4400 GEYSERS RD GEY
B-143159

COUNTY OF SONOMA

PERMIT AND RESOURCE MANAGEMENT DEPARTMENT

2550 Ventura Avenue, Santa Rosa, CA (707) 527-1900 FAX (707) 527-1103

PLANCHECK RECEIPT ONLY - NOT A PERMIT | **B-143159**

Printed: 15:30 Jun 26, 1997

Address: 4400 GEYSERS RD GEY
APN: 131-040-017
In Plancheck: 00/00/0000
Cross Street: RED WINERY RD
Activity Type: B-BLD 9601
Res/Com: C
Std/Quick: S Fire District: ....
Insp Area:
Tax Rate Area: 097020

Owner	Applicant
JACKSON JESS S JR TR ET AL 421 AVIATION BLVD SANTA ROSA CA 954031069	JULIP JLLINS/KENDALL-JACKSON 421 AVIATION BLVD SANTA ROSA CA 95103 707 547 4763

Plancheck Expires: 00/00/0000

Description: RAIL C[illegible] BRIDGE OVER MILLER CREEK - BRIDGE #2

Initialized By: CNIEDERM Approved By: Status: APPLIED
Plancheck Multiplier:1.00

Occupancy	Ty	Factor	Sq. Feet	Valuation
		Subtotal:		.00
		Multiplier 1.00:		.00
		Addl Fixed Amount:		80,000.00
Table Date: 07/01/1997		Total Valuation:		80,000.00

Item #	Item Account Code	Description	Fee	Previously Paid
0060	025619-1341	BLDG PERM PLAN CHECK FEE	$383.13	$.00
0100	025619-1341	SITE REVIEW/ELEV. CERT.	$.00	$.00
0121	025619-1341	FIRE SAFE STDS/REF FEES	$.00	$.00
0707	025627-3140	REF.-GRADING/DRAIN. PLAN	$.00	$.00
0708	025627-3140	REF.-GRD/DRAIN DAM/DRVWY	$.00	$.00
5060	025619-1341-WAIVED	BLDG PERM PLAN CHECK FEE	$.00	$.00
5100	025619-1341-WAIVED	SITE REVIEW/ELEV. CERT.	$.00	$.00
5121	025619-1341-WAIVED	FIRE S.S. REFERRAL FEE	$.00	$.00
5707	025627-3140-WAIVED	REF.-GRADING/DRAIN. PLAN	$.00	$.00
5708	025627-3140-WAIVED	REF.-GRD/DRAI[illegible] DAM/DRVWY	$.00	$.00
			$383.13	$.00

Qualifies for Fee Waivers (Y/N): N

Total Calculated Fees	$383.13	
Total Additional Fees	$.00	CASH REGISTER VALIDATION REQUIRED BELOW
Previously Paid	$.00	
Balance Due	$383.13	

Lola
Here are the 5 Bridges
Jobs for K.J.
Rick

016125 07/01/97C01
0143159
STEPPR $383.13
**TTL $383.13
CHECK $383.13
CHN $0.00

SONOMA COUNTY Id: ACTP150 Keyword: UACT User: LCORETTI 03/12/98
Activity Maintenance - Inspection Processing Bldg Permit W/Plancheck

Permit: B-143159 Applicant: JULIE COLLINS/KENDALL-JACKSON
Status: ISSUED Address: 4400 GEYSERS RD GEY
Notice: SEE B-144546 FOR GRADING PERMIT FOR THIS JOB.

Inspections for Activity

Item	Flags	Description
100	■	site inspection
500	r √	plancheck
510	r √	fire plancheck
520	r √	Drainage Review
101		grading, rough
102		grading, final
103		foundations
104		piers/piles
105		slab
106		ufer ground
107		underground utilities

F1=Help, INS=Insert, A=Add at End, F5=Requests, F6=ALL Notations, ESC=Exit

3

DOCUMENT: DRAINAGE REVIEW - STORAGE POND____ GRADING___ HYDROLOGY___X__
PROJECT NUMBER__B-143159 BY__B.ROBERTS__ DATE 8/28/96

SECTION	CODE	COMMENTS	SECTION	CODE	COMMENTS
3309	GRADING PERMITS REQ		3315	DANS & TERRACE	
3309.1	PERMITS REQUIRED		3315.1	GENERAL	
3309.2	APPLICATIONS		3315.2	TERRACE	
3309.3	GRADING DESIGNATION		3315.3	SUBSURF DRAINS	
3309.4	ENG GRADING REQ		3315.4	DISPOSAL	
3309.5	SOILS ENG REPORTS		3315.5	INTERCEP DRAINS	
3309.6	ENG GEO REPORT		3316	EROSION CONTROL	
3309.7	LIQUID FACTION STUDY		3316.1	SLOPES	yes
3309.8	REG GRADING REPORT		3316.2	OTHER DEVICES	
3309.9	ISSUANCE		3317	GRDING INSPECTION	
3312	CUTS		3317.1	GENERAL	
3312.1	GENERAL		3317.2	CIVIL ENGINEER	
3312.2	SLOPE		3317.3	SOILS ENGINEER	
3313	FILLS		3317.4	ENG GEOLOGIST	
3313.1	GENERAL		3317.5	PERMITTEE	
3313.2	PREP OF GROUND		3317.6	BUILDING OFFICIAL	
3313.3	FILL MATERIAL		3317.7	NOTIF OF NONCOMP	
3313.4	COMPACTION		3317.8	TRANS OF RESPOS.	
3313.5	SLOPE		3318.	COMPLET OF WORK	
3314	SETBACKS		3318.1	FINAL REPORTS	
3314.1	GENERAL		3318.2	NOTIF OF COMP	
3314.2	TOP OF CUT SLOPES				
3314.3	TOE OF FILL SLOPES				
3314.4	MODIF OF SLOPE LOCAT				

DOCUMENTS RECEIVED :

1. Set of Plans " Bridge at South Fork of Miller Creek" sheets b1 of 7.
2. Geotechnical Report dated July 1,97.
3. Hydro / Hyd . Report dated April 1, 97
4. Fish & Game Stream Alteration #253-97. Note: recommendations missing from front page, report incomplete.

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1994 UBC APPENDIX CHAPTER 33

3316.1	SLOPES

This code of the UBC needs to be address regarding erosion control. The plan and specs has no erosion control for fill slopes.

DRAINAGE REVIEW AND OTHER COMMENTS

1. Water shed area = 314ac. Engineer used the Rational Method with a 100 yr storm freq, 410 CFS. For an open channel design.

2. Hydro/Hydra Calculations were checked O.K

OTHER COMMENTS

1. Sheet b7 of 7 makes reference to test pits in Geo report. Test pits are not in report.

Information needed to complete review processes:

1. Need recommendations. Fish & Game Stream Alteration #253-97. Note: recommendations missing from front page, report incomplete.
2. Recommend that engineer provide documentation to this office on how water level (elev 896) was established.
3. See comments on plans.

Additional Concerns:

COUNTY OF SONOMA
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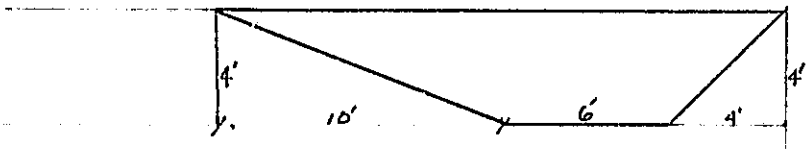
2550 Ventura Avenue, Santa Rosa, CA 95403
(707) 527-1900 FAX (707) 527-1103

Field Operations • Code Enforcement • Permits • Environmental & Comprehensive Planning

MILLER Bridges 2nd B-143159

SCALE 1"-5'

5



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Miller Creek - Area Check

H&H Calcs Sheet M1 of 6 B-143159

		Morris Engineering
M_1 (2400 + 3600) (2500 + 2800) 3000 × 2650 = 7,950,000 SF ÷ 43560	183	186
M_2 (2400 + 1300) (2200) 1850. × 2200 = 4,070,000 SF ÷ "	94	91
M_3 (1300 + 500) (1900) 900 × 1900 = 1710,000. ÷ "	40	37
	317	314

B143158 & B143159

Notification No. 253-97 THP No. _____

AGREEMENT REGARDING PROPOSED STREAM OR LAKE ALTERATION

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THIS AGREEMENT, entered into between the State of California, Department of Fish and Game, hereinafter called the Department, JULIE COLLINS REP KENDALL-JACKSON of SANTA ROSA, State of CALIF, hereinafter called the operator, is as follows:

WHEREAS, pursuant to Division 2, Chapter 6 of California Fish and Game Code, the operator, on the 24TH day of MARCH, 19 97, notified the Department that he intends to substantially divert or obstruct the natural flow of, or substantially change the bed, channel, or bank of, or use material from the streambed of, the following water: MILLER CREEK, in the County of SONOMA, State of California, S_____ T_____ R_____.

