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. A-1-MEN-02-019**, the applicant shall submit revised site, and erosion & runoff control plans to the Executive Director for review and approval. The revised plans shall substantially conform with the site plan submitted to the Commission on September 17, 2003 as "Exhibit C," except that the plans shall also provide for the following changes to the project:

1) Site Plan Revisions

a. All structural improvements, including the proposed residence, garage, septic tank, and leach field for the on-site wastewater treatment system, and any construction staging and materials storage areas shall be setback at least fifty (50) feet from the edge of the riparian vegetation along the northwestern side of the project parcel, and from the wetland areas on the southern portions of the parcel, as delineated by Wetlands Research Associates, Inc. in their August 2003 biological study. In addition, the above-grade improvements shall be set back at least six (6) feet from side property lines, and at least twenty (20) feet from the front and rear property lines;

b. The driveway serving the residential use shall be routed through the riparian vegetation buffer area and not encroach into either the riparian vegetation ESHA or into the wetlands ESHA or its buffer area. Utility connections to serve the residential use shall be co-located along the side of the driveway; and

c. Areas of Bolander's Reed Grass (Calamagrostis bolanderi) located to the northwest and southeast of the approved building envelope, driveway access route, and utility extensions shall remain open and free of development, including the placement of permit-exempt accessory structures, site landscaping, and other ancillary improvements associated with the residential use, consistent with the proposed project description.

2) Erosion and Runoff Control Plan

a. The Erosion and Runoff Control Plan shall incorporate design elements and/or Best Management Practices (BMPs) which will serve to minimize the volume and velocity of stormwater runoff leaving the developed site, and to capture sediment and other pollutants contained in stormwater runoff from the development, by facilitating on-site infiltration and trapping of sediment generated from construction. The final drainage and runoff control plans shall at a minimum include the following provisions:

1. A physical barrier consisting of silt fencing and/or bales of straw placed end to end shall be installed between any construction and: (1) the edge of the riparian plant community along the property's northwestern side; and (2) areas of Bolander's Reed Grass (Calamagrostis bolanderi) outside of the approved building, parking, and driveway envelope. The bales shall be composed of weed-free rice straw, and shall be maintained in place throughout the construction period;

2. Vegetation at the site shall be maintained to the maximum extent possible and any disturbed areas shall be replanted or seeded with native vegetation immediately following project completion;

3. Provide that runoff from the roof, driveway and other impervious surfaces from the completed development shall be collected and directed into pervious areas on the site for infiltration to the maximum extent practicable in a non-erosive manner, prior to entry into the unnamed drainage course of the parcel's northeastern side. Where gutters and downspouts are used, velocity reducers shall be incorporated, to prevent scour and erosion at the outlet;

4. Soils grading activities shall be restricted to the drier-months period between May 1 and October 31; and

5. The washing-out of concrete delivery vehicles, disposal of solid waste, or release of any hazardous materials in the reduced-width wetlands buffer area shall be prohibited, and any accidental spill of such materials shall be promptly cleaned up and restored.

B. The permittee shall undertake development in accordance with the approved site and erosion & runoff control plans. Any proposed changes to the approved plans shall be reported to the Executive Director. No changes to the approved site plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

2. <u>Landscape Plan</u>

A. **PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. A-1-MEN-02-019**, the applicant shall submit, for the review and approval of the Executive Director, a plan for landscaping to ensure the viability and biological productivity of areas located outside of the approved building site. The plan shall be prepared by a licensed landscape architect.

1. The plan shall demonstrate that:

(a) The planting of non-native invasive plants at the project site will be prohibited;

(b) The initial removal of all Scotch broom (<u>Cytisus scoparius</u>) and pampas grass (<u>Cortaderia jubata</u>) on the project site as proposed by the applicants and recommended by the California Department of Fish and Game to protect the integrity of habitat afforded by the reduced-width ESHA buffers will be undertaken;

(c) Consistent with the proposed project description, areas to the north and south of the approved building site containing patches of Bolander's Reed Grass (Calamagrostis bolanderi) shall be maintained as "rare plant conservation areas" and not developed, landscaped, or otherwise encroached into by the residential use; and

(d) Following completion of construction, a minimum of twelve (12) California wax-myrtle (Myrica californica) and twelve (12) California blackberry (Rubus ursinus) 5-gallon container plants shall be planted on ten-foot (10') centers within the wetland buffer area, arranged in such a manner to form a landscaped strip between the residence, its parking areas and driveway, and the wetland.

2. The plan shall include, at a minimum, the following components:

(a) A map showing the type, size, and location of all plant materials that will be retained or installed on the developed site, the irrigation system, topography of the developed site, and all other landscape features, and

(b) Appropriately worded landscaping plan notes, declaring that:

(1) "No non-native invasive plants shall be planted at the project site."; and

(2) "All areas located outside of the approved building site containing patches of Bolander's Reed Grass (Calamagrostis bolanderi) shall be maintained as 'rare plant conservation areas' and not developed, landscaped, or otherwise encroached into by residential uses or site improvements."

B. The permittee shall undertake development in accordance with the approved final plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

3. Design Restrictions

A. All exterior siding of the proposed structures shall be composed of natural or natural appearing materials, and all siding and roofing of the proposed structures shall be composed of materials of dark earthtone colors only. The current owner or any future owner shall not repaint or stain the house with products that will lighten the color the house as approved. In addition, all exterior materials, including roofs and windows, shall be non-reflective to minimize glare; and

B. All exterior lights, including any lights attached to the outside of the buildings, shall be the minimum necessary for the safe ingress and egress of the structures, and shall be low-wattage, non-reflective, shielded, and have a directional cast downward such that no light will shine beyond the boundaries of the subject parcel.

4. Deed Restriction.

PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. A-1-MEN-02-019, the applicant shall submit to the Executive Director for review and approval documentation demonstrating that the applicant has executed and recorded against the parcel(s) governed by this permit a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property; and (2) imposing the Special Conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property. The deed restriction shall include a legal description of the entire parcel or parcels governed by this permit. The deed restriction shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the subject property so long as either this permit or the development it authorizes, or any part, modification, or amendment thereof, remains in existence on or with respect to the subject property.

5. Conditions Imposed By Local Government.

This action has no effect on conditions imposed by a local government pursuant to an authority other than the Coastal Act.

IV. FINDINGS AND DECLARATIONS:

The Commission hereby finds and declares as follows:

A. Incorporation of Substantial Issue Findings.

The Commission hereby incorporates by reference the Substantial Issue Findings contained in the Commission staff report dated April 19, 2002.

B. Project History / Background.

On April 26, 2000, Bud Kamb, agent-of-record for Torben Moller & Laura Jean Spurrier, submitted Coastal Development Permit Application No. 39-00 to the Mendocino County Planning and Building Services Department for a coastal development permit seeking authorization to construct a 1,680-square-foot single-family residence with an average maximum height of 28 feet above finished grade and installation of a driveway, "Wisconsin mound" septic system with a curtain drain, and connection to the Big River Vista Mutual Water Company on an

approximately 1¼-acre parcel, located near the southeast boundary of the Town of Mendocino, approximately ¼ mile east of Highway One on a private lane extension of Crestwood Drive (County Road 407RR).

The project had originally been approved by the County under CDP #06-97; however, the permit expired on March 11, 2000 prior to the commencement of any construction activities. On February 28, 2002, the Coastal Permit Administrator for the County of Mendocino approved a Standard Coastal Development Permit (CDP #39-00) for the subject development with two special conditions (see Exhibit No. 6).

The decision of the Coastal Permit Administrator was not appealed at the local level to the County Board of Supervisors. The County then issued a Notice of Final Action, which was received by Commission staff on March 27, 2002 (Exhibit No. 5).

On April 2, 2002, the Commission received an appeal of the County's decision to approve the development from Dr. Hillary Adams, representing the Sierra Club – Redwood Chapter. The appeal alleged that the manner in which the County of Mendocino conditionally approved the project did not effectively ensure: (1) the establishment of an adequate buffer between the approved development and environmentally sensitive habitat areas on the site; (2) minimization of potentially significant adverse impacts on water quality from site drainage; and (3) identification and protection of apparent pygmy soils at the site. The full text of the appellant's contentions is included as Exhibit No. 7.

On May 10, 2002, the Commission found that a Substantial Issue had been raised with regard to the consistency of the project as approved and the applicable policies of the LCP concerning the provisions of adequately wide buffers between new development and environmentally sensitive areas.

The Commission continued the *de novo* portion of the appeal hearing so that the applicant could provide additional information relating to the substantial issue. Supplemental biological assessments as the extent of all ESHA types on the project site and evaluations of the adequacy of the proposed buffers were subsequently provided to the Commission. From the results of these studies, the applicants also amended the project for purposes of the Commission's hearing *de novo* to respond to the most current scientific information and regulatory status of the affected environmentally sensitive areas on the site. These project modifications primarily involved moving the building site further to the east-northeast from the County-approved location to one that would provide the 50-foot minimum buffer width between both riparian vegetation and wetlands ESHAs and the development, as required by the LCP.

C. Project and Site Description.

1. Project Setting

The project site comprises Parcel 3 of the Van Meter Subdivision, created by parcel map in 1975. The subject property is a vacant, 1.24-acre parcel located in a rural residential area located north

of Big River near the southeast boundary of the town of Mendocino (APN 119-370-10). The site is located approximately ¼ mile east of Highway One, on a private lane extension of Crestwood Drive (County Road 407RR). Together with the 19 lots that comprise the adjoining Big River Vista Subdivision to the west, the site is one of 23 hillside lots developed on the upper northern banks of the lower Big River canyon, extending approximately ½ mile east of the Mendocino townsite (see Exhibit No. 2).

Immediately adjacent to the east of the applicants' parcel where the residence would be constructed, the applicants have obtained a roughly ½-acre (138.50' x 168.50') easement area in which development of the septic disposal leachfield serving the residence would be constructed. The septic disposal easement area is designated Forest Land (FL) under the LCP. This property was recently purchased by the California Parks and Recreation Department as part of the Big River Acquisition Area. The easement area is not located near any existing or proposed trails or roads, and, because of the presence of thick vegetation surrounding area, is not visible from any public viewing areas.

The roughly triangular-shaped residential property is approximately 1¼ acre in size and, along with the adjoining septic disposal easement area on the neighboring forestlands, consists of a moderately sloping, logged-over, grass-covered hillside lot with a well-developed riparian corridor running along the parcel's northwestern side. Plant cover on the parcel consists of a mixture of native and exotic upland and hydrophytic grasses, forbs, and shrubs on the cleared portions, including sweet vernal grass (Anthoxanthum odoratum), velvet grass (Holcus lanatus), pampas garass (Cortaderia selloana), hedge nettle (Stachys ajugoides), California blackberry (Rubus ursinus), foxglove (Digitalis purpurea), blue elderberry (Sambucus mexicana), soft rush (Juncus effuses var. brunneaus), scoth broom (Cytisus scoparius), hairgrass (Deschampsia cespitosa ssp. holciformis), goose grass (Gallium aparine), and red alder (Alnus rubra). The property is flanked along its northwestern side, by a thicket of North Coast coniferous forest and Bishop pine community plants including, Bishop pine (Pinus muricata), tan oak (Lithocarpus densiflorus), California wax-myrtle (Myrica californica), red alder, and cascara (Rhamnus purshiana), with an understory composed of braken fern (Pteridium aquilinum), sword fern (Polystichum minutum), thimbleberry (Rubus parviflorus) giant horsetail (Equisetum telmateia), skunk cabbage (Lysichiton americanum) trout lily (Scoliopus bigelovii), and sugar scoops (Tiarella trifoliata var. unifoliata). In addition, the project site also provides habitat for Bolander's Reed Grass (Calamogrostis bolanderi), listed by the California Native Plant Society's (CNPS) as "Class 4" rare plant species, both within the riparian corridor vegetation and in a linear patch following a drainage swale at the base of the cutbank on the property's eastern side.[1]

The project site lies within the LCP's Russian Gulch and Van Damme State Park Planning Area. The subject property is designated in the Land Use Plan and on the Coastal Zoning Map as Rural Residential (RR). The subject property is not within a designated highly scenic area (see Exhibit

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[1] At the time of the filing of the appeal, Bolander's Reed Grass appeared on the CNPS' "1B" list. For a further discussion of the significance of a plant species being enumerated on the various CNPS rare plant lists, and their status with respect to meeting the LCP definition of an "environmentally sensitive habitat area," refer to Staff Note No. 3, on pages 2-3.

Nos. 2, 3 and 4). Due to the property's location on a private road well inland from the coastline, no public views are afforded to and along the ocean across the property. Additionally, given the distance to the highway and the presence of the forested hillside vegetation lying between the coast and project parcel, views of the site from either public roads rights-of-way or other public recreational areas are limited to the distant offshore area within Mendocino Bay, a popular sea kayaking area, located at the mouth of Big River immediately south of Mendocino Headlands State Park. Notwithstanding the project parcel's relatively inland location, the site is located with the area between the first public road and the sea for purposes of reviewing the project's effects on coastal access.[2]

2. Project Description

As approved by the County, the development would have consisted of a 28-foot-high, 1,680-square-foot, partial two-story, single-family residence with exterior decking, and a 900-square-foot detached graveled parking area. As approved by the County, the residence and parking would have been located at the top-center of the rectangular lobed portion of the lot, where a driveway would have been routed in from the existing private lane that runs along the parcel's western side. A new "Wisconsin mound" septic system and an up-slope curtain drain would have been installed on the adjoining forestlands easement area to serve the proposed three-bedroom residence.

For the purposes of the Commission's *de novo* review, the project was subsequently revised by the applicants to: 1) relocate the new residence and parking area approximately 50 feet northward and 25 feet to the east, respectively, from the wetlands on the southwest quarter of the parcel so that a minimum 50-foot-wide ESHA buffer as required by the LCP would be provided; 2) include provisions for protecting remaining Bolander's Reed Grass located outside of the approved building envelope for the house, parking area, septic system, and driveway.

The amended development proposal continues to entail the construction of a 1,680-square-foot, 28-foot-height, one- to two-story residence with a graveled 900-square-foot parking area, and an individual septic disposal system (see Exhibit No. 3). The house and parking area are now proposed to be built in the mid-center of the parcel with the closest point of the house and parking pad located a minimum of fifty feet from the riparian vegetation and wetland areas on the parcel. Water service would be provided to the residence by the Big River Vista Mutual Water Company. The development's "Wisconsin mound" sewage disposal system and associated curtain drain would be sited within a rectangular, roughly ½-acre easement area obtained from an adjacent property owner immediately to the east of the applicant's parcel. The applicants also proposed to keep all remaining areas containing Bolander's Reed Grass on the property outside of the building envelopes for the proposed site improvements in their natural state as conservation areas for these rare plants.

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[2] Coastal Act Section 30115 includes within its definition of "sea" rivers subject to tidal action through any connection to the Pacific Ocean (i.e., the tidally-influenced portions of lower Big River flanking to project site to the south). See Findings Section IV.G.2 for a further discussion of the project's effects on public coastal access.

D. Planning and Locating New Development.

1. LCP Provisions

LUP Policy 3.9-1 of the Mendocino County Land Use Plan states that new development shall be located within or near existing developed areas able to accommodate it or in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. The intent of this policy is to channel development toward more urbanized areas where services are provided and potential impacts to resources are minimized.

LUP Policy 3.8-1 states that Highway 1 capacity, availability of water and sewage disposal system and other know planning factors shall be considered when considering applications for development permits.

The subject property is zoned in the Mendocino Town Plan appendix to the County of Mendocino's LCP as Mendocino Rural Residential (MRR). Mendocino Town Zoning Code (MTZC) Chapter 20.644 establishes the prescriptive standards for development within Rural Residential (MRR) zoning districts. Single-family residences are a principally permitted use in the MRR zoning district. Setbacks for the subject parcel are twenty feet to the front and rear yards, and six feet on the side yards, pursuant to MTZC Sections 20.644.030 and 20.644.035, respectively. MTZC Sec. 20.644.040 limits building heights to 28 feet above natural grade. MTZC Section 20.644.050 sets a maximum of 20% structural coverage on RR lots of less than two acres in size.

The adjoining parcel on which the septic systems leachfield would be developed is zoned Forest Lands (FL). Construction of the septic system would constitute a form of single-family residential use, a principal permitted use within the FL zoning district. Coastal Zoning Code (CZC) Section 20.510.020 further requires that development of new residential dwellings occurring adjacent to lands designated as FL or TP be located no closer than two hundred (200) feet from a parcel designated as FL or TP unless there is no other feasible building site on the parcel.

2. Discussion

The proposed residence would be constructed within an existing developed residential area known as the Van Meter Subdivision. The proposed single-family residential use is consistent with the Rural Residential zoning for the site. The subject parcel, created in 1975 before adoption of the County's coastal zoning regulations, is a legal parcel of approximately 1.24-acre in size. The applicants propose to construct a total floor area of 1,680 square feet of single-family residential structural improvements, which, with the proposed deck area, represents approximately 1,450 square feet or approximately 10% lot coverage. The proposed maximum building height is 28 feet. The proposed residence's location, lot coverage and building height are consistent with the standards for the zoning district.

Although the parcel lies just within the Mendocino City Community Services District, the project site is located over ¼-mile from the nearest district water supply or sanitary sewer line. The proposed development would be served by an off-site community water supply system operated by the Big River Vista Mutual Water Company. Sewage would be processed by a proposed individual disposal system, whose "Wisconsin mound" disposal field would be developed within a roughly ½-acre easement area on an adjoining Forest Lands-zoned parcel to the east of the applicant's. The system's design has received a preliminary approval "clearance" letter from the Mendocino County Department of Public Health's Division of Environmental Health (see Exhibit No. 10, page 3). Therefore, the proposed development is consistent with the LUP and Zoning designations for the site and would be constructed within an existing developed area consistent with applicable provisions of LUP Policy 3.9-1.

Use of the site as a single-family residence is envisioned under the certified LCP. The cumulative impacts on traffic capacity of development approved pursuant to the certified LCP on lots recognized in the certified LCP were addressed at the time the LCP was certified. Further, the proposed development would meet the prescriptive standards for development within its rural residential zoning district in terms of height, bulk, and coverage, and demonstrated water and wastewater infrastructure. Therefore, the proposed development is consistent with the LUP and Coastal Zoning Code designations for the site, would be constructed within an existing developed rural residential area, and would not adversely impact transportation or public service infrastructure capacities consistent with applicable provisions of LUP Policies 3.9-1 and 3.8-1, respectively.

Finally, with regard to locating a new residential dwelling a minimum of 200 feet from FL-zoned lands, given both the size of the subject parcel and the presence and extent of ESHA at the site, no feasible location exists on the project site to allow for providing such a setback. The entire 672-foot northwestern side of the property is flanked by a 60- to 100-foot wide band of riparian vegetation. The parcel's southern rectangular lobe is similarly occupied by a 20- to 60-foot-wide band of emergent scrub-shrub wetlands running across its entire 230-foot width. With the minimum 50-foot wide ESHA buffers applied at the outer edges of these environmentally sensitive areas, only a roughly 3,700-square-foot triangular-shaped area remains along the parcel's eastern side in which the site improvements could be located and be found consistent with the certified LCP's natural resources protection policies.

As detailed further in the Findings Section IV.D below, with very limited exceptions for utility and access connections, these policies and standards effectively prohibit the structures and other appurtenant residential improvements from being developed within both ESHAs and their requisite buffer areas. The Commission further notes that with the acquisition of 7,334 acres of these adjoining forest lands within the lower Big River watershed by the California Department of Parks and Recreation on July 1, 2002 to be managed for fish and wildlife habitat and public recreation uses, the necessity for providing a 200-foot setback to afford a buffer between incompatible timber production and rural residential uses– has been for all intents and purposes alleviated.

Therefore, the Commission finds that as conditioned, the proposed development is consistent with LUP Policies 3.9-1 3.8-1, and with Coastal Zoning Code Sections 20.376 and 20.510.020 as the development will be located in a developed area, there will be adequate services on the site to serve the proposed development, the project will not contribute to significant adverse cumulative impacts on highway capacity, scenic values, or other coastal resources, and no feasible building site exists on the parcel such that a minimum 200-foot-wide buffer could be provided between the proposed new residential dwellings and adjacent designated Forest Lands.

E. Environmentally Sensitive Habitat Areas

1. LCP Provisions

LUP Policy 3.1-4 states:

> *As required by the Coastal Act, development within wetland areas shall be limited to:*
>
> 1. *Port facility construction or expansion, Section 30233(a)(1).*
> 2. *Energy facility construction or expansion, Section 30233(a)(1).*
> 3. *Coastal-dependent industrial facilities such as commercial fishing facilities, construction or expansion, Section 30233(a)(1).*
> 4. *Maintenance or restoration of dredged depths or previously dredged depths in: navigational channels, turning basins, vessel berthing and mooring areas, and associated with boat launching ramps.*
> 5. *In wetland areas, only entrance channels for new or expanded boating facilities may be constructed, except that in a degraded wetland, other boating facilities may be permitted under special circumstances, Section 30233(a)(3). New or expanded boating facilities may be permitted in estuaries, Section 30233(a)(4).*
> 6. *Incidental public services purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.*
> 7. *Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*
> 8. *Nature study purposes and salmon restoration projects.*
> 9. *Aquaculture, or similar resource dependent activities excluding ocean ranching. (See Glossary)*
>
> *In any of the above instances, the diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes, shall be permitted in accordance with all other applicable provisions of this plan. Such requirements shall include a finding that there is no feasible less environmentally damaging alternative and shall include mitigation measures required to minimize adverse environmental effects,*

in accordance with Sections 30233 and 30607, and other provisions of the Coastal Act. [citations and parenthetic in original]

LUP Policy 3.1-7 in applicable part states:

A buffer area shall be established adjacent to all environmentally sensitive habitat areas. The purpose of this buffer area shall be to provide for a sufficient area to protect the environmentally sensitive habitat from significant degradation resulting from future developments. The width of the buffer area shall be a minimum of 100 feet, unless an applicant can demonstrate, after consultation and agreement with the California Department of Fish and Game, and County Planning Staff, that 100 feet is not necessary to protect the resources of that particular habitat area from possible significant disruption caused by the proposed development. The buffer area shall be measured from the outside edge of the environmentally sensitive habitat areas and shall not be less than 50 feet in width. New land division shall not be allowed which will create new parcels entirely within a buffer area. Developments permitted within a buffer area shall generally be the same as those uses permitted in the adjacent environmentally sensitive habitat area and must comply at a minimum with each of the following standards:

1. *It shall be sited and designed to prevent impacts which would significantly degrade such areas;*
2. *It shall be compatible with the continuance of such habitat areas by maintaining their functional capacity and their ability to be self-sustaining and to maintain natural species diversity; and*
3. *Structures will be allowed within the buffer area only if there is no other feasible site available on the parcel. Mitigation measures, such as planting riparian vegetation, shall be required to replace the protective values of the buffer area on the parcel, at a minimum ratio of 1:1, which are lost as a result of development under this solution* [emphasis added.]

LUP Policy 3.1-10 states:

Areas where riparian vegetation exists, such as riparian corridors, are environmentally sensitive habitat areas and development within such areas shall be limited to only those uses which are dependent on the riparian resources. All such areas shall be protected against any significant disruption of habitat values by requiring mitigation for those uses which are permitted. No structure or development, including dredging, filling, vegetation removal and grading, which could degrade the riparian area or diminish its value as a natural resource shall be permitted in the Riparian Corridor except for:

- *Channelizations, dams, or other substantial alterations of rivers and streams as permitted in Policy 3.1-9;*

- *pipelines, utility lines and road crossings, when no less environmentally damaging alternative route is feasible;*
- *existing agricultural operations;*
- *removal of trees for disease control, public safety purposes, or for firewood for the personal use of the property owner at his or her residence. Such activities shall be subject to restrictions to protect the habitat values* [emphasis added.]"

LUP Policy 3.1-24 states:

> *Any development within designated resource areas, if not specifically addressed by other policies, shall be carefully reviewed and established in accord with conditions which could allow some development under mitigating conditions but would assure the continued protection of the resource.* [emphasis added]

LUP Policy 3.1-29 states:

> *The California Department of Fish and Game, the California Native Plant Society, and the U.S. Fish and Wildlife Service shall be requested to maintain and augment mapped inventory of all rare, endangered, threatened and protected plant and wildlife habitats on the Mendocino Coast based on up-to-date survey information. Symbols indicating rare or endangered plants and wildlife are placed on the Land Use Maps to generally locate listed species and will be pinpointed as necessary to prevent degradation prior to issuing any development permit. Furthermore, the Department of Fish and Game is requested to work with the county during the planning and permit process to evaluate the significance of mapped sites as they apply to individual development applications.*

Section 20.308.040(F) of the Mendocino County Coastal Zoning Code (CZC) defines the term "environmentally sensitive habitat area" as follows:

> *'Environmentally Sensitive Habitat Area' means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could easily be disturbed or degraded by human activities or developments. In Mendocino County, environmentally sensitive habitat areas include, but are not limited to: anadromous fish streams, sand dunes, rookeries and marine mammal haul-out areas, wetlands, riparian areas, areas of pygmy vegetation that contain species of rare or endangered plants, and habitats of rare and endangered plants and animals.*

CZC Section 20.302.130(E) defines wetlands as:

> *'Wetlands' means lands covered periodically or permanently with shallow water, including saltwater marshes, freshwater marshes, open or closed brackish water*

marshes, swamps, mudflats, and fens. Wetlands are extremely fertile and productive environments. Tidal flushing from the ocean and/or nutrient-rich freshwater runoff mix to form a delicate balance responsible for their productivity. They function as nurseries for many aquatic species and serve as feeding and nesting areas for water fowl, shore birds and wading birds, as well as a few rare and endangered species such as the peregrine falcon.

CZC Section 20.496.010 states in applicable part:

Purpose.
The purpose of this Chapter is to ensure that environmentally sensitive habitat and other designated resource areas listed on Pages 39, 40 and 41 of the Coastal Element dated November 5, 1985, which constitute significant public resources are protected for both the wildlife inhabitating them as well as the enjoyment of present and future populations.

Environmentally Sensitive Habitat Areas (ESHA's) include: anadromous fish streams, sand dunes, rookeries and marine mammal haul-out areas, wetlands, riparian areas, areas of pygmy vegetation which contain species of rare or endangered plants and habitats of rare and endangered plants and animals."

CZC Section 20.496.020 states in applicable part:

ESHA- Development Criteria

(A) Buffer areas. A buffer shall be established adjacent to all environmentally sensitive habitat areas. The purpose of this buffer area shall be to provide for a sufficient area to protect the environmentally sensitive habitat from degradation resulting from future developments and shall be compatible with the continuance of such habitat areas.

(1) Width.

The width of the buffer area shall be a minimum of one hundred (100) feet, unless an applicant can demonstrate, after consultation with the California Department of Fish and Game, and County Planning staff, that one hundred feet is not necessary to protect the resources of that particular habitat area from possible significant disruption caused by the proposed development. The buffer area shall be measured from the outside edge of the Environmentally Sensitive Habitat Areas and shall not be less than fifty (50) feet in width. ...Standards for determining the appropriate width of the buffer area are as follows:

(a) Biological Significance of Adjacent Lands. Lands adjacent to a wetland, stream, or riparian habitat area vary in the degree to which they

are functionally related to these habitat areas. Functional relationships may exist if species associated with such areas spend a significant portion of their life cycle on adjacent lands. The degree of significance depends upon the habitat requirements of the species in the habitat area (e.g., nesting, feeding, breeding, or resting).

Where a significant functional relationship exists, the land supporting this relationship shall also be considered to be part of the ESHA, and the buffer zone shall be measured from the edge of these lands and be sufficiently wide to protect these functional relationships. Where no significant functional relationships exist, the buffer shall be measured from the edge of the wetland, stream, or riparian habitat that is adjacent to the proposed development.

(b) Sensitivity of Species to Disturbance. The width of the buffer zone shall be based, in part, on the distance necessary to ensure that the most sensitive species of plants and animals will not be disturbed significantly by the permitted development. Such a determination shall be based on the following after consultation with the Department of Fish and Game or others with similar expertise:

(i) Nesting, feeding, breeding, resting, or other habitat requirements of both resident and migratory fish and wildlife species;
(ii) An assessment of the short-term and long-term adaptability of various species to human disturbance;
(iii) An assessment of the impact and activity levels of the proposed development on the resource.

(c) Susceptibility of Parcel to Erosion. The width of the buffer zone shall be based, in part, on an assessment of the slope, soils, impervious surface coverage, runoff characteristics, and vegetative cover of the parcel and to what degree the development will change the potential for erosion. A sufficient buffer to allow for the interception of any additional material eroded as a result of the proposed development should be provided.

(d) Use of Natural Topographic Features to Locate Development. Hills and bluffs adjacent to ESHA's shall be used, where feasible, to buffer habitat areas. Where otherwise permitted, development should be located on the sides of hills away from ESHA's. Similarly, bluff faces should not be developed, but shall be included in the buffer zone.

(e) Use of Existing Cultural Features to Locate Buffer Zones. Cultural features (e.g., roads and dikes) shall be used, where feasible, to buffer habitat areas. Where feasible, development shall be located on the side of

roads, dikes, irrigation canals, flood control channels, etc., away from the ESHA.

(f) Lot Configuration and Location of Existing Development. Where an existing subdivision or other development is largely built-out and the buildings are a uniform distance from a habitat area, at least that same distance shall be required as a buffer zone for any new development permitted. However, if that distance is less than one hundred (100) feet, additional mitigation measures (e.g., planting of native vegetation) shall be provided to ensure additional protection. Where development is proposed in an area that is largely undeveloped, the widest and most protective buffer zone feasible shall be required.

(g) Type and Scale of Development Proposed. The type and scale of the proposed development will, to a large degree, determine the size of the buffer zone necessary to protect the ESHA. Such evaluations shall be made on a case-by-case basis depending upon the resources involved, the degree to which adjacent lands are already developed, and the type of development already existing in the area.

(2) Configuration. The buffer area shall be measured from the nearest outside edge of the ESHA (e.g., for a wetland from the landward edge of the wetland; for a stream from the landward edge of riparian vegetation or the top of the bluff).

(3) Land Division. New subdivisions or boundary line adjustments shall not be allowed which will create or provide for new parcels entirely within a buffer area.

(4) Permitted Development. Development permitted within the buffer area shall comply at a minimum with the following standards:

(a) Development shall be compatible with the continuance of the adjacent habitat area by maintaining the functional capacity, their ability to be self-sustaining and maintain natural species diversity.

(b) Structures will be allowed within the buffer area only if there is no other feasible site available on the parcel.

(c) Development shall be sited and designed to prevent impacts which would degrade adjacent habitat areas. The determination of the best site shall include consideration of drainage, access, soil type, vegetation, hydrological characteristics, elevation, topography, and distance from natural stream channels. The term "best site" shall be defined as the site having the least impact on the

maintenance of the biological and physical integrity of the buffer strip or critical habitat protection area and on the maintenance of the hydrologic capacity of these areas to pass a one hundred (100) year flood without increased damage to the coastal zone natural environment or human systems.

(d) Development shall be compatible with the continuance of such habitat areas by maintaining their functional capacity and their ability to be self-sustaining and to maintain natural species diversity.

(e) Structures will be allowed within the buffer area only if there is no other feasible site available on the parcel. Mitigation measures, such as planting riparian vegetation, shall be required to replace the protective values of the buffer area on the parcel, at a minimum ratio of 1:1, which are lost as a result of development under this solution.

(f) Development shall minimize the following: impervious surfaces, removal of vegetation, amount of bare soil, noise, dust, artificial light, nutrient runoff, air pollution, and human intrusion into the wetland and minimize alteration of natural landforms.

(g) Where riparian vegetation is lost due to development, such vegetation shall be replaced at a minimum ratio of one to one (1:1) to restore the protective values of the buffer area.

(h) Aboveground structures shall allow peak surface water flows from a one hundred (100) year flood to pass with no significant impediment.

(i) Hydraulic capacity, subsurface flow patterns, biological diversity, and/or biological or hydrological processes, either terrestrial or aquatic, shall be protected.

(j) Priority for drainage conveyance from a development site shall be through the natural stream environment zones, if any exist, in the development area. In the drainage system design report or development plan, the capacity of natural stream environment zones to convey runoff from the completed development shall be evaluated and integrated with the drainage system whenever possible. No structure shall interrupt the flow of groundwater within a buffer strip. Foundations shall be situated with the long axis of interrupted impermeable vertical surfaces oriented parallel

to the groundwater flow direction. Piers may be allowed on a case by case basis.

(k) If findings are made that the effects of developing an ESHA buffer area may result in significant adverse impacts to the ESHA, mitigation measures will be required as a condition of project approval. Noise barriers, buffer areas in permanent open space, land dedication for erosion control, and wetland restoration, including off-site drainage improvements, may be required as mitigation measures for developments adjacent to environmentally sensitive habitats.

CZC Section 20.496.035 states in applicable part:

Riparian Corridors and other Riparian Resource Areas.

(A) No development or activity which could degrade the riparian area or diminish its value as a natural resource shall be permitted in the riparian corridor or in any area of riparian vegetation except for the following:

(1) Channelizations, dams or other alterations of rivers and streams as permitted in Section 20.496.030(C);
(2) Pipelines, utility lines and road and trail crossings when no less environmentally damaging alternative route is feasible;
(3) Existing agricultural operations;
(4) Removal of trees for disease control, public safety purposes or personal use for firewood by property owner.

(B) Requirements for development in riparian habitat areas are as follows:

(1) The development shall not significantly disrupt the habitat the habitat area and shall minimize potential development impacts or changes to natural stream flow such as increased runoff, sedimentation, biochemical degradation, increased stream temperatures and loss of shade created by development;
(2) No other feasible, less environmentally sensitive alternative exists;
(3) Mitigation measures have been incorporated into the project to minimize adverse impacts upon the habitat;

Where development activities caused the disruption or removal of riparian vegetation, replanting with appropriate native plants shall be required at a minimum ratio of one to one (1:1) and replaced if the survival rate is less than seventy-five (75) percent. [emphasis added.]

CZC Sec. 20.496.050 states:

> *(A) General. Other designated resource areas as identified on Pages 39, 40 and 41 of the Coastal Element dated November 5, 1985 include: State parks and reserves, underwater parks and reserves, areas of special biological significance, natural areas, special treatment areas, fishing access points, areas of special biological importance, significant California ecosystems and coastal marine ecosystems.*
>
> *(B) Development of Resource Areas. Any development within designated resource areas shall be reviewed and established in accord with conditions which could allow some development under mitigating conditions but which assures the continued protection of the resource area.* [emphases added]

2. Discussion

The subject property is situated on a middle Quaternary-aged uplifted coastal terrace vegetated by two plant communities. First, a mixture of native and exotic grasses and shrubs covers most of the open terrace area of the site that was originally vegetated with North Coast Coniferous Forest, but was subjected to timberland harvesting and conversion activities (i.e., grading for log landings and stump clearing) activities several decades ago. Remnants of the original vegetation that covered the whole of the parcel are still present at the site as part of the streamside corridor along the northwestern side of the parcel upon which the house would be developed and on the adjoining parcel to the east, where the septic system leach field would be installed. This stream is a small, unnamed intermittent drainage course that traverses the site from its north apex to the southwest. A riparian plant community extends along the immediate banks of the stream.

The applicants' botanist, Gordon McBride, Ph.D., conducted a botanical survey of the subject parcel and submitted an initial report dated July 5, 2000 as well as several subsequent reports to the County during its review of the project (see Exhibit No. 8). The initial report identified a riparian plant community along the stream. A reduced-width fifty-foot-wide setback between the proposed residence and the outer edge of the riparian vegetation was proposed.

Pursuant to the requirements of LUP Policy 3.1-7 and CZC Section 20.496.020(A)(1), on January 7, 2002, Dr, McBride provided a supplemental analysis of the adequacy of the less-than-100-foot-wide buffer area to protect the riparian corridor (see Exhibit No. 8). This evaluation concluded that given the non-anadromous, seasonal nature of the drainage course, the actual and potential habitat utilization within the vegetated riparian corridor, and the scope and extent of the proposed development, reducing the buffer from a default 100-foot-width to the proposed 50-feet would still provide adequate protection to this environmentally sensitive area as required by the certified LCP.

The Commission also notes that in his earlier July 5, 2000 report Dr. McBride also disclosed that Bolander's Reed Grass (Calamagrostis bolanderi) had been found on the project site growing in a linear outcropping from the riparian corridor to down along the eastern side of the property (see map illustrations within Exhibit Nos. 8 and 9). At the time of Dr. McBride's report, Bolander's

Reed Grass appeared on "List 1B" of the California Native Plants Society's (CNPS) Inventory of Rare and Endangered Plants of California - Sixth Edition. Given this listing's significance as a threshold for determining the relative significance of potentially adverse impacts on biological resources and for setting requirements for formulating related mitigation and monitoring programs, the outcroppings of Bolander's Reed Grass and the area in which they are growing met the LCP's definition of an ESHA as they were both: (1) "*an area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem;*" and (2) "*which could easily be disturbed or degraded by human activities or developments.*"

However, since the preparation of Dr McBride's buffer needs assessment, the status of Bolander's Reed Grass has been re-assigned by the CNPS to "List 4" species status, reflective of the receipt of new information indicating that the plant is not as restricted in range and discrete populations as was previously concluded. As such, the plant would no longer meet the first prong of the LCP's ESHA definition.

At the time of the Commission's action on the appeal of the County's conditional approval of the project, Bolander's Reed Grass appeared on the California Native Plants Society's (CNPS) "List 1B," as a rare plant species vulnerable under present circumstances or to have a high potential for becoming so because of its limited or vulnerable habitat, its low numbers of individuals per population (even though they may be wide ranging), or its limited number of populations. Consequently, the plant met the definition as a "threatened" or "endangered" species and at that time was eligible for listing as such under the California Endangered Species Act (CESA). Additionally, given this status, the plant and the area in which it grows also met the definition within the County of Mendocino's LCP for an "environmentally sensitive habitat area," and was thus subject to the protections enumerated therein (i.e., providing adequately wide buffer areas from development and other similar preclusions).

Since the Commission's Substantial Issue determination in May 2002, Bolander's Reed Grass has been downgraded by the CNPS to "List 4" status, reflecting the receipt of additional botanical field data which found the plant to be in greater population occurrence and range than had been previously thought. CNPS List 4 is effectively a "watch list," comprising those rare plants which are of limited distribution or infrequent throughout a broader area in California, and their vulnerability or susceptibility to threat appears relatively low at this time. These plants cannot be considered "rare" from a statewide perspective and therefore are not eligible for CESA candidacy as a "threatened" or "endangered" species. As a result, with the re-listing of Bolander's Reed Grass from a designation associated with critical concerns regarding possible and eventual extirpation to one which is effectively an advisory ranking, the plant and its habitat no longer meet the LCP's definition of a "environmentally sensitive habitat area" for purposes of implementing the LCP's ESHA policies (i.e., restrictions on development within ESHAs, provision of adequately-wide buffer areas between development and ESHAs).

Also, subsequent to the Commission's determination that Appeal No. A-1-MEN-02-019 raised a substantial issue of conformance with the certified LCP in May 2002, a field visit to the project parcel by Commission staff revealed the presence of potential wetland areas on a portion of the

site that had not been previously considered either by the County or the Commission. In August 2003, a wetlands delineation and buffer analysis was prepared by Wetlands Research Associates, Inc. for the project site. The investigation found that an approximately 4,700-square-foot area on the parcel contains a prevalence of hydrophytic vegetation and meets the LCP's definition of wetlands. The report went on to analyze the buffer needed to protect this habitat area, concluding that a 25-foot-wide buffer is adequate to protect this environmentally sensitive area from the proposed development (see Exhibit No. 9).

LCP Provisions for Reduced-Width ESHA Buffers

As set forth above, LUP Policy 3.1-7 and Coastal Zoning Code Section 20.496.020 require that buffer areas shall be established adjacent to all environmentally sensitive habitat areas to provide sufficient area to protect the environmentally sensitive habitat from significant disruption resulting from future developments. These provisions of the LCP state that the width of the buffer area shall be a minimum of one hundred (100) feet, unless an applicant can demonstrate, after consultation with the California Department of Fish and Game, and County Planning staff, that one hundred feet is not necessary to protect the resources of that particular habitat area from possible significant disruption caused by the proposed development, in which case the buffer can be reduced to not less than fifty (50) feet in width.

CZC Section 20.496.020(A)(1)(a) through (g) sets forth specific standards to be considered when determining the width of a buffer. These standards include: (a) an assessment of the biological significance of adjacent lands and the degree to which they are functionally related to wetland resources; (b) the sensitivity of species to disturbance such that the most sensitive species of plants and animals will not be disturbed significantly by the permitted development; (c) the susceptibility of the parcel to erosion determined from an assessment of the slope, soils, impervious surface coverage, runoff characteristics, and vegetative cover of the parcel; (d) the use of natural topographic features to locate development so that hills and bluffs adjacent to ESHA's can be used to buffer habitat areas; (e) use of existing cultural features such as roads and dikes to buffer habitat areas; (f) lot configuration and location of existing development such that buildings are a uniform distance from the habitat area, and provision for additional mitigation if the distance is less than 100 feet; and (g) the type and scale of development proposed as a determining factor for the size of the buffer zone necessary to protect the ESHA.

As noted above, because of the riparian vegetation corridor and wetland habitat on the site, the required septic system setbacks from a community water system wellhead, and the minimum required yard areas, development options are so constrained that it would not be feasible to develop even a small house on the property and maintain a minimum 100-foot buffer from all environmentally sensitive habitat areas. As noted above, the ESHA buffer may be reduced to 50 feet when the applicant presents appropriate evidence demonstrating that based on a review of the buffer width standards set forth in Coastal Zoning Code Section 20.496.020(A)(1), a narrower buffer would still protect the ESHA from significant disruption, and when the California Department of Fish & Game agrees. Even where it is not appropriate to reduce the minimum buffer, limited development may still be approved within the buffer pursuant to LUP Policy 3.1-7 and CZC Section 20.496.020(A)(4) if it can be demonstrated that: (a) the development is generally the same as those uses permitted in the adjacent ESHA; (b) it will be

sited and designed to prevent impacts which would significantly degrade such areas; (c) it will be compatible with the continuance of such habitat by maintaining the habitat's functional capacity and its ability to be self-sustaining and to maintain natural species diversity; and (d) there is no other feasible site available on the parcel and mitigation measures will be implemented to replace the protective values of the buffer area.

Consistent with the standards contained within CZC Section 20.496.020(A)(1)(a) through (g), the applicant provided supplemental evaluations of the width of the buffer needed to protect the riparian vegetation and wetland ESHAs as requested by the Commission for purposes of the Commission's *de novo* review of the proposed project (see Exhibit Nos. 8 and 9).

Adequacy of Proposed Reduced-width Riparian Vegetation Buffer

Gordon McBride PhD, in conjunction with consulting biologist Theodore W. Wooster Wetlands Research Associates, Inc. (WRA) developed a peer-reviewed supplemental evaluation of the riparian buffer width requirements to adequately protect the riparian resources on the site, considering the following seven standards in arriving at their recommendation of a 50-foot buffer:

(1) Biological Significance of Adjacent Lands.

In order to assess the biological significance of lands adjacent to the delineated riparian corridor, Dr. McBride conducted a reconnaissance for the presence of sensitive plants and wildlife on the property. No listed or sensitive plants were found within any portion of the property. No fish or migratory waterfowl use the seasonal watercourse area. According to Dr. McBride, one would expect the primary inhabitants of the intermittent drainage course and adjoining area to be insects, passerine bird species, and small mammals. Terrain adjoining the drainage course is heavily vegetated, and surface water is generally not present for significant portions of the year. The herbaceous nature of the vegetation limits nesting opportunities for birds. The density of the vegetation on the site provides sufficient cover for those animals that do utilize this area such that visual disturbances associated with the proposed residential use of the property would not present a significant impact. For these foregoing reasons, Dr. McBride concluded that the biological relationship of the adjoining terrain to the riparian corridor is not significant, and the habitat requirements of species likely to use the riparian corridor and adjoining areas are consistent with a reduced buffer.

(2) Sensitivity of Species to Disturbance.

Doctor McBride and Mr. Wooster also examined the distance necessary to ensure that the most sensitive species of plants and animals would not be disturbed by the permitted development in a significant way. Dr. McBride noted that with the exception of the then endangered/threatened species candidate eligible Bolander's Reed Grass, he was not aware of any sensitive plant species on the site that would be susceptible to human activity. Mr. Wooster similarly concluded that a reduced-width 50-foot riparian vegetation buffer would suffice to provide adequate protection to the urban fringe-

accustomed species that would most likely utilize this wooded intermittent stream for habitat.

The impact to wildlife species would be less than significant because as discussed above, the density of the vegetation in the area provides sufficient cover for those animals that utilize the wetland and adjoining terrain, and nesting and breeding habitat is limited given the herbaceous structure of the wetland area. Additionally, in evaluating the adequacy of the proposed 50-foot riparian corridor buffer, Dr. McBride and Mr. Wooster assessed the short-term and long-term adaptability of various species to human disturbance, and found that since the subject property is the last lot to be developed within the existing Big River-Van Meter rural residential area, the type of wildlife that may use this area are likely to be adapted to human presence. Non-native, invasive species such as pampas grass and Scotch broom have been present on the property for many years. Because the proposed development would be located between existing residential structures on adjacent properties, and because the northwestern and southwestern portions of the property would be protected as delineated riparian corridor and wetland, the impacts of development would be located near areas already subject to human disturbance.

Finally, in order to further assess the sensitivity of species to disturbance, Dr. McBride and Mr. Wooster evaluated the impact and activity levels of the proposed development. The proposed development is limited to one building and a graveled parking and access drive for the purpose of maintaining a single-family residential use. Activities that would occur within this residence are similar to the existing residential homes in this neighborhood. This use would not result in any significant change in land use practices nor would there be any significant change in use patterns for the neighborhood. Dr. McBride and Mr. Wooster concluded that in relation to potential significant adverse impacts resulting from increased activity levels, the proposed 50-foot wetland buffer would be adequate to protect the wetland.

(3) Susceptibility of Parcel to Erosion.

Dr. Mc Bride considered the susceptibility of the subject parcel to erosion in determining that a 50-foot buffer would be sufficient to protect the riparian corridor from impacts resulting from the proposed development. The proposed house, parking area, and access drive would be developed downslope from the riparian corridor. No erosion is anticipated on this relatively flat parcel as a result of constructing the development associated with the proposed single-family residence. Therefore, Dr. McBride believes that significant adverse impacts to the delineated wetland from erosion resulting from the proposed development is very unlikely.

(4) Use of Natural Topographic Features to Locate Development.

Dr. McBride evaluated natural topographic features located on the property in recommending the 50-foot buffer. Dr. McBride recognized that with the exception of areas directly adjoining the seasonal drainage course, the property slopes gently toward

the southwest, to the lowest portion at the southwest corner. The riparian corridor is generally contained by a cleft uphill and to the north and west of the proposed building envelope. Along the property boundary to the west, the drainage course is separated from the proposed residential structures by a slight topographic rise. The house, parking area, and driveway would be located in the central slightly downhill portion of the property. Therefore, the natural topography would cause storm water runoff from the proposed development to flow away from the stream. Therefore, the proposed 50-foot riparian buffer conforms to natural topographic features of the property and would use natural topographic features in a way that would avoid significant adverse impacts to the riparian corridor from the proposed development.

(5) Use of Existing Cultural Features to Locate Buffer Zones.

In evaluating the adequacy of the buffer width, Dr. McBride considered whether any existing cultural features within the proposed 50-foot buffer could be utilized to protect the riparian corridor and thus support use of the proposed 50-foot buffer width. The subject property is located along an unnamed private rural road. There are no other roads located within or adjacent to the applicant's approximately 1¼-acre parcel. The proposed development would occur adjacent to neighboring structures that exist on parcels to the south and to the north. On the subject parcel, near its northern apex is an existing community water system well. There are no other cultural features that occur on or near the subject property, which could be used to better ensure protection for the riparian area.

(6) Lot Configuration and Location of Existing Development.

Dr. McBride evaluated the width of the proposed buffer in relation to the subject parcel configuration and to the proximity of existing development in the vicinity. As discussed above, the proposed development would be within an existing rural residential developed area. The subject parcel would be the last to be developed in the Big River-Van Meter rural residential neighborhood. Because the area on the parcel available for development is constrained by the presence of the riparian corridor, a delineated wetland, setback requirements from front, rear, and side lot lines and wellheads, the lot configuration and how it affects the location of existing development on the parcel is significant. The applicant has revised the project description to conform to the new wetland delineation and proposed 50-foot reduced-width riparian and wetlands buffers. Dr. McBride believes that the proposed 50-foot buffer would be adequate to protect the riparian corridor resources in relation to the configuration of the parcel, to all existing development located on the parcel, and to the proposed development, and would not result in significant adverse impacts to the delineated wetland.

(7) Type and Scale of Development .

Dr. McBride considered the nature of the delineated wetland resources involved, the fact that adjacent properties have been developed, and the type of development in the vicinity in order to arrive at the recommended 50-foot buffer. As discussed previously, the

development would be limited to a single-family residence, a graveled parking area, an access driveway garage/workshop, and on-site sewage disposal system. All of the other lots in the residential area are completely developed with homes, including expansive driveways, garages, and lawns. For the applicant's parcel, the intensity of use is limited and within the character of the existing residential community. The riparian corridor and wetland buffers effectively limit development to the central portion of the subject property to about 1/10 of the parcel. The actual area proposed for structures and other improvements on the approximately 1¼-acre parcel is a relatively modest 5,470 square feet, and would represent only about 10% lot-coverage. The remaining 9/10 of the parcel would remain undeveloped. In considering the type and scale of development proposed, Dr. McBride determined that a 50-foot buffer would be adequate to protect the riparian corridor.

The foregoing analysis of the proposed buffer width in relation to the seven standards contained within Coastal Zoning Code Section 20.496.020(A)(1)(a) through (g) provide a basis for determining whether the buffer proposed by Dr. McBride would be adequate to protect the riparian corridor's aquatic and vegetated habitat areas. The particular facts of this site and the proposed development suggest that some of the standards should be weighed more in the evaluation of buffer width than other standards. For instance, the fact that a sensitive plant survey and wildlife survey conducted on the subject property identified no listed or sensitive plants and the intermittent nature of the drainage course weighs more heavily than does the fact that no cultural features could be identified to better ensure protection of the delineated wetland.

Those factors that support the establishment of a 50-foot buffer as adequate to protect the riparian areas include: (1) the lack of listed or sensitive plants on the property; (2) the lack of resident or migratory fish or migratory waterfowl; (3) the fact that terrain adjoining the riparian areas is heavily vegetated and lacks the year-round presence of surface water, (4) the herbaceous nature of the vegetation adjacent to the wetland and its limited nesting opportunity for birds; (5) the fact that the adjoining vegetation is of sufficient density to provide sufficient cover for human activity-desensitized animals that do use the area; (7) the fact that the subject property is the last lot to be developed in the Big River-Van Meter rural residential neighborhood and that the type of wildlife most likely to use the area have already adapted to human presence; (8) the fact that the parcel is only moderately side-sloped and well vegetated, and that the proposed development would not entail significant grading that would cause erosion; and (9) the fact that the riparian drainage corridor is contained in a cleft uphill of the proposed development, which will prevent storm water runoff from the development from degrading the waterway.

To conform to the need to provide an adequate ESHA buffer, the applicant has revised the project description to relocate the proposed development such that it is a minimum of 50 feet from both the edge of the riparian vegetation and the wetlands on the site. The proposed residence would be of modest size, leaving nearly 9/10 of the parcel undeveloped. When considering the totality of all the factors as discussed above, the Commission finds that the applicant's evaluation of the width of the delineated wetland buffer as provided by Dr. McBride, sufficiently demonstrates that no significant adverse impacts will result from the 50-foot recommended buffer width.

Staff of the California Department of Fish and Game (CDFG) conducted a site visit with Commission staff on May 3, 2002, and reviewed the revised riparian habitat assessment and buffer width analysis. CDFG staff has determined that the recommended 50-foot buffer would be an acceptable buffer for this particular project (see Exhibit No. 10). Additionally, CDFG expressed its support for the applicant's proposal to cut and remove from the property all pampas grass (Cortaderia jubata) plants. The removal of these exotics in particular from the project area would greatly enhance the value of the buffers as a transitional zone from riparian and wetland ESHAs to the proposed developed areas by allowing native plants of greater habitat value to wildlife that use both wetlands and adjoining lands to become reestablished.

The applicants' amended application for the hearing *de novo* incorporates the conservation measure to remove exotic vegetation. To ensure that the ESHA buffer is established consistent with the terms under which CDFG determined that the 50-foot buffer would be adequate, the Commission attaches Special Condition No. 2, which requires the applicants to perform the removal of invasive exotic vegetation as recommended by the applicants biologists and CDFG and proposed by the applicants. Based on all of the foregoing, the Commission finds that the proposed 50-foot buffer between the proposed development and the riparian ESHA on the site in conjunction with the requirements of Special Condition No. 2 to remove invasive exotic vegetation will adequately protect the riparian ESHA and is consistent with the buffer requirements of LUP Policy 3.1-7 and CZC Section 20.496.020(A)(4).

Adequacy of Proposed Reduced-width Wetlands Buffer

Similarly for the wetlands ESHA, Wetlands Research Associates, Inc. (WRA) performed the supplemental evaluation for determining the buffer width that would adequately protect the wetland areas on the parcel. WRA considered the following seven standards in arriving at their recommendation of a 25-foot buffer:

(1) Biological Significance of Adjacent Lands.

To assess the biological significance of lands adjacent to the delineated wetland, WRA conducted a sensitive plant survey and wildlife survey on the subject property. No listed or sensitive plants were found within any portion of the property. No fish or migratory waterfowl use the wetland area. One would expect the primary inhabitants of the wetland and adjoining area to be insects, passerine bird species, and small burrowing mammals. Terrain adjoining the wetland swale is heavily vegetated, and surface water is generally not present. The herbaceous nature of the vegetation limits nesting opportunities for birds, and during the daylong visit to the property on June 20, 2003, WRA did not detect any birds actually using the wetlands. The density of the vegetation on the site provides sufficient cover for those animals that do utilize this area such that visual disturbances associated with the proposed residential use of the property would not present a significant impact. For these foregoing reasons, WRA believes that the biological relationship of the adjoining terrain is not significant, and the habitat requirements of

species likely to use the delineated wetland and adjoining areas are consistent with a reduced buffer.

(2) Sensitivity of Species to Disturbance.

WRA also examined the distance necessary to ensure that the most sensitive species of plants and animals would not be disturbed by the permitted development in a significant way. In considering the nesting, feeding, breeding, resting, or other habitat requirements of both resident and migratory fish and wildlife species, WRA noted that no resident or migratory fish are present. Although wildlife may forage in the wetland area, nesting and breeding habitat is limited given the herbaceous structure of the wetland. Because no resident or migratory fish are present on the subject property, there will be no impact on the nesting, feeding, breeding, resting or other habitat requirements resulting from the proposed reduction of wetland buffer to 50 feet. The impact to wildlife species would be less than significant because as discussed above, the density of the vegetation in the area provides sufficient cover for those animals that utilize the wetland and adjoining terrain, and nesting and breeding habitat is limited given the herbaceous structure of the wetland area.

In evaluating the adequacy of their proposed reduced-width wetland buffer, WRA also assessed the short-term and long-term adaptability of various species to human disturbance, and found that since the subject property is the last lot to be developed within the existing Big River-Van Meter rural residential area, the type of wildlife that may use this area are likely to be adapted to human presence. Non-native, invasive species such as pampas grass and Scotch broom have been present on the property for many years. Because the proposed development would be located between existing residential structures on adjacent properties, and on the southern portion of the subject property near the road, and because the northern portion of the property would be protected as delineated wetland, the impacts of development would be located near areas already subject to human disturbance.

Finally, to further assess the sensitivity of species to disturbance, WRA evaluated the impact and activity levels of the proposed development. The proposed development is limited to two buildings for the purpose of constructing and maintaining a single-family residence. Activities that would occur within this residence are similar to the existing residential homes in this neighborhood. This use would not result in any significant change in land use practices nor would there be any significant change in use patterns for the neighborhood. WRA concluded that in relation to potential significant adverse impacts resulting from increased activity levels, the proposed reduced-width wetland buffer would be adequate to protect the wetland.

3) Susceptibility of Parcel to Erosion.

WRA considered the susceptibility of the subject parcel to erosion in determining that a reduced-width wetland buffer would be sufficient to protect the delineated wetland from

impacts resulting from the proposed development. Although the proposed house, parking area, and access driveway would be developed upslope from the delineated wetland, no erosion is anticipated on this relatively moderately sloped parcel as a result of grading and construction associated with the proposed single-family residence. Therefore, WRA believes that significant adverse impacts to the delineated wetland from erosion resulting from the proposed development is very unlikely.

4) Use of Natural Topographic Features to Locate Development.

WRA evaluated natural topographic features located on the property in recommending a reduced-width wetland buffer. WRA recognized that the property is only moderately sloped. The majority of property, especially the areas proposed for development, slopes gently toward the southwest, with a drop of about thirty feet from the highest portion at the northeast corner, to the lowest portion at the southwest corner. The wetland is generally contained by a seep-like depression downhill and to the south and west of the proposed buildings. Along the property boundary to the west, the swale is separated from the proposed residential structures by a slight topographic rise. The house and parking area would be located in the eastern-central portion of the property, and the driveway would traverse the full width of parcel at its narrowest point, running north and upslope of the wetland area from the existing road frontage along the west side of the property to its east side. Therefore, the natural topography would cause storm water runoff from the proposed development to flow toward the wetlands.

Although the runoff effects from the driveway and parking area would be somewhat minimized by the applicants' proposed use of a permeable gravel surface for these improvements, impact to the wetlands from unchecked runoff originating from the approximately 3,100-square feet of impervious roofing and decking areas could be significant. Therefore, provided the mitigation measures identified within the WRA report are incorporated as project performance standards, the reduced-width wetland buffer proposed by WRA would conform to natural topographic features of the property and would use natural topographic features in a way that would avoid significant adverse impacts to the delineated wetland from the proposed development.

5) Use of Existing Cultural Features to Locate Buffer Zones.

In evaluating the adequacy of the buffer width, WRA considered whether any existing cultural features within the proposed 50-foot buffer could be utilized to protect the wetlands. The subject property is located along an unnamed private rural road, approximately 1/8 mile beyond the end of the public road that serves the adjoining Big River Subdivision. There are no other roads located within or adjacent to the applicant's approximately 1¼-acre parcel. The proposed development would occur adjacent to neighboring structures that exist on parcels to the north, south, and west. On the subject parcel there is a community water system wellhead and storage tank. There are no other cultural features that occur on or near the subject property, which could be used to better ensure protection for the delineated wetland.

6) Lot Configuration and Location of Existing Development.

WRA evaluated the width of the proposed buffer in relation to the subject parcel configuration and to the proximity of existing development in the vicinity. As discussed above, the proposed development would be within an existing residential development. The subject parcel would be the last lot to be developed in the Big River-Van Meter rural residential neighborhood. Because the area on the parcel available for development is constrained by the presence of the delineated wetland and adjoining riparian habitat areas, front, rear, and side yard setbacks, the presence of a 200-foot-radius sewage disposal exclusion area around the community well, and given the lot configuration and the limitations of the location for potential development on the parcel is significant. Notwithstanding these limitations, all portions of the house, the decking, and the parking area would be a minimum of 50 feet from the delineated wetland. The house and parking areas would be located very close to the required setback limits for rear yards. The applicant has revised the project description to conform to the new expanded wetland delineation and proposed buffer. WRA believes that a reduced-width buffer would be adequate to protect the delineated wetland in relation to the configuration of the parcel, the location of all existing development on the parcel, and the location of the proposed development, and would not result in significant adverse impacts to the delineated wetland.

7) Type and Scale of Development .

WRA considered the nature of the delineated wetland resources involved, the fact that adjacent properties have been developed, and the type of development in the vicinity in order to arrive at the recommended reduced-width buffer. As discussed previously, the development would be limited to a single-family residence and a gravel-surfaced parking area and driveway. All of the other lots in the residential area are completely developed with homes, including expansive driveways, garages, and lawns. For the applicants' parcel, the intensity of use is limited and within the character of the existing rural residential community. The delineated wetland and protective buffer-width effectively limit development to the eastern-central portion of the subject property. The actual area proposed for structures on the approximately 1¼-acre parcel is a relatively modest 5,470 square feet, and would represent only about 10% lot-coverage. The remaining 9/10 of the parcel would remain undeveloped. In considering the type and scale of development proposed together with the small size and isolated nature of the subject environmentally sensitive area, WRA determined that a reduced-width buffer would be adequate to protect the delineated wetland.

The foregoing analysis of the proposed buffer width in relation to the seven standards contained within Coastal Zoning Code Section 20.496.020(A)(1)(a) through (g) provide a basis for determining whether the buffer proposed by WRA would be adequate to protect wetland resources as delineated. The particular facts of this site and the proposed development suggest that some of the standards should be weighed more in the evaluation of buffer width than other

standards. For instance, the fact that a sensitive plant survey and wildlife survey conducted on the subject property identified no listed or sensitive plants, and no resident or migratory fish or migratory waterfowl use of the property, weighs more heavily than does the fact that no cultural features could be identified to better ensure protection of the delineated wetland.

Those factors that support the establishment of a reduced-width buffer as adequate to protect the delineated wetland include: (1) the lack of listed or sensitive plants on the property; (2) the lack of resident or migratory fish or migratory waterfowl; (3) the fact that no birds were seen using the delineated wetland during site visits; (4) the fact that terrain adjoining the wetland is heavily vegetated and lacks the presence of surface water; (5) the herbaceous nature of the vegetation adjacent to the wetland and its limited nesting opportunity for birds; (6) the fact that the adjoining vegetation is of sufficient density to provide sufficient cover for animals that do use the area; (7) the fact that the subject property is the last lot to be developed in the neighborhood and the type of wildlife most likely to use the area have adapted to human presence; (8) the fact that the parcel is relatively flat and well vegetated and development would not entail significant grading so that no erosion is anticipated; and (9) the fact that the delineated wetland is relatively small and isolated.

As mentioned under some of the above-listed factors for determining an appropriate wetlands buffer width, the adequacy of WRA's reduced-width buffer was based upon the inclusion of numerous mitigation and monitoring provisions within the project. This mitigation program included:

- Maintaining a minimum of a 50-foot-wide buffer between the riparian habitat and the development (except where the proposed driveway enters the site from the existing access road.) Additionally, the driveway should be surfaced with clean aggregate material (rock gravel) rather than being paved;

- Prohibiting the placement or construction of any structures within the reduced buffer areas that would alter the existing hydrology of the area (i.e., result in cutting off the surface and subsurface flows of water from the riparian corridor into the wetland area.);

- Planting native shrubs (e.g., California wax-myrtle or California blackberry) in the reduced-width buffer zone between the development and the wetland habitat area following construction;

- Avoiding undue soils disturbance, grading, or soil or building material storage in the areas on the parcel inhabited with Bolander's Reed Grass;

- Restricting soils grading activities to the drier-months period between May 1 and October 31 to reduce soil erosion and sedimentation of wetland areas;

- Installing temporary silt fencing along the limits of the area disturbed by construction activities;

- Minimizing soil disturbances within the buffer areas as much as is possible;

- Prohibiting the storage of any solid building materials or equipment, concrete delivery vehicle wash-out, the disposal of solid waste, or the release of any hazardous materials in the reduced-width buffer area, and cleaning up and restoring any area where an accidental spill of such materials has occurred; and

- Removing the exotic, invasive Scotch broom and pampas grass from the parcel.

Although the WRA analysis resulting in a determination that a 25-foot wide wetland buffer, together with certain specified mitigation measures would be sufficient to protect the wetlands on the site, the LCP does not provide for reducing the width of an ESHA buffer to such a proposed width. CZC 20.496.020(A)(1) specifically states, "*The buffer area shall be measured from the outside edge of the Environmentally Sensitive Habitat Areas and shall not be less than fifty (50) feet in width.*" [emphasis added] Moreover, pursuant to the standards within CZC 20.496.020(A)(4), allowable further encroachment by development within a wetland buffer area is limited to certain qualified uses and activities that: (1) would be allowed within a wetland ESHA proper; (2) are clearly demonstrated to be designed and sited where the biological integrity of the resource would be protected; and (3) in the case of structural development, is only authorized if there are no other feasible locations outside of the buffer area.

To conform to the need to provide an ESHA buffer that would be both adequately protective of this environmentally sensitive area and meet the LCP's minimum width requirements, the applicant has revised the project description to relocate the proposed development a minimum of 50 feet from the outer edge of the delineated wetlands. The proposed residence would be of modest size, located near existing development, leaving more than 9/10 of the parcel undeveloped. When considering the totality of all the factors as discussed above, the Commission finds that the applicant's evaluation of the width of the delineated wetland buffer as provided by WRA, sufficiently demonstrates that no significant adverse impacts will result from the 50-foot recommended buffer width.

Staff of the California Department of Fish and Game (CDFG) visited the site on May 3, 2002, and reviewed the revised wetland delineation and buffer width analysis, and determined that the recommended 50-foot buffer adjacent to the riparian ESHA would be an acceptable wetland buffer for this particular project (see Exhibit No. 10). Additionally, CDFG expressed its support for the applicant's proposal to cut and remove from the property all Scotch broom and pampas grass plants. The removal of these exotics in particular from the project area would greatly enhance the value of the buffers as a transitional zone from riparian and wetland ESHAs to the proposed developed areas by allowing native plants of greater habitat value to wildlife that use both wetlands and adjoining lands to become reestablished. In consultations with Commission staff CDFG has also indicated that a 50-foot buffer adjacent to the wetland ESHA found on the site would be acceptable.

The applicant has included in the amended application for the Commission's hearing *de novo* their offer to incorporate the recommended removal of exotic vegetation. To ensure that the

ESHA buffer is established consistent with the terms under which CDFG determined that the 50-foot buffer would be adequate, the Commission attaches Special Condition No. 2, which requires the applicant to include the mitigation measures identified in the WRA study, including the removal of invasive exotic vegetation as recommended by CDFG and the wetlands biologist, and proposed by the applicant. In addition, the Commission attaches Special Condition No. 4, requiring the applicants to record a deed restriction detailing the specific development authorized under the permit, identifying all applicable special conditions attached to the permit, and providing notice to future owners of the terms and limitations placed on the use of the property.

Permissible Development within ESHA Buffers

Although all portions of the house, decking, and parking area would be located outside of the minimum 50-foot-wide riparian and wetland buffers, the driveway to the parking area will, by necessity, need to cross through one of these areas. The applicants also propose to provide utility service for the new residential development by extending existing utility lines from the private road frontage to the proposed building site. The specific locations for the proposed driveway and utilities are not specified in the amended application.

LUP Policy 3.1-7 allows development within buffer areas for the same uses that would be permitted in the adjacent ESHA, provided: (1) the development is sited and designed to prevent impacts which would significantly degrade such areas; (2) its is compatible with the continuance of such habitat areas by maintaining their functional capacity and ability to be self-sustaining and to maintain natural species diversity; and (3) no other feasible site is available and mitigation is provided. Pipelines, utility lines and road and trail crossings are expressly allowed within riparian ESHA by LUP Policy 3.1-10 and CZC Section 20.496.035 when no less damaging route is feasible. However, such uses are not specifically enumerated in Policy 3.1-4 as allowable uses within wetland ESHA.