WHEREAS, the Department (represented by JERRY BOESEL, WARDEN has made an inspection of subject area on the _____ day of PREVIOUS, 19 ____, and) has determined that such operations may substantially adversely affect existing fish and wildlife resources including: TROUT, SALMON, STEELHEAD, NON-GAME AQUATIC SPECIES.

THEREFORE, the Department hereby proposes measures to protect fish and wildlife during the operator's work. The operator hereby agrees to accept the following recommendations as part of his work: Numbers 1, 2, 3, 4, 18, 19, 20 & 21 (SEE BACK). from the list of recommendations on the back of this page and the following special recommendations:

1. All work in or near the stream or lake shall be confined to the period APRIL 21, 1997 THRU OCTOBER 31, 1997.

PROJECT LOCATION: 4400 GEYSERS ROAD / 3.5 MILES NORTHEAST OF GEYSERVILLE. PROJECT IS TO CONSTRUCT TWO RAILCAR STREAM CROSSINGS. CROSSING NUMBER 1 CROSSES THE SOUTH FORK OF MILLER CREEK AND CROSSING NUMBER 2 CROSSES THE MIDDLE FORK OF MILLER CREEK. THE FOLLOWING PERTAINS TO BOTH CROSSINGS: (1) THE NUMBERED RECOMMENDATIONS LISTED ABOVE SHALL BE ADHERED TO AND; (2) TEMPORARY CROSSINGS MAY BE INSTALLED DURING THE NORMAL LOW SUMMER FLOW SEASON OF 1997 TO ALLOW PASSAGE DURING BRIDGE CONSTRUCTION AND; (3) THE TEMPORARY CROSSINGS SHALL INCORPORATE CMP OR OTHER SUITABLE MATERIAL CAPABLE OF HOLDING 100% OF WATER PASSAGE AND; (4) STREAMBED GRAVEL INDIGENOUS TO THE SITE MAY BE UTILIZED AS FILL FOR THE TEMPORARY CROSSINGS AND; (5) THE TEMPORARY CROSSINGS SHALL BE REMOVED BY OCTOBER 31, 1997 AND; (5) ALL STRUCTURES CONSTRUCTED WITHIN THE STREAM CHANNEL SHALL CONFORM TO THE PLANS AND SPECIFICATIONS ESTABLISHED BY MORRIS ENGINEERING DATED 4/1/97, JOB #97-10 AND; (6) A COPY OF THIS AGREEMENT SHALL BE KEPT AVAILABLE ON THE JOBSITE DURING ALL PHASES OF CONSTRUCTION AND; (7) A COPY OF THIS AGREEMENT SHALL BE PROVIDED TO ALL CONTRACTORS, SUB-CONTRACTORS AND OTHERS DOING WORK PRIOR TO COMMENCEMENT OF SUCH WORK AND; (8) THE STRUCTURES SHALL NOT ENCROACH UPON THE CARRYING CAPACITY OF THE STREAM CHANNEL.

The operator, as designated by the signature on this agreement, shall be responsible for the execution of all elements of this agreement. A copy of this agreement must be provided to contractors and subcontractors and must be in their possession at the work site.

If the operator's work changes from that stated in the notification specified above, this agreement is no longer valid and a new notification shall be submitted to the Department of Fish and Game. Failure to comply with the provisions of this agreement and with other pertinent Code Sections, including but not limited to Fish and Game Code Sections 5650, 5652 and 5948, may result in prosecution.

Nothing in this agreement authorizes the operator to trespass on any land or property, nor does it relieve the operator of responsibility for compliance with applicable federal, state, or local laws or ordinances.

THIS AGREEMENT IS NOT INTENDED AS AN APPROVAL OF A PROJECT OR OF SPECIFIC PROJECT FEATURES BY THE DEPARTMENT OF FISH AND GAME. INDEPENDENT REVIEW AND RECOMMENDATIONS WILL BE PROVIDED BY THE DEPARTMENT AS APPROPRIATE ON THOSE PROJECTS WHERE LOCAL, STATE, OR FEDERAL PERMITS OR OTHER ENVIRONMENTAL REPORTS ARE REQUIRED.

This agreement becomes effective on APRIL 21, 1997

Operator Julie Collins

Title Fo Project Manager

Organization Kendall-Jackson

Date 4-18-97

Department Representative

Title FISH & GAME WDN, ENVIRONMENTAL PROJECTS

Department of Fish and Game, State of California

Date APRIL 17, 1997

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RECOMMENDATIONS

1. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations. The disturbed portions of any stream channel or lake margin within the high water mark of the stream or lake shall be restored to as near their original condition as possible.

2. Restoration shall include the revegetation of stripped or exposed areas.

3. Rock, riprap, or other erosion protection shall be placed in areas where vegetation cannot reasonably be expected to become reestablished.

4. Installation of bridges, culverts, or other structures shall be such that water flow is not impaired and upstream or downstream passage of fish is assured at all times. Bottoms of temporary culverts shall be placed at or below stream channel grade. Bottoms of permanent culverts shall be placed below stream channel grade.

5. Plans for design of concrete sills and other features that could potentially impede fish migrations must be approved by Department engineers.

6. When any dam (any artificial obstruction) is being constructed, maintained, or placed in operation, sufficient water shall at all times be allowed to pass downstream to maintain fishlife below the dam.

7. An adequate fish passage facility must be incorporated into any barrier that obstructs fish passage.

8. Any temporary dam (any artificial obstruction) constructed shall only be built from material such as clean gravel which will cause little or no siltation.

9. No equipment will be operated in live stream channels.

10. Equipment shall not be operated in the stream channels of flowing live streams except as may be necessary to construct crossings or barriers and fills at channel changes.

11. When work in a flowing stream is unavoidable, the entire streamflow shall be diverted around the work area by a barrier, temporary culvert, and/or a new channel capable of permitting upstream and downstream fish movement. Construction of the barrier and/or the new channel shall normally begin in the downstream area and continue in an upstream direction, and the flow shall be diverted only when construction of the diversion is completed. Channel bank or barrier construction shall be adequate to prevent seepage into or from the work area. Channel banks or barriers shall not be made of earth or other substances subject to erosion unless first enclosed by sheet piling, rock riprap, or other protective material. The enclosure and the supportive material shall be removed when the work is completed and the removal shall normally proceed from downstream in an upstream direction.

12. Temporary fills shall be constructed of nonerodible materials and shall be removed immediately upon work completion.

13. Equipment shall not be operated in the lake or its margin except during such operations as may be necessary to construct barriers or fills. If work in the lake is unavoidable, a curtain enclosure to prevent siltation of the lake beyond the immediate working area shall be installed. The enclosure and any supportive material shall be removed when the work is completed.

14. Silt settling basins shall be located away from the stream or lake to prevent discolored, silt-bearing water from reaching the stream or lake.

15. Preparation shall be made so that runoff from steep, erodible surfaces will be diverted into stable areas with little erosion potential. Frequent water checks shall be placed on dirt roads, cat tracks, or other work trails to control erosion.

16. Wash water containing mud or silt from aggregate washing or other operations shall not be allowed to enter a lake or flowing streams.

17. a) A silt catchment basin shall be constructed across the stream immediately below the project site. This catchment basin shall be constructed of gravel which is free from mud or silt.

b) Upon completion of the project and after all flowing water in the area is clear of turbidity, the gravel along with the trapped sediment shall be removed from the stream.

18. If operations require moving of equipment across a flowing stream, such operations shall be conducted without substantially increasing stream turbidity. For repeated crossings, the operator shall install a bridge, culvert, or rock-fill crossing as specified in comments below.

19. If a stream channel has been altered during the operations, its low flow channel shall be returned as nearly as possible to its natural state without creating a possible future bank erosion problem, or a flat wide channel or sluice-like area. If a lake margin has been altered, it shall be returned as nearly as possible to its natural state without creating a future bank erosion problem. The gradient of the streambed or lake margin shall be as nearly as possible the same gradient as existed prior to disturbance.

20. Structures and associated materials not designed to withstand high seasonal flows shall be removed to areas above the high water mark before such flows occur.

21. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete or washings thereof, oil or petroleum products or other organic or earthen material from any logging, construction, or associated activity of whatever nature shall be allowed to enter into or placed where it may be washed by rainfall or runoff into, waters of the State. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark of any stream or lake.