Locating the driveway and utilities within the riparian ESHA buffer area but outside all ESHA and any wetland ESHA buffer would meet the requirements of LUP Policy 3.1-7 and CZC Section 20.496.020 in that: (a) although the driveway will be a permanent development serving the new residential development, the accessway will be constructed with a permeable gravel surface that will allow for infiltration of precipitation, and not otherwise significantly alter the hydrology of the site; (b) the driveway and utilities do not represent structures intended for on-going human occupancy where such activities or human presence could further degrade the protection afforded by the buffer; (c) the driveway and utilities would pass through a relatively open, gently sloped area that would not require the removal of major vegetation or extensive grading; (d) provided the utilities are routed along the side of the driveway, additional disruption of new ground and vegetation that would result from placing the utility lines in another location would be avoided; and (e) as there are no other feasible locations for the driveway and utilities that would not otherwise encroach into the riparian and wetlands ESHA or their buffer areas, or require the applicants to secure substantial additional rights-of-way through adjoining properties for these improvements than they currently possess, routing the driveway and utilities through the riparian ESHA buffer would be the most feasible and least environmentally-damaging alternative.

For these reasons, the installation of driveway and the utility lines within the riparian ESHA buffer as conditioned to be located outside of all ESHA and any wetland ESHA buffer, avoid sedimentation impacts to the ESHA on the property, prevent the spread to invasive plants, and be co-located so as to minimize the area of ground and habitat disruption is consistent with the standards of LUP Policy 3.1-7 and CZC Sections 20.496.020 and 20.496.035 for allowing development within ESHA buffers. Therefore, Special Condition No. 1 requires the submittal of final plans for the review and approval of the Executive Director that show the driveway and utilities routed through the riparian ESHA buffer and outside of all ESHA and any wetland ESHA buffer.

Preventing Degradation of ESHA by Invasive Plants

Landscaping of the residential development is proposed. To ensure that no invasive exotic vegetation is planted at the site that could spread into the ESHAs and significantly disrupt the value of the rare plant conservation area or the other protected riparian and wetland habitat areas, the Commission imposes Special Condition No. 2, requiring the preparation of a landscaping plan to protect biological resources on the site, including requirements that all Scotch broom and pampas grass be initially removed from the project site and no invasive exotic plants be planted.

Protection of Other Designated Resource Areas (State Parks and Reserves, and Special Treatment Areas)

CZC 20.496.050(B) requires that any development within designated resource areas such as state parks and reserves, and special treatment areas, shall be reviewed and established in accord with conditions which could allow some development under mitigating conditions but which assures the continued protection of the resource area.

The proposed project includes the development of an individual onsite "Wisconsin mound" sewage disposal leachfield on property immediately adjacent to the applicants' parcel. At the time of the securement of an easement by the applicants to develop the sewage disposal facility, the property was owned by Georgia-Pacific Corporation. In March 2002, this forestland property was purchased as part of the "Big River Acquisition" and became part of the California State Parks system.

With respect to conformance of the proposed development with the requirements of CZC 20.496.050(B), the project has been reviewed and considered by a variety of resource agencies, including the County of Mendocino's Public Health Department's Division of Environmental Health, the California Department of Fish and Game, the California Department of Forestry and Fire Protection, and the California Department of Parks and Recreation in regard to the potential effects that the development and on-going maintenance of the mound disposal field would have on this forested parkland area. Based upon CDPR's current plans to maintain the lands adjacent to the project site primarily as wildlife habitat open space and watershed buffer to the Big River with no intention to develop trails or other recreational facilities in this area, no impacts associated with the leachfield or its maintenance have been identified that would necessitate the application of any additional constraints or mitigation measures to protect this designated resource area.

Conclusion

As conditioned to: (1) establish adequately wide buffers to protect the riparian and wetland ESHAs; (2) limit development within the 50-foot riparian buffer area to only uses allowable under the LCP buffer policy and development that would not significantly disrupt the habitat value of ESHA resources; and (3) include specific mitigation measures to further protect the environmentally sensitive areas from the construction and uses associated with the residential development, including the removal of existing exotic/invasive plants and prohibiting the introduction or further spreading of invasive exotic species, the Commission finds that the project as proposed and conditioned will protect the ESHAs on the property consistent with LUP Policies 3.1-7 and 3.1-10 and with Coastal Zoning Code Sections 20.496.010, 20.496.020, 20.496.035, and 20.496.050.

F. Stormwater and Drainage.

1. LCP Provisions

LUP Policy 3.1-25 states:

> *The Mendocino Coast is an area containing many types of marine resources of statewide significance. Marine resources shall be maintained, enhanced and, where feasible, restored; areas and species of special biologic or economic significance shall be given special protection; and the biologic productivity of coastal waters shall be sustained.*

CZC Section 20.492.020 incorporates sedimentation standards and states in part:

> *A. Sediment basins (e.g., debris basins, desilting basins, or silt traps) shall be installed in conjunction with initial grading operations and maintained through the development/construction process to remove sediment from runoff wastes that may drain from land undergoing development to environmentally sensitive areas.*
>
> *B. To prevent sedimentation of off-site areas, vegetation shall be maintained to the maximum extent possible on the development site. Where necessarily removed during construction, native vegetation shall be replanted to help control sedimentation.*
>
> *C. Temporary mechanical means of controlling sedimentation, such as hay baling or temporary berms around the site, may be used as part of an overall grading plan, subject to the approval of the Coastal Permit Administrator.*
>
> *D. Design of sedimentation control devices shall be coordinated with runoff control structure to provide the most protection [emphasis added.]*

Discussion

Storm water runoff from new residential development can adversely affect the biological productivity of coastal waters by degrading water quality. LUP Policy 3.1-25 requires the protection of the biological productivity of coastal waters. Section 20.492.020 of the Mendocino County Coastal Zoning Code sets forth sedimentation standards to minimize sedimentation of environmentally sensitive areas and off-site areas. Specifically, Section 20.492.020(B) requires that the maximum amount of vegetation existing on the development site shall be maintained to prevent sedimentation of off-site areas, and where vegetation is necessarily removed during construction, native vegetation shall be replanted afterwards to help control sedimentation.

As discussed above, the subject parcel is located on a sloping coastal terrace planned and zoned for low-density rural residential development. The unnamed seasonal drainage course along the northwest side of the property and runoff from open portions of the site eventually discharge into the Big River estuary approximately ⅛-mile to the southwest of the project site. Runoff originating from the development site that is allowed to drain off the site to streams and Big River would contain entrained sediment and other pollutants that would contribute to degradation of the quality of coastal waters, including downstream marine waters. Sedimentation impacts from runoff would be of greatest concern during and immediately after construction. Consistent with CZC Section 20.492.020(B), the Commission includes within attached Special Condition No. 1 a requirement that the applicants minimize erosion and sedimentation impacts from the proposed construction of the residence. Special Condition No. 1 requires that the applicants submit for the review and approval of the Executive Director an Erosion and Runoff Control Plan that would provide that: (1) hay bales be installed to contain runoff from construction and demolition areas; (2) on-site vegetation be maintained to the maximum extent possible during construction; (3) any disturbed areas be replanted or seeded with native vegetation following project completion; and (4) runoff from rooks, decks and other impervious surfaces by collected and conveyed to an area on the site where it may infiltrate into the ground and undergo bio-filtration prior to entry into any drainage course or waterway.

The Commission finds that as conditioned, the proposed development is consistent with Section 20.492.020 because erosion and sedimentation will be controlled and minimized by (1) maintaining on-site vegetation to the maximum extent possible; (2) replanting or seeding any disturbed areas with native vegetation following project completion; (3) using hay bales to control runoff during construction, and (4) directing runoff from the completed development in a manner that would provide for infiltration into the ground. Furthermore, the Commission finds that the proposed development as conditioned to require these measures to control sedimentation from storm water runoff from the site is consistent with the provisions of LUP Policy 3.1-25 requiring that the biological productivity of coastal waters be sustained.

G. Visual Resources.

1. LCP Provisions

LUP Policy 3.5-1 states in applicable part:

> *The scenic and visual qualities of Mendocino county coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas designated by the County of Mendocino Coastal Element shall be subordinate to the character of its setting.*

2. Discussion.

The proposed development includes a 28-foot-high, 1,680-square-foot single-family residence, with a 30′ x 30′ graveled off-street parking area. The development is located in the Van Meter Subdivision, situated approximately ½ mile east of the unincorporated town of Mendocino. The property is not situated within a designated highly scenic area as enumerated within the LCP or appearing as such on its LUP maps. The subject site lies in a grassy opening on a moderately-sloped hillside with scattered tree and shrub cover. Development of the residence will not involve substantial alteration of natural landforms.

Due to its location well inland on a private road, no views to and along the ocean through the project site are available to the public. Further, because of the presence of intervening major vegetation, the site is not visible to motorists traveling northbound on Highway 1. Consequently, there are no views of the site from Highway One or any other public thoroughfare to the west of the subject site. Portions of the site may, however, be visible from watercraft within the Big River estuary or from offshore areas within the Mendocino Headlands State Park, which are popular sea kayaking areas.

With respect to the protection of views to and along the coast, the development of the proposed above-grade structures within the designated building sites has the potential to cumulatively adversely affect such at-sea views through the introduction of an additional structure into the predominantly tree-covered viewshed. Further, as regards the requirement that new development be visually compatible with the character of the surrounding area, depending upon the choice of exterior building materials used in its construction, the resulting residence could dramatically contrast with its forested hillside surroundings.

The proposed 1,680-square-foot, 28-foot-high house would be similar in size and height to other structures in its developed neighborhood. The applicants' agent has indicated that the exterior of the residence and decking will be horizontal cedar clapboard. No specific information was submitted as to whether the siding would be painted. The roof would be covered with Certainteed Independence Shangle®, a one-piece fiberglass shingle underlay with random overlay tabs. No information was provided as to which color of shingle would be used, which range from neutral greys and black, to various greens and browns, to brick-red options. To ensure that the colors of the exterior surfaces of the proposed house will not further impact at-sea

views along the coastline and be compatible with the character of the area, the Commission attaches Special Condition No. 3. This condition imposes design restrictions, including a requirement that all exterior siding and roofing of the proposed structure shall be of natural or natural-appearing materials of dark earthtone colors only; that all exterior materials, including the roof and the windows, shall be non-reflective to minimize glare; and that all exterior lights, including any lights attached to the outside of the house, shall be low-wattage, non-reflective, and have a directional cast downward. As conditioned, the development will blend into its backdrop of trees and will be compatible with the character of the surrounding area.

Special Condition No. 4 further requires that a deed restriction be recorded to ensure that future buyers of the property will be notified that the choice of permissible colors of the structure is limited to better ensure that the development is not painted lighter colors in the future that would not be compatible with its forested hillside surroundings. These requirements will ensure the project remains consistent with the provisions of LUP Policy 3.5-1.

The Commission thus finds that the proposed development, as conditioned, is consistent with LUP Policies 3.5-1, as the project has been conditioned to minimize visual impacts, will be visually compatible with the character of surrounding areas, and will provide for the protection of coastal views.

H. Public Access and Recreation.

1. Coastal Act Access Policies

Projects located between the first public road and the sea and within the coastal development permit jurisdiction of a local government are subject to the coastal access policies of both the Coastal Act and the LCP. Coastal Act Sections 30210, 30211, and 30212 require the provision of maximum public access opportunities, with limited exceptions. Section 30210 states that maximum access and recreational opportunities shall be provided consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse. Section 30211 states that development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation. Section 30212 states that public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, adequate access exists nearby, or agriculture would be adversely affected.

2. LCP Provisions

The Mendocino County LUP includes a number of policies regarding standards for providing and maintaining public access. Policy 3.6-9 states that offers to dedicate an easement shall be required in connection with new development for all areas designated on the land use plan maps. LUP Policy 3.6-27 states that development shall not interfere with the public's right of access to the sea either acquired by the public at-large, through court decree, or where evidence of historic

public use indicates the potential existence of prescriptive rights of public access. Policy 3.6-28 states that new development on parcels containing the accessways identified on the land use maps shall include an irrevocable offer to dedicate an easement.

3. Discussion

In its application of the above policies, the Commission is limited by the need to show that any denial of a permit application based on this section, or any decision to grant a permit subject to special conditions requiring public access is necessary to avoid or offset a project's adverse impact on existing or potential access.

The subject site is located along a private road approximately ¼ mile north of the tidally-influenced reaches of the lower Big River and roughly ½ mile inland from the open coastline. The County's land use maps do not designate the subject parcel for public access. In addition, there does not appear to be any safe or appropriate horizontal access to the dense, brush-covered, public parkland hillsides within the Big River Acquisition area immediately to the east of the site, slated to be managed for wildlife habitat and watershed restoration purposes rather than for public recreational uses.[3] No evidence exists of public prescriptive use of the subject site.

Therefore, the proposed project will not interfere with any possible prescriptive rights. In addition, the proposed project would not otherwise adversely affect public access. The proposed development of one single-family residence would not significantly increase the density of development in the area, and therefore would not create the need for new public access to the shoreline.

Therefore, the Commission finds that the proposed development does not have any significant adverse effect on public access, and the proposed project without new public access, is consistent with the requirements of Coastal Act Sections 30210, 30211, and 30212, and the public access policies of the County's certified LCP.

I. California Environmental Quality Act (CEQA).

Section 13096 of the Commission's administrative regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as modified by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The Commission incorporates its findings on conformity with LCP policies at this point as if set forth in full. These findings address and respond to all public comments regarding potential

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[3] Ron Munson, Acting District Superintendent, California Department of Parks and Recreation – Mendocino District, pers. comm.

significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed herein, in the findings addressing the consistency of the proposed project with the certified LCP, the proposed project has been conditioned to be found consistent with the County of Mendocino LCP and the access and recreation policies of the Coastal Act. Mitigation measures which will minimize all adverse environmental impacts have been made requirements of project approval. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity may have on the environment. Therefore, the Commission finds that the proposed project can be found to be consistent with the requirements of the Coastal Act to conform to CEQA.

V. EXHIBITS:

1. Regional Location Map
2. Vicinity Map
3. Excerpt, Land Use Plan Map No. 17 – "Mendocino"
4. Excerpt, Coastal Zoning Map No. 42-F
5. Revised Site Plan, House and Garage Elevations, and Floor Plans
6. Notice of Final Local Action
7. Appeal, filed July 19, 2001 (Hillary Adams, PhD, Sierra Club – Redwood Chapter)
8. Biological Analyses (Gordon McBride, PhD; Theodore W. Wooster)
9. Wetlands Delineation and Buffer Analyses (Wetlands Research Associates, Inc.)
10. Reviewing Agency Correspondence

ATTACHMENT A:

STANDARD CONDITIONS

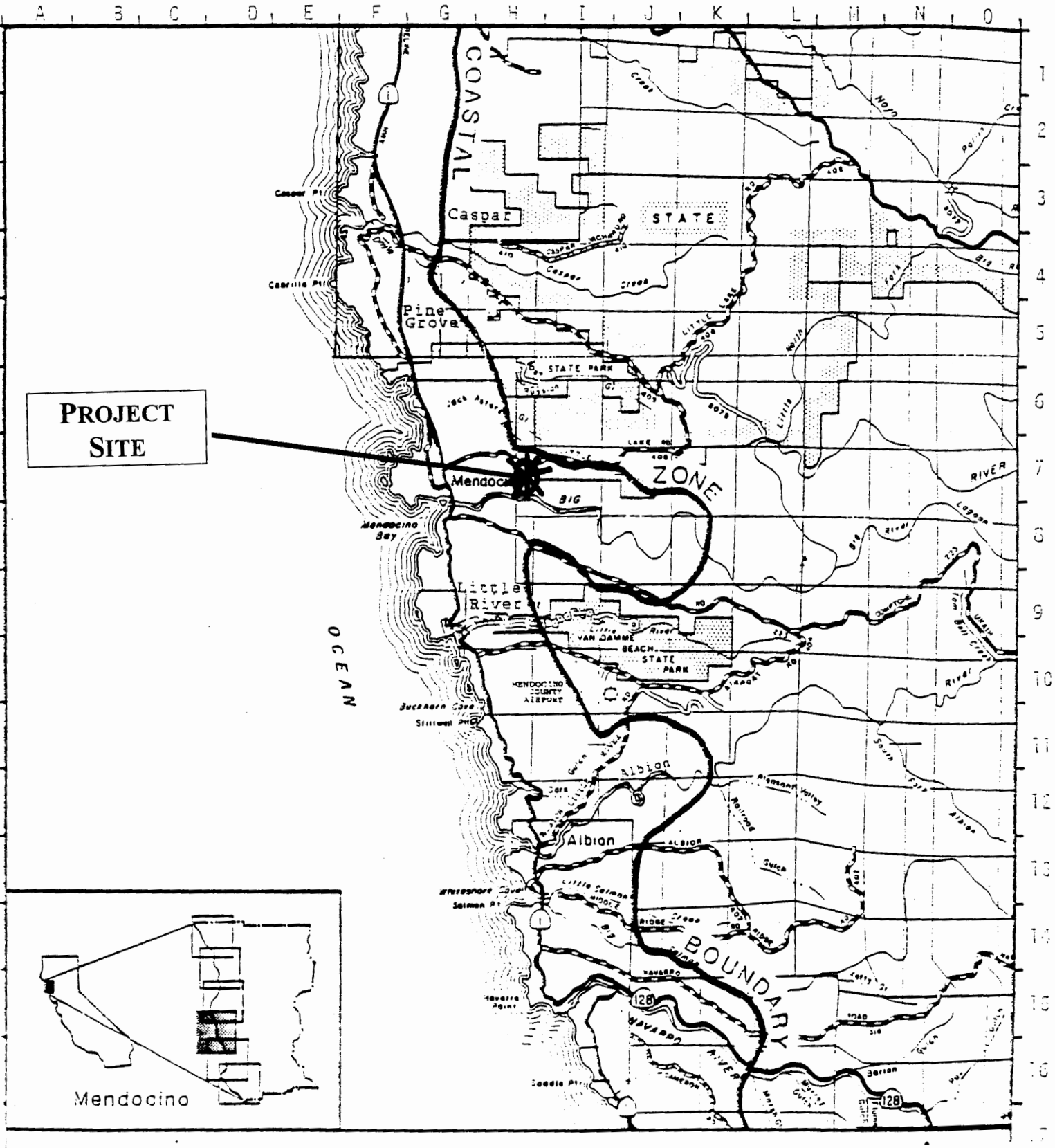
1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director of the Commission.

4. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.



California Coastal Commission

LOCATION MAP

County of Mendocino

EXHIBIT NO. 1

APPLICATION NO.
A-1-MEN-02-019
MOLLER & SPURRIER
REGIONAL LOCATION MAP

CDP #39-00
February 28, 2002
CPA-12

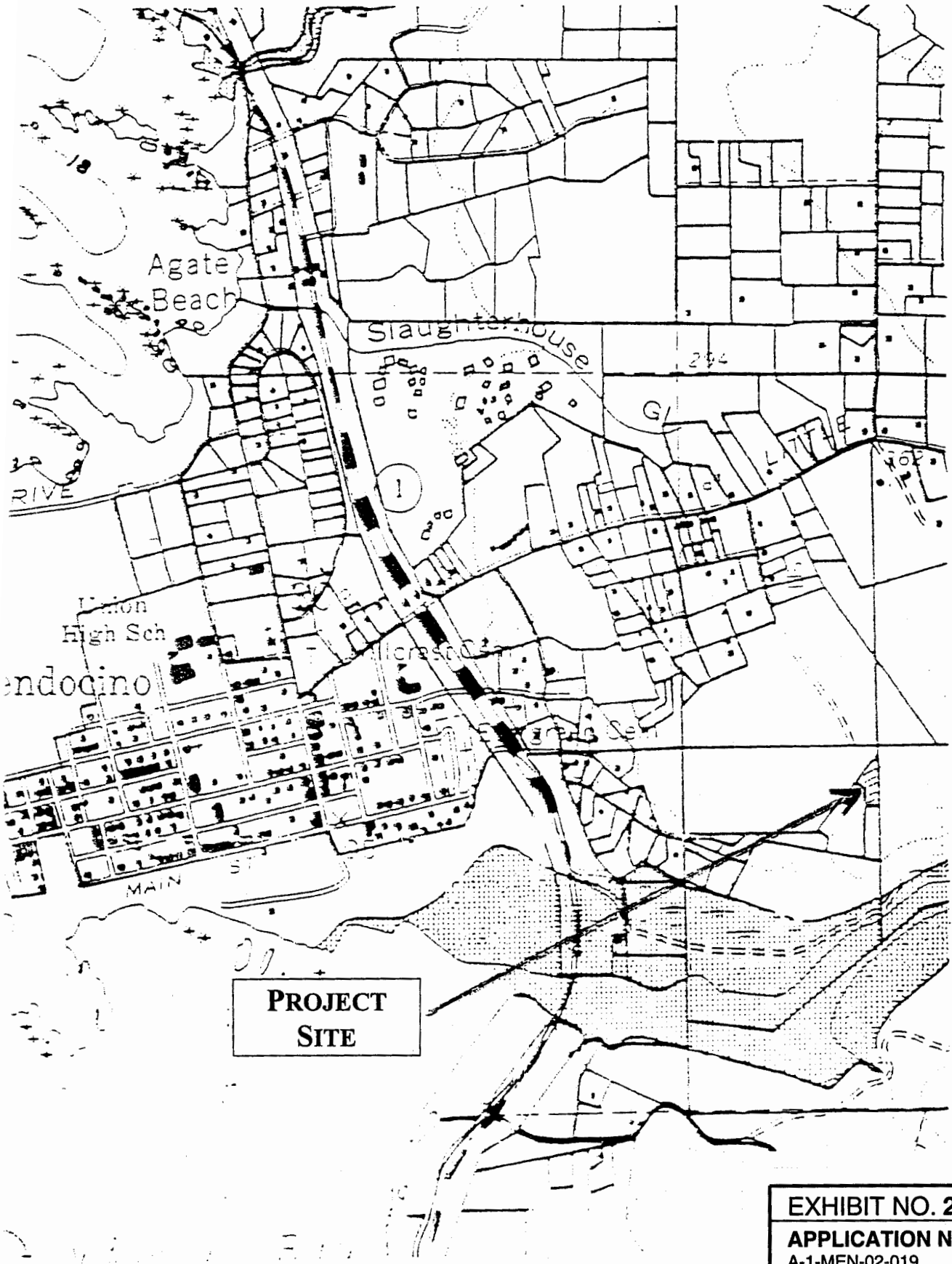


EXHIBIT NO. 2

APPLICATION NO.
A-1-MEN-02-019

MOLLER & SPURRIER

VICINITY MAP

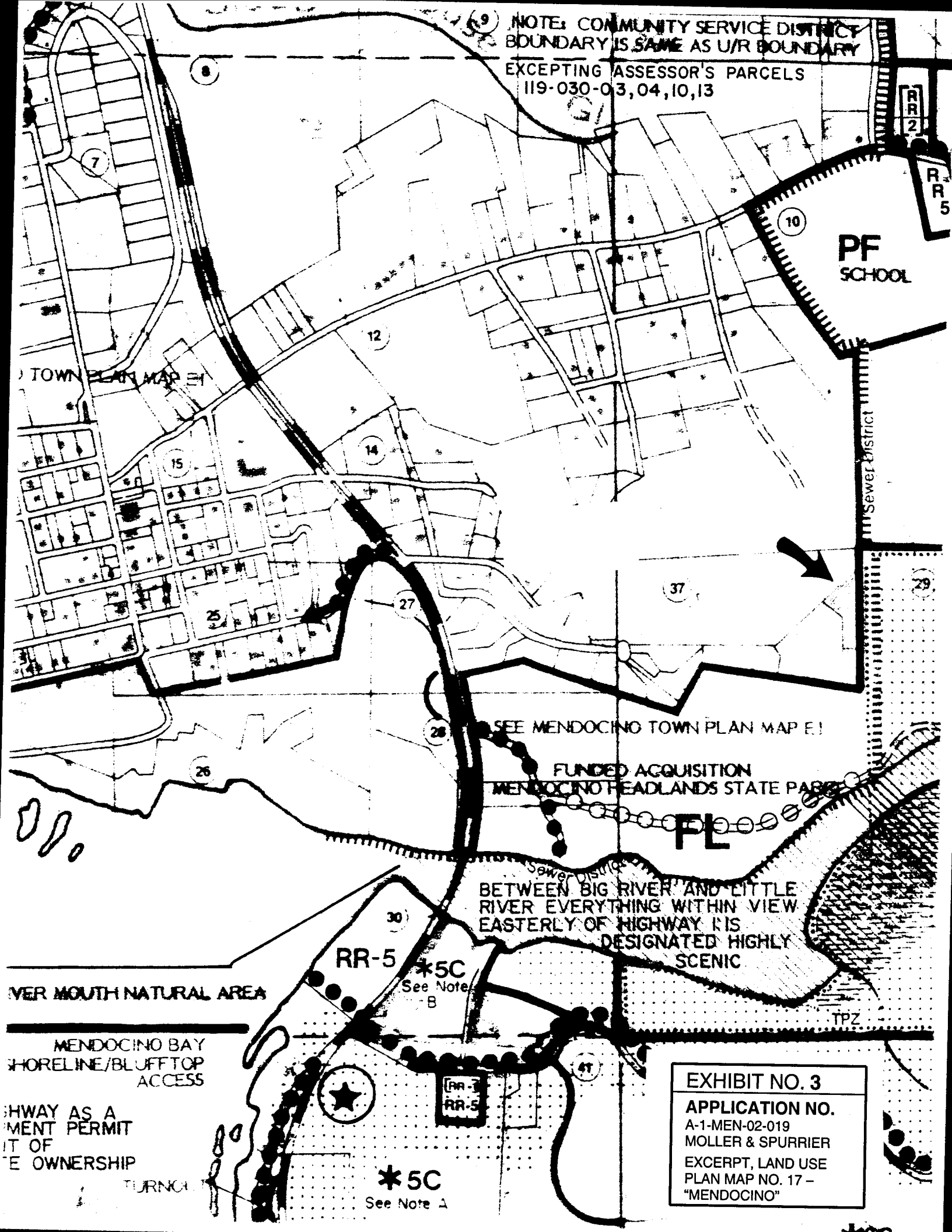


EXHIBIT NO. 3

APPLICATION NO.
A-1-MEN-02-019
MOLLER & SPURRIER

EXCERPT, LAND USE PLAN MAP NO. 17 – "MENDOCINO"

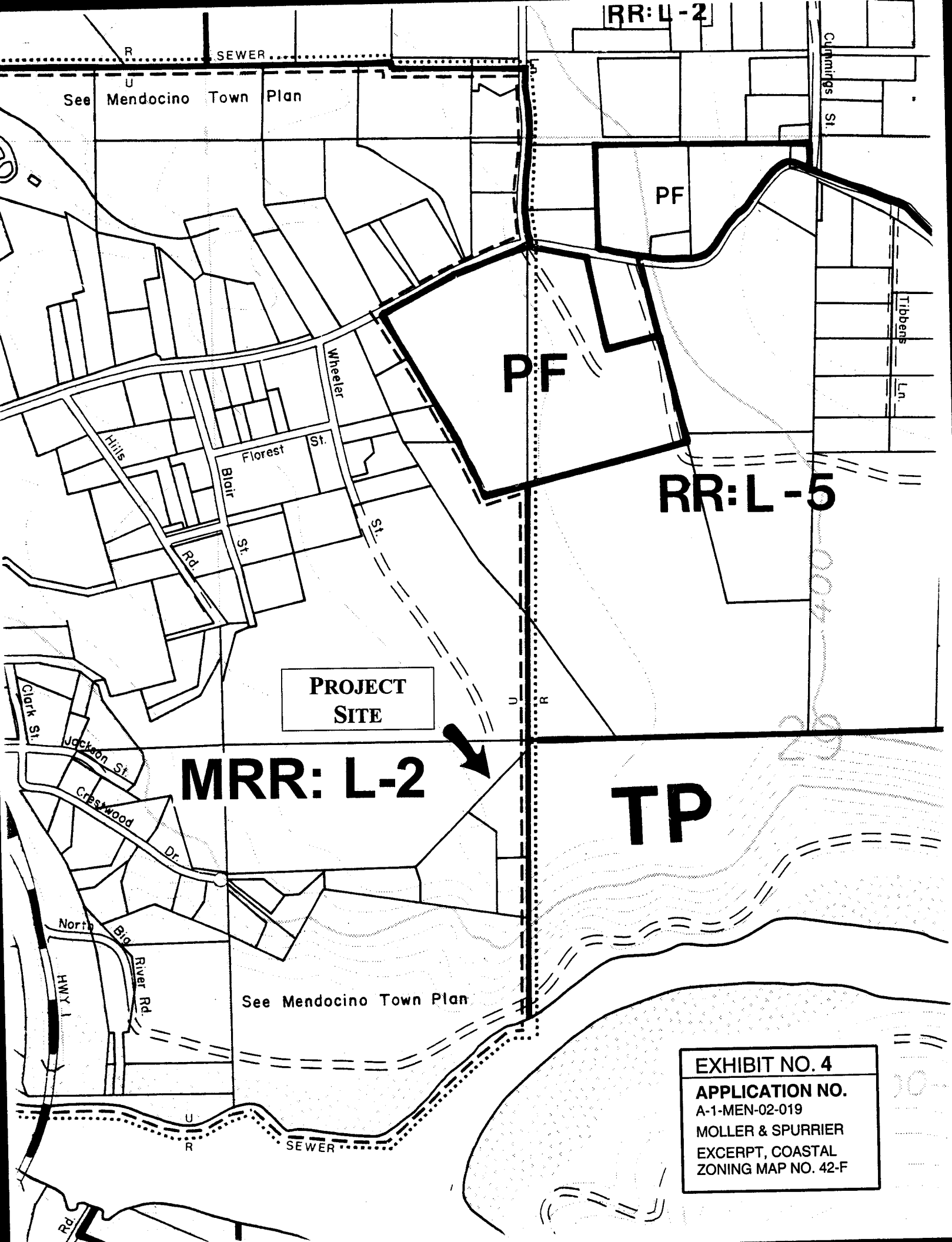


EXHIBIT NO. 4

APPLICATION NO.
A-1-MEN-02-019
MOLLER & SPURRIER
EXCERPT, COASTAL ZONING MAP NO. 42-F

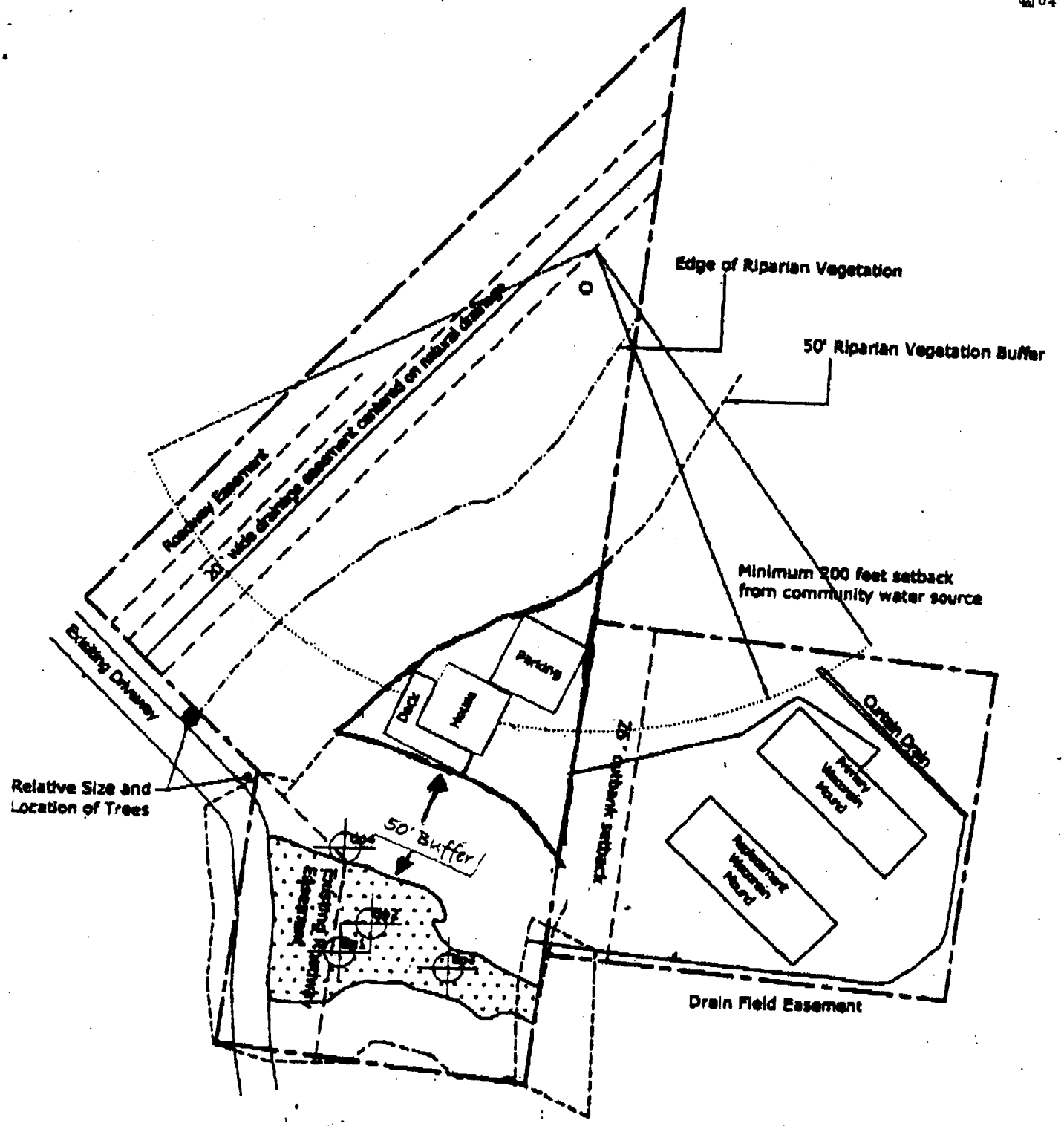
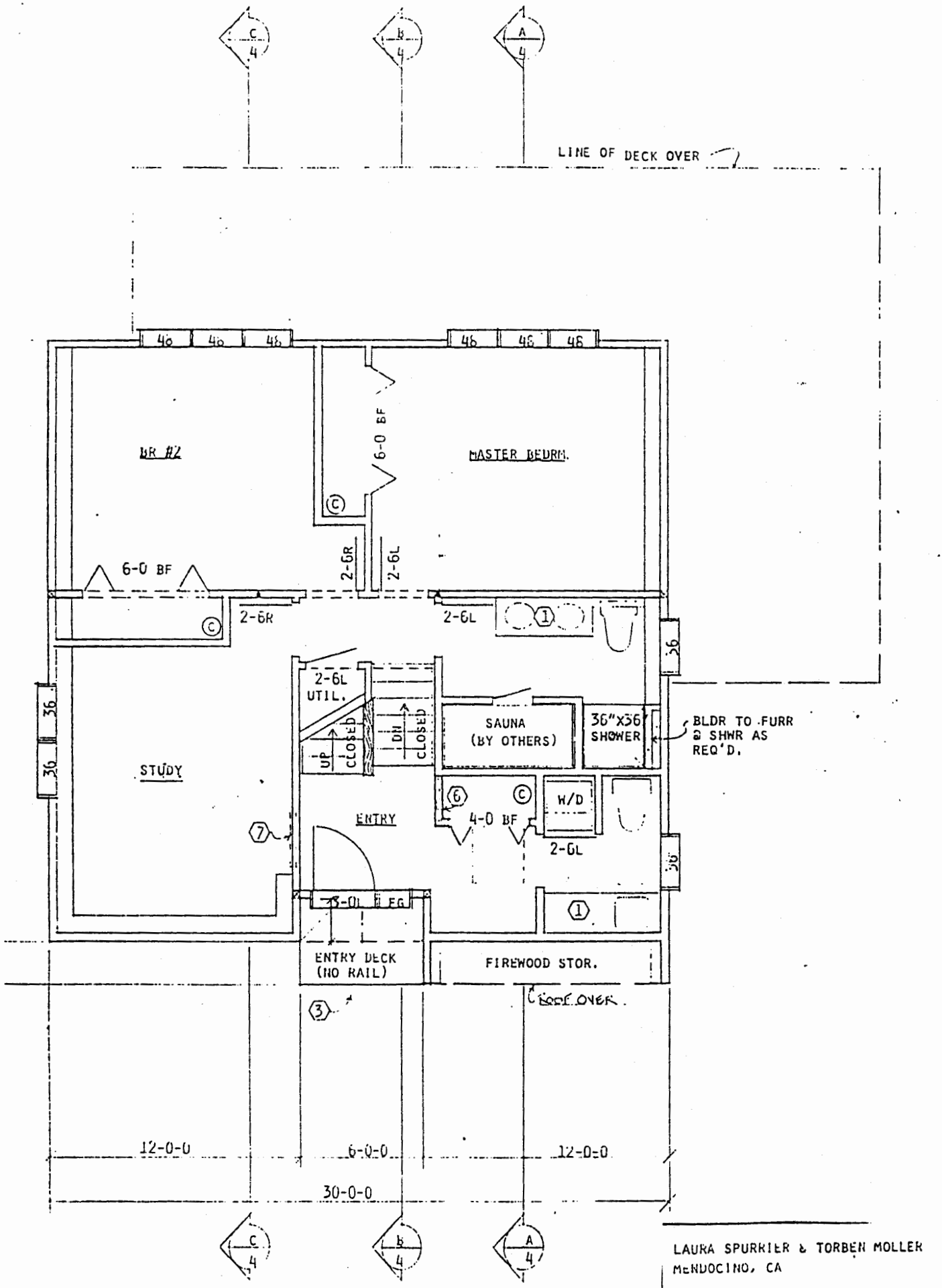


EXHIBIT C: MY PROPOSED SITING

EXHIBIT NO. 5
APPLICATION NO.
A-1-MEN-02-019
MOLLER & SPURRIER
REVISED SITE PLAN, HOUSE & GARAGE ELEVATIONS, & FLOOR PLANS (1 of 7)



LAURA SPURRIER & TORBEN MOLLER
MENDOCINO, CA

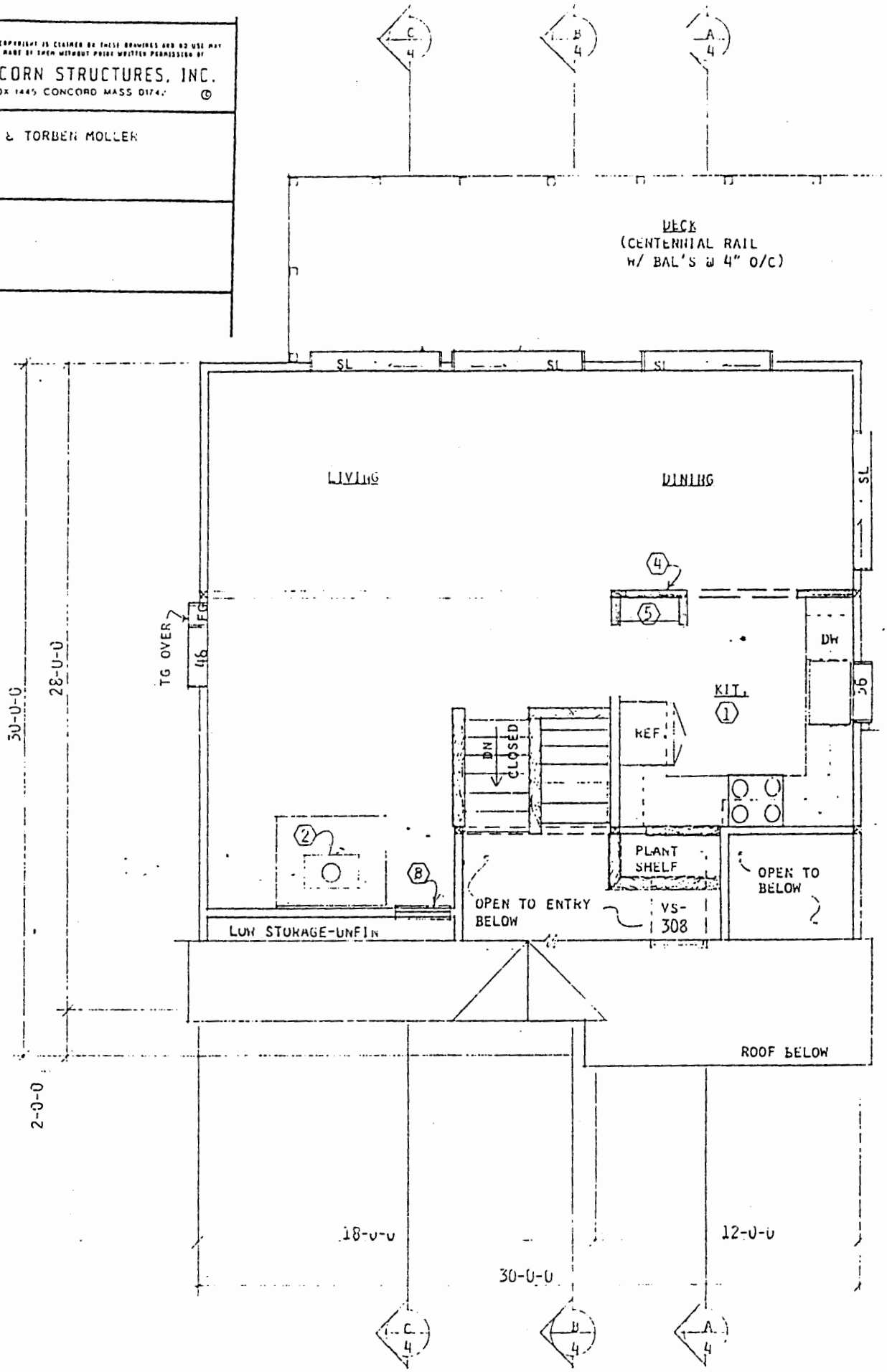
FLOOR PLANS

ACORN STRUCTURES, INC.
BOX 1445 CONCORD MASS 01742 ©

LAURA SPURRIER & TORBEN MOLLER
MENDOCINO, CA

FLOOR PLANS
¼"=1'-0"

DATE
4/24/96 ML



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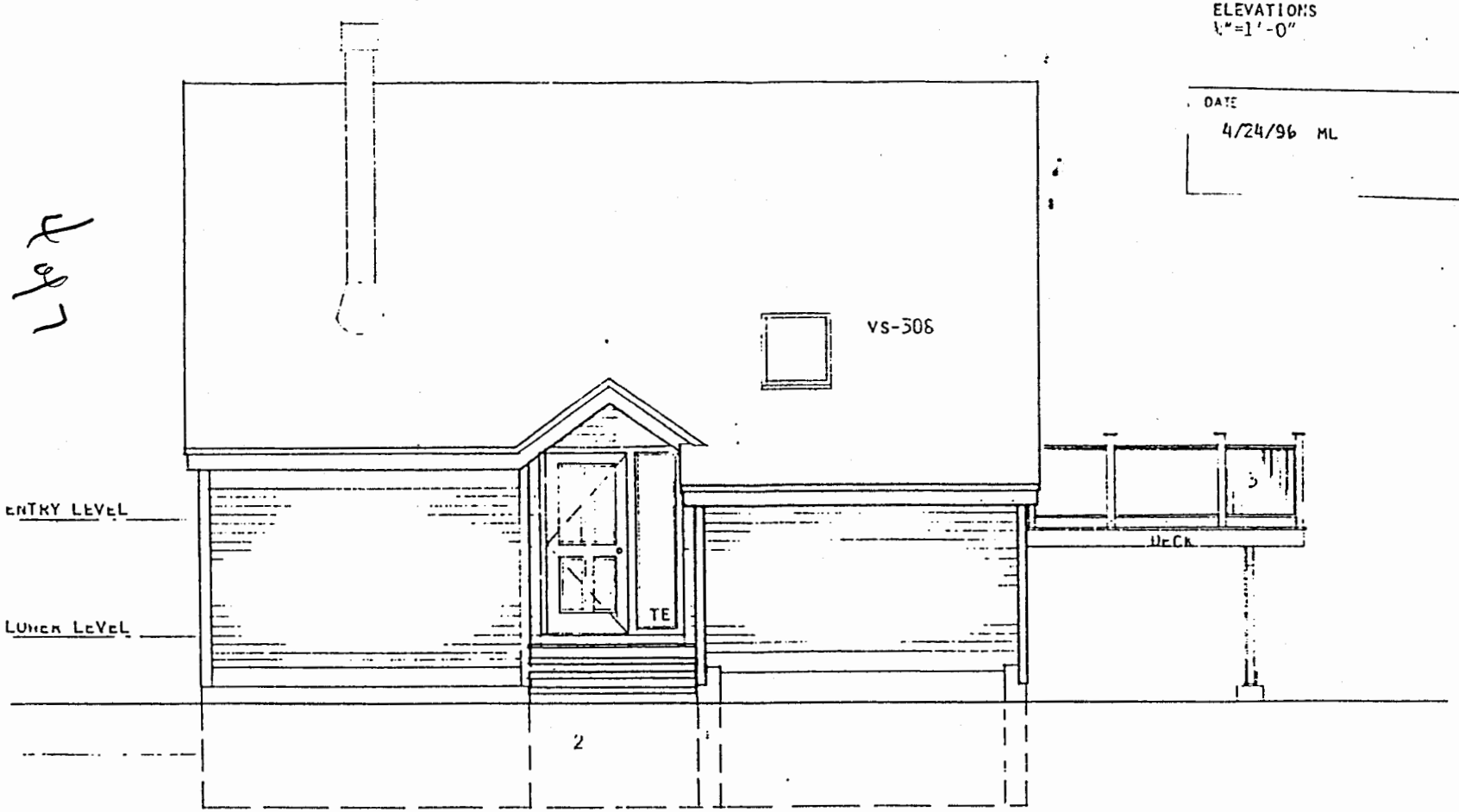
UPPER LEVEL

ACORN STRUCTURES, INC.
930 MAIN STREET, ACTON, MASS.
ACORN® 01720 (617) 259-9450 ©

LAURA SPURRIER & TORBEN MOLLER
MENDOCINO, CA

ELEVATIONS
1/4"=1'-0"

DATE
4/24/96 ML



FRONT

ACORN STRUCTURES, INC.
ACORN® 930 MAIN STREET, ACTON, MASS. 01720 (617) 259-9450 ©

LAURA SPURRIER & TORBEN MOLLER
MENDOCINO, CA

ELEVATIONS
1/4"=1'-0"

DATE
4/24/96 ML

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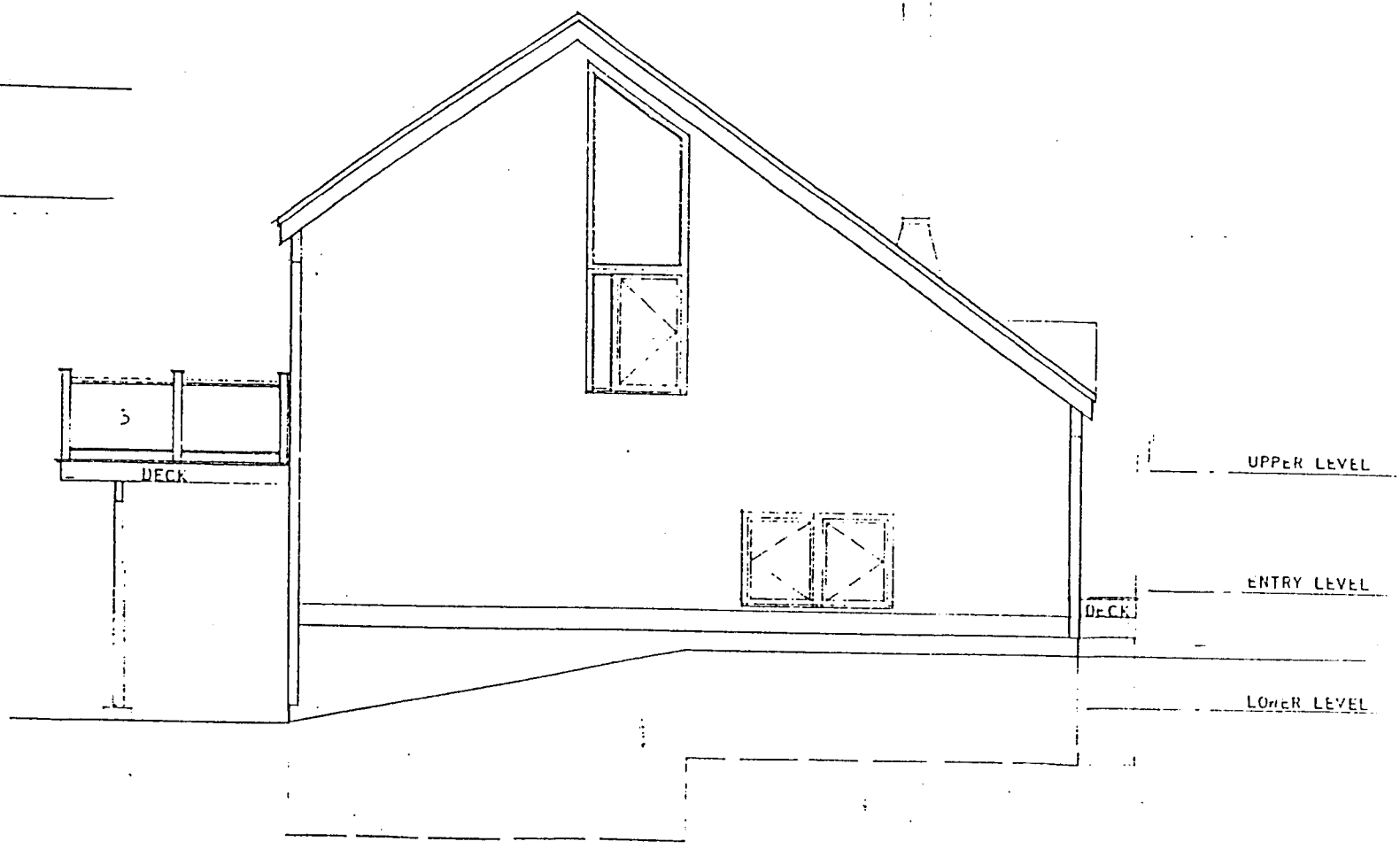

LEFT

ACORN STRUCTURES, INC.
930 MAIN STREET, ACTON, MASS. 01720 (617) 259-9450 ©
ACORN®

LAURA SPURRIER & TORBEN MOLLER
MENDOCINO, CA

ELEVATIONS
¼"=1'-0"

DATE
4/24/96 ML

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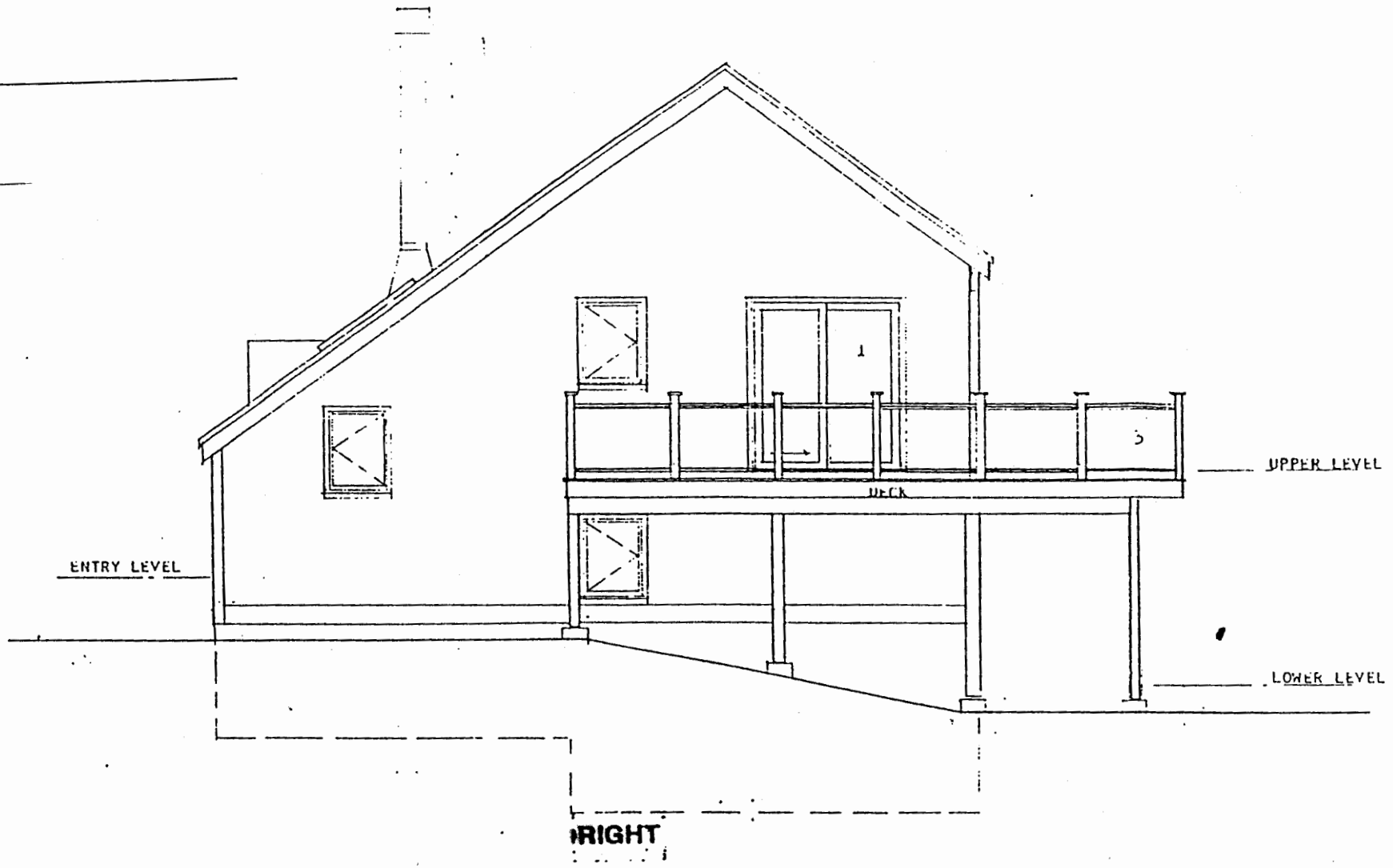

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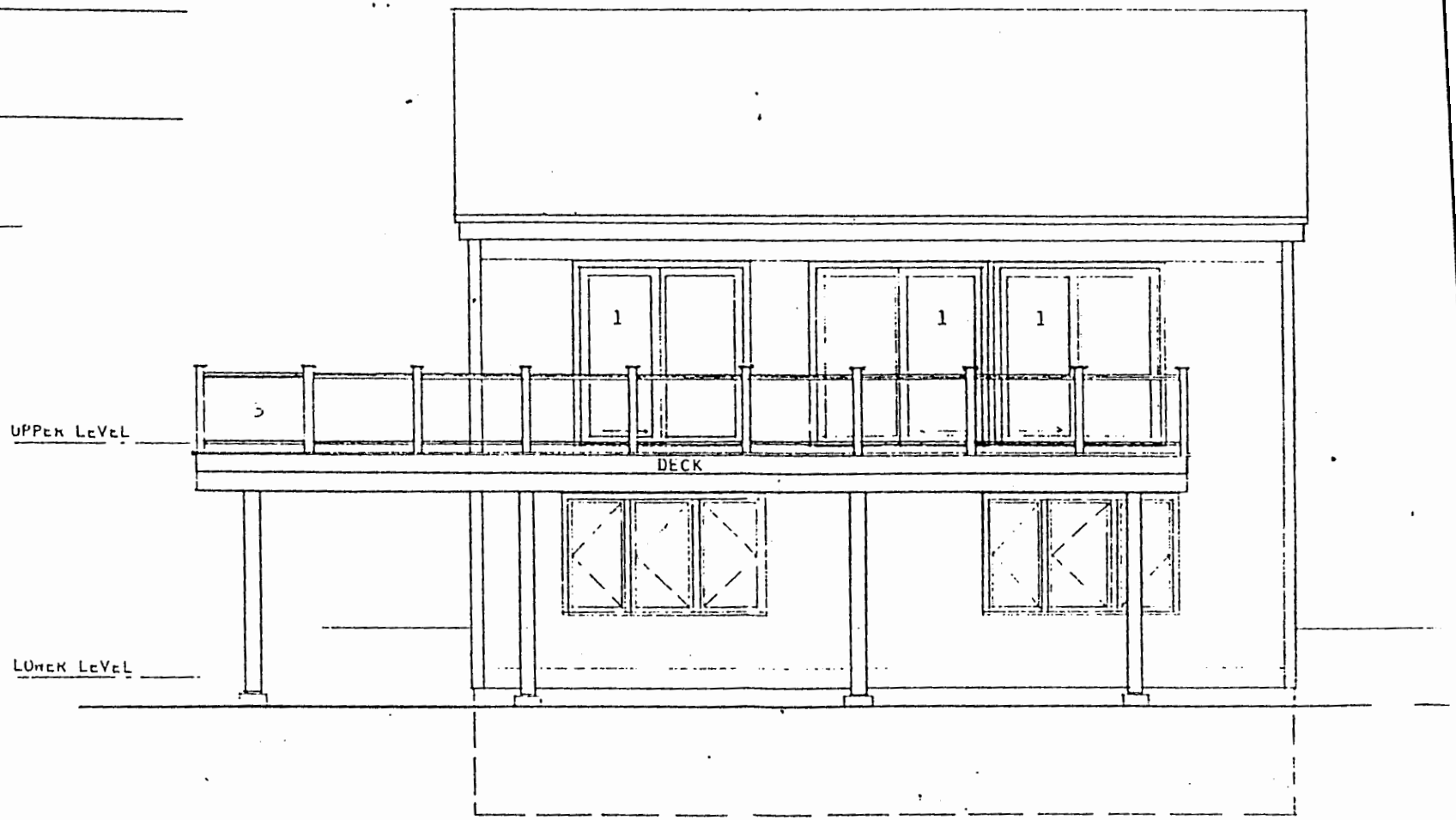
LAURA SPURRIER & TORBEN MOLLER
MENDOCINO, CA

ELEVATIONS
¼"=1'-0"

DATE
4/24/96 ML



REAR

MEN-DO-138

RAYMOND HALL
DIRECTOR

COUNTY OF MENDOCINO
DEPARTMENT OF PLANNING AND BUILDING SERVICES
MAILING ADDRESS:
790 SO. FRANKLIN
FORT BRAGG, CA 95437

TELEPHONE
(707) 964-5379

March 21, 2002

NOTICE OF FINAL ACTION

Action has been completed by the County of Mendocino on the below described project located within the Coastal Zone.

CASE#: CDP #39-00
OWNER: Torben Moller/Laura Jean Spurrier
AGENT: Bud Kamb
REQUEST: Construct a 1,680 square foot single-family residence with an average maximum height of 28' from finished grade. Install a driveway, Wisconsin mound septic system with a curtain drain and connection to the Big River Vista Mutual Water Company.
LOCATION: E side of Highway One approximately ¼ mile E of its intersection with Crestwood Drive which leads into the Big River Vista Subdivision at 44696 Crestwood Drive (APN 119-370-10).

PROJECT COORDINATOR: Robert Dostalek

HEARING DATE: February 28, 2002

APPROVING AUTHORITY: Coastal Permit Administrator

ACTION: Approved with Conditions.

See staff report for the findings and conditions in support of this decision.

The project was not appealed at the local level.

The project is appealable to the Coastal Commission pursuant to Public Resources Code. Section 30603. An aggrieved person may appeal this decision to the Coastal Commission within 10 working days following Coastal Commission receipt of this notice. Appeals must be in writing to the appropriate Coastal Commission district office.

EXHIBIT NO. 6
APPLICATION NO.
A-1-MEN-02-019
MOLLER & SPURRIER
NOTICE OF FINAL ACTION
(1 of 13)

COASTAL PERMIT ADMINISTRATOR ACTION SHEET

CASE#: CDP #39-00 HEARING DATE: February 28, 2002

OWNER: Moller/Spurrier

ENVIRONMENTAL CONSIDERATIONS:

___X___ Categorically Exempt

_____ Negative Declaration

_____ EIR

FINDINGS:

____X____ Per staff report

_____ Modifications and/or additions

ACTION:

____X____ Approved

_____ Denied

_____ Continued _____

CONDITIONS:

_____ Per staff report

___X____ Modifications and/or additions

Add a new second sentence to Special Condition #1: "Culverts shall be provided as necessary to maintain existing drainage patterns."

Signed: Coastal Permit Administrator

2413

A-1-MEN-00-135

STAFF REPORT FOR COASTAL DEVELOPMENT
STANDARD PERMIT

CDP# 39-00
February 28, 2002
CPA-1

OWNER: Torben Moller
Laura Jean Spurrier
1281 Queens Road
Berkeley, CA 94708

AGENT: Bud Kamb
PO Box 616
Little River, CA 95456

REQUEST: Construct a 1,680 square foot single family residence with an average maximum height of 28 feet measured from finished grade. The project also includes the installation of a driveway, a Wisconsin mound septic system with curtain drain and connection to the Big River Vista Mutual Water Company.

LOCATION: On the east side of Highway One, approximately ¼ mile east of its intersection with Crestwood Drive (which leads into the Big River Vista Subdivision) at 44696 Crestwood Drive (APN: 119-370-10).

APPEALABLE AREA: Yes (ESHA)

PERMIT TYPE: Standard

TOTAL ACREAGE: ±1.27 acres

ZONING: MRR: L-2

GENERAL PLAN: RR2- Rural Residential

EXISTING USES: Vacant

SUPERVISORIAL DISTRICT: 5

ENVIRONMENTAL DETERMINATION: Categorically Exempt. Class 3(a)

OTHER RELATED APPLICATIONS: CDP # 06-97 (expired), 7802-F (septic), LCP 96-02 (for a single family residence).

PROJECT DESCRIPTION AND HISTORY: *The project was originally approved under CDP #06-97, however the permit expired on March 11, 2000 prior to the commencement of any construction activities with reliance on said permit.*

The applicant proposes to construct a 1,680 square foot, two story, two bedroom, single family residence with driveway. The maximum average height of the structure would be 28 feet above finished grade. A Wisconsin mound septic system and curtain drain would be developed on an easement obtained from an

3 of 13

adjacent property owner. Water service will be provided by Big River Vista Mutual Water Company, a community water system. The project requires a Standard Coastal Development Permit because the proposed development is located within 100 feet of an environmentally sensitive habitat area (ESHA).

LOCAL COASTAL PROGRAM CONSISTENCY RECOMMENDATION: The proposed project is consistent with the applicable goals and policies of the Local Coastal Program as described below. A ☑ indicates that the statement regarding policy consistency applies to the proposed project.

Land Use

☑ Single family residences are compatible with the Mendocino Rural Residential (MRR) Zoning District and are designated as a principal permitted use.

☑ The MRR zoning district requires a minimum 20-foot setback for front and rear yards and 6 feet for side yards. The proposed setbacks of the residence are 30 feet from the eastern property boundary, 85 feet from the southern boundary, 45 feet from the western boundary and 130 feet from the northwestern boundary. The proposed development complies with the maximum building height (28 feet) and setback requirements of the zoning district.

Public Access

☑ The project site is located east of Highway 1 and public access to coastal resources is not an issue.

Hazards

☑ The site is located in a State Responsibility Area and potential hazards associated with fire protection on the subject property are addressed by CDF. A preliminary fire clearance form (#45-97) has been submitted by the applicant.

☑ The proposed development would be located on slopes which are less than 20% and the development does not present any issues relative to erosion and/or slope failure.

☑ There are no known faults, landslides or other geologic hazards in close proximity to the proposed development.

Visual Resources

☑ The project site is not located within a designated "highly scenic area."

☑ Pursuant to Section 20.760.035, the project is not subject to Mendocino Historical Review Board approval as the proposed development would not be visible by a person standing on any point in Historical Zone A, including the banks and beach of Big River.

Natural Resources

Section 20.692.025 sets forth additional requirements of Title 20 of the Mendocino County Code that apply to development proposals within the jurisdictional area of Division III of the Zoning Code. This section specifically includes provisions pertaining to the identification and protection of environmentally sensitive habitat areas (ESHA's).

The following paragraphs provide a summation of correspondence between staff and the botanist contracted by the applicant (see file for complete letters and surveys pertaining to the natural resource portion of this report).

Gordon McBride, Ph.D., conducted a botanical survey of the parcel and a report was submitted dated July 5, 2000. The report identified the existence of Bolander's Reed Grass, a listed California Native Plant Society Class 1B rare plant species. Additionally, a riparian plant community was identified along the stream that flows along the northwestern parcel boundary. The initial buffer width recommended to protect the riparian plant community and the Bolander's Reed Grass was 50 feet.

With a 50-foot buffer from both the riparian plant community and the Bolander's Reed Grass population, the resulting building envelope did not appear to be adequate to accommodate the proposed development, which is a relatively modest size structure. Staff corresponded with the botanist to determine if a lesser buffer width would be sufficient to protect the resource from significant degradation. A letter from staff to the applicant's agent dated April 25, 2001 addressed the apparent constraints on the parcel and further stated that the botanical report did not adequately support the findings required for staff to recommend approval of the project, as proposed. The letter also requested more specific information relating to the Bolander's Reed Grass population. A response letter from the botanist dated May 4, 2001 provided insight as to the approximate size of the population including mitigation measures. A portion of this response letter states:

> *"I have not done an exact count, but I believe there are between 30 to 40 Bolander's Reed Grass in the Moller/Spurrier site. Bolander's Reed Grass has only been listed as a California Native Plant Society (CNPS) List 1B since June 2000, however, I have been aware of the grass for more than a decade and have identified it a number of times in many botanical surveys. In Coastal Mendocino County it is an occasional plant in Closed Cone and North Coast Coniferous forests. When these habitats are disturbed, as in logging, road construction or building envelope clearing, Bolander's Reed Grass has prospered. It is what an ecologist would call a colonizing or successional plant species. On the Moller/Spurrier site, for example, it is much more abundant along the eastern portion of the historically cleared building envelope. On other sites I have done botanical surveys where I have not found Bolander's Reed Grass present under a dense overstory of Bishop Pine and associated midlevel vegetation. However, subsequent visits to the site after it was cleared have shown Bolander's Reed Grass to be abundant in the cleared building envelope."*

The letter dated May 4, 2002 also included recommendations to protect the riparian habitat on the northern portion of the parcel. This portion of the letter states:

> *"I do not believe the installation of a driveway within the recommended 50 foot buffer associated with the riparian plant community on the northern portion of the Moller/Spurrier parcel will*

jeopardize the ecological status of the riparian community. I recommend that such a driveway be rocked rather than paved. Paved surfaces may have a tendency to concentrate more runoff than a more porous surface and cause erosion which may degrade the riparian habitat. A rocked driveway would allow rainfall to be absorbed in a manner very similar to the natural soil on the site.

A portion of the driveway that serves the parcel is existing and would only require moderate additional surfacing. Special Condition #1 is recommended to ensure the driveway is surfaced in accordance with Gordon McBride's recommendation.