22. The operator will notify the Department of Fish and Game of the date of commencement of operations and the date of completion of operations at least five days prior to such [illegible]

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(707) 527-1900 FAX (707) 527-1103

Field Operations • Code Enforcement • Permits • Environmental & Comprehensive Planning

Development Submittal Information for Drainage Review

Please type or print the following information:			
Name of Development:	Bridge #2 over Miller Creek		
Property Address: 4400 Geysers Road		City, Zip Geyserville, CA	
Nearest Cross Street: Red Winery Road			
Assessor's Parcel Number: 131-040-017		Developer:	
Design Engineer: Jeff Morris Address: City, State, Zip: 817 Dora Avenue Ukiah, CA Phone No.: (707) 463-1243		Applicant Name: Kendall-Jackson Address: Julie Collins City, State, Zip: 421 Aviation Blvd. Santa Rosa, CA 95403 Phone No.: (707) 547-4763	
Land Use (Planning) File #:		Permit Application # B143159	
Number of Units:		Area:	
↻ To Be Completed by Drainage Review (527-3605) ↻			
File/Unique #:		Quad Maps:	
Major Dev. (MJS/UP/DR): Minor Dev. (MNS/UP/DR):	Permit Referral: Public Project:	Flood Zone:	
Fee based on: _____ minimum, _____ Units @ _____ per unit = _____			
Permit Referral Fee: _____ Flood Zone Fee _____ Date: _____ Receipt #: _____			
MJS/UP/DR Fee:	Amount	Date	Receipt #:
Base/minimum	_____	_____	_____
Balance or Total	_____	_____	_____
Review Engineer/Technician:		Final Letter Date:	
Comments:			

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YES! YOUNG ENGINEERING SERVICES
GEOTECHNICAL CONSULTANTS
132 Boas Drive • Santa Rosa, CA 95409-3611 • (707) 538-7503 • (FAX) 539-8227
e-mail gyoung@sonic.net

July 1, 1997

Job 72901

Kendall-Jackson, Corporate Development
421 Aviation Boulevard
Santa Rosa, California 95403

Attention: Ms. Julie Collins

Gentlemen:

Consultation - Site Review, 3 Bridges
Consultation - Plan Review
B-143158 ——→ #1, South Fork of Miller Creek
4400 Geysers Road, APN 131-120-011
B-143159 ——→ #2, Middle Fork of Miller Creek
4400 Geysers Road, APN 131-120-011
B-143242 ——→ #3, Crossing at Yellow Jacket Creek
16745 Highway 128, Knights Valley
Sonoma County, California

This letter presents the consultation that Young Engineering Services (*YES!*) has provided at your request in connection with the referenced property. It is our understanding that our reconnaissance and review are desired to evaluate the gross stability of the lot, with emphasis on the development of a planned building envelope on slope near the topographic high of the parcel. Our consultation consisted of site and file review related to geotechnical hazards.

A representative of this office reviewed the site and vicinity of proposed Bridges 1 through 3 on May 9 and Bridge 3 on May 12, 1997, in the presence of Jeff Morris, project engineer. In addition to our reconnaissance, we reviewed data in our files which included: 1) the California Division of Mines and Geology (CDMG) Special Report 120, entitled Geology for Planning in Sonoma County, dated 1980; 2) the CDMG Regional Geologic Map of Santa Rosa, dated 1982; and 3) the CDMG Special Studies Zone (Alquist-Priolo) mapping, dated July 1, 1983.

The sites are located as follows: Bridge #1, South Fork of Miller Creek, 4400 Geysers Road, APN 131-120-011, about 3.5 miles east of Geyserville; Bridge #2, Middle Fork of Miller Creek, 4400 Geysers Road, APN 131-120-011, about 3.5 miles east of Geyserville; Bridge #3, Crossing at Yellow Jacket Creek, 6745

Highway 128, about 3 miles southwest of Mount Saint Helena, in Knights Valley, all in Sonoma County, California.

The soil cover at each site (gravelly silt/silty gravel at sites 1 and 2; silty gravel and cobbles at site 3) is estimated to have "very low to low expansion potential" (tendency to undergo volume changes with changes in moisture content) per Uniform Building Code (UBC) classification. The weathered bedrock is dense to very dense shale (silty gravel) at sites 1 and 2; silty gravel and cobbles, with cementation at site 3. These bearing materials have negligible expansion potential, at least moderate strength relative to the proposed development, and are resistant to scour. Minor seepage was noted at several of the abutment locations.

Bridge	Abutment	Footing	Existing Ground	Weathered Rock	Seepage noted
Bridge-1	Abut-1	893.0	899.0	896.0	seepage
	Abut-2	891.0	897.4	891.0	--
Bridge-2	Abut-1	888.0	895.5	891.0	--
	Abut-2	893.0	899.0	896.0	seepage
Bridge-3	Abut-1	578.0	584.6	580.0	seepage
	Abut-2	580.0	585.6	582.0	seepage

Discussion - Conclusions

The sites are relatively stable, and the projected depth of potential scour is estimated to be one to three feet at each of the sites during the next 50 to 100 years. The main geotechnical considerations pertinent to the development of the sites are the excavation characteristics, presence of seepage, and potential for scour.

There are no known active faults within the immediate site vicinity; the site is not within an Alquist-Priolo Special Studies Zone relating to fault hazard potential. The closest active faults to the Miller Creek sites are the (northerly terminus of the) Healdsburg-Rodgers Creek Fault, located approximately 5 miles to the southwest, the San Andreas Fault, located approximately 26 miles to the southwest, and the Maacama Fault is projects between through the valley floor between the bridge sites. For the Yellow Jacket Creek sites, these faults are 8, 29 and 5 miles to the southwest, respectively

Recommendations

In general, the site is stable, and support can be achieved at shallow depth in the bedrock which underlies this site. These concerns are discussed in more detail as follows.

Site Grading. Grading is expected to be limited to any fill

or backfill associated construction of the new abutments and the approach ramps, and should generally conform to Chapter 33 (Chapter 70, pre-1994) of the Uniform Building Code (UBC). The site should be cleared of any rubbish and debris materials. These materials should be removed, and disposed of off the site. The surface soils containing grass and roots should be stripped from all areas to be graded. The surface soils should be scarified to a depth of at least eight inches, moisture conditioned to near optimum moisture content, and compacted to at least 90 percent relative compaction per ASTM D1557. (Relative compaction refers to the in-place dry density of a soil expressed as a percentage of the maximum dry density of the same soil when determined by the ASTM D1557 compaction procedure. Optimum moisture is the water content percentage of the dry weight which corresponds to the maximum dry density.) Any areas not achieving compaction should be removed and replaced as engineered fill. All fill material should be free of any debris, organic matter, and oversize (four inch or larger dimension) rocks, and should be approved by a representative of *YES!* before it is placed. Any imported fill should be approved by a representative of *YES!*, and in building areas, be of relatively low expansion potential (i.e., Expansion Index of about 30 or less), and in pavement areas, a Stabilometer Resistance Value (R-Value) of 20 or more. All fill should be placed to at least 90 percent relative compaction; 95 percent at subgrade and structural section.

Footings. Foundation support for the planned bridges can be established on conventional spread footings, providing that such footings penetrate through the weaker topsoil and bedload debris soil units. The footing elements should penetrate at least 18 inches into the weathered bedrock; this depth should be considered a minimum for planning purposes. Footings so established may be assigned soil bearing pressures of 4000 pounds per square foot (psf, net at ground line) achieved entirely in the weathered bedrock (as identified during construction by a representative of *YES!*) for dead plus live loads, with a one-third increase allowable for wind and/or seismic forces.

Footing foundations are to be stepped into the slope so that they have a lateral confinement of at least 10 foot from the face of the slopes, or a theoretical two foot horizontal to one foot vertical (2H:1V) plane projected up from the toe of the slope, whichever controls. Topsoil and channel load debris will not be considered as a part of this confinement. Minimum tread length of steps should be 24 inches. Maximum step height should be limited to 18 inches without specific consideration of the project structural engineer.

Wing walls for the structures are anticipated to be typical cantilever design retaining walls, ranging from nominal height to full abutment height adjacent the bridge abutments. It is anticipated that such walls will have some freedom to deflect under applied loads.

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Retaining Walls. It is our understanding that the planned abutments are to be restrained through opposing forces applied through the bridge deck, and retaining wall overturning design forces will not require consideration. If such design were required, an appropriate equivalent fluid pressure (EFP) of 55 pounds per cubic foot (pcf) would be appropriate for at-rest earth pressures (for walls "fixed", or unable to rotate), assuming fully drained walls utilizing select low expansive soils for backfill.