Staff corresponded further with Gordon McBride with a letter dated May 11, 2001. The basis of the letter was that the information provided in the May 4, 2001 response did not specifically address staff's concerns or requests contained in the letter dated April 25, 2001. A response letter from Gordon McBride dated July 5, 2001 summarized his observations of Bolander's Reed Grass populations over the course of 10+ years.

At this point in the process, the issue of the Bolander's Reed Grass had not been fully addressed in accordance with the applicable sections of the Coastal Zoning Code. Staff met on site with the botanist to assess the building areas and discuss the required supplemental ESHA findings necessary to recommend approval of the project. Staff faxed the applicable code sections to Gordon McBride for his review and comment.

Sections 20.496.015(A)(2) & (3) of the Coastal Zoning code states:

"The development is proposed to be located within an ESHA, according to an on-site investigation, or documented resource information."

"A project has the potential to impact an ESHA if the development is proposed to be located within one hundred (100) feet of an environmentally sensitive habitat and/or has the potential to negatively impact the long-term maintenance of the habitat, as determined through the project review."

"Development proposals in ESHA's including but not limited to those shown on the coastal land use maps, or which have the potential to impact an ESHA, shall be subject to a biological survey, prepared by a qualified biologist, to determine the extent of the sensitive resource, to document potential negative impacts, and to recommend appropriate mitigation measures. The biological survey shall be submitted for the review and approval of the Coastal Permit Administrator prior to a determination that the project application is complete."

The project would be located within an ESHA as a result of the necessity to disturb a rare plant population to accommodate the proposed development. The following code sections set forth the supplemental findings for projects located in ESHAs. Comments and recommendations contained in a letter dated July 23, 2001 from Gordon McBride follow each of the three (3) supplemental findings. Sections 20.532.100(A)(1)(a-c) states:

"No development shall be allowed in an ESHA unless the following findings are made:

(a) "The resource as identified will not be significantly degraded by the proposed development."

"Given that Bolander's Reed Grass is a demonstrably colonizing grass that will invade, colonize and prosper in disturbed sites in Closed Cone Coniferous forest, I submit that placing a building envelope closer than 50 feet to the Bolander's Reed Grass population will not jeopardize its survival on the site. As long as care is taken to avoid disturbing the existing clumps of Bolander's Reed Grass, I believe a building envelope could be permitted as close a [sic] ten feet to the grass clumps."

(b) "There is no feasible, less environmentally damaging alternative."

"Given the constraints of required setbacks from the Community Water Service (200 feet), the riparian plant community (50 feet), property boundary, septic system and so forth, there does not appear to be an adequate building envelope if an additional 50 foot setback is enforced from the Bolander's Reed Grass population as earlier recommended for the Moller/Spurrier site.

(c) "All feasible mitigation measures capable of reducing or eliminating project related impacts have been adopted."

"Furthermore, the clearing of a ±23,337 square foot area of the adjacent property for a septic system will create almost a half an acre of cleared land that at present only has scattered Bolander's Reed Grass growing in the few existing openings where soil tests were made. Once that land is cleared, given the seed bank and rhizome establishment of Bolander's Reed grass in the vicinity, I [sic] confident that Bolander's Reed Grass will establish a much larger population on the septic field within two years after the septic field is installed. Moreover, if the overstory vegetation and midlevel vegetation will be regularly discouraged on the proposed septic system, as I understand it must, that will contribute to the long term prosperity of the Bolander's Reed Grass population that will establish itself on the septic field."

"With these circumstances in mind I recommend that a building envelope be permitted within 10 feet of the Bolander's Reed Grass population as established by Surveyor Richard Seale in 1990 when he showed my flagging of the perimeter of that population on a map."

"I also recommend that the ±33,227 square foot area where the primary and secondary Wisconsin mounds septic systems will be established be taken as mitigation for providing a building envelope closer than the originally recommended 50 foot buffer for the Bolander's Reed Grass. Once the vegetation has been cleared in this area and the septic systems installed, I recommend that the overstory trees (primarily Bishop Pine and Douglas Fir as well as midlevel vegetation such as Rhododendron, Huckleberry and Wax Myrtle be periodically removed to favor the growth and continuance of the Bolander's Reed Grass as well as proper functioning of the septic system."

Staff conducted a subsequent site visit with Dr. McBride on July 19, 2001. At that time, it was discovered that the house footprint on the site plan prepared by Richard Seale, in which Dr. McBride annotated, did not correspond with the house location on the site plan submitted with the Coastal Development Permit application. Staff requested, in a letter dated August 2, 2001, that the house footprint be staked and strung so a revised site plan could be accurately annotated.

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A follow up site visit occurred late in December 2001 once the stakes and string were in place. Dr. McBride provided the following final comments in a letter dated January 3, 2002 which states:

> *"This letter summarizes my observations regarding the location of the proposed single family dwelling on the Moller/Spurrier site at 44696 Crestwood Drive, Mendocino.*
>
> *Regarding the location of the proposed house, as indicated by the stakes placed by Mr. Richard Seale, it is clearly more than the ten foot minimum distance that I recommended from the Bolander's Reed Grass population that I identified on the site.*
>
> *Regarding protection for the Bolander's Reed Grass during the single family dwelling construction phase of the project, I recommend the following:*
>
> 1. *Soil disturbance, grading or soil storage should be avoided in the area of the Bolander's Reed Grass population.*
> 2. *Building materials should not be stored and construction debris should not be allowed to accumulate in the area of the Bolander's Reed Grass population.*
> 3. *Significant modification of existing vegetation, as in landscaping and planting of ornamental vegetation should not be permitted in the area of the Bolander's Reed Grass population.*
>
> *Regarding monitoring of the establishment of Bolander's Reed Grass population in the area adjacent to the eastern property boundary where removal of existing vegetation is proposed for installation of the septic system, I do not believe it is necessary. Bolander's Reed Grass, as I indicated earlier, is a colonizing species that will reestablish itself vigorously in the area disturbed for the septic system."*

Special Condition #2 is recommended to require the applicant to adhere to Dr. Gordon McBride's recommendations during project construction. Additionally, to ensure the construction crew does not inadvertently disturb the ESHAs on site, staff recommends protecting the riparian and rare plant population with temporary fencing during construction and maintaining the 50-foot non-disturbance buffer to maintain the functional capacity of the watercourse and integrity of the riparian habitat.

Chapter 20.496 and Section 20.532.060, et. seq. of the Coastal Zoning Code contain specific requirements for protection of ESHA's and development within the buffer area of an ESHA. A sufficient buffer area is required to be established and maintained to protect ESHA's from disturbances related to proposed development. Section 20.496.020 requires that:

> *"The width of the buffer area shall be a minimum of one hundred (100) feet, unless an applicant can demonstrate, after consultation and agreement with the California Department of Fish and Game, and County Planning staff, that one hundred (100) feet is not necessary to protect the resources of that particular habitat area from possible significant disruption caused by the proposed development. The buffer area shall be measured from the outside edge of the Environmentally Sensitive Habitat Areas and shall not be less than fifty (50) feet in width. New land division shall not be allowed which will create new parcels entirely within a buffer area.*

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Developments permitted within a buffer area shall generally be the same as those uses permitted in the adjacent Environmentally Sensitive Habitat Area."

The proposed development within an ESHA has been justified by the consulting botanist, Dr. Gordon McBride. Dr. McBride has been observing plant life along the Mendocino Coast for over a decade – including Bolander's Reed Grass. Staff discussed the project with Liam Davis of the Department of Fish and Game in which copies of the botanical surveys and correspondence were requested. On August 3, 2001, staff sent the Department of Fish and Game copies of all received botanical correspondence for comment. Staff received no response.

Since the time that the botanical surveys were conducted and recommendations formulated, the applicant has revised the site plan by relocating the driveway and parking area to the south of the residence and thereby completely avoiding the recommended rare plant and riparian buffer areas. However, staff recommends Special Condition #1 should still be applied to the project to ensure surface discharge is not concentrated into the stream channel.

Archaeological/Cultural Resources

☑ The project site is not located in an area where archaeological and/or cultural resources are likely to occur. The applicant is advised by Standard Condition #8 of the County's "discovery clause" which establishes procedures to follow should archaeological materials be unearthed during project construction.

Groundwater Resources

The proposed development would be served by the Big River Vista Mutual Water Company community water system and would not adversely affect groundwater resources. A letter dated August 1, 1996 states the applicant has rights to be served by the Big River Vista Mutual Water Company.

The proposed development would be served by a proposed septic system and would not adversely affect groundwater resources. The applicant has secured a septic drain field easement agreement from the adjacent property owner to the east of the subject parcel, Georgia-Pacific West, Inc. A copy of this agreement and clearance from Environmental Health are contained in the case file.

Transportation/Circulation

The project would contribute incrementally to traffic on local and regional roadways. The cumulative effects of traffic due to development on this site were considered when the Coastal Element land use designations were assigned. No adverse impacts would occur.

The parcel is situated along a private access road, however, the private road begins at the terminus of Crestwood Drive (CR 407RR). A referral response from the Mendocino County Department of Transportation dated May 24, 2000 states:

"It is determined from our site review, the existing private road approach at the end of Crestwood Drive (CR 407RR), which serves the subject property, is adequately paved and in conformance with County standards. However, our road foreman has indicated that the ditches for this private

road are not adequately maintained, resulting in water sheet flowing down the private road and across the cul-de-sac of Crestwood Drive. This leaves sediment and debris on the County road which requires constant clean-up during the winter months. To address this issue, we recommend that the applicant clean the private road ditch in accordance with the following condition of approval:

Applicant shall clean out the ditch for the private road serving the subject property, to the satisfaction of the Department of Transportation, for a minimum distance of 200 feet from the end of Crestwood Drive (CR 407RR)."

The subject parcel is located approximately 1,000 feet from the end of Crestwood Drive. Therefore, staff requests that the Coastal Permit Administrator determine whether a reasonable correlation exists between the proposed development and the maintenance of the private road. This will allow the applicant and the Coastal Permit Administrator to comment on the recommended condition in a public forum. Staff notes that no environmentally sensitive habitat areas were apparent in or near the area requested for ditch maintenance. In the event that the Coastal Permit Administrator can justify the requested maintenance, then the aforementioned condition should be applied as an additional Special Condition. The condition should read as follows:

- *"Prior to the final building inspection, the applicant shall clean out the ditch for the private road serving the subject property, to the satisfaction of the Department of Transportation, for a minimum distance of 200 feet from the end of Crestwood Drive (CR 407RR)."*

Zoning Requirements

☑ The project, as conditioned, complies with all of the zoning requirements of Division III of Title 20 of the Mendocino County Code.

PROJECT FINDINGS AND CONDITIONS: Pursuant to the provisions of Chapter 20.720 of the Town of Mendocino Zoning Code, staff recommends the Coastal Permit Administrator approve the proposed project, and adopt the following findings and conditions.

FINDINGS:

1. The proposed development is in conformity with the certified Local Coastal Program; and

2. The proposed development will be provided with adequate utilities, access roads, drainage and other necessary facilities; and

3. The proposed development is consistent with the purpose and intent of the applicable zoning district, as well as all other provisions of Division II, and preserves the integrity of the zoning district; and

4. The proposed development, if constructed in compliance with the conditions of approval, will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act; and

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5. The proposed development will not have any adverse impacts on any known archaeological or paleontological resource; and

6. Other public services, including but not limited to, solid waste and public roadway capacity have been considered and are adequate to serve the proposed development.

7. The proposed development is in conformity with the public access and public recreation policies of Chapter 3 of the California Coastal Act and Coastal Element of the General Plan.

SUPPLEMENTAL FINDINGS FOR DEVELOPMENT IN ENVIRONMENTALLY SENSISTIVE HABITAT AREAS (ESHAs):

8. The resource as identified will not be significantly degraded by the proposed development.

9. There is no feasible less environmentally damaging alternative.

10. All feasible mitigation measures capable of reducing or eliminating project related impacts have been adopted.

STANDARD CONDITIONS:

1. The permit shall become effective on or after June 12, 2000 and shall expire and become null and void at the expiration of two years after granting except where construction and use of the property in reliance on such permit has been initiated prior to its expiration.

   To remain valid, progress towards completion of the project must be continuous. The applicant has sole responsibility for renewing this application before the expiration date. The County will not provide a notice prior to the expiration date.

2. The use and occupancy of the premises shall be established and maintained in conformance with the provisions of Division III of Title 20 of the Mendocino County Code.

3. The application, along with supplemental exhibits and related material, shall be considered elements of this permit, and that compliance therewith is mandatory, unless an amendment has been approved by the Coastal Permit Administrator.

4. That this permit be subject to the securing of all necessary permits for the proposed development from County, State and Federal agencies having jurisdiction.

5. The applicant shall secure all required building permits for the proposed project as required by the Building Inspection Division of the Department of Planning and Building Services.

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6. This permit shall be subject to revocation or modification upon a finding of any one (1) or more of the following:

   a. That such permit was obtained or extended by fraud.

   b. That one or more of the conditions upon which such permit was granted have been violated.

   c. That the use for which the permit was granted is so conducted as to be detrimental to the public health, welfare or safety or as to be a nuisance.

   d. A final judgment of a court of competent jurisdiction has declared one (1) or more conditions to be void or ineffective, or has enjoined or otherwise prohibited the enforcement or operation of one (1) or more such conditions.

7. This permit is issued without a legal determination having been made upon the number, size or shape of parcels encompassed within the permit described boundaries. Should, at any time, a legal determination be made that the number, size or shape of parcels within the permit described boundaries are different than that which is legally required by this permit, this permit shall become null and void.

8. If any archaeological sites or artifacts are discovered during site excavation or construction activities, the applicant shall cease and desist from all further excavation and disturbances within one hundred (100) feet of the discovery, and make notification of the discovery to the Director of the Department of Planning and Building Services. The Director will coordinate further actions for the protection of the archaeological resources in accordance with Section 22.12.090 of the Mendocino County Code.

SPECIAL CONDITIONS:

1. To ensure the ongoing protection of the riparian plant community, the applicant shall surface the driveway and parking area with gravel or other similar surfacing. Paving of the driveway or parking area with an impervious surface shall be prohibited. Should paving of the driveway or parking area become necessary in the future, the applicant shall submit documentation and justification by a qualified botanist to ensure the ongoing integrity of the resource will not be compromised. Said documentation shall be subject to the review and approval of the Coastal Permit Administrator or shall require a modification to the Coastal Development Permit.

2. Soil disturbance, grading or soil storage shall be prohibited in the area of the Bolander's Reed Grass population. Building materials shall not be stored and construction debris shall not be allowed to accumulate in the area of the Bolander's Reed Grass population. With the exception of the area to be cleared for the septic system, significant modification of existing vegetation, as in landscaping and planting of ornamental vegetation shall not be permitted in the area of the Bolander's Reed Grass population. Prior to project commencement, the applicant shall install temporary fencing at the edge of the 50-foot buffer for the riparian area and around the Bolander's Reed Grass

populations in the vicinity of the footprint of the residence. The fencing shall remain in place until the building permit is finaled and the site is absent of any project-related debris or equipment.

Coastal Development Permit Prepared By:

2/19/02
Date

Robert Dostalek
Coastal Planner

Attachments: Exhibit A: Location Map
Exhibit B: Site Plan (w/ESHA buffer areas)
Exhibit C: Lower Level Floor Plan
Exhibit D: Upper Level Floor Plan
Exhibit E: Front Elevation
Exhibit F: Left Elevation
Exhibit G: Right Elevation
Exhibit H: Rear Elevation

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STATE OF CALIFORNIA -- THE RESOURCES AGENCY

GRAY DAVIS, GOVERNOR

CALIFORNIA COASTAL COMMISSION
NORTH COAST DISTRICT OFFICE
710 E STREET • SUITE 200
EUREKA, CA 95501-1865
VOICE (707) 445-7833
FACSIMILE (707) 445-7877

MAILING ADDRESS:
P. O. BOX 4908
EUREKA, CA 95502-4908

RECEIVED
APR 02 2002
CALIFORNIA
COASTAL COMMISSION

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT

Please Review Attached Appeal Information Sheet Prior To Completing This Form.

SECTION I. Appellant(s)

Name, mailing address and telephone number of appellant(s):

Sierra Club, Redwood Chapter c/o Dr. Hillary Adams
P.O. Box 1936
Mendocino, CA. 95460 714 877-3527
Zip Area Code Phone No.

SECTION II. Decision Being Appealed

1. Name of local/port government: Mendocino County

2. Brief description of development being appealed: 1,680 sq ft. residence, wisconsin mound septic, in riparian area + ESHA, pygmy soil probable

3. Development's location (street address, assessor's parcel no., cross-street, etc.): 44696 Crestwood Drive APN 119-370-10 Mendocino

4. Description of decision being appealed

a. Approval; no special conditions: _____

b. Approval with special conditions: X

c. Denial: _____

Note: For jurisdiction with a total LCP, denial decisions by a local government cannot be appealed unless the development is a major energy or public works project. Denial decisions by port governments are not appealable.

TO BE COMPLETED BY COMMISSION:

APPEAL NO: A-1-MEN-02-019

DATE FILED: 4/2/02

DISTRICT: North Coast

EXHIBIT NO. 7
APPLICATION NO.
A-1-MEN-02-019
MOLLER & SPURRIER
APPEAL, FILED JULY 19, 2001
(HILLARY ADAMS, PhD,
SIERRA CLUB – REDWOOD
CHAPTER) (1 of 3)

APPEAL FROM COASTAL PERM DECISION OF LOCAL GOVERNMENT (Pag)

State briefly your reasons for this appeal. Include a summary description of Local Coastal Program, Land Use Plan, or Port Master Plan policies and requirements in which you believe the project is inconsistent and the reasons the decision warrants a new hearing. (Use additional paper as necessary.)

- Significant riparian and ESHA area reduced from 100' minimum buffer by McBride to 50' without giving reason based on scientific evidence. LCP 3.1 et seq, esp § -7) + CZC 20.496(020 + 025) et seq; Coastal Act 30240 etc,
- Pygmy soil in area of development not identified (LCP 3.1 et seq) CZC 20.496.045
- No drainage plan
- Calif. Dept. of Fish and Game did not give official comment.

Note: The above description need not be a complete or exhaustive statement of your reasons of appeal; however, there must be sufficient discussion for staff to determine that the appeal is allowed by law. The appellant, subsequent to filing the appeal, may submit additional information to the staff and/or Commission to support the appeal request.

SECTION V. Certification

The information and facts stated above are correct to the best of my/or knowledge.

Hillary Adams
Signature of (Appellant(s) or Authorized Agent

Date March 27, 2002

Note: If signed by agent, appellant(s) must also sign below.

SECTION VI. Agent Authorization

I/We hereby authorize _____ to act as my/our representative and to bind me/us in all matters concerning this appeal.

_____
Signature of Appellant(s)

Date _____

SIERRA CLUB

Redwood Chapter

P. O. Box 466
Santa Rosa, CA. 95402-0466

March 26, 2002

Mr. Randy Stemler
Coastal Commission
Northcoast District Office
P. O. Box 4908
Eureka, CA. 95502-4908

Re: Mendocino County CDP 39-00

Dear Mr. Stemler:

Enclosed is the Sierra Club, Redwood Chapter appeal of Mendocino County CDP 39-00 (Moller/Spurrier; agent, Bud Kamb).

The property involved has a significant riparian area and a Environmentally Sensitive Habitat Area (ESHA). Both have been identified by the applicant or his agents. However, the application and reports did not identify what appears to be pygmy soil in the area planned for the house development (LCP 3.1 et seq). When I looked at the lot, the light-colored soil in this area was streaming with water over the entire surface after several weeks of dry weather. Very little grass grows there. The immediate neighbor (C. Robson) informed me that during the summer, the area became hard and cracked. There is no drainage plan for the project. The neighbor attended the hearing and was concerned about drainage and the impact on her property.

The minimum 100' buffer required by the certified Local Coastal Program (LCP 3.1-7; CZC 20,496,020/025) was reduced to 50' without giving scientific reasons for this reduction. This project, like others which the County of Mendocino has recently approved [Spies: A-1-MEN-02-014; Brorson/Egleston: A-!-MEN-02-012] did not include official comments from the California Department of Fish and Game. A statement was read by the Coastal Commissioner at the hearing which led the public to believe it was an official comment, but that proved not to be the case. The County of Mendocino has consistently failed to follow its own certified Local Coastal Program in this regard.

Small wetlands and ESHA's are important for the protection of wildlife. The cumulative impact created by the consistent reduction to 50' by agents hired by the applicants of this and other projects is significant. We ask that you find substantial issue for this case and that the County be required to follow its own LCP.

Sincerely,

Hillary Adams

Dr. Hillary Adams

c: Redwood Chapter

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Adams: P. O. Box 1936, Mendocino, CA. 95460

Botanical Surveys
GORDON E. McBRIDE, Ph.D.

January 7, 2003

Ms. Tiffany S. Tauber
Coastal Planner
California Coastal Commission
North Coast District Office
710 E Street, Suite 200
Eureka, CA 95501-1865

RE: Appeal No. A-1-MEN-02-19

Dear Ms. Tauber:

This letter is in response to your letter of December 11, 2002 to Mr. Torbin Moller and Ms. Laura Jean Spurrier, and addresses the items raised in Section 20.496.020 (A) (1) (a) through (g) on the above referenced property at 44696 Crestwood Drive, Mendocino. This letter addresses the issues of the riparian plant community and the Bolander's Reed Grass population separately.

Riparian Plant Community

Section 20.496.020 (A) (1) (a) deals with the biological significance of adjacent lands to the riparian plant community described in my original botanical survey of July 5, 2000. Please refer to that botanical survey for a description of the site and the vegetation present. On the subject parcel there is a historic building envelope that has been cleared south of the small unnamed watercourse that flows from east to west across the site and the riparian plant community associated with it. To the north of the subject parcel there is mixed north coast coniferous forest and Bishop pine forest that is mostly undisturbed except for a road and a water storage area. To the east of the subject parcel there is mixed north coast coniferous forest and Bishop pine forest that is in mature second growth but has been subject to some logging. The parcels to the south and west have been developed with single family dwellings. The vegetation that was historically cleared for the existing building envelope was in all probability mixed north coast coniferous forest and Bishop pine forest, but this area is now vegetated primarily by ruderal species including grasses, rushes and forbs. The value – or the functional relationship - of the vegetation on the cleared building envelope to species of mammals, birds, reptiles, amphibians and invertebrates that may inhabit the riparian plant community and the associated north coast/Bishop pine forest is minimal. While the ruderal plant species may provide some seed source to birds and small mammals, there is little in the way of cover, nesting or other elements of habitat diversity. See also comments in the attached report by Mr. Theodore Wooster.

Section 20.496.020 (A) (1) (b) deals with sensitivity of species to disturbance. Outside of Bolander's Reed Grass, which is discussed separately, I am aware of no sensitive

30301 Sherwood Road, Fort Bragg, CA 95437 USA - (707) 964-2922 – Fax: 707 964 2987 - email: gmcbride@mcn.org

plant species on the site that would be susceptible to human activity. The issue of sensitive animals is addressed in an attached report by Mr. Theodore Wooster.

Section 20.496.020 (A) (1) (c) deals with the susceptibility of the parcel to erosion. According to the on line Mendocino County Soil Survey and Carl Rittiman (personal communication) the soil type of the parcel is Shinglemill-Gibney complex (see attached printout from the online Mendocino County Soil Survey). Shinglemill-Gibney complex soil has an erosion hazard of slight to moderate if the surface is left bare. For this reason I recommend that during construction on the site a temporary erosion barrier be erected consisting of straw bales placed end to end between the proposed construction and the riparian plant community. The proposed erosion barrier should remain in place during construction and thereafter until vegetation is reestablished on the bare soils.

Section 20.496.020 (A) (1) (d) deals with natural topographic features to locate development. All proposed development on the parcel is within the historic cleared building envelope. There are no other natural topographic features that could be incorporated into a buffer area for the riparian plant community on the parcel.

Section 20.496.020 (A) (1) (e) deals with existing cultural features to locate buffer zones. No existing cultural features are available on the site to be used as a buffer for the riparian plant community.

Section 20.496.020 (A) (1) (f) deals with lot configuration and existing development. The parcel to the south is developed with a single family dwelling situated well away from the riparian plant community in question. The parcel to the west is developed with a single family dwelling. The relationship of this dwelling to the riparian plant community is not clear without trespassing on the parcel to the west. There is no development to the north except for a road that accesses a water treatment plant. There is no development to the east.

Section 20.496.020 (A) (1) (g) addresses type and scale of development being proposed. A single family dwelling of +- 1680 square feet is being proposed.

Bolander's Reed Grass Population

Section 20.496.020 (A) (1) (a) deals with biological significance of adjacent lands. While this section appears to focus primarily on species associated with wetlands, streams or riparian habitat – rather than rare or endangered plant species - certain observations regarding Bolander's Reed Grass may be addressed under this title. When Bolander's Reed Grass was changed from California Native Plant Society list 4

(Plants of Limited Distribution – a Watch List) to List 1B (Plants Rare or Endangered in California and Elsewhere) in 2001 it suddenly came to the attention of both consulting botanists and foresters. It is now very clear, based on many observations, that Bolander's Reed Grass does respond positively to disturbance both in north coast coniferous forest and closed cone coniferous forest soil. Indeed the most common place to find Bolander's Reed Grass growing is on and along roads, skid trails and other disturbed sites in these plant communities. The Moller/Spurrier site is a prime example: the Bolander's Reed Grass population is most abundant in the historically cleared proposed building envelope. As one approaches the dense vegetation of the riparian plant community or the nearby forest the Bolander's reed grass population drops off to zero. The property owners have an easement for a +- half acres septic area along the eastern boundary that is vegetated by mixed north coast coniferous/Bishop pine forest in mature second growth (but with some tree removal in the last 5 to 10 years). This area would be cleared, and a primary and backup Wisconsin mound would be installed and maintained. Because of the thinning of overstory in this proposed septic area there are a few scattered Bolander's reed grass plants scattered in this area. However, after clearing and installation of the septic system I submit that Bolander's reed grass would become much more abundant in that half acres, and mitigate the reduced buffer area between the Bolander's reed grass population in the building envelope and the proposed single family dwelling.

Section 20.496.020 (A) (1) (b) deals with sensitivity of species to disturbance. As just addressed in the previous section, the evidence is very strong that Bolander's reed grass actually responds positively to disturbance of forest soils. To the best of my knowledge there are no mammals, birds, reptiles, amphibians or invertebrates that depend on Bolander's reed grass populations for nesting, feeding, breeding, resting or other habitat requirements. The seeds of Bolander's reed grass are relatively small for a grass, and could only contribute a small fraction of the diet of seed eating mammals or birds when compared to the larger seeded grasses such as Brome, Fescue, Oats and other common grasses. Bolander's reed grass is wind pollinated and does not depend on any of the various pollinating birds or invertebrates for pollination. In both the short and long term, the proposed clearing of the adjacent half acre for a septic system will have a beneficial impact on the Bolander's reed grass population.

Section 20.496.020 (A) (1) (c) addresses the susceptibility of the parcel to erosion. This was addressed earlier in this response.

Section 20.496.020 (A) (1) (d) addresses the use of natural topographic features to locate development. There are no natural features (hills of bluffs) on the site that could be used to locate development.

Section 20.496.020 (A) (1) (e) addresses the use of existing cultural features to locate buffer zones. There are not cultural features on the site that could be used to locate development.

Section 20.496.020 (A) (1) (f) addresses lot configuration and location of existing development. I have no information regarding the relationship of this parcel to any subdivision. The parcels to the south and west are developed with single family dwellings, but it is not possible to determine the proximity of these structures to any sensitive habitat without trespassing on these parcels. The area to the north is the subject parcel is undeveloped except for a road and water treatment plant. The parcel to the east is undeveloped.

Section 20.496.020 (A) (1) (g) addresses type and scale of development proposed. The landowner proposes a +- 1680 square foot single family dwelling on the site.

If you have any additional questions please do not hesitate to contact me.

Sincerely,

Gordon E. McBride

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199—Shinglemill-Gibney complex, 2 to 9 percent slopes

This map unit is on marine terraces. The vegetation is mainly bishop pine and huckleberry. Elevation ranges from 200 to 750 feet. The average annual precipitation is 40 to 65 inches, the average annual air temperature is about 53 degrees F, and the average frost-free period is 270 to 330 days.

This unit is about 45 percent Shinglemill loam and 35 percent Gibney loam. The Shinglemill and Gibney soils occur as areas so intricately intermingled that it was not practical to map them separately at the scale used.

Included with these soils in mapping are small areas of Blacklock, Gibwell, and Tregoning soils and Tropaquepts. These included soils make up about 20 percent of the total acreage of the unit. The percentage varies from one area to another.

The Shinglemill soil is very deep and is poorly drained. It formed in marine sediments. Typically, the surface is covered with a mat of litter about 2 inches thick. The surface layer is light gray, light brownish gray, and very pale brown loam about 3 inches thick. The next layer is very pale brown and reddish yellow loam about 5 inches thick. The upper 7 inches of the subsoil is very pale brown loam. The next 10 inches is light yellowish brown clay. The lower part of the subsoil to a depth of 63 inches or more is light yellowish brown, yellow, and brownish yellow clay and sandy clay that have light gray, white, and red mottles. In some areas the surface layer is sandy loam.

Permeability is slow in the Shinglemill soil. Available water capacity is high. The effective rooting depth is limited by saturation for long periods following episodes of heavy rain from December through April. The saturated zone starts between the depths of 12 and 30 inches and extends to a depth of more than 60 inches. Surface runoff is slow or medium, and the hazard of water erosion is slight or moderate if the surface is left bare.

The Gibney soil is very deep and is somewhat poorly drained. It formed in marine sediments. Typically, the surface is covered with a mat of litter about 3 inches thick. The surface layer is pale yellow loam about 9 inches thick. The upper 6 inches of the subsoil is brownish yellow sandy clay loam. The next layer is yellowish brown clay loam about 14 inches thick. Below this is 11 inches of yellowish brown clay that has strong brown and red mottles. The next layer is brownish yellow clay that has strong brown, red, and light gray mottles. It is about 15 inches thick. The lower part of the subsoil to a depth of 63 inches or more is light gray sandy clay loam that has strong brown and red mottles. In some areas the surface layer is sandy loam.

Permeability is slow in the Gibney soil. Available water capacity is high. The effective rooting depth is limited by saturation for brief or long periods following episodes of heavy rain from December through April. The saturated zone starts between the depths of 24 and 48 inches and extends to a depth of more than 60 inches. Surface runoff is slow or medium, and the hazard of water erosion is slight or moderate if the surface is left bare.

This unit is used for homesite development, for wildlife habitat, or as watershed.

The main limitations affecting homesite development are the seasonally saturated soil conditions and the slow permeability in the subsoil. Low strength is also a limitation in areas of the Shinglemill soil. The design of buildings and roads should offset the limited ability of the Shinglemill soil to support a load. Surface drainage may be needed for roads and buildings. The restricted permeability in the subsoil and the saturated soil conditions increase the possibility of failure of septic tank absorption fields. Alternative systems may be needed, such as those in which leach lines are placed in a mound above the soil surface.

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The capability classification is IIIw-2(4), nonirrigated.

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Theodore W. Wooster
Consulting Biologist and Designated Biologist-Retired
6645 Yount Street, Yountville, CA 94599,
Telephone and Fax Number (707) 944-8451

2/9/03

TO: Gordon McBride, PHD
FROM: Theodore Wooster, Consulting Biologist
SUBJECT: Wildlife Report for the Torben Moller Property
44696 Crestwood Drive in Mendocino

This is in response to your request for fish and wildlife information and recommendations on buffer widths for protection of the riparian zone and attendant wildlife, along the northwest edge of the subject property.

The property consists of approximately 1.27 acre (55,321 square feet) and is located east of Highway 1 in the town of Mendocino in Mendocino County (Appendix 1). The property drains to the Big River system.

On February 1, 2003 I examined the property, accompanied by yourself. The parcel consists of essentially two distinct vegetative zones as follows:

1) A plus/minus ten foot wide natural drainage area with a Class II stream in the bottom that runs along the northwest edge of the property. The streambed at this time of the year is ten inches wide and flowing several gallons per minute. The bottom is composed of loose sands. Upstream, just off the property, are water diversion and storage facilities for downstream users. The vegetation in this zone is very rank (dense). The ground cover of sword fern and berry vines is too dense for small mammals such as fox, raccoons, skunks etc. to move up and down the corridor. The overstory vegetation of mature alder and elderberry also make it unlikely that deer can move up and down the zone.

2) The remainder of the lot consists of upland of mixed North Coast Coniferous forest and Bishop pine forest. A portion of the site was historically cleared for a building envelope. Pampas grass is beginning to invade this area as well as other species noted in your July 5, 2000 report to the County of Mendocino. None of the upland vegetation is a hinderance to wildlife movement unless the Pampas grass continues to expand.

   The riparian zone associated with the watercourse is habitat at some life stage to numerous small birds and mammals. However, there are no listed rare, threatened or endangered species associated with this area.

   I have previously surveyed for Northern spotted owls, ospreys and red tree voles throughout this general area. No nests or evidence of these species was found. Ospreys do fly over this area but they do not nest here.

   There are several over mature Bishop pine within the riparian and upland zones. Several of these have recently been uprooted by high winds coming from the west. Basically the Bishop pine stand in this area is falling apart and is subject to continuing wind throw.

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There is presently a deer trail that parallels the riparian zone, approximately 35 feet to the east.

There are also existing residences adjacent to the parcel as well as two large barking dogs two residences down Crestwood Drive.

Wildlife heard or seen in the general area were a pair of ravens, California quail, robins, scrub jays and acorn woodpeckers. Evidence of other wildlife included black tailed deer, mice, voles dusky footed woodrats and rabbits. I spoke with two senior citizens who were walking their dog on the road to the water storage facilities. They indicated they had seen a gray fox one evening on the road.