Lateral Loads. Resistance to lateral loads can be obtained using a combination of passive earth pressure against the base of foundations and frictional resistance against the face of footing elements. An allowable passive earth pressure of 700 pcf (triangular distribution), and frictional resistance of 0.40 times the net vertical dead load, can be used in design. Passive pressure should be neglected within 12 inches of pad grade, unless the surface is confined by slabs or pavement, and within 10 feet of the face of the exterior slopes.

Site Drainage. Assurance of drainage could be provided by burlap wrapped, clean free draining aggregate behind weep holes; a blanket of Permeable Materials (per Section 68 of Caltrans Standard Specifications); a blanket of coarse, granular soil (per gravel or ¾ inch drain rock separated from the general embankment backfill be a geotextile filter fabric (Mirafi 140 or equal); or a composite drain system (e.g., Miradrain, Amerdrain, or equal) is well suited for footings poured "neat" (without forming), and should be placed along the upslope wall of the footing excavation prior to concrete pour. Weep holes should be at least 6 feet on center horizontal, and 3 feet on center vertical. We have appended Retaining Wall Details for more specific information.

Asphalt Paved Areas. Where fills are necessary within paved areas, they should conform to the previous Fill Quality recommendations, and be compacted to at least 90 percent relative compaction, with 95 percent relative compaction achieved at pavement subgrade. Prior to subgrade preparation, utility trench backfills should be placed and compacted in accordance with the governing specifications. The upper six inches of subgrade soils should then be moisture conditioned to near optimum moisture content, and be compacted to at least 95 percent relative compaction. Finished subgrade surfaces should be maintained moist and free of shrinkage cracks until covered by permanent construction.

Aggregate Base, and Subbase if used, should conform to the requirements of the State of California "Caltrans" Standard Specifications, latest edition. Aggregate base courses should be placed in thin lifts in a manner to prevent segregation, moisture conditioned as necessary, and compacted to at least 95 percent relative compaction to provide a smooth, unyielding surface. Footing support for the retaining walls is available as

indicated above for typical wall footings. It would be prudent for upslope wall lines to be designed to retain slough to about 2 feet deep. An appropriate Equivalent Fluid Pressure (EFP) for use in design of such walls would be 36 pounds per cubic foot (pcf) with a level backslope, and 50 pcf with the natural superjacent slope. As active earth pressure assumes that relative movement will occur between the wall and the backfill, backfill should be completed prior to completion of the framing tie-in.

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The retaining wall backdrain should be prevented from clogging. This may be most readily accomplished by separating the aggregate backfill from the adjacent soil by incorporation of a geotextile filter fabric (Mirafi 140, Supac 4NP, or equal). Refer to the Retaining Wall Details attached as Plate 1 for more detailed information.

Seismicity. The site will be subjected to strong ground shaking during future, nearby, large magnitude earthquakes. Generally, structures founded in firm soil and/or bedrock can be expected to be subjected to short period, jarring motions, with little or no ground wave amplification. Structures founded in firm soil, and designed in accordance with current earthquake resistant building codes (UBC), are well suited to resist the effects of strong ground shaking. On the basis of the data reviewed, we do not believe the site seismicity to be an overriding geologic hazard, and no additional geologic or engineering geologic studies appear warranted.

Plan Review

Our review of the plans dated May 20, 1997 by Morris Engineering, was for conformance with the project guidelines as outlined above, together with typical good practice consistent with our knowledge of the site conditions. Our review were favorable, and no additional considerations are indicated.

Additional Considerations

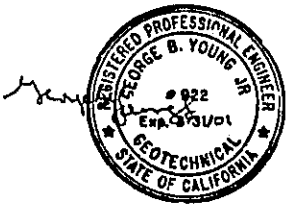
Our review of construction excavations is considered an integral part of our review for this residence. Please call when the excavation has been scheduled so that we can coordinate with the contractor to provide the necessary reviews. Our construction period observations would allow us to verify conformance of the work to project guidelines, determine that the soil conditions are as anticipated, and to modify our recommendations, if necessary.

We have enjoyed this opportunity to be of service. Please do not hesitate to call if we can be of further assistance.

Very Truly Yours,

YOUNG ENGINEERING SERVICES

15



George B. Young, Jr.
Civil Engineer - 27405
Geotechnical Engineer - 922

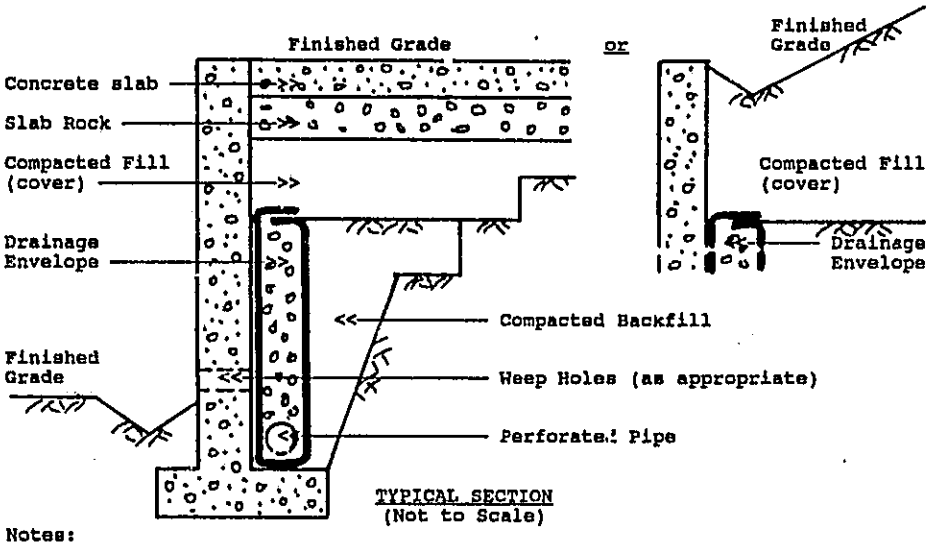
4 copies submitted
cc: Morris Engineering

Attachments: Plate 1 - Retaining Wall Details

YES! RETAINING WALL DETAILS

Miller and Yellow Jacket Creek Bridges
Sonoma County, California

16



TYPICAL SECTION
(Not to Scale)

Notes:

1. Compacted Fill (cover). The drainage envelope should be capped by a compacted soil cover a minimum of 12 inches thick. This cover blanket may be omitted where the surface is paved.

2. Drainage Envelope. To minimize potential for clogging of retaining wall drainage, the drainage envelope should also be separated from the soil by use of a Geotextile Filter Fabric (Mirafi 140NP or equal).

   or utilize a select Permeable Material (per Section 68 of Caltrans Standard Specifications) for backfill.

   or utilize a Composite Geosynthetic Drainage System (Miradrain or equal). To relieve this drainage envelope, a perforated pipe and typical drainage envelope (drain rock wrapped in geotextile filter fabric, or perforated pipe wrapped in the composite fabric) should be in contact with the ends of the drain for a distance of at least 5 feet.

3. Perforated Pipe. The perforated pipe should conform to the requirements of Section 68 of Caltrans Standard Specifications, perforations placed down, sloped at least one percent to drain to a gravity outlet.

   or Weep Holes. Where water draining in front of the wall is acceptable, weep holes should be placed at six foot spacing. Weep holes can consist of 2 inch PVC cut to fit within the foundation stem wall, with the ends wrapped in hardware cloth (one-quarter inch sieve openings) to minimize clogging, and prevent access from rodents.

4. Compacted Backfill. The compacted backfill should be keyed and benched into the backslope. The width and location of benches are approximate, and will be determined in the field by a representative of *YES!*.