Basically, in this area, existing human development along Crestwood Drive has precluded the use by any significant wildlife species.

One exception to this is home owners have planted ornamental plants which are attracting additional deer.

The area is zoned for single residence with pertinent surface covering structures such as the driveway, parking area and a plus/minus 1680 square foot family dwelling. This would result in covering an estimated plus/minus 2,500 square feet of impervisious surface of the 55, 321 square foot parcel (5 percent).

Because the parcel includes the sensitive riparian habitat, any building proposals must involve the establishment of a sufficiently wide buffer area to protect the sensitive habitat and any plant and animal species associated with it.

The riparian zone does not contain fish and is classified as a Class II stream. It can support aquatic insects and aquatic amphibians.

I have reviewed the Mendocino County Zoning Code item 20.496.020 (A) (1) items (a) through (f). My specific responses to items (a) and (b) are as follows:

(a) Biological Significance of Adjacent Lands

The riparian habitat involved is heavily influenced by its location at the end of a residential street, Crestwood Drive, an adjacent residence and a muncipal water supply facility just uphill from the parcel. Access to the property is via a plus/minus 15 foot wide road which crosses the riparian zone and the creek via a 24 inch aluminium culvert. The Bishop pine forest associated with the area is a common vegetation type. The riparian zone is less than 25 feet wide with a hundred percent understory canopy of vegetation. Species of wildlife associated with the riparian zone are common ones such as skunks, dusky footed woodrats and rabbits. With or without the residential development on the upland area, these species are expected to continue to survive (see references). The maintenance of these common species as well as nesting birds within the riparian, should be adequately protected by the 50 foot buffer (Appendix 1) and by the remaining parcel acreage that will not be covered by the residence and pertinent structures.

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The buffer has no vegetation to interfer with the movement of wildlife except some of the clumps of Pampas grass. The buffer area is relatively flat ground. With proper engineering of the drainage from the future imperious surfaces, along with the temporary erosion barrier recommended in your January 7, 2003 letter to the California Coastal Commission, there should be little or no movement of sediments above existing levels into the riparian and/or stream habitats.

(b) Sensitivity of Species to Distrubance

As has been previously noted, all the known and predicted species associated with the riparian and stream habitats are common species which generally are able to sustain themselves even with an urban or residential interface. The 50 foot buffer will provide protection for the riparian zone as well as function as a wildlife movement corridor for small and large mammals.

In summary, all the previously mentioned species are very adaptable and should continue to nest, breed and/or feed in the riparian zone and its 50 foot buffer.

Signed Theodore W Wooster Date 2/9/03

Theodore W. Wooster, Consulting Biologist

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References

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APPENDIX 1

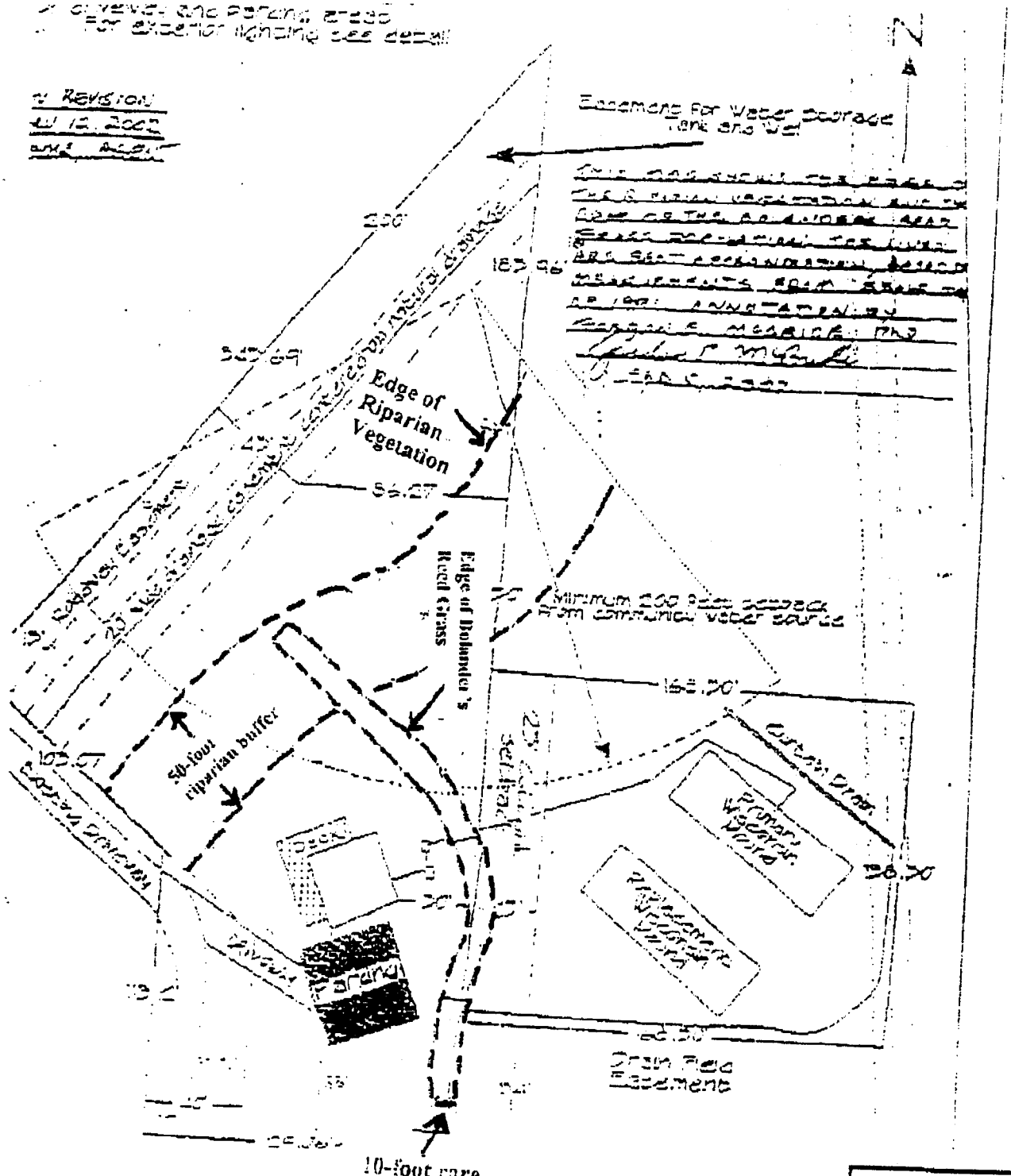

EXHIBIT NO. 4
APPLICATION NO. A-1-MEN-02-019
MOLLER/SPURRIER
ESHA BUFFERS

EXHIBIT 3

SITE PLAN w/ESHA buf

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REPORT AUTHOR

Theodore W. Wooster, A. A. A., Forestry, 1956 Paul Smiths' College, Paul Smiths, New York, B. S., Fish and Wildlife Conservation, 1959 University of California Berkeley. Graduate work in 1959. 38 years of employment with California Department of Fish and Game, ranging from Assistant Fishery Biologist in 1960 to Environmental Services Supervisor of Region III (17 central coastal counties) from 1976 through 1989. In 1989 was appointed Environmental Specialist IV in charge of Timber Harvest Plan (THP's) reviews in Region III. In 1990 I was designated by the U. S. Fish and Wildlife Service as their representative to determine what measures are requiredon THP's to insure "no take" of Northern spotted owls. In 1999 after inspecting and commenting on over 2,000 THP's I retired and became a Consulting Biologist. Extensive experience with forest flora and fauna in the forests of California and southern Oregon.

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Botanical Surveys
GORDON E. McBRIDE, Ph.D.

January 3, 2002

Mr. Robert Dostalek, Coastal Planner
Mendocino County
Department of Planning and Building Services
790 South Franklin Street
Fort Bragg, CA 95437

RE: MOLLER/SPURRIER

Dear Mr. Dostalek:

This letter summarizes my observations regarding the location of the proposed single family dwelling on the Moller/Spurrier site at 44696 Crestwood Drive, Mendocino.

Regarding the location of the proposed house, as indicated by stakes placed by Mr. Richard Seale, it is clearly more than the ten foot minimum distance that I recommended from the Bolander's Reed Grass population that I identified on the site.

Regarding protection for Bolander's Reed Grass during the single family dwelling construction phase of the project, I recommend the following:

1. Soil disturbance, grading or soil storage should be avoided in the area of the Bolander's Reed Grass population.

2. Building materials should not be stored and construction debris should not be allowed to accumulate in the area of the Bolander's Reed Grass population.

3. Significant modification of existing vegetation, as in landscaping and planting of ornamental vegetation should not be permitted in the area of Bolander's Reed Grass population.

Regarding monitoring of the establishment of Bolander's Reed Grass population in the area adjacent to the eastern property boundary where removal of existing vegetation is proposed for installation of the septic system, I do not believe it is necessary. Bolander's Reed Grass, as I indicated earlier, is a colonizing species that will reestablish itself vigorously in the area disturbed for the septic system.

Please do not hesitate to contact me if you have additional questions.

Sincerely,
Gordon E. McBride

Cc Bud Kamb

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MCN.ORG
website: http://www.jps.net/gmcbride/consult.htm

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Botanical Surveys
GORDON E. McBRIDE, Ph.D.

July 23, 2001

Mr. Robert Dostalek, Coastal Planner
Mendocino County
Department of Planning and Building Services
790 South Franklin Street
Fort Bragg, Ca 95437

RE: MOLLER/SPURRIER

Dear Mr. Dostalek:

Pursuant to our meeting on the Moller/Spurrier site on July 19, I would like to make the following observations and recommendations regarding the location of a single family residence on the site at 44696 Crestwood Drive:

1. Given the constraints of required setbacks from the Community Water Service (200 feet), the riparian plant community (50 feet), property boundary, septic system and so forth, there does not appear to be an adequate building envelope if an additional 50 foot setback is enforced from the Bolander's Reed Grass population as earlier recommended for the Moller/Spurrier site..

2. Given that Bolander's Reed Grass is a demonstrably colonizing grass that will invade, colonize and prosper in disturbed sites in Closed Cone Coniferous forest, I submit that placing a building envelope closer than 50 feet to the Bolander's Reed Grass population will not jeopardize its survival on the site. As long as care is taken to avoid disturbing the existing clumps of Bolander's Reed Grass, I believe a building envelope could be permitted as close a ten feet to the grass clumps.

3. Furthermore, the clearing of a +- 23,337 square foot area of the adjacent property for a septic system will create almost half an acre of cleared land that at present only has scattered Bolander's Reed Grass growing in the few existing openings where soil tests were made. Once that land is cleared, given the seed bank and rhizome establishment of Bolander's Reed Grass in the vicinity, I confident that Bolander's Reed Grass will establish a much larger population on the septic field within two years after the septic field is installed. Moreover, if the overstory vegetation and midlevel vegetation will be regularly discouraged on the proposed septic system, as I understand it must, that will contribute to the long term prosperity of the Bolander's Reed Grass population that will establish itself on the septic field.

With these circumstances in mind I recommend that a building envelope be permitted within 10 feet of the Bolander's Reed Grass population as established by Surveyor

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website: http://www.jps.net/gmcbride/consult.htm

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Richard Seale in 1990 when he showed my flagging of the perimeter of that population on a map.

I also recommend that the +- 33,227 square foot area where the primary and secondary Wisconsin mounds septic systems will be established be taken as mitigation for providing a building envelope closer than the originally recommended 50 foot buffer for the Bolander's Reed Grass. Once the vegetation has been cleared in this area and the septic systems installed, I recommend that the overstory trees (primarily Bishop Pine and Douglas Fir as well as midlevel vegetation such as Rhododendron, Huckleberry and Wax Myrtle be periodically removed to favor the growth and continuance of the Bolander's Reed Grass as well as proper functioning of the septic system.

I hope I have addressed your concerns on this matter. Please do not hesitate to contact me if I can be of further help.

Sincerely,

Gordon E. McBride

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Botanical Surveys
GORDON E. McBRIDE, Ph.D.

July 5, 2001

Mr. Robert Dostalek, Coastal Planner
Mendocino County
Department of Planning and Building Services
790 S. Franklin Street, Fort Bragg, CA 95437

RE: CDP 39-00, MOLLER/SPURRIER, 44696 CRESTWOOD DRIVE MENDOCINO, CA , AP # 119-370-10, YOUR LETTER OF MAY 11, 2001.

Dear Mr. Dostalek:

In order to manage the environment in order to protect rare plant species such as Bolander's Reed Grass, it is imperative to have some general understanding of the autecology of the species. Without such knowledge we are in the uncomfortable position of trying to do surgery with no knowledge of anatomy. We may, in spite of our best intentions, protect certain rare plant populations to death.

Outside of the experience and observations of a few people, such as myself, who have been working with and observing these populations for more than a decade, there is no such body of knowledge. Would that there were! I could then refer it to you and your questions would be answered.

For example, you ask for a count of the Bolander's Reed Grass plants on the Moller/Spurrier site. Bolander's Reed Grass is a perennial rhizomatous species. A rhizome is a horizontal underground stem that is a common mechanism of asexual reproduction in flowering plants. Thus, if three clumps of Bolander's Reed Grass, each two or three feet apart are connected by a rhizome, then they are in fact one individual. The only way to determine that fact is to carefully dig up the plants to see if a rhizome connects the individuals. That will generate a number, but it will also destroy the plants. In botany, the concept of counting individuals is not as simple as counting sheep. Alternatively, I can go to the site and count the number of clumps of Bolander's Reed Grass and generate a number for you that is absolutely meaningless!

If you insist on a specific number, I must dig up the entire population of Bolander's Reed Grass on the Moller/Spurrier site in order to generate that number. That could destroy the entire population. We have no knowledge of how well Bolander's Reed Grass survives digging or whether it will survive replanting. If the number of Bolander's Reed Grass plants on the Moller/Spurrier site is that critical, please give me written authorization to dig up and perhaps destroy the entire population. You will also need to convince me that a number is important enough to justify the possible destruction of the population.

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With some plants, it is the better part of valor to live and work with the concept of a population.

It was for that specific reason that I was circumspect when I estimated the population of Bolanders Reed Grass on the Moller/Spurrier site as between 30 and 40 individuals. That is also the reason, in our last telephone conversation, that I suggested we meet on the site so I could show you the population and explain why I reached the conclusions in my letter of May 4.

I believe that map that I submitted with my botanical survey shows where the population of Bolander's Reed Grass was located last year, roughly east of the line that I flagged on the site on July 3, 2000 and shown with surveyor's accuracy on that map. I emphasize **was located** because the population may wax or wane, depending upon rainfall and a host of other ecological factors we could only know if we understood the autecology of the species. Other rare plants in this area are certainly capable of such fluctuation. Some bulbiferous species, to confound the situation even more, may lie dormant for as much as three or four years, based on my observations. If I were to hazard a guess, I would suspect that the Bolander's Reed Grass population is more or less in the same place and the map that I provided is accurate!

I have not seen a final plot plan of the Moller/Spurrier site, however. I have requested one from Mr. Kamb. If, however, the footprint of the house and driveway lie outside of the portion of the site where the Bolander/s Reed Grass is shown on the map I annotated and supplied, then I do not anticipate the existing Bolander's plants will be jeopardized. If an area is cleared east of the site for a septic system I believe the disturbance will provide additional habitat for Bolander's Reed Grass. If the property owners make an effort to remove some of the undergrowth beyond the existing cleared building envelope, I believe Bolander's Reed Grass will benefit from the removal of competition.

I have already given you the best summation of my years of observations on Bolander's Reed Grass: that will exist in coastal woodlands and grassy areas that have a relatively shallow water table. I observe it most often growing on unpaved roads and other disturbed areas within these habitats. If, for some reason, it was important for me to go and locate a new populations of Bolander's Reed Grass I would go along unpaved roads or cleared building sites in coastal forestland. I have been recently working on a timber harvest plan where Bolander's Reed Grass plants are growing by the thousands in skid roads! If I knew of anyone else who has observed Bolander's Reed Grass populations in coastal Mendocino County for more than a decade, I would most certainly refer you to them to confirm (or refute) my observations. I know of no such references.

Sincerely,

Gordon E. McBride

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Botanical Surveys
GORDON E. McBRIDE, Ph.D.

DATE: May 4, 2001

To: County of Mendocino
Department of Planning and Building Services
790 S Franklin Steet
Fort Bragg, CA 95437

From: Gordon E. McBride, PhD
30301 Sherwood Road
Fort Bragg, CA 95437
707 964 2922

Gordon E. McBride

Re: ADDITIONAL COMMENTS REGARDING THE MOLLER/SPURRIER COASTAL DEVELOPMENT PERMIT #CDP 39-00 AT 44696 CRESTWOOD DRIVE, MENDOCINO, IN RESPONSE TO DOSTALEK LETTER TO KAMB OF APRIL 25, 2001: COMMENTS ON POTENTIAL IMPACT TO BOLANDER'S REED GRASS AND IMPACT OF DRIVEWAY WITHIN RIPARIAN BOUNDARY.

1. **Project Description:** As per original botanical survey.

2. **Area Description**: As per original botanical survey.

3. **Survey Methodology and Dates:** As per original botanical survey.

4. **Results and Discussion:** As per original botanical survey.

5. **Impact Assessment and Mitigation Measures:**

I have not done an exact count, but I believe there are between 30 to 40 Bolander's Reed Grass in the Moller/Spurrier site. Bolander's Reed Grass has only been listed as a California Native Plant Society (CNPS) List 1B since June of 2000, however I have been aware of the grass for more than a decade and have identified it a number of times in many botanical surveys. In coastal Mendocino County it is an occasional plant in Closed Cone and North Coast Coniferous forests. When these habitats are disturbed, as in logging, road construction or building envelope clearing, Bolander's Reed Grass has prospered. It is what an ecologist would call a colonizing or successional plant species. On the Moller/Spurier site, for example, it is much more abundant along the eastern portion of the historically cleared building envelope than it is in the timber to the east of the cleared building envelope. On other sites I have done botanical surveys where I have not found Bolander's Reed Grass present under a dense overstory of Bishop Pine and associated midlevel vegetation. However, subsequent visits to the site after it was cleared have shown Bolander's Reed Grass

to be abundant in the cleared building envelope. On the Moller/Spurrier site I believe the construction of a single family dwelling will not jeopardize the continuance of Bolander's Reed Grass as long as the portions of the building envelope not actually dedicated to the house, outbuildings, driveway, and well are not paved over or planted into a highly manicured yard . In fact I do not believe the 50 foot buffer is necessary to protect the population of Bolander's Reed Grass, but inasmuch as that buffer is the minimum mandated by the Mendocino County General Plan, Coastal Element, I had little choice but to recommend it. By the same token the location of a septic system on the Georgia Pacific land to the east of the Moller/Spurrier site will not jeopardize the continuance of Bolander's Reed Grass. As the population of Bolander's Reed Grass on the cleared building envelope illustrates, removing vegetation and disturbing the soil to install a septic system will provide additional habit for the grass.

I do not believe the installation of a driveway within the recommended 50 foot buffer associated with the riparian plant community on the northern portion of the Moller/Spurrier parcel will jeopardize the ecological status of the riparian community. I recommend that such a driveway be rocked rather than paved. Paved surfaces may have a tendency to concentrate runoff more than a more porous surface and cause erosion which may degrade the riparian habitat. A rocked driveway would allow rainfall to be absorbed in a manner very similar to the natural soil on the site.

6. Referencecs;

Anon. 1985. Mendocino County General Plan – Coastal Element. Ukiah

Anon. 1991. Zoning Mendocino County Code – Coastal Zone. Ukiah

Hitchcock, A. S. 1950. Manual of the Grasses of the United States. U.S. Govt. Printing Office, Washington DC

Hickman, J. C. (ed). 1993. The Jepson Manual the Higher Plants of California University of California Press, Berkeley

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Mason, H. G. 1959. A Flora of the Marshes of California. University of California Press, Berkeley.

Skinner, M and B. Pavlik 1994. Inventory of Rare and Endangered Vascular Plants Of California. California Native Plant Society Special Publication #1 (5th ed), Sacramento, CA.

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Botanical Surveys
GORDON E. McBRIDE, Ph.D.

DATE: July 5, 2000

To: County of Mendocino
Department of Planning and Building Services
501 Low Gap Road, Room 1440
Ukiah, CA 95482

From: Gordon E. McBride, PhD
30301 Sherwood Road
Fort Bragg, CA 95437
707 964 2922

Re: **BOTANICAL SURVEY AS REQUIRED FOR A PROPOSED COASTAL DEVELOPMENT # 39-00 PERMIT FOR A SINGLE FAMILY DWELLING AT 44696 CRESTWOOD DRIVE, MENDOCINO (AP #119-370-10, MOLLER/SPURRIER).**

1. **Project Description:**

The proposed Coastal Development Permit would allow the construction of a single family residence on a +- 1.27 acre site at 44696 Crestwood Avenue, Mendocino.

2. **Area Description**:

The site was originally vegetated by a mixed North Coast Coniferous forest and Bishop Pine forest in mature second growth. A portion of the site has been historically cleared for a building envelope, but is otherwise undeveloped. A small unnamed watercourse flows roughly from east to west across the northern portion of the parcel. The watercourse supports a modest riparian plant community.

Overstory in the coniferous forest includes Douglas Fir (*Psuedotsuga menziesii*), Bishop Pine (*Pinus muricata*) and Tan Oak (*Lithocarpus densiflora*). Midlevel vegetation includes Wax Myrtle (*Myrica californica*), Elderberry (*Sambucus mexicana*), Alder (*Alnus oregana*), Broom (*Cytisus scoparius*), Cascara (*Rhamnus purshiana*), Huckleberry (*Vaccinium ovatum and V. parviflorum*). Groundcover includes Blackberry (*Rubus ursinatus*), Reed Grass (*Calamagrostis nutkeanus*), **Bolander's Reed Grass (*Calamagrostis bolanderi*)**, Pampas Grass (*Cortaderia*

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selloana), Hedge Nettle (*Stachys rigida*), Brome (*Bromus tectorum*), Bracken (*Pteridium aquilinum*), Sword Fern (*Polystichum munitum*) and associated plant species.

Vegetation within the historically cleared building envelope on the site includes Sweet Vernal Grass (*Anthoxanthum odoratum*), Velvet Grass (*Holcus lanatus*), Pampas Grass, **Bolander's Reed Grass,** Bent Grass (*Agrostis capillaris*), Reed Grass (*Calamagrostis nutkeanus*), Bracken Fern, Alder (*Alnus oregana*), Brome (*Bromus vulgaris*), Fireweed (*Erichites arguta*), Blackberry, Foxglove (*Digitalis purpurea*), Elderberry, Rush (*Juncus effusus var. brunneus*) and associated plant species.

The Riparian plant community includes Alder, Cascara, Sword Fern, Hedge Nettle, Thimbleberry (*Rubus parviflorus*), Bracken , Trout Lily (*Scoliopus bigelovii*), Horsetail (*Equisetum telmateia*), Skunk Cabbage (*Lysichiton americanum*), Elderberry, False Hellbore (*Veratrium fimbriatum*), Sugar Scoops (*Tiarella trifoliata var. unifoliata*) and associated plant species.

3. Survey Methodology and Dates:

The site was surveyed on June 30 and July 3, 2000. The survey was conducted by systematically walking the parcel and making field notes of plant communities and species represented. Any material needing further identification was taken to the laboratory and keyed in one or more of the references listed below.

According to the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California there are twelve rare or endangered plant species known from North Coast and Closed Cone coniferous forest in the Mendocino Quadrangle: Pygmy Manzanita, Bolander's Reed Grass, Swamp Harebell, California Sedge, Mendocino Paintbrush, Pygmy Cypress, Baker's Goldfields, Coast Lily, Leafy-stemmed Mitrewort, Bolander's Beach Pine, Great Burnett and the Seacoast Ragwort. See Appendix A for a CNPS Fulldata printout for these species.

At the time of the June 30 field survey Bolander's Reed Grass, Swamp Harebell, California Sedge, Mendocino Paintbrush, Baker's Goldfields, Coast Lily, Leafy-stemmed Mitrewort and the Seacoast Ragwort were known to be in bloom from reference populations or the CNPS database. Pygmy Cypress, Pygmy Manzanita and Bolander's Pine can be recognized any time of year. On the July 3 field survey the Great Burnett was in bloom according to the CNPS database.

The boundary of the riparian plant community on the southern side of the watercourse was flagged on June 30. No development is possible on the north side of the watercourse because of the proximity of Crestwood Drive – that boundary was not flagged. The boundary of the Bolander's Reed Grass population was flagged on July 3, 2000.

4. **Results and Discussion:**

Of the twelve rare or endangered plant species listed above, only Bolander's Reed Grass was located on the Moller/Spurrier site. It is growing primarily in, and is characteristic of, the mixed coniferous forest area east of the cleared building envelope. A portion of the Bolander's Reed Grass population extends into the eastern edge of the cleared building envelope. This population of Bolander's Reed Grass should be protected from disturbance by a 50 foot buffer, measured from the edge of the population as marked on July 3, 2000.

The Pygmy Manzanita, Swamp Harebell, California Sedge, Mendocino Paintbrush, Pygmy Cypress, Baker's Goldfields, Leafy-stemmed Mitrewort, Bolander's Pine, Great Burnett and the Seacoast Ragwort were not discovered on the site by this survey. No other rare or endangered plant species were discovered on the site by this survey.

The Riparian plant community should be protected from disturbance by a 50 foot buffer, measured from the edge of the Riparian community as flagged on June 30, 2000.

There are no Pygmy Forest or Sand Dune communities on the site.

5. **Impact Assessment and Mitigation Measures:**

The Bolander's Reed Gras population should be protected from disturbance by a 50 foot buffer measured from the edge of the population as flagged on July 3, 2000 on the Moller/Spurier site.

The Riparian community should be protected from disturbance by a 50 foot buffer, measured from the edge of that community as flagged on June 30, 2000 on the Moller/Spurier site.

No mitigation measures are necessary for the protection of Pygmy Manzanita, Swamp Harebell, California Sedge, Mendocino Paintbush, Pygmy Cypress, Baker's

Goldlfields, Leafy-stemmed Mitrewort, Bolander's Pine, Great Burnett or the Seacoast Ragwort on the Moller/Spurrier site

No mitgation measures are necessary for the protection of Pygmy Forest or Sand Dune communities on the Moller/Spurrier site.

6. Referencecs;

Anon. 1985. Mendocino County General Plan – Coastal Element. Ukiah

Anon. 1991. Zoning Mendocino County Code – Coastal Zone. Ukiah

Hitchcock, A. S. 1950. Manual of the Grasses of the United States. U.S. Govt. Printing Office, Washington DC

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Skinner, M and B. Pavlik 1994. Inventory of Rare and Endangered Vascular Plants Of California. California Native Plant Society Special Publication #1 (5th ed), Sacramento, CA.

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Full Data Report for the Selected Plants
Appendix A – Rare or Endangered Plants from the Mendocino quad in North Coast and Closed Cone Coniferous Forest

ARCTOSTAPHYLOS MENDOCINOENSIS
"pygmy manzanita" **Family:** Ericaceae

Life Form: Shrub (evergreen) **Blooms:** January
CNPS List: [1B] R/T/E in CA and elsewhere **R-E-D:** 3-2-3
State: [None] No state status
Federal: [None] No federal status
Counties: Mendocino
Quads: Mendocino (569D)
Habitat: Closed-cone coniferous forest (acidic sandy clay)
Elevation: 90-200 m.
Notes: Known only from one occurrence on the Mendocino Plains. See Four Seasons 8(3):30 (1989) for original description.

CALAMAGROSTIS BOLANDERI
"Bolander's reed grass" **Family:** Poaceae

Life Form: Perennial herb (rhizomatous) **Blooms:** June-August
CNPS List: [1B] R/T/E in CA and elsewhere **R-E-D:** 2-2-3
State: [None] No state status
Federal: [None] No federal status
Counties: Humboldt, Mendocino, Sonoma
Quads: Sebastopol (502A), Camp Meeker (502B), Valley Ford (502C), Two Rock (502D), Stewarts Point (520B), Plantation (520D), Point Arena (537B), Noyo Hill (568B), Fort Bragg (569A), Mendocino (569D), Rodgers Peak (689A), Trinidad (689C)
Habitat: Bogs and fens, Closed-cone coniferous forest, Coastal scrub, Meadows (mesic), Marshes and Swamps (freshwater), North Coast coniferous forest / mesic
Elevation: 0-185 m.

CAMPANULA CALIFORNICA
"swamp harebell" **Family:** Campanulaceae

Life Form: Perennial herb (rhizomatous) **Blooms:** June-October
CNPS List: [1B] R/T/E in CA and elsewhere **R-E-D:** 2-2-3
State: [None] No state status
Federal: [SOC] Species of Concern
Counties: Mendocino, Marin, Santa Cruz [extirpated], Sonoma
Quads: Felton (408D) [extirpated], Tomales (485B), Drakes Bay (485C), Inverness (485D), Sebastopol (502A) [extirpated], Duncans Mills (503A) [extirpated], Bodega Head (503D) [extirpated], Warm Springs Dam (519A) [extirpated], Annapolis (520A) [extirpated], Stewarts Point (520B), Plantation (520D), Point Arena (537B), Saunders Reef (537C), Gualala (537D), Navarro (552A), Elk (552B), Albion (553A), Noyo Hill (568B), Mathison Peak (568C), Fort Bragg (569A), Mendocino (569D), Inglenook (585D)
Habitat: Bogs and fens, Closed-cone coniferous forest, Coastal prairie, Meadows, Marshes and Swamps (freshwater), North Coast coniferous forest / mesic
Elevation: 1-405 m.
Notes: Many occurrences have few plants. Threatened by grazing, development, marsh habitat loss, and logging. See Proceedings of the California Academy of Sciences I 2:158 (1861) for original description.

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Full Data Report for the Selected Plants
Appendix A – Rare or Endangered Plants from the Mendocino quad in North Coast and Closed Cone Coniferous Forest

CAREX CALIFORNICA
"California sedge" **Family:** Cyperaceae

Life Form: Perennial herb (rhizomatous) **Blooms:** May-August
CNPS List: [2] R/T/E in CA, but more common elsewhere **R-E-D:** 3-1-1
State: [None] No state status
Federal: [None] No federal status
Counties: Mendocino, Sonoma [?], Idaho, Oregon, Washington, and other states
Quads: Point Arena (537B), Elk (552B), Albion (553A), Noyo Hill (568B), Mathison Peak (568C), Fort Bragg (569A), Mendocino (569D)
Habitat: Bogs and fens, Closed-cone coniferous forest, Coastal prairie, Meadows, Marshes and Swamps (margins)
Elevation: 90-250 m.
Notes: Does plant occur in SON Co.? Sensitive in ID. See Memoirs of the Torrey Botanical Club 1:9 (1889) for original description.

CASTILLEJA MENDOCINENSIS
"Mendocino coast Indian paintbrush" **Family:** Scrophulariaceae

Life Form: Perennial herb, hemiparasitic **Blooms:** April-August
CNPS List: [1B] R/T/E in CA and elsewhere **R-E-D:** 2-2-3
State: [None] No state status
Federal: [SOC] Species of Concern
Counties: Humboldt, Mendocino
Quads: Saunders Reef (537C), Gualala (537D), Elk (552B), Mallo Pass Creek (552C), Albion (553A), Fort Bragg (569A), Mendocino (569D), Westport (585A), Inglenook (585D), Bear Harbor (601B), Hales Grove (601D), Trinidad (689C)
Habitat: Coastal bluff scrub, Closed-cone coniferous forest, Coastal dunes, Coastal prairie, Coastal scrub
Elevation: 0-160 m.
Notes: Threatened by coastal development, recreation, non-native plants, and habitat fragmentation. Related to C. affinis ssp. litoralis.

CUPRESSUS GOVENIANA SSP. PIGMAEA
"pygmy cypress" **Family:** Cupressaceae

Life Form: Tree (evergreen) **Blooms:** not applicable
CNPS List: [1B] R/T/E in CA and elsewhere **R-E-D:** 2-2-3
State: [None] No state status
Federal: [SOC] Species of Concern
Counties: Mendocino, Sonoma
Quads: Plantation (520D), Point Arena (537B), Saunders Reef (537C), Gualala (537D), Elk (552B), Noyo Hill (568B), Mathison Peak (568C), Comptche (568D), Fort Bragg (569A), Mendocino (569D)
Habitat: Closed-cone coniferous forest (podzol-like soil)
Elevation: 30-500 m.
Notes: Threatened by development and vehicles. See Phytologia 70(4):229-230 (1990) for revised nomenclature.

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LASTHENIA MACRANTHA SSP. BAKERI
"Baker's goldfields" **Family:** Asteraceae

Life Form: Perennial herb **Blooms:** April-September
CNPS List: [1B] R/T/E in CA and elsewhere **R-E-D:** 2-2-3
State: [None] No state status
Federal: [None] No federal status
Counties: Mendocino, Marin, Sonoma [extirpated]
Quads: Sebastopol (502A) [extirpated], Valley Ford (502C) [extirpated], Bodega Head (503D) [extirpated], Plantation (520D) [extirpated], Point Arena (537B), Saunders Reef (537C), Gualala (537D) [extirpated], Albion (553A) [extirpated], Fort Bragg (569A), Mendocino (569D)
Habitat: Closed-cone coniferous forest (openings), Coastal scrub
Elevation: 60-520 m.
Notes: See Leaflets of Western Botany 1:7 (1932) for original description, and University of California Publications in Botany 40:62 (1966) for revised nomenclature.

LILIUM MARITIMUM
"coast lily" **Family:** Liliaceae

Life Form: Perennial herb (bulbiferous) **Blooms:** May-July
CNPS List: [1B] R/T/E in CA and elsewhere **R-E-D:** 2-3-3
State: [None] No state status
Federal: [SOC] Species of Concern
Counties: Mendocino, Marin, San Francisco [?], San Mateo [extirpated], Sonoma
Quads: San Mateo (448D) [extirpated], Drakes Bay (485C), Stewarts Point (520B), Plantation (520D), Eureka Hill (537A), Point Arena (537B), Saunders Reef (537C), Gualala (537D), Elk (552B), Albion (553A), Noyo Hill (568B), Mathison Peak (568C), Comptche (568D), Fort Bragg (569A), Mendocino (569D), Westport (585A), Inglenook (585D)
Habitat: Broadleafed upland forest, Closed-cone coniferous forest, Coastal prairie, Coastal scrub, Marshes and Swamps (freshwater), North Coast coniferous forest
Elevation: 5-335 m.
Notes: Did this plant occur in SFO Co.? Populations along Highway 1 routinely disturbed by road maintenance; also threatened by urbanization, horticultural collecting, and habitat fragmentation. Hybridizes with L. pardalinum ssp. pardalinum. See Proceedings of the American Academy of Arts and Sciences 6:140 (1875) for original description.

MITELLA CAULESCENS
"leafy-stemmed mitrewort" **Family:** Saxifragaceae

Life Form: Perennial herb (rhizomatous) **Blooms:** May-July
CNPS List: [2] R/T/E in CA, but more common elsewhere **R-E-D:** 2-1-1
State: [None] No state status
Federal: [None] No federal status
Counties: Del Norte, Humboldt, Mendocino, Siskiyou, Tehama, Idaho, Oregon, widespread outside of California
Quads: Navarro (552A), Elk (552B), Mathison Peak (568C), Mendocino (569D), Yolla Bolly 15' NW (613B), Iaqua Buttes (653B), Owl Creek (653C), Maple Creek (671D), Trinity Mtn. (686C), Etna (701B), Grider Valley (719B), Childs Hill (723A), Dutch Creek (736A), Preston Peak (738D)

MITELLA CAULESCENS (cont.)
Habitat: Broadleafed upland forest, Lower montane coniferous forest, Meadows, North Coast coniferous forest / mesic
Elevation: 610-1,700 m.

PINUS CONTORTA SSP. BOLANDERI
"Bolander's beach pine" **Family:** Pinaceae

Life Form: Tree (evergreen) **Blooms:** not applicable
CNPS List: [1B] R/T/E in CA and elsewhere **R-E-D:** 2-2-3
State: [None] No state status
Federal: [SOC] Species of Concern
Counties: Mendocino
Quads: Elk (552B), Albion (553A), Noyo Hill (568B), Mathison Peak (568C), Fort Bragg (569A), Mendocino (569D)
Habitat: Closed-cone coniferous forest (podzol-like soil)
Elevation: 75-250 m.
Notes: Known only from the white sand pine barrens along the Mendocino coast. Threatened by development and vehicles.

SANGUISORBA OFFICINALIS
"great burnet" **Family:** Rosaceae

Life Form: Perennial herb (rhizomatous) **Blooms:** July-October
CNPS List: [2] R/T/E in CA, but more common elsewhere **R-E-D:** 2-2-1
State: [None] No state status
Federal: [None] No federal status
Counties: Del Norte, Humboldt, Mendocino, Oregon, Washington, widespread outside of California
Quads: Ukiah (550B), Albion (553A), Mendocino (569D), Longvale (583C), Laytonville (583B), Cahto Peak (584A), Mad River Buttes (653A), Lord-Ellis Summit (671A) [?], Maple Creek (671D), Ship Mountain (722A), Shelly Creek Ridge (739A), High Plateau Mtn. (739B), Gasquet (739C), High Divide (740A)
Habitat: Bogs and fens, Broadleafed upland forest, Meadows, Marshes and Swamps, North Coast coniferous forest, Riparian forest / often serpentinite
Elevation: 60-1,400 m.
Notes: CA plants may be ssp. microcephala.

SENECIO BOLANDERI VAR. BOLANDERI
"seacoast ragwort" **Family:** Asteraceae

Life Form: Perennial herb (rhizomatous) **Blooms:** June-July
CNPS List: [2] R/T/E in CA, but more common elsewhere **R-E-D:** 2-2-1
State: [None] No state status
Federal: [None] No federal status
Counties: Del Norte, Humboldt, Mendocino, Oregon, Washington
Quads: Mendocino (569D), Gasquet (739C), Hiouchi (740D)
Habitat: Coastal scrub, North Coast coniferous forest
Elevation: 30-650 m.
Notes: Need quads for HUM Co. See Proceedings of the American Academy of Arts and Sciences 7:362 (1868) for original description.

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BIOLOGICAL STUDY
including
DELINEATION OF WETLAND HABITATS,
and
BUFFER ZONE ANALYSIS
for
MENDOCINO COUNTY
LOCAL COASTAL PROGRAM

Proposed Coastal Development Permit (AP# 119-370-10)

MOLLER/SPURRIER PROJECT SITE
44696 CRESTWOOD DRIVE
MENDOCINO, MENDOCINO COUNTY, CALIFORNIA

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August 2003

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1.0 INTRODUCTION

Wetlands Research Associates, Inc. (WRA) conducted a biological study on an approximately 1.27-acre property located at 44696 Crestwood Drive, Mendocino, California ("Study Area")(Figure 1). The purpose of the study was to determine the presence of potential areas meeting the definition of wetlands habitats described in the Mendocino County LCP and the California Coastal Act and to determine the appropriate widths of the onsite ESHA buffers.

1.1 Mendocino County Coastal Act ESHA Definition

The LCP and the Coastal Act defines ESHAs as the following:

1.1.1 Wetlands

"Wetland means land within the coastal zone which may be covered periodically or permanently with shallow water and includes saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens".

The LCP and the Coastal Act defines the upland limit of wetlands as:

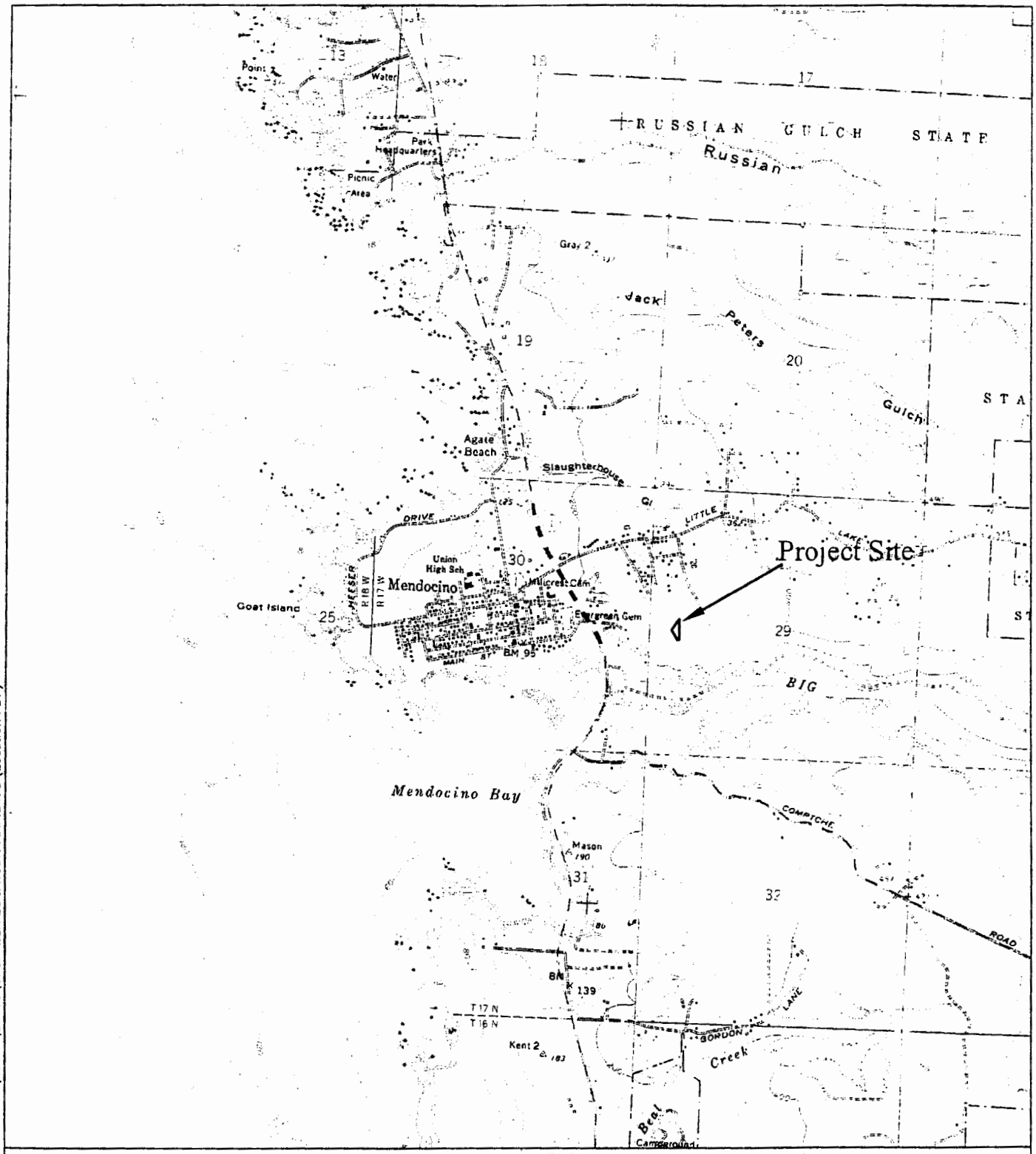
(1) the boundary between land with predominantly hydrophytic cover and land with predominantly mesophytic or xerophytic cover; (2) the boundary between soil that is predominantly hydric and soil that is predominantly non-hydric; or (3) in the case of wetlands without vegetation or soil, the boundary between land that is flooded or saturated at some time each year and land that is not."

1.1.2 Estuaries

"An estuary is a coastal water body usually semi-enclosed by land, but which has open, partially obstructed, or intermittent exchange with the ocean and in which ocean water is at least occasionally diluted by fresh water runoff from the land. The salinity may be periodically increased above the open ocean by evaporation. In general, the boundary between wetland and estuary is the line of extreme low water."

1.1.3 Streams and Rivers

"A stream or a river is a natural watercourse as designated by a solid line or dash and three dots symbol shown on the United States Geological Survey map most recently published, or any well-defined channel with distinguishable bed and bank that shows evidence of having contained flowing water as indicated by scour or deposit of rock, sand, gravel, soil, or debris."



Location Map

Moller / Spurrier Project Site
44696 Crestwood Drive
Mendocino, Californina

SOURCE: USGS DRG Mendocino Quad

Wetlands Research Associates, Inc.

Aug 01, 2003 - 2:08pm L: \Acad 2000 Files \13000\13059\SPURRIER LOCATION MAP.DWG (Location PDF)

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1.1.4 Open Coastal Waters and Coastal Waters

> *"The terms open coastal waters or coastal waters refer to the open ocean overlying the continental shelf and its associated coastline. Salinities exceed 30 parts per thousand with little or no dilution except opposite mouths of estuaries."*

1.1.5 Riparian Habitats

> *"A riparian habitat is an area of riparian vegetation. This vegetation is an association of plant species which grows adjacent to freshwater watercourses, including perennial and intermittent streams, lakes, and other bodies of freshwater."*

1.1.6 Sand Dunes

> *"Sand Dunes means naturally occurring accumulations of sand in ridges or mounds on the beach as well as landward of the beach."*

1.1.7 Pygmy Forests

> *"Pygmy Forests means a stunted forest, with mature vegetation the majority of which is approximately two (2) to twelve (12) feet in height occurring on soils with conditions which severely limit the growth of vegetation such as Blacklock soils and characterized by Mendocino cypresses, Fort Bragg Manzanitia, Bolander pines, and pygmy Mendocino Bishop pines."*

1.1.8 Other Resource Areas

> *"Other designated resource areas include: State parks and reserves, underwater parks and reserves, areas of special biological significance, natural areas, special treatment areas, fishing access points, areas of special biological importance, significant California ecosystems, and coastal marine ecosystems."*

1.2 Project Background Summary

On July 5, 2000, Dr. Gordon McBride performed a botanical survey of the subject property. Of the twelve potential endangered plant species that could occur on the subject property, only Bolander's reed grass (*Calamagrostis bolanderi*) was observed. Additionally, a riparian plant community was located along the northwestern boundary of the property; both of these areas were flagged. Dr. McBride recommended that both the Bolander's reed grass and riparian community be protected from disturbance by a 50-foot buffer (McBride 2000).

On May 4, 2001, Dr. McBride submitted a letter to the Mendocino County Planning Department clarifying that there was approximately 30-40 Bolander's reed grass individuals on the subject

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property. Dr McBride also stated that he did not believe the 50-foot buffer was necessary to protect the population of Bolander's reed grass, but that he had little choice but to recommend it based upon the requirements outlined in the Mendocino County General Plan. Additionally, Dr. McBride concluded that the installation of a driveway within the recommended 50-foot riparian buffer would not jeopardize the ecological status of the riparian community. Dr. McBride recommended that such a driveway be rocked rather than paved, as paved surfaces may have a tendency to concentrate runoff more than a more porous surface and cause erosion which may degrade the riparian habitat. A rocked driveway would allow rainfall to be absorbed in a manner very similar to the natural soil on the site (McBride 2001a).

On July 19, 2001, Robert Dostalek of the Mendocino County Planning Department and Dr. McBride met onsite to discuss the width of the onsite ESHA buffers and other development constraints. On July 23, 2001, Dr. McBride reported that given the constraints of the required setbacks from the Community Water Service (200 feet), the riparian plant community (50 feet), property boundary, septic system, and so forth, there did not appear to be an adequate building envelope if an additional 50-foot setback was enforced from the Bolander's reed grass population. As a result, Dr McBride recommended that a building envelope be permitted within 10 feet of the Bolander's reed grass population (McBride 2001a).

On February 1, 2003, Theodore Wooster performed a site investigation of the subject property in order to obtain fish and wildlife information and to make recommendations on buffer widths for protection of the riparian zone and attendant wildlife. Mr. Wooster concluded that the existing development along Crestwood Drive has precluded the use of the subject property by any significant wildlife species except for deer. Additionally, Mr. Wooster concluded that the onsite stream does not contain fish; however, it can support aquatic insects and amphibians. Moreover, Mr Wooster stated that the maintenance of these common species as well as nesting birds within the riparian area should be adequately protected by the 50-foot buffer and by the remaining parcel acreage that will not be covered by the residence and pertinent structures (Wooster 2003).

On June 10, 2003, the Department of Fish and Game (DFG) determined that a 50-foot buffer from the top of the bank of the stream would be established between the stream and the newly constructed development footprint and entrance road. The DFG also understands that no development will occur within this buffer area. Additionally, the applicant has agreed to avoid the Bolander's reed grass. The grass is a California Native Plant Society List 4 plant and DFG recommends an avoidance strategy from the road and footprint, but did not require a minimum buffer width (DFG 2003).

During early June 2003, Robert Merrill and Jim Baskin of the California Coastal Commission (CCC) conducted a site visit of the subject property. During their site visit, hydrophytic plant species were observed near the southern portion of the subject property. As a result, the CCC requested that the property owner have a wetlands scientist perform an investigation of the area in question to determine if it met the Mendocino County LCP and the Coastal Act definition of wetlands.

On June 20, 2003, WRA conducted a wetlands delineation near the southern portion of the subject property. It was concluded that the area in question was dominated by hydrophytic vegetation; therefore, it met the Mendocino County LCP and Coastal Act wetlands definition based on a one parameter approach.

On July 7, 2003, WRA contacted Jim Baskin of the CCC to convey the findings and to discuss the appropriate steps to be taken. Mr. Baskin requested that WRA complete a biological study that included a wetlands delineation and buffer zone analysis. This analysis would allow the Mendocino County Planning Department and CCC to determine what is the least environmentally damaging alternative.

2.0 STUDY AREA DESCRIPTION

The approximately 1.27-acre Study Area is located at 44696 Crestwood Drive, Mendocino, California. The Study Area is currently undeveloped and is bounded by a residential dwelling to the south and west, by a small unnamed watercourse and Crestwood Drive the north, and by undeveloped parcels to the east. The Study Area is dominated by mixed north coast coniferous forest and Bishop pine (*Pinus muricata*) forest community in mature second growth. Additionally, the portion of the Study Area that is directly to the north of the onsite wetland was cleared and devoid of vegetation during the time of this investigation.

3.0 ENVIRONMENTALLY SENSITIVE HABITAT AREA (ESHA) DELINEATION

3.1 Methods

Due to the previous botanical studies performed by Dr. McBride on the subject property and the request from the CCC to have a wetlands delineation performed near the southern portion of the Study Area, WRA's ESHA delineation focused solely on wetlands. The wetlands delineation methodology followed the respective ESHA definition as stated in the Coastal Act and the Mendocino County LCP.

With regards to wetlands, rather than utilizing a three parameter approach (presence of hydrophytic vegetation, wetland hydrology, and hydric soils) used at the federal level by the U.S. Army Corps of Engineers, the Coastal Act uses a broader definition. Although the California Coastal Commission has determined that the presence of water (wetland hydrology) is required at least seasonally, only one other wetland parameter (either hydric soil or hydrophytic vegetation) was needed to make a wetland determination (Statewide Interpretive Guideline 1981). The Mendocino LCP has adopted these guidelines, and so this delineation study utilized a two parameter (wetland hydrology *and* either hydrophytic vegetation *or* hydric soils) approach to determining the presence of Coastal Act/LCP wetlands. Because the site visit was made during the dry season, a one parameter approach (presence of hydrophytic plants or hydric soil) was used.

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Prior to conducting field studies, available reference materials were reviewed, including the Mendocino County Soil Survey, Western Part (USDA 2001). The Study Area was field inspected on June 20, 2003 for areas that had the potential to meet the LCP wetland definition.
Plant species were assigned a wetland status according to the U.S. Fish and Wildlife Service list of plant species that occur in wetlands (Reed 1988). This wetland plant classification system is based on the expected frequency of occurrence of plants in wetlands. The classification system has the following categories which determines the frequency that plants occur in wetlands:

OBL	Obligate, always found in wetlands	> 99% frequency
FACW	Facultative wetland, usually found in wetlands	67-99%
FAC	Facultative, equal in wetland or non-wetlands	34-66%
FACU	Facultative upland, usually found in non-wetlands	1-33%
UPL/NL	Not found in local wetlands	<1%
NI	Wetland preference unknown	

The Study Area was searched for indicators of wetland hydrology. Positive indicators of wetland hydrology can include direct evidence such as visible inundation or saturation, surface sediment deposits (algal mats), and drift lines, or indirect indicators such as oxidized root channels and a positive fac-neutral test. Depressions, seeps, and topographic low areas were examined for these hydrological indicators.

Soil profiles were described to include horizon depths, color, redoximorphic features, and texture. Soil color was determined using a Munsell soil color chart (GretagMacbeth 2000). Soils formed under wetland (anaerobic) conditions generally have a characteristic low chroma matrix color, designated 0, 1, or 2, used to identify them as hydric soils. Soils with a chroma of 0 or 1 are usually considered hydric; soils with a chroma of 2 are required to contain mottles or other redoximorphic features to be considered hydric.

3.2 Results

3.2.1 Plant Communities

Based upon WRA's field investigation and review of the botanical survey prepared by Dr McBride, the Study Area was determined to be vegetated primarily by North Coast Coniferous forest and Bishop pine forest in mature second growth (McBride 2000). During WRA's field investigation, the southern portion of the site (focus of this study) was vegetated by sweet vernal grass (*Anthoxanthum odoratum*), velvet grass (*Holcus lanatus*), pampas grass (*Cortaderia selloana*), hedge nettle (*Stachys ajugoides)*, Californica blackberry (*Rubus ursinus*), foxglove (*Digitalis purpurea*), elderberry (*Sambucus mexicana*), soft rush (*Juncus effusus var. brunneus*), scotch broom (*Cytisus scoparius*), hairgrass (*Deschampsia cespitosa ssp. holciformis*), goose grass (*Gallium aparine*), and red alder (*Alnus rubra*).

As detailed in the botanical survey performed by Dr. McBride on July 5, 2000, species within the coniferous forest portion of the Study Area include: Bishop pine, tan oak (*Lithocarpus*

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densiflora), wax myrtle (*Myrica californica*), elderberry, red alder, scotch broom, cascara (*Rhamnus purshiana*), huckleberry (*Vaccinium ovatum and V. parviflorum*), California blackberry, reed grass (*Calamagrostis nutkeanus*), Bolander's reed grass, pampas grass, hedge nettle (*Stachys rigida*), brome (*Bromus tectorum*), bracken fern (*Pteridium aquilinum*), and sword fern (*Polystichum munitum*) (McBride 2000).

Additionally, the riparian plant community located in the northwestern portion of the Study Area is vegetated by red alder, cascara, sword fern, hedge nettle, thimbleberry (*Rubus parviflorus*), bracken fern, trout lily (*Scoliopus bigelovii*), horsetail (*Equisetum telmateia*), skunk cabbage (*Lysichiton americanum*), elderberry, false hellbore (*Veratrium fimbriatum*), and sugar scoops (*Tiarella trifoliata var. unifoliata*) (McBride 2000).

3.2.2 Soils

The Mendocino County Soil Survey, Western Part (2001), indicates that the Study Area is predominantly underlain by one soil mapping unit:

199 - Shingle Mill Gibney complex, 2 to 9 percent slopes

The Soil Survey describes this unit as follows:

This map unit is on marine terraces. The vegetation is mainly Bishop pine and huckleberry. Elevation ranges from 200 to 750 feet. This unit is about 45 percent Shinglemill loam and 35 percent Gibney loam. The Shinglemill and Gibney soils occur as areas so intricately intermingled that it was not practical to map them separately at the scale used.

Included with these soils in mapping are small areas of Blacklock, Gibwell, and Tregoning soils and Tropaquepts. These included soils make up about 20 percent of the total acreage of the unit. The percentage varies from one area to another.

The Shinglemill soil is very deep and is poorly drained. It formed in marine sediments. Typically, the surface is covered with a mat of litter about 2 inches thick. The surface layer is light gray, light brownish gray, and very pale brown loam about 3 inches thick. The next layer is very pale brown and reddish yellow loam about 5 inches thick. The upper 7 inches of the subsoil is very pale brown loam. The next 10 inches is light yellowish brown clay. The lower part of the subsoil to a depth of 63 inches or more is light yellowish brown, yellow, and brownish yellow clay and sandy clay that have light gray, white, and red mottles. In some areas the surface layer is sandy loam.

Permeability is slow in the Shinglemill soil. Available water capacity is high. The effective rooting depth is limited by saturation for long periods following episodes of heavy rain from December through April. The saturated zone starts between the depths of 12 and 30 inches and extends to a depth of more than 60 inches. Surface runoff is slow or medium, and the hazard of water erosion is slight or moderate if the surface is left bare.

The Gibney soil is very deep and is somewhat poorly drained. It formed in marine sediments. Typically, the surface is covered with a mat of litter about 3 inches thick. The surface layer is pale yellow loam about 9 inches thick. The upper 6 inches of the subsoil is brownish yellow sandy clay loam. The next layer is yellowish brown clay loam about 14 inches thick. Below this is 11 inches of yellowish brown clay that has strong brown and red mottles. The next layer is brownish yellow clay that has strong brown, red, and light gray mottles. It is about 15 inches thick. The lower part of the subsoil to a depth of 63 inches or more is light gray sandy clay loam that has strong brown and red mottles. In some areas the surface layer is sandy loam.

Permeability is slow in the Gibney soil. Available water capacity is high. The effective rooting depth is limited by saturation for brief or long periods following episodes of heavy rain from December through April. The saturated zone starts between the depths of 24 and 48 inches and extends to a depth of more than 60 inches. Surface runoff is slow or medium, and the hazard of water erosion is slight or moderate if the surface is left bare.

This unit is used for homesite development, for wildlife habitat, or as watershed.

The main limitations affecting homesite development are the seasonally saturated soil conditions and the slow permeability in the subsoil. Low strength is also a limitation in areas of the Shinglemill soil. The design of buildings and roads should offset the limited ability of the Shinglemill soil to support a load. Surface drainage may be needed for roads and buildings. The restricted permeability in the subsoil and the saturated soil conditions increase the possibility of failure of septic tank absorption fields. Alternative systems may be needed, such as those in which leach lines are placed in a mound above the soil surface.

3.2.3 Hydrology

The primary hydrological sources for the Study Area appears to be direct precipitation, stormwater runoff, groundwater seepage, and flows contained within the stream along the northwestern boundary of the Study Area.

3.3 Areas Potentially Meeting Mendocino County LCP ESHA Definition

Four areas potentially meeting the Mendocino County LCP ESHA definition were located within the Study Area. The potential ESHAs consist of a freshwater wetland, stream, riparian community, and rare plant habitat. Please refer to Appendix A for the onsite ESHA/Buffer map. The riparian community and rare plant habitat were mapped by Dr. McBride during the botanical survey performed in July 2000. Additionally, Appendix B contains complete wetland data sheets describing the methodology used during the June 2003 wetland delineation performed by WRA.

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3.3.1 Wetlands

The mapped wetland area contained positive indicators for wetland vegetation; however, all of the data points taken within the mapped wetland area lacked direct and indirect hydrology indicators. Moreover, only one of three data points taken within the wetland area had strong hydric soils indicators; the remaining two data points had marginal hydric soils indicators (Appendix B). The dominant plants within the wetland included California blackberry, velvet grass, hedge nettle, and soft rush. Due to the lack of hydrology and strong hydric soils indicators within the wetland habitat, the mapped area was determined to be a marginal wetland habitat. Please refer to Appendix A for the location of the wetland on the subject property.

3.3.2 Riparian Habitat

During the botanical survey performed by Dr. McBride in July 2000, a small unnamed tributary was located near the northern boundary of the site. Additionally, it was determined that the watercourse has an associated riparian community. The boundary of the riparian community was flagged on June 30, 2000 by Dr. McBride and is indicated on the map included as Appendix A (McBride 2000).

3.3.3 Other Resource Areas

In Mendocino County, environmentally sensitive habitat areas also include: anadromous fish streams, sand dunes, rookeries and marine mammal haulout areas, pygmy vegetation containing species of rare or endangered plants, and habitats of rare and endangered plants and animals (California Coastal Commission 1985). Based upon WRA's review of the botanical report performed within the Study Area, a population of the uncommon plant Bolander's reed grass (*Calamagrostis bolanderi*) was found within the Study Area (McBride 2000). Bolander's reed grass is a CNPS List 4 plant. List 4 plants are not fully protected under CEQA because these plants are not rare from a statewide perspective, however, they are uncommon enough that their status should be monitored regularly (CNPS 2001). Please refer to Appendix A for the reported location of the individuals on the subject property.

4.0 IMPACT ANALYSIS AND MITIGATION MEASURES

Projects that propose construction within a buffer less than 100 feet from an ESHA must provide information that indicates a lesser buffer distance will not have a significant adverse impact on the habitat. The buffer zone analysis utilizing Mendocino LCP Zoning Ordinance 20.496.020(A) through (4)(k) is described below and in Table 1.

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The applicant proposes to reduce the buffer of the onsite wetland and riparian habitat. However, the applicant is not proposing to impact the population of Bolander's reed grass or 10 foot wide buffer as recommended by Dr. McBride and agreed to by the Department of Fish and Game (McBride 2001b, 2003; DFG 2003). As a result, the buffer zone analysis included in this report primarily addresses the onsite wetland and riparian habitat.

The results of the buffer analysis indicate that the condition of the onsite ESHAs and surrounding habitat, and the type, location, and elevation of the proposed development (private single family residence with associated driveway and parking area) with a minimum 15-foot buffer distance between the development and onsite wetland and riparian habitats would potentially have a significant impact on the habitat. However, several impacts were identified and several mitigation measures are included that would reduce the potential impacts to a less than significant level.

Potential Impact 1: The proposed development with less than a 100-foot buffer may adversely affect sensitive species potentially using the habitat.

The onsite ESHAs consists of a marginal wetland, unnamed watercourse with a modest riparian community, and uncommon plant habitat. The following mitigation measures will reduce potential impacts to a less than significant level.

> ***Mitigation Measure 1a:*** Maintain a minimum 50-foot buffer between the riparian habitat and the development (except where the proposed driveway enters the site from the existing driveway). Additionally, the proposed driveway should be surfaced with clean aggregate material (rock gravel) rather than paved. A rocked driveway would allow rainfall to be absorbed in a manner very similar to the natural soil on the site (McBride 2001a).
>
> ***Mitigation Measure 1b:*** Do not construct or place any structures within the reduced buffer areas that would alter the existing hydrology of the Study Area. The primary hydrological source for the onsite wetland and unnamed watercourse appears to be stormwater runoff and groundwater seepage from areas to the northeast of the site. Due to the sensitive nature of the onsite ESHAs, any alteration to the existing hydrologic regime would significantly impact the habitat.
>
> ***Mitigation Measure 1c***: Native shrubs and trees shall be planted in the reduced buffer zone between the development and the onsite wetland habitat following construction. Typical plant species may include wax myrtle and California blackberry.

Mitigation Measure 1d: Soil disturbance, grading or soil storage should be avoided in the area of the Bolander's reed grass population (McBride 2002).

Mitigation Measure 1e: Building materials should not be stored and construction debris should not be allowed to accumulate in the area of the Bolander's reed grass population (McBride 2002).

Mitigation Measure 1f: Significant modification of existing vegetation, as in landscaping and planting of ornamental vegetation should not be permitted in the area of the Bolander's reed grass population (McBride 2002).

Potential Impact 2: Construction of the development may adversely affect the onsite ESHAs by causing sediment, debris, or other harmful materials to enter the ESHAs.

Construction requires that human workers and construction equipment be present, causes soil disturbance, and involves the use of solid and fluid construction materials. The following mitigation measures should be implemented to reduce potential impacts to a less than significant level:

Mitigation Measure 2a: Site grading should be restricted between approximately May 1 and October 31. Construction work during these dryer months will reduce the possibility of soil erosion and sediments flowing into to onsite ESHAs

Mitigation Measure 2b: Install temporary silt fencing along the construction limit of disturbance.

Mitigation Measure 2c: Soil disturbance in the reduced buffer zone should be minimized as much as possible. This will reduce the impact to existing soils and vegetation that will remain as natural habitat within the buffer zone and reduce the potential for soil erosion.

Mitigation Measure 2d: Solid materials, including wood, masonry/rock, glass, paper, or other materials should not be stored or placed in the reduced buffer area. Solid waste materials should be properly disposed of off-site. Fluid materials, including concrete, wash water, fuels, lubricants, or other fluid materials used during construction should not be disposed of onsite and should be stored or confined as necessary to prevent spillage into natural habitats including the onsite ESHAs. If a spill of such materials occurs, the area should be cleaned and contaminated materials disposed of properly. The affected area should be restored to its natural condition.

Potential impact 3: Exotic species within the Study Area may degrade the habitat quality of the onsite ESHAs.