5. Surface drainage is to be provided at the toe of the retaining wall.

B143158 & B143159 17 (1)

MORRIS ENGINEERING

817 DORA AVENUE | (707) 463-1243 FAX 463-1041 | UKIAH, CA 95482

HYDROLOGY / HYDRAULICS

FOR:
KENDALL – JACKSON
WINERY AND VINEYARDS
421 AVAITION BOULEVARD
SANTA ROSA, CA. 95403
(707) 544-4000 PHONE
(707) 544-4013 FAX
ATTN: JULIE COLLINS,
CORPORATE DEVELOPMENT

BY:
MORRIS ENGINEERING
817 DORA AVE.
UKIAH, CA 95482
(707) 463-1243

REGISTERED PROFESSIONAL ENGINEER
JEFFREY S. MORRIS
No. C46005
Exp. 12/31/98
CIVIL
STATE OF CALIFORNIA

DATE: 4/1/97
JOB NO: 97-10
SHEET # T1 OF 1
CHECKED: _____ BY: _____

REFERENCES

1. U.S.G.S. 7.5 MINUTE QUAD SHEETS
   JIMTOWN, MOUNT SAINT HELENA, DETERT RESERVOIR QUAD SHEETS
2. MISC. INFORMATION FROM S.C.W.A. "FLOOD CONTROL DESIGN CRITERIA" REVISED AUGUST, 1983
3. SONOMA COUNTY MEAN SEASONAL PRECIPITATION (S.C.W.A., APRIL 1964)
4. S.C.W.A. I - D - F CHART, K-FACTOR CHART, C-FACTOR CHART

SHEET INDEX

MORRIS ENGINEERING

817 DORA AVENUE
UKIAH, CA
95482

(707) 463-1243
FAX 463-1041

DATE: 4/97
JOB NO: 97-10
SHEET # M2 OF 6

CKD: _____ DATE: _____

MILLER CREEK - SOUTH FORK B-143158

HYDROLOGY CALCULATIONS

* MEAN SEASONAL PRECIP = 40" - 45"
& K = 1.5

AREAS:

	AREA	DISTANCE	ELEV.
S1	132 AC	2500	1925
S2	132 AC	2600	1320
S3	105 AC	1800	960
	EA = 369 ✓	ED = 6900	800

MILLER CREEK - MIDDLE FORK B-143159

HYDROLOGY CALCULATIONS

* MEAN SEASONAL PRECIP = 40" - 45"
& K = 1.5

AREAS:	AREA:	DISTANCE:	ELEV.
M1	186	3400	2100
M2	91	2200	1320
M3	37	2000	1080
	EA = 314	ED = 7,600	960

RATIONAL METHOD DRAINAGE STUDY

By JSM Date 4/97 Subject MILLER SOUTH FORK (BRIDGE #1) B-143158 Sheet No. M3 of 6

Chkd. By _____ Date _____ Storm Freq. _____ % 100 yr. Job. No. 97-10

Point of Conc.	Area	EL / Distance	Slope	v	Time of Conc. (in minutes) Travel Time	Total Time	i	K	C	ΔA / A Total	KΔAC	ΣKΔAC	Q= KΔAC·i	Design	Remarks
1	S1	1925 / 2500			15 MIN	INITIAL	2.4	1.5	.45	132	89.1			OPEN — CHANNEL	
2	S2	1320 / 2600	.23	10	4.3	19.3	2.3	1.5	.45	132 / 264	89.1	178.2	409.8	"	
3	S3	960 / 1800	.20	10	3.0	22.3	2.2	1.5	.45	105 / 369	70.9	249.1	548.0	" →	SAY 600 CFS

FHR 1 Rev 7/91

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RATIONAL METHOD DRAINAGE STUDY

By JSM Date 4/97 Subject MILLER MIDDLE FORK Sheet No. M4 of 6

Chkd. By _____ Date _____ Storm Freq. _____ % 100 yr. Job. No. 97-10

Point of Conc.	Area	EL / Distance	Slope	v	Time of Conc. (in minutes) Travel Time	Total Time	I	K	C	ΔA / A Total	KΔAC	ΣKΔAC	Q	Design	Remarks
		2100													
1	M1	1320 / 3000	.26✓	10	15 MIN	INITIAL	2.4	1.5	.45	186	126✓			OPEN CHANNEL	
2	M2	1080 / 2400	.10✓	8	5	20✓	2.1	1.5	.45	91 / 277	62✓ 65	187 191		"	
3	M3	960 / 2000	.06✓	5	7	27✓	1.9	1.5	.45	37 / 314	25✓	211 216	202✓ 410.4	"	

118-1 Rev. 7/61

MORRIS ENGINEERING 21

817 DORA AVENUE
UKIAH, CA 95482
(707) 463-1243
FAX 463-1041

DATE: 4/97
JOB NO: 97-10
SHEET # M5 OF 6

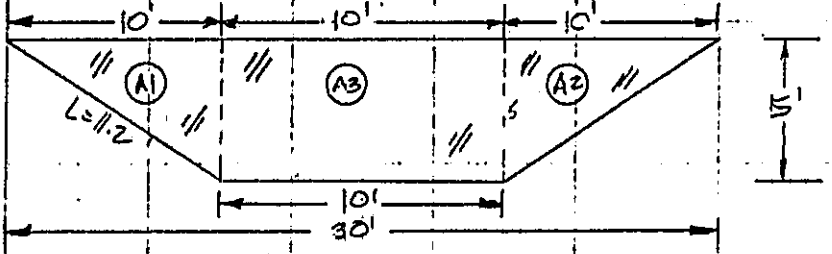
CKD: DATE:

MILLER BRIDGES #1 & 2 HYDRAULICS:

B-143158

BRIDGE #1:

APPROX. SLOPE @ SITE (FROM QUAD. SHEET)
$= 80'/2600 = .0307$ ✓ (SAY .01)



$A1 = (.5)(10)(5) = 25$ SF ✓ $\quad A_{TOT} = 100$ SF ✓
$A2 = 25$ ✓
$A3 = (10)(5) = 50$ SF ✓ $\quad P_{TOT} = (2)(11.2) + 10 = 32.4$ ✓ FT.

$R_H = \frac{A}{P} = 100/32.4 = 3.1$ ✓

$Q_{TOT} = (A)\left(\frac{1.49}{n}\right)(R_H)^{2.15/3}(S)^{.215/2}$ ⟺ $Q = \frac{68.3}{n}$

$A = 100$
$R_H = 3.1$
$S = .01$

FOR: n =	Q =	V = Q/A
.03	2280 CFS	22.8 ✓ FT/SEC (100 FT/SEC) ✓
.06	1138	11.4 ✓ " "
.10	683 > 548 CFS	6.82 ✓ + TIGHT
	∴ O.K.	

MORRIS ENGINEERING 22

817 DORA AVENUE
UKIAH, CA
95482

(707) 463-1243
FAX 463-1041

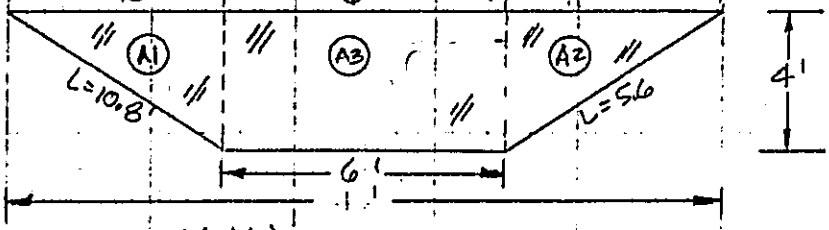
DATE: 4/97
JOB NO: 97-10
SHEET # M1 OF 6

CKD: _____ DATE: _____

MILLER BRIDGES 1 & 2 HYDRAULICS:

BRIDGE #2: 8-143159

APPROX. SLOPE @ SITE (FROM QUAD. SHEET)
= 80'/8000 = .0507 ✓ (SAY .01)



A1 = (.5)(10)(4) = 20 SF
A2 = (.5)(4)(4) = 8 SF
A3 = (6)(4) = 24 SF

A_{TOT} = 52 SF.

P_{TOT} = 10.8 + 6 + 5.6 = 22.4 FT.

$R_H = \frac{A}{P} = 52/22.4 = 2.32$ ✓

$Q_{TOT} = (A)\left(\frac{1.49}{n}\right)(R_H)^{2/3}(S)^{1/2}$ [A = 52, R_H = 2.32, S = .01] ⇔ $Q = \frac{29.3}{n}$

FOR: n =	Q =
.06	488.3 CFS > 440 CFS ∴ OK.