Mitigation Measure 3a: Remove the exotic Scotch broom and pampas grass within the Study Area

5.0 BUFFER ZONE ANALYSIS

Table 1. Buffer Zone Analysis	
Section 20.496.020 Coastal Zoning Ordinance	
A. Buffer Areas. A buffer area shall be established adjacent to all environmentally sensitive habitat areas. The purpose of this buffer area shall be to provide for a sufficient area to protect the environmentally sensitive habitat from degradation resulting from future developments and shall be compatible with the continuance of such areas.	Buffer widths were analyzed based on current habitat conditions and surrounding areas.
1. **Width.** The width of the buffer area shall be a minimum of one hundred feet, unless an applicant can demonstrate, after consultation and agreement with the California Department of Fish and Game, and County Planning staff, that one hundred feet is not necessary to protect the resources of that particular habitat area from possible significant disruption caused by the proposed development. The buffer areas shall not be less than fifty feet in width. New land division shall not be allowed which will create new parcels entirely within a buffer area. Developments permitted within a buffer area shall generally be the same as those uses permitted in the adjacent Environmentally Sensitive Habitat Area.	Based upon the WRA's buffer analysis and review of the existing conditions of the onsite ESHAs, the surrounding area, and proposed site plan, the buffer width of the onsite ESHAs meets the minimal 50-foot requirement. However, the placement of 50-foot buffers directly adjacent to the onsite riparian and wetland habitat, combined with the uncommon plant buffer (10 foot) and community water source setback (200 foot), would render the Study Area undevelopable. As a result, the focus of this buffer matrix is the analysis of the least environmentally damaging alternative that was developed by WRA. Additionally, the applicant is not proposing to sub-divide the land and the proposed development (single-family home with associated driveway and parking area) is consistent with adjacent developments within the vicinty. Moreover, an existing access driveway is located within the same ESHA buffer where the applicant is proposing to install a similar driveway.
a. Biological Significance of Adjacent Lands. The degree of significance depends upon the habitat requirements of the species in the habitat area.	*Riparian Habitat* On the Study Area there is a historic building envelope that has been cleared south of the small unnamed watercourse that flows from east to west across the site and the riparian plant community associated with it. To the north of the Study Area there is mixed north coast coniferous forest and Bishop pine forest that is mostly undisturbed except for a road and a water storage area. To the east of the Study Area there is mixed north coast coniferous forest and Bishop pone forest that is in mature second growth but has been subject to some logging. The parcels to the south and west have been developed with single family dwellings. The vegetation that was historically cleared for the existing building envelope was in all probability mixed north coast coniferous forest and Bishop pine forest, but this area is now vegetated primarily by ruderal species including grasses, rushes, and forbs. The value - or the functional relationship - of the vegetation on the cleared building envelope to species of mammals, birds, reptiles, amphibians and invertebrates that may inhabit the riparian plant

	community and the associated north coast/Bishop pine forest is minimal. While the ruderal plant species may provide some seed source to birds and small mammals, there is little in the way of cover, nesting or other elements of habitat diversity (McBride 2003). The riparian habitat within the Study Area is heavily influenced by its location at the end of a residential street, Crestwood Drive, an adjacent residence and a municipal water supply facility just uphill from the parcel. Access to the property is via an approximately 15 foot wide road which crosses the riparian zone and the creek via a 24 inch aluminum culvert. The Bishop pine forest associated with the area is a common plant community type. The riparian zone is less than 25 feet wide with a hundred percent understory canopy of vegetation. Species of wildlife associated with the riparian zone are common ones such as skunks, dusky footed woodrats and rabbits. With or without residential development on the upland area, these species are expected to continue to survive. The maintenance of these common species as well as nesting birds within the riparian, should be adequately protected by the 50-foot buffer and by the remaining parcel acreage that will not be covered by the residence and pertinent structures (Wooster 2003). *Wetland Habitat* The onsite wetland habitat consists of herbaceous species including hedge nettle, soft rush, California blackberry, and velvet grass. Approximately half of the dominant species within the wetland are facultative species that occur equally in wetlands and in non-wetlands. Additionally, the remaining hydrophytic species are common species that have been observed in wetland habitats within the vicinity of the Study Area. Moreover, this area is a marginal wetland that lacks strong evidence of historic ponding or saturation; therefore, the onsite wetland lacks the habitat requirements of many amphibians and other aquatic wildlife. The wetland also lacks sufficient nesting habitat for the common avian fauna that inhabits the site; limited foraging habitat does exist within the wetland (California blackberry). However, California blackberry is also located in sufficient quantities outside the wetland and within the Study Area. As a result, the common wetland plant species and wildlife species within the Study Area are expected to survive with the proposed development of the Study Area. Based upon the above, a 25-foot buffer will be adequate to protect the wetland habitat.
b. Sensitivity of Species to Disturbance. The width of the buffer zone shall be based, in part, on the distance necessary to ensure that the most sensitive species of plants and animals will not be disturbed significantly by the permitted development:	
b(i). Nesting, feeding, breeding, resting, or other habitat requirements of both resident and migratory fish and wildlife species.	Existing human development along Crestwood Drive has precluded the use of the site by any significant wildlife species. Wildlife heard or seen in the general area were a pair of ravens, California quail, robins, scrub jays and acorn woodpecker. Evidence of other wildlife included black tailed deer, mice, voles dusky footed woodrats and rabbits. The riparian zone does not contain fish and is classified as a Class II stream. It can support aquatic insects and amphibians. The maintenance of these species as well as nesting birds within the riparian area should be adequately protected by the 50-foot buffer and

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	by the remaining parcel acreage that will not be covered by the residence and pertinent structures (Wooster 2003).
b(ii) An assessment of the short-term and long-term adaptability of various species to human disturbance	No wildlife species were observed using the onsite ESHAs during WRA's field investigation. Species observed in the Study Area vicinity were common species adapted to human disturbance, such as common ravens. Common species of avian wildlife that are expected to use the onsite ESHAs are highly adaptable to low level human disturbance. The continued use of the existing habitat by common species is expected to continue with the proposed development.
b(iii) An assessment of the impact and activity levels of the proposed development	The single family residence will cause relatively low level impacts to the Study Area. There will be a limited amount of occupants within the residence since it is only a single family home. The siting of the proposed residential structure and parking area is within a previously disturbed area that is partially devoid of vegetation. Although the entire proposed development is within the 100-foot buffer of onsite ESHAs, the reduced buffers will adequately protect the sensitive habitats from disturbance. Additionally, the proposed residential structure is developed in a similar manner as the neighboring residences.
c. **Susceptibility of Parcel to Erosion.** A sufficient buffer to allow for the interception of any additional material eroded as a result of the proposed development should be provided	Soils near the proposed construction area may be susceptible to erosion, and precautions should be taken to reduce erosion, such as conducting site grading only during fair weather during summer months, installing silt fences, and seeding exposed areas with an erosion control seed mix prior to the winter rainy season. The onsite ESHAs may be affected by erosion and sedimentation during construction unless the mitigation measures listed in this report are followed.
d. **Use of Natural Topographic Features to Locate Development**	The proposed residence and parking area will be located on a relatively topographic level area to minimize earthmoving and impacts to slopes.
e. **Use of Existing Cultural Features to Locate Buffer Zones.** Cultural features (e.g. roads and dikes) shall be used, where feasible, to buffer habitat areas. Where feasible, development shall be located on the side of roads, dikes, irrigation canals, flood control channels, etc. away from the ESHA.	There are no existing cultural features that could be used to locate buffer zones. However, the siting of the proposed residence and parking area is situated within an existing disturbed area that is partially devoid of vegetation. The entire portion of the Study Area that is directly adjacent to the existing driveway consists of ESHAs or ESHA buffers. As a result, access to the disturbed portion of the Study Area cannot occur without impacting a buffer area or ESHA. Therefore, WRA attempted to place the proposed driveway an equal distance from the delineated boundary of the riparian and wetland habitats. However, in doing so, the driveway would impact an existing tree located along the existing driveway. As a result, to avoid the tree WRA moved the driveway approximately 10 feet towards the riparian area. Therefore, only a small portion of the riparian ESHA buffer is impacted while direct impacts to the onsite ESHAs are avoided. The mitigation measures listed in this report should minimize indirect impacts to the onsite ESHAs.
f. **Lot Configuration and Location of Existing Development.** Where an existing subdivision is present, similar buffer distances as	The area is zoned for single residence with pertinent surface covering structures such as the driveway, parking area, and a plus/minus 1,680 square foot family dwelling. Currently, there are existing residences directly to the south and west of the Study Area. Moreover, there is an existing driveway that is directly adjacent to the onsite wetland; the

existing may be used. However, mitigation measures shall be provided to provide additional protection.	western boundary of the wetland is the existing driveway. Additionally, the existing driveway crosses the riparian habitat and unnamed watercourse via a 24 inch aluminum culvert. WRA has determined that a 25-foot buffer would be adequate to protect the marginal wetland that exists within the Study Area. This is a greater buffer than what was used when the existing driveway was installed to allow access to the property to the south of the Study Area. Mitigation measures that provide additional protection to the oniste ESHAs include planting native shrubs within the buffer area, minimizing the footprint of disturbance and impervious surfaces, and implementing soil erosion control measures.
g. **Type and Scale of Development Proposed**. Such evaluations will be made on a case-by-case basis depending upon the resources involved and the degree to which adjacent lands have been developed and the type of development in the area.	The proposed project is a single family residence on approximately 1.27 acres of land. The proposed residence is similar to surrounding development within the vicinity.
2. **Configuration**. The buffer area shall be measured from the nearest outside edge of the ESHA (e.g. for a wetland from the landward edge of the wetland; for a stream from the landward edge of the riparian vegetation or the top of the bluff.	The proposed ESHA buffer areas are measured from the delineated edge of the riparian vegetation, the edge of hydrophytic vegetation, and, the edge of Bolander's reed grass. The delineation methodology followed the riparian, wetland, and other resource area definition as stated in the Coastal Act and the Mendocino County LCP.
3. **Land Division**. New subdivisions or boundary line adjustments shall not be allowed which will create or provide for new parcels entirely within a buffer area.	The property owner does not propose to subdivide the property.
4 (a). **Permitted Development**. Development shall be compatible with the continuance of the adjacent habitat area by maintaining the functional capacity, their ability to be self-sustaining and maintain natural species diversity	The proposed development of a single family home should not impact the functional capacity of the riparian vegetation, wetland habitat, or Bolander's reed grass. *Riparian Habitat* The functions of the onsite riparian habitat appear to provide habitat for numerous small birds and mammals and to prevent sedimentation of the adjacent watercourse. A 50-foot buffer should adequately protect the common species that may occupy the onsite riparian habitat. Moreover, the proposed mitigation measures included in this report should reduce potential impacts related to project construction and the installation of the proposed driveway within the 50-foot buffer. *Wetland Habitat* The surrounding development, small size, and marginal nature of the onsite wetland limits the types of wildlife that can utilize the habitat. The facultative wetland plant California blackberry provides limited foraging habitat for avian fauna; however, the lack of sustained

	hydrology precludes the use of the wetland by most amphibians and other aquatic wildlife. The absence of hydrology and week hydric soils within the wetland indicates that the wetland does not store water for extended periods of time. The 25-foot buffer and proposed mitigation measures should help maintain the functional capacity of the onsite wetland while maintaining the natural species diversity. *Bolander's reed grass* The Bolander's reed grass is most abundant in the historically cleared proposed building envelope. As one approaches the dense vegetation of the riparian plant community or the nearby forest, the Bolander's reed grass population drops off to zero. The property owners have an easement for a half acre septic area along the eastern boundary that is vegetated by mixed north coast coniferous/Bishop pine forest in second growth (but with some tree removal in the last 5 to 10 years). This area would be cleared, and a primary and backup Wisconsin mound would be installed and maintained. Because of the thinning of overstory in this proposed septic area there are a few scattered Bolander's reed grass plants in this area. However, after clearing and installation of the septic system the Bolander's reed grass would become much more abundant in that half acre, and mitigate the reduced buffer area between the Bolander's reed grass population in the building envelope and the proposed single family dwelling. The proposed clearing of the adjacent half acre for a septic system will have a beneficial impact on the Bolander's reed grass population (McBride 2003).
(b). Structures will be allowed within the buffer area only if there is no other feasible site available on the parcel.	The applicant is proposing to place structures (residential dwelling, septic, parking area, and driveway) within the 100-foot buffer of the onsite ESHAs. Based upon the buffer zone analysis, the minimal 50-foot buffer is adequate to protect the onsite riparian vegetation, wetland habitat, and Bolander's reed grass. However, the application of 50-foot buffers, directly adjacent to the onsite ESHAs, combined with the 200-foot community water source setback would render the parcel undevelopable. Moreover, the existing driveway frontage of the property would be completely occupied by ESHAs or ESHA buffers. Based upon the previous buffer analysis performed by Dr. McBride, the riparian habitat and Bolander's reed grass would require a 50-foot and 10-foot buffer, respectively (McBride 2001b; 2003). Due to the marginal nature of the onsite wetland, WRA believes a 25-foot buffer would adequately protect this ESHA. Based upon WRAs review of the applicant's site plan, the application of a 25-foot wetland buffer, combined with the 50-foot riparian buffer would not leave any room to install an access driveway from the existing driveway. The least environmentally damaging alternative (Alt. 1) would be to install the driveway an equal distance from the wetland and riparian habitats. However, in doing so, a tree located along the existing driveway would be impacted. As a result, WRA recommends placing the proposed driveway approximately 10 feet closer to the onsite riparian habitat. The proposed driveway should originate along the existing driveway, directly between the existing

	two trees, and make the shortest route from the existing driveway to the developable portion of the Study Area (Appendix A). As a result, only a small portion of the onsite riparian ESHA buffer would be impacted. The only other alternatives would be to remove the tree along the existing driveway (Alt. 2), install the driveway so that it is directly adjacent to the onsite wetland (Alt. 3) or either directly through the riparian or wetland habitat (Alt. 4). These alternatives would cause significantly greater environmental damage than the proposed alternative (Alt. 1). The siting of the proposed parking and residential dwelling is within a cleared portion of the Study Area that is relatively level and partially devoid of vegetation. Additionally, this is the only portion of the Study Area that is not located within a reduced ESHA buffer or other setback. As result, the location of the proposed house is the least environmentally damaging alternative. Other alternatives would be to move the proposed structures within a reduced ESHA buffer or other onsite setback. Moving the proposed structures into these areas would cause significantly more environmental damage than the proposed project.
(c). Development shall be sited and designed to prevent impacts which would degrade adjacent habitat areas. The determination of the best site shall include consideration of drainage, access, soil type, vegetation, hydrological characteristics, elevation, topography, and distance from the natural stream channels.	The development is situated on the existing level areas of the site that are partially devoid of vegetation. Additionally, the parking area and residential dwelling are sited in the only portion of the Study Area that is not occupied by a reduced ESHA buffer or other setback. Moreover, the proposed development is situated at higher elevations than the unnamed watercourse. As a result, the proposed development will not interfere with the hydrologic capacity of the unnamed watercourse to pass a 100 year flood event without damaging the coastal zone natural environments or human systems.
(d). Same as 4 (a)	Same as 4 (a)
(e) Structures will be allowed within the buffer area only if there is no other feasible site available on the parcel. Mitigation measures, such as planting riparian vegetation, shall be required to replace the protective values of the buffer area on the parcel, at a minimum ratio of 1:1 which are lost as a result of development under this solution.	The applicant is proposing to place structures within the reduced ESHA buffers. Mitigation measures are proposed that will reduce impacts to a less than significant level. Additionally, no riparian vegetation will be disturbed by the proposed project; however, proposed mitigation measures include planting native riparian trees and shrubs between the proposed development and onsite wetland habitat. Additionally, the exotic plants Scotch broom and pampas grass shall be removed from the Study Area.
(f). Development shall minimize the following: impervious surfaces, removal of vegetation, amount of bare soil, noise, dust, artificial light, nutrient runoff, air pollution, and human intrusion into the wetland and minimize alteration of natural landforms.	The proposed development consists of a single family home and associated parking area and driveway . The driveway will be rocked rather than paved. All bare soil areas will be seeded with a soil erosion control mix. Minimal noise, dust, and air pollution would be generated by the proposed development. Additionally, the proposed project is sited away from the onsite ESHAs on a relatively level portion of the Study Area that is partially devoid of vegetation.

(g). Where riparian vegetation is lost due to development, such vegetation shall be replaced at a minimum ratio of 1:1 to restore protective values of the buffer area.	The property owner does not propose to remove any existing riparian vegetation. However mitigation measures include planting native riparian shrubs within the onsite wetland buffer area.
(h). Aboveground structures shall allow peak surface water flows from a 100 year flood to pass with no significant impediment.	The proposed development does not include structures that would significantly impede the flow of water during large storm events. More importantly, the proposed siting of the residence is at a higher elevation than that of the onsite unnamed watercourse. As a result, it is unlikely that flows from a 100 year storm event will impact the proposed development.
(i). Hydraulic capacity, subsurface flow patterns, biological diversity, and/or biological or hydrological processes, either terrestrial or aquatic, shall be protected.	No existing hydrologic features shall be impacted by the proposed development. The proposed development is situated at higher elevations than the onsite unnamed tributary. Moreover, the proposed mitigation measures may help promote the occupation of the site by additional wildlife and increase the functional capacity of the onsite ESHAs.
(j). Priority for drainage conveyance from a development site shall be through the natural stream environment zones, if any exist in the development area. In the drainage system design report or development plan, the capacity of natural stream environment zones to convey runoff from the completed development shall be evaluated and integrated with the drainage system whenever possible. No structure shall interrupt the flow of groundwater within a buffer strip. Foundations shall be situated with the long axis of interrupted impermeable vertical surfaces oriented parallel to the groundwater flow direction. Piers may be allowed on a case by case basis.	Due to the existing topography of the Study Area, the stormwater runoff will be naturally directed toward the onsite intermittent watercourse (as it currently occurs).
(k). If findings are made that the effects of developing an ESHA buffer area may result in significant adverse impacts to the ESHA, mitigation measures will be required as a condition of project approval.	Several mitigation measures are proposed that should minimize the impact to the onsite ESHAs. See Section 4.0 of this report

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6.0 CONCLUSION

Based upon WRA's site visit and review of the previous performed reports, there are four ESHAs located on the subject property. The potential ESHAs consist of a freshwater wetland, stream, riparian community, and rare plant habitat. The size, composition, hydrology, landscape position, proposed development, etc. determines the degree of impact that each ESHA can be subjected to and subsequently the width of the adjacent buffers. Based upon this report and the previously performed studies, the freshwater wetland should be protected by a 25-foot buffer, the riparian community and associated watercourse should have a 50-foot buffer, and the rare plant habitat should be afforded a 10-foot buffer.

The applicant is proposing to place structures within the reduced ESHA riparian buffer that is located on the subject property (proposed driveway). The remaining reduced ESHA buffers will remain undisturbed.

The proposed development consists of a single family home and associated parking area and driveway. The proposed driveway installed within the riparian buffer will be rocked rather than paved so that infiltration can occur. Additionally, riparian vegetation will not be disturbed by the installation of the proposed driveway. Moreover, the proposed residential structure is sited away from the onsite ESHAs on a relatively level portion of the Study Area that is partially devoid of vegetation and not within a reduced ESHA buffer. Additional mitigation measures are included within this report that will reduce impacts to a less than significant level.

Based upon the above, the proposed site plan included as Appendix A is the least environmentally damaging alternative. Other alternatives would move the proposed residential structure, parking area, or proposed driveway within a reduced ESHA buffer, ESHA habitat, or other onsite setback. Moving the proposed structures into these areas would cause significantly more environmental damage than the proposed alternative.

7.0 REFERENCES

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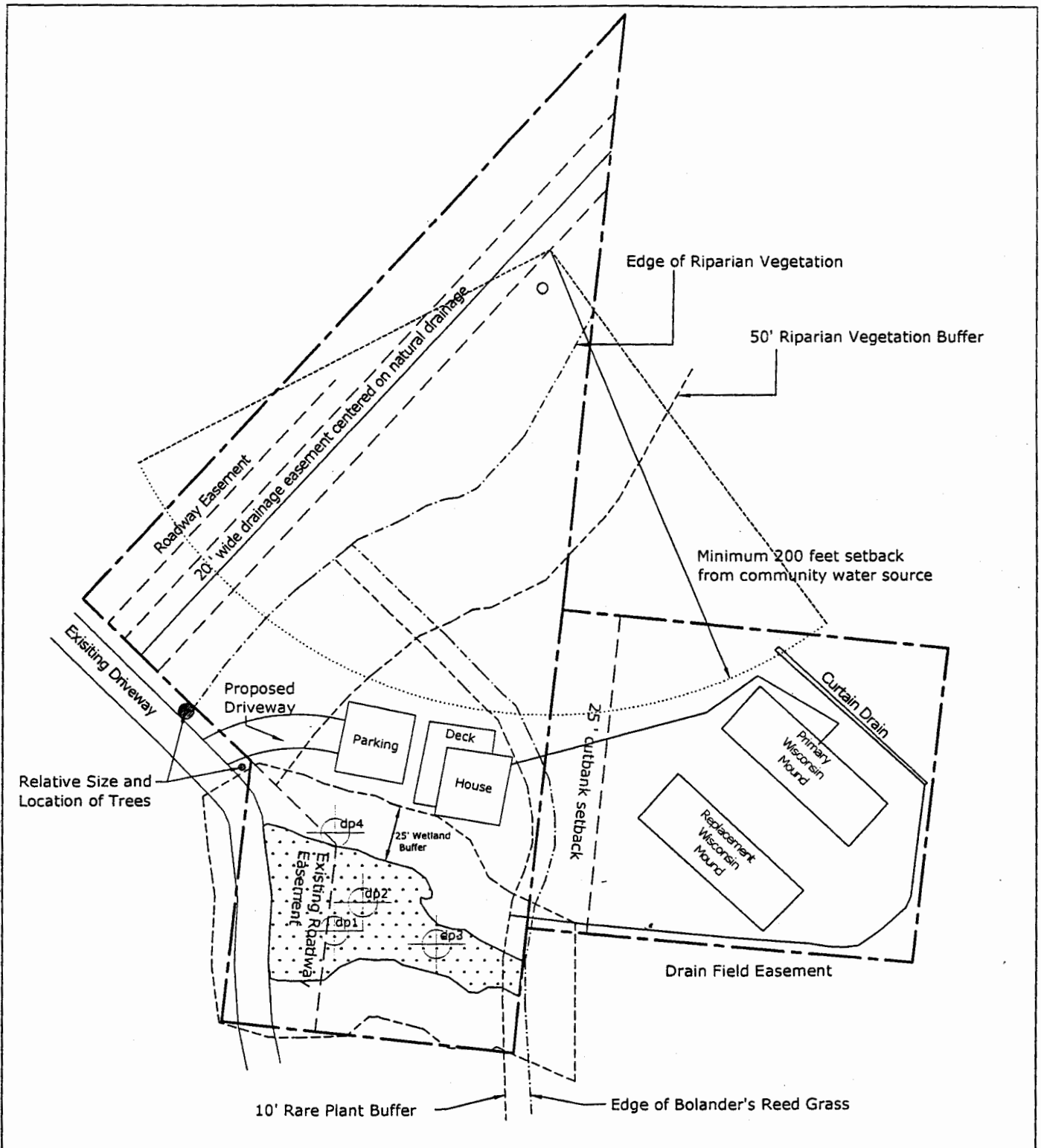
APPENDIX A
ESHA /BUFFER MAP

22432



ESHA / Buffer Map

Moller / Spurrier Project Site
44696 Crestwood Drive
Mendocino, California

SOURCE: Hand drawn survey map

Wetlands Research Associates, Inc.

Jul 23, 2003 - 1:36pm L:\Acad 2000 Files\13000\13059\SPURRIER.DWG (ESHA PDF)

APPENDIX B
WETLAND DATA SHEETS

24432

Project Site: Moller/Spurrier
County: Mendocino
Applicant/Owner: Torben Moller & Laura Spurrier

WRA Investigator(s): Tim DeGraff Date: 20-Jun-03
Habitat: wetland
Plot ID: Data Point 1

Vegetation

Dominant Species	Status
Holcus lanatus	FAC
Deschampsia cespitosa ssp. holciformis	FACW
Stachys ajugoides	OBL
Rhubus ursinus	FAC
Juncus effusus var. brunneus	OBL

Total Number of Dominants: 5

Number of Dominants with OBL, FACW, or FAC (excluding FAC-) Status: 5

Percent of Dominants OBL, FACW, or FAC (excluding FAC-): 100%

SOILS

Map Unit Name: Shingle Mill- Gibney complex, 2 to 9 percent slopes
Drainage Class: somewhat poorly drained to poorly drained
Map unit confirmed? No

Profile Description

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color(s) (Munsell Moist)	Mottle Abundance/Contrast	Texture
0-14	A	10YR 2/1	10YR 5/8	less than 1 percent below 8"	clay loam

Comments:
The soil below 14" was comprised of dense clay; therefore, could not get profile below 14"

HYDROLOGY

Depth of ponded surface water: none

Depth to free water in pit: none

Depth to saturated soil: none

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Comments:

This data point was taken near the southern portion of the mapped wetland area. There were no direct indicators of wetland hydrology. The only indirect hydrology indicator was a positive fac-neutral test.

WETLAND DETERMINATION

Data point 1 has positive indicators for hydrophytic vegetation but lacks wetlands hydrology and hydric soils indicators. This area was determined to be a wetland based on the one parameter approach used by the CCC. However, since the area of hydrophytic vegetation lacked hydrology indicators and strong hydric soils, this area is a marginal wetland.

Project Site: Moller/Spurrier
County: Mendocino
Applicant/Owner: Torben Moller & Laura Spurrier

WRA Investigator(s): Tim DeGraff
Date: 20-Jun-03
Habitat: wetland
Plot ID: Data Point 2

Vegetation

Dominant Species	Status	Sub-dominant species	Status
Holcus lanatus	FAC	Anthoxanthum odoratum	FACU
Deschampsia cespitosa ssp. holciformis	FACW	Galium aparine	FACU
Stachys ajugoides	OBL		
Juncus effusus var. brunneus	OBL		

Total Number of Dominants: 4

Number of Dominants with OBL, FACW, or FAC (excluding FAC-) Status: 4

Percent of Dominants OBL, FACW, or FAC (excluding FAC-): 100%

Soils

Map Unit Name: Shingle Mill- Gibney complex, 2 to 9 percent slopes
Drainage Class: somewhat poorly drained to poorly drained
Map unit confirmed? No

Profile Description

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color(s) (Munsell Moist)	Mottle Abundance/Contrast	Texture
0-2	O				peat
2-10	A	10YR 2/1	10YR 5/6	less than 1percent	clay loam
10-12	A1	10 YR 2/1, 2.5Y 7/2, and 10YR 5/8	10YR 5/6	less than 1 percent	clay loam
12-24	A2	10YR 2/1	10YR 5/8 and 7.5YR 4/6	5 percent	clay loam

Comments:
The A1 horizon was comprised of approximately 10% 10YR 2/1, 60% 10YR 7/2, and 30% 10YR 5/6. The soil below 24" was comprised of dense clay.

Hydrology

Depth of ponded surface water: none

Depth to free water in pit: none

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Depth to saturated soil: none

Comments:

This data point was taken near the central portion of the mapped wetland area. There were no direct indicators of wetland hydrology. The only indirect hydrology indicator was a positive fac-neutral test. Additionally, there were very faint oxidized rhizospheres below 12 inches; however, none were observed within the upper 12 inches of the soil profile.

WETLAND DETERMINATION

Data point 2 has positive indicators for hydrophytic vegetation but lacks wetlands hydrology and hydric soils indicators. This area was determined to be a wetland based on the one parameter approach used by the CCC. However, since the area of hydrophytic vegetation lacked hydrology indicators and strong hydric soils, this area is a marginal wetland.

Project Site: Moller/Spurrier
County: Mendocino
Applicant/Owner: Torben Moller & Laura Spurrier

WRA Investigator(s): Tim DeGraff Date: 20-Jun-03
Habitat: wetland
Plot ID: Data Point 3

Vegetation

Dominant Species	Status	Sub-dominant species	Status
Holcus lanatus	FAC	Anthoxanthum odoratum	FACU
Rhubus ursinus	FAC	Stachys ajugoides	OBL
Deschampsia cespitosa ssp. holciformis	FACW		

Total Number of Dominants: 3

Number of Dominants with OBL, FACW, or FAC (excluding FAC-) Status: 3

Percent of Dominants OBL, FACW, or FAC (excluding FAC-): 100%

Soils

Map Unit Name: Shingle Mill- Gibney complex, 2 to 9 percent slopes
Drainage Class: somewhat poorly drained to poorly drained
Map unit confirmed? No

Profile Description

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color(s) (Munsell Moist)	Mottle Abundance/Contrast	Texture
0-10	A	10YR 2/1	10 YR 5/8	5 percent	peat
10+	B	10YR 7/2 and 10YR 5/6	none	none	dense clay

Comments:
The B horizon was comprised of approximately 20% 10YR 7/2 and 80% 10YR 5/6. Could not get profile below 10" due to the dense clay

Hydrology

Depth of ponded surface water: none

Depth to free water in pit: none

Depth to saturated soil: none

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Comments:

This data point was taken near the eastern portion of the mapped wetland area. There were no direct indicators of wetland hydrology. The only indirect hydrology indicator was a positive fac-neutral test.

WETLAND DETERMINATION

Data point 3 has positive indicators for hydrophytic vegetation and hydric soils but lacks wetlands hydrology. This area was determined to be a wetland based on the one parameter approach used by the CCC. However, since the area of hydrophytic vegetation lacked hydrology indicators, this area is a marginal wetland.

Project Site: Moller/Spurrier
County: Mendocino
Applicant/Owner: Torben Moller & Laura Spurrier

WRA Investigator(s): Tim DeGraff Date: 20-Jun-03
Habitat: upland
Plot ID: Data Point 4

Vegetation

Dominant Species	Status	Sub-dominant species	Status
Cytisus scoparius	NL	Anthoxanthum odoratum	FACU
		Rhubus ursinus	FAC
		Holcus lanatus	FAC

Total Number of Dominants: 1

Number of Dominants with OBL, FACW, or FAC (excluding FAC-) Status: 0

Percent of Dominants OBL, FACW, or FAC (excluding FAC-): 0%

SOILS

Map Unit Name: Shingle Mill- Gibney complex, 2 to 9 percent slopes
Drainage Class: somewhat poorly drained to poorly drained
Map unit confirmed? No

Profile Description

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color(s) (Munsell Moist)	Mottle Abundance/Contrast	Texture
0-10	A	10YR 3/2	10 YR 5/8	3 percent	peat
10+	B	10YR 7/2 and 10YR 5/6	none	none	dense clay

Comments:
The B horizon was comprised of approximately 20% 10YR 7/2 and 80% 10YR 5/6. Could not get profile below 10" due to the dense clay

HYDROLOGY

Depth of ponded surface water: none

Depth to free water in pit: none

Depth to saturated soil: none

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Comments:

This data point was taken directly to the north of the mapped wetland area. There were no direct or indirect indicators of wetland hydrology.

WETLAND DETERMINATION

Data point 4 lacks hydrophytic vegetation, hydric soils, and hydrology indicators. This area was determined to be a non-wetland. The wetland boundary was placed primarily along the edge of *Holcus lanatus/Rhubus ursinus* and *Cytisus scoparius/Anthoxanthum odoratum*. Areas outside the mapped wetland area were either dominated by bare ground or were not dominated by hydrophytic species. Moreover, many investigated areas directly outside the mapped wetland area had very compacted soils. As a result, it was very difficult to obtain soil logs within the non-wetland portion of the site.

State of California

Memorandum

To: Jim Baskin, Coastal Planner
California Coastal Commission
North Coast District Office
710 E Street, Suite 200
Eureka, CA 95501
Via fax (707) 445-7877

Date: June 10, 2003

From: ***Copy; original signed by Rick Parmer for***
Robert W. Floerke, Regional Manager
Department of Fish and Game - Central Coast Region, Post Office Box 47, Yountville, California 94599

Subject: Coastal Development Permit A-1-MEN-02-19 (Moller/Spurrier), County of Mendocino

On May 3, 2002, Department of Fish and Game (DFG) personnel conducted a site visit at the Moller/Spurrier project site. The property site is located near the coastal town of Mendocino in Mendocino County. The purpose of the site visit was to determine an adequate buffer width between the onsite wetland area and the proposed development, avoidance from Bollander's reed grass (*Calamagrostis bolanderi*), and habitat site improvement within the applicant's parcel. Attending the site visit were Liam Davis, DFG; Randall Stemler and Robert Merrill, California Coastal Commission; Doug Zanini, Mendocino County Planning; Bud Kamb, the Moller/Spurrier land agent; and Dr. Gordon McBride, botanical consultant.

As we understand, the Moller/Spurrier party now wishes to expedite their coastal development permit to proceed with their project. DFG recommends the following narratives be rewritten and included as follows:

Enforceable conditions for the permit:

1) DFG has determined, from the site visit and consultation with Dr. McBride and in a further June 5, 2003 telephone consultation with Mr. Bud Kamb concerning minimization of impacts of the project, that a 50-foot wetland buffer from the top of the bank of the stream would be established between the

wetland and the newly constructed development footprint and entrance road. DFG also understands that no development will occur within this wetland buffer area.

2) The applicant has agreed to avoid the Bollander's reed grass. The grass is a California Native Plant Society List 4 plant and DFG recommends an avoidance strategy from the road and housing footprint.

3) The applicant has agreed to remove the exotic Scotch broom on their parcel.

If there are any comments regarding this memorandum, you may contact Liam Davis, Environmental Scientist, at (707) 944-5529; or Scott Wilson, Habitat Conservation Supervisor, at (707) 944-5584.

cc: Dr. Gordon Mc Bride
30301 Sherwood Road
Fort Bragg, CA 95437

Bud Kamb
Real Estate Services
Post Office Box 616
Little River, CA 95456

2094

STANLEY TOWNSEND
DIRECTOR OF TRANSPORTATION

Ex Officio
Road Commissioner
County Engineer
County Surveyor

COUNTY OF MENDOCINO
DEPARTMENT OF TRANSPORTATION

340 LAKE MENDOCINO DRIVE
UKIAH, CALIFORNIA 95482-9432
(707) 463–4363 FAX (707) 463–5474

FUNCTIONS

Administration & Business
Airports
County Surveyor
Engineering
Land Improvement
Roads and Bridges

24 May 2000

TO: Doug Zanini, Supervising Planner
Department of Planning and Building Services, Fort Bragg

FROM: Benjamin Kageyama, Deputy Director BK
Department of Transportation

SUBJECT: COASTAL DEVELOPMENT PERMIT NO. CDP 39-00 (MOLLER/SPURRIER)
PROJECT COORDINATOR – LOUISA MORRIS

We have reviewed the application for the above referenced coastal development permit received under cover of your referral dated 9 May 2000, and offer the following comments for your consideration:

1. The applicant proposes construction of a 1,680 square foot single family residence, and installation of a Wisconsin mound septic system, located approximately ½ mile east of Highway One in the Big River Vista Subdivision at 44696 Crestwood Drive, Mendocino.

2. As determined from our site review, the existing private road approach at the end of Crestwood Drive (CR 407RR), which serves the subject property, is adequately paved and in conformance with County standards. However, our road foreman has indicated that the ditches for this private road are not adequately maintained, resulting in water sheet flowing down the private road and across the cul-de-sac of Crestwood Drive. This leaves sediment and debris on the County road which requires constant clean-up during the winter months. To address this issue, we recommend that the applicant clean the private road ditch in accordance with the following condition of approval:

   Applicant shall clean out the ditch for the private road serving the subject property, to the satisfaction of the Department of Transportation, for a minimum distance of 200 feet from the end of Crestwood Drive (CR 407RR).

If you have any questions regarding this, please contact me at your convenience.

cc: Torben Moller & Laura Jean Spurrier
Bud Kamb
Warren Bilstein, Permit Technician, Department of Transportation
CDP 39-00

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Big River Vista Mutual Water Company

Post Office Box 794 Mendocino, CA 95460

TO: Bud Kamb
P.O. Box 247
Mendocino, CA 95460

RE: Torben Moller and Laura J. Spurrier

DATE: August 1, 1996

To Whom It May Concern:

This letter is to certify that Torben Moller and Laura J. Spurrier are shareholders in good standing in the Big River Vista Mutual Water Company and as such are awarded all rights and privileges to water provided by this water company.

Sincerely,

Carolyn Lancaster

Carolyn Lancaster, Secretary

cc: Torben Moller and Laura J. Spurrier

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