MORRIS ENGINEERING

817 DORA AVENUE
UKIAH, CA 95482

(707) 463-1243
FAX 463-1041

23

DATE: 4/97
JOB NO: 97-10
SHEET # Y2 OF 4

CKD: _____ DATE: _____

YELLOWJACKET CREEK NEAR KELLOG CREEK

HYDROLOGY CALCULATIONS

* MEAN ~~SEAS.~~ PRECIP = 55 @ TOP
40 @ BOTTOM

& Kc @ TOP = 1.8
Kc @ BOT. = 1.3

AREAS

ELEV.		AREA	DIST.
4350	Y1	100	1900
3100	Y2	378	3500
1920	Y3	287	2800
1400	Y4	417	4200
880	Y5	113	1500
780	Y6	100	5200
580			

ΔEL = 3770 ΣA = 1395 ΣD = 19,100

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RATIONAL METHOD DRAINAGE STUDY

By JSM Date 4/97 Subject YELLOWJACKET CREEK NEAR KELLOGG Sheet No. 43 of 4

Chkd. By _____ Date _____ Storm Freq. _____ % 100 yr. Job. No. 97-10

Point of Conc.	Area	EL / Distance	Slope	v	Time of Conc. (in minutes) Travel Time	Total Time	i	K	C	ΔA / A Total	KΔAC	ΣKΔAC	Q	Design	Remarks
		4350													
1	Y1	3100 / 400	.66 ✓	20	5 MIN	INITIAL	2.4	1.8	.45	100	81			OPEN CHANNEL	
2	Y2	1920 / 3500	.34 ✓	15	3.8	18.8 ✓	2.2	1.7	.45	378 / 478	289	370 ✓	814		
3	Y3	1400 / 2800	.19 ✓	10	4.7	23.5 ✓	1.9	1.6	.45	287 / 765	207	577 ✓	1096		
4	Y4	880 / 4200	.12 ✓	10	7.0	30.5 ✓	1.7	1.5	.45	417 / 1182	282	859 ✓	1460		
5	Y5	780 / 1500	.07 ✓	5	5.0	35.5 ✓	1.5	1.4	.45	113 / 1295	71	930 ✓	1395		
6	Y6	580 / 5000	.04 ✓	5	17.3	52.8 ✓	1.3	1.3	.45	100 / 1395	59	989 ✓	1286		SAY 1300

118-1 Rev 7/64

MORRIS ENGINEERING

817 DORA AVENUE
UKIAH, CA
95482

(707) 463-1243
FAX 463-1041

DATE: 4/97
JOB NO: 97-10
SHEET # 4 OF 4

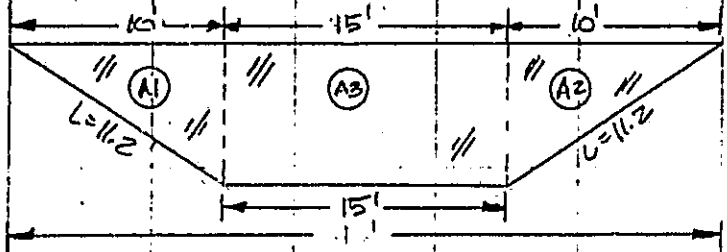
B-143242

CKD: _____ DATE: _____

YELLOWJACKET CREEK BRIDGE HYDRAULICS:

BRIDGE #3:

APPROX. SLOPE @ SITE (FROM QUAD. SHEET)
$= 80'/3000 = .0267$ ✓ (SAY .01)



$A_1 = (.5)(5)(10) = 25$ SF ✓
$A_2 = 25$ ✓
$A_3 = (5)(15) = 75$ SF ✓

$A_{TOT} = 125$ SF.

$P_{TOT} = (2)(11.2) + 15 = 37.4$ FT ✓

$R_H = \frac{A}{P} = 125/37.4 = 3.34$ ✓

$Q_{TOT} = (A)\left(\frac{1.49}{n}\right)(R_H)^{2/3}(S)^{1/2}$

$A = 125$, $R_H = 3.34$, $S = .01$ $\Leftrightarrow$ $Q = \frac{89.6}{n}$

FOR: n =	Q =	V =
.04	2240 CFS	17.9 FT/SEC
.06	1494 CFS > 1300 CFS ✓	12 FT/SEC
	& O.K.	

DATE: 7/96
JOB NO: 97-10
SHEET # B OF Appx

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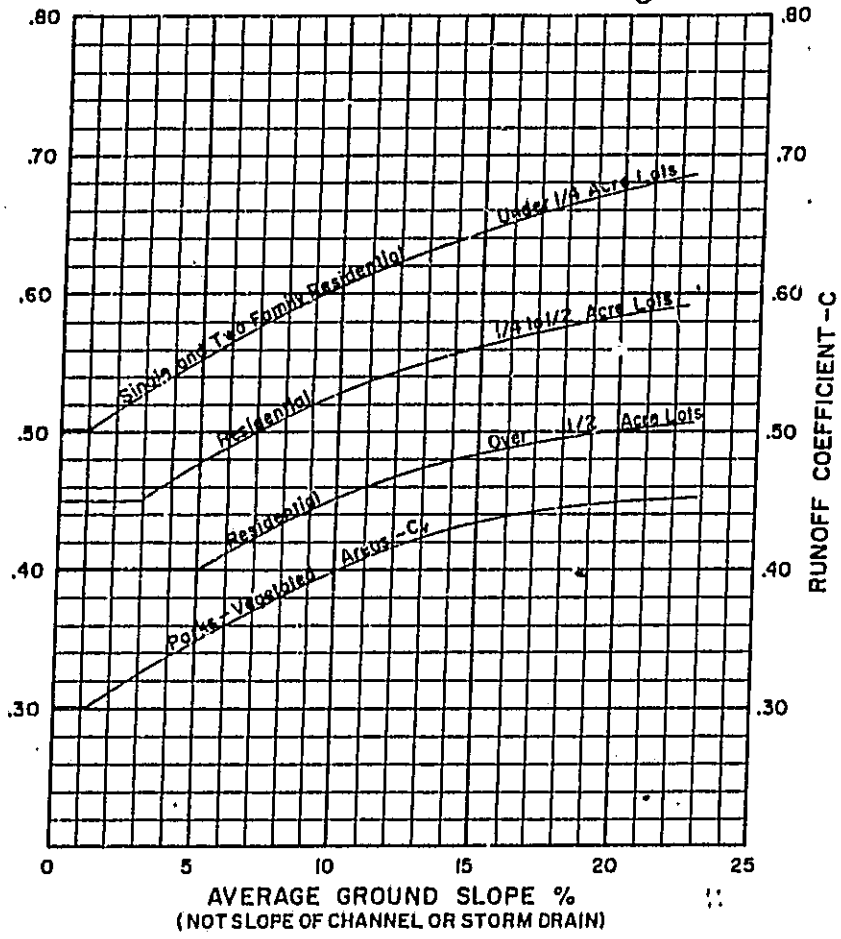
RUNOFF COEFFICIENTS FOR RATIONAL FORMULA



NOTE: Commercial, Industrial & Multiple Residential Areas

$C_p = 0.9$ (Based on paving, roofs, etc.)

When vegetated area exceeds 20% of total, C_v from vegetated curve may be used to reduce above C_p as follows:

$$C_T = C_v \frac{A_v}{A_T} + C_p \frac{A_p}{A_T}$$

SONOMA COUNTY WATER AGENCY

PLATE No. B-1

11B:1
7/84

DATE: 7/96
JOB NO: 97-10
SHEET # C OF APP'x

27

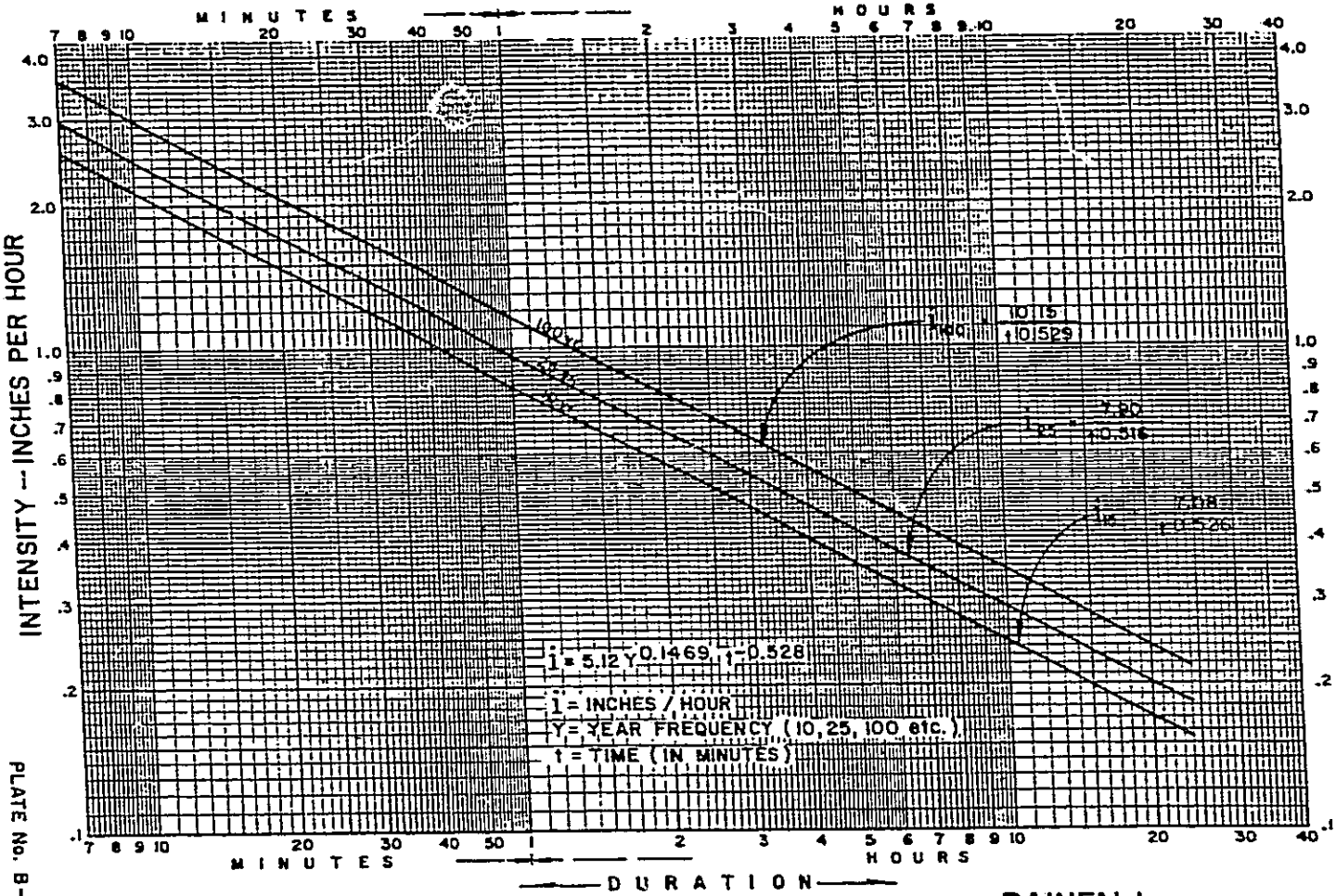
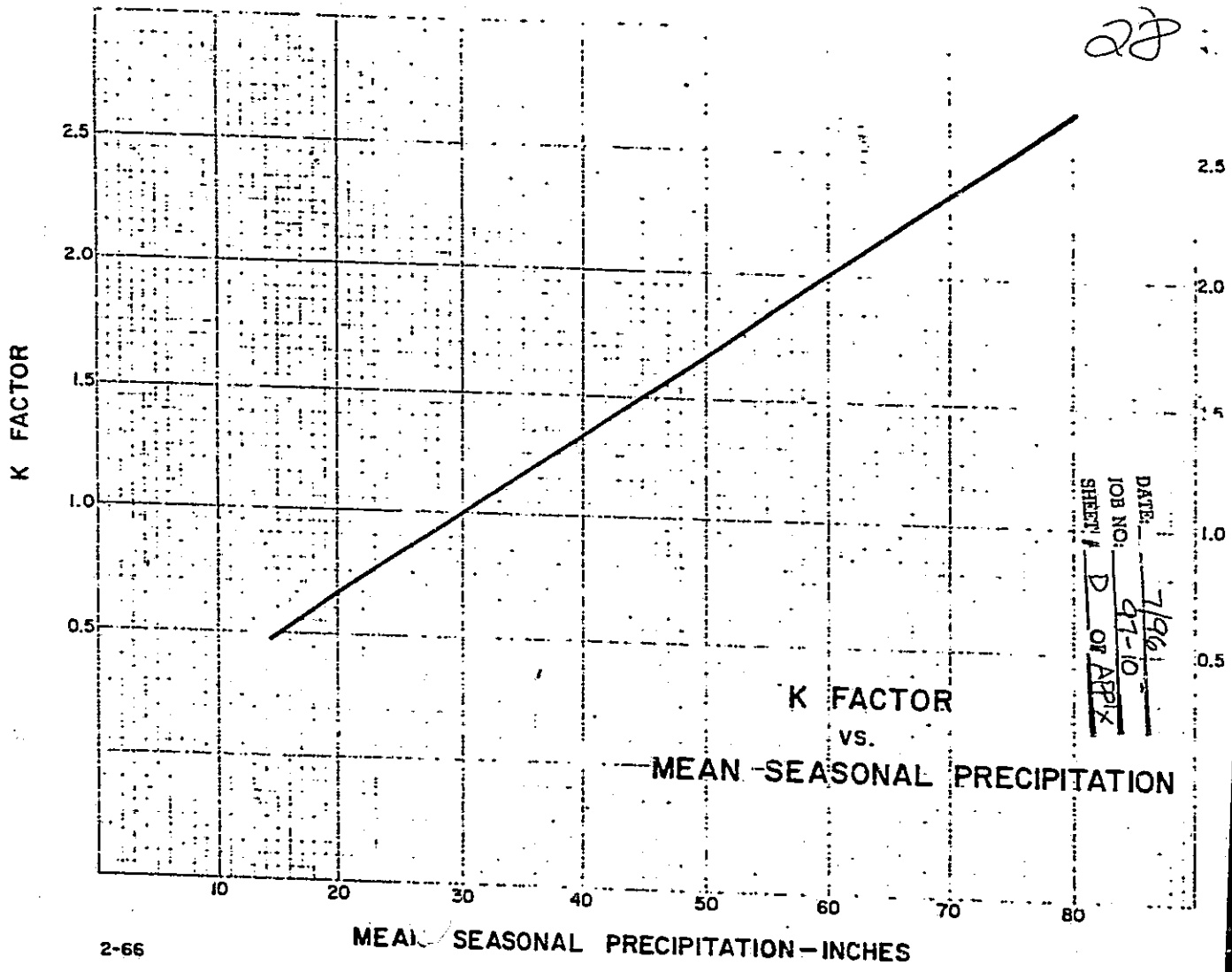


PLATE No. B-2

NOTE: THE INFORMATION SHOWN IS SUBJECT TO ANNUAL REVISION AS ADDITIONAL RAINFALL

RAINFALL
INTENSITY vs DURATION



K FACTOR
vs.
MEAN SEASONAL PRECIPITATION

PLATE No. B-4

2-66

COUNTY OF SONOMA 29
PERMIT AND RESOURCE MANAGEMENT DEPARTMENT
2550 Ventura Avenue, Santa Rosa, CA 95403
(707) 527-1900 FAX (707) 527-1103
Field Operations • Code Enforcement • Permits • Environmental & Comprehensive Planning

Miller Creek - Area Check
H&H Calc's Sheet M1 of 6 B-143158

Morris Engineering

S1 2400 x 2400 = 5,760,000 SF ÷ 43,560 =	132.	132.
S2 2400 x 2200 = 5,280,000 ÷ " =	121.	132
S3 2400 x 1900 = 4,560,000 ÷ " =	105	105

B143158 & B143159

Notification No. 253-97 THP No. _____

AGREEMENT REGARDING PROPOSED STREAM OR LAKE ALTERATION 30

THIS AGREEMENT, entered into between the State of California, Department of Fish and Game, hereinafter called the Department, JULIE COLLINS REP KENDALL-JACKSON of SANTA ROSA, State of CALIF, hereinafter called the operator, is as follows:

WHEREAS, pursuant to Division 2, Chapter 6 of California Fish and Game Code, the operator, on the 24TH day of MARCH, 19 97, notified the Department that he intends to substantially divert or obstruct the natural flow of, or substantially change the bed, channel, or bank of, or use material from the streambed of, the following water: MILLER CREEK, in the County of SONOMA, State of California, S_____ T_____ R_____.

WHEREAS, the Department (represented by JERRY BOESEL, WARDEN has made an inspection of subject area on the _____ day of PREVIOUS, 19____, and) has determined that such operations may substantially adversely affect existing fish and wildlife resources including: TROUT, SALMON, STEELHEAD, NON-GAME AQUATIC SPECIES

THEREFORE, the Department hereby proposes measures to protect fish and wildlife during the operator's work. The operator hereby agrees to accept the following recommendations as part of his work: Numbers 1, 2, 3, 4, 18, 19, 20 & 21 (SEE BACK), from the list of recommendations on the back of this page and the following special recommendations:

1. All work in or near the stream or lake shall be confined to the period APRIL 21, 1997 THRU OCTOBER 31, 1997.

PROJECT LOCATION: 4400 GEYSERS ROAD / 3.5 MILES NORTHEAST OF GEYSERVILLE. PROJECT IS TO CONSTRUCT TWO RAILCAR STREAM CROSSINGS. CROSSING NUMBER 1 CROSSES THE SOUTH FORK OF MILLER CREEK AND CROSSING NUMBER 2 CROSSES THE MIDDLE FORK OF MILLER CREEK. THE FOLLOWING PERTAINS TO BOTH CROSSINGS: (1) THE NUMBERED RECOMMENDATIONS LISTED ABOVE SHALL BE ADHERED TO AND; (2) TEMPORARY CROSSINGS MAY BE INSTALLED DURING THE NORMAL LOW SUMMER FLOW SEASON OF 1997 TO ALLOW PASSAGE DURING BRIDGE CONSTRUCTION AND; (3) THE TEMPORARY CROSSINGS SHALL INCORPORATE CMP OR OTHER SUITABLE MATERIAL CAPABLE OF ALLOWING 100% OF WATER PASSAGE AND; (4) STREAMBED GRAVEL INDIGENOUS TO THE SITE MAY BE UTILIZED AS FILL FOR THE TEMPORARY CROSSINGS AND; (5) THE TEMPORARY CROSSINGS SHALL BE REMOVED BY OCTOBER 31, 1997 AND; (5) ALL STRUCTURES CONSTRUCTED WITHIN THE STREAM CHANNEL SHALL CONFORM TO THE PLANS AND SPECIFICATIONS ESTABLISHED BY MORRIS ENGINEERING DATED 4/1/97, JOB #97-10 AND; (6) A COPY OF THIS AGREEMENT SHALL BE KEPT AVAILABLE ON THE JOBSITE DURING ALL PHASES OF CONSTRUCTION AND; (7) A COPY OF THIS AGREEMENT SHALL BE PROVIDED TO ALL CONTRACTORS, SUB-CONTRACTORS AND OTHERS DOING WORK PRIOR TO COMMENCEMENT OF SUCH WORK AND; (8) THE STRUCTURES SHALL NOT ENCROACH UPON THE CARRYING CAPACITY OF THE STREAM CHANNEL.

The operator, as designated by the signature on this agreement, shall be responsible for the execution of all elements of this agreement. A copy of this agreement must be provided to contractors and subcontractors and must be in their possession at the work site.

If the operator's work changes from that stated in the notification specified above, this agreement is no longer valid and a new notification shall be submitted to the Department of Fish and Game. Failure to comply with the provisions of this agreement and with other pertinent Code Sections, including but not limited to Fish and Game Code Sections 5650, 5652 and 5948, may result in prosecution.

Nothing in this agreement authorizes the operator to trespass on any land or property, nor does it relieve the operator of responsibility for compliance with applicable federal, state, or local laws or ordinances.

THIS AGREEMENT IS NOT INTENDED AS AN APPROVAL OF A PROJECT OR OF SPECIFIC PROJECT FEATURES BY THE DEPARTMENT OF FISH AND GAME. INDEPENDENT REVIEW AND RECOMMENDATIONS WILL BE PROVIDED BY THE DEPARTMENT AS APPROPRIATE ON THOSE PROJECTS WHERE LOCAL, STATE, OR FEDERAL PERMITS OR OTHER ENVIRONMENTAL REPORTS ARE REQUIRED.

This agreement becomes effective on APRIL 21, 1997

Operator Julie Collins

Title Re Project Manager

Organization Kendall-Jackson

Date 4-18-97

Department Representative

Title FISH & GAME WDN, ENVIRONMENTAL PROJECTS

Department of Fish and Game, State of California

Date APRIL 17, 1997

COUNTY OF SONOMA

PERMIT AND RESOURCE MANAGEMENT DEPARTMENT

2550 Ventura Avenue, Santa Rosa, CA (707) 527-1900 FAX (707) 527-1103

31

PLANCHECK RECEIPT ONLY - NOT A PERMIT | **B-143158**

Printed: 15:26 Jun 26, 1997

Address: 4400 GEYSERS RD GEY
APN: 131-040-017

Cross Street: RED WINERY RD
In Plancheck: 00/00/0000

Res/Com: C
Activity Type: B-BLD 9601

Std/Quick: S Fire District: ....
Insp Area:

Tax Rate Area: 097020

Owner

JACKSON JESS S JR TR ET AL
421 AVIATION BLVD
SANTA ROSA CA 954031069

Applicant

JULIE COLLINS-KENDALL-JACKSON
421 AVIATION BLVD
SANTA ROSA CA 95403

707 547 4763

Plancheck Expires: 00/00/0000

Description: RAIL CAR BRIDGE OVER MILLER CREEK - BRIDGE #1

Initialized By: CNIEDERM Approved By: Status: APPLIED
Plancheck Multiplier:1.00

Occupancy	Type	Factor	Sq. Feet	Valuation
		Subtotal:		.00
		Multiplier 1.00:		.00
		Addl Fixed Amount:		80,000.00
Table Date: 07/01/1996		Total Valuation:		80,000.00

Item #	Item Account Code	Description	Fee	Previously Paid
0060	025619-1341	BLDG PERM PLAN CHECK FEE	$363.13	$.00
0100	025619-1341	SITE REVIEW/ELEV. CERT.	$54.00	$.00
0121	025619-1341	FIRE SAFE STDS/REF FEES	$60.00	$.00
0707	025627-3140	REF.-GRADING/DRAIN. PLAN	$.00	$.00
0708	025627-3140	REF.-GRD/DRAIN DAM/DRVWY	$.00	$.00
5060	025619-1341-WAIVED	BLDG PERM PLAN CHECK FEE	$.00	$.00
5100	025619-1341-WAIVED	SITE REVIEW/ELEV. CERT.	$.00	$.00
5121	025619-1341-WAIVED	FIRE S.S. REFERRAL FEE	$.00	$.00
5707	025627-3140-WAIVED	REF.-GRADING/DRAIN. PLAN	$.00	$.00
5708	025627-3140-WAIVED	REF.-GRD/DRAIN DAM/DRVWY	$.00	$.00
	Qualifies for Fee Waivers (Y/N): N		$497.13	$.00

Total Calculated Fees	$497.13	
Total Additional Fees	$.00	CASH REGISTER
Previously Paid	$.00	VALIDATION
Balance Due	$497.13	REQUIRED BELOW

016125 07/01/97BU:
0142158
SIERRA $497.13
***TTL $497.13
CHECK $497.13
CHNG $0.00

Lola:

Here are plans for all 3 bridges -

The drainage information sheet & hydrology report for bridge 3 (B 143242) were missing.

I suggest we send our comments out together if possible considering your schedule.

Rick

32

DOCUMENT: PROJECT REVIEW - STORAGE POND____ GRADING___ HYDROLOGY___X__
PROJECT NUMBER__B-143158 BY__B.ROBERTS__ DATE 8/27/96

SECTION	CODE	COMMENTS	SECTION	CODE	COMMENTS
3309	GRADING PERMITS REQ		3315	DANG & TERRACE	
3309.1	PERMITS REQUIRED		3315.1	GENERAL	
3309.2	APPLICATIONS		3315.2	TERRACE	
3309.3	GRADING DESIGNATION		3315.3	SUBSURF DRAINS	
3309.4	ENG GRADING REQ		3315.4	DISPOSAL	
3309.5	SOILS ENG REPORTS		3315.5	INTERCEP DRAINS	
3309.6	ENG GEO REPORT		3316	EROSION CONTROL	
3309.7	LIQUID FACTION STUDY		3316.1	SLOPES	yes
3309.8	REG GRADING REPORT		3316.2	OTHER DEVICES	
3309.9	ISSUANCE		3317	GRDING INSPECTION	
3312	CUTS		3317.1	GENERAL	
3312.1	GENERAL		3317.2	CIVIL ENGINEER	
3312.2	SLOPE		3317.3	SOILS ENGINEER	
3313	FILLS		3317.4	ENG GEOLOGIST	
3313.1	GENERAL		3317.5	PERMITTEE	
3313.2	PREP OF GROUND		3317.6	BUILDING OFFICIAL	
3313.3	FILL MATERIAL		3317.7	NOTIF OF NONCOMP	
3313.4	COMPACTION		3317.8	TRANS OF RESPOS.	
3313.5	SLOPE		3318.	COMPLET OF WORK	
3314	SETBACKS		3318.1	FINAL REPORTS	
3314.1	GENERAL		3318.2	NOTIF OF COMP.	
3314.2	TOP OF CUT SLOPES				
3314.3	TOE OF FILL SLOPES				
3314.4	MODIF OF SLOPE LOCAT				

33

DOCUMENTS RECEIVED :

1. Set of Plans " Bridge at South Fork of Miller Creek" sheets b1 of 7.
2. Geotechnical Report dated July 1,97.
3. Hydro / Hydra Report dated April 1, 97
4. Fish & Game Stream Alteration #253-97. Note: recommendations missing from front page, report incomplete.

1994 UBC APPENDIX CHAPTER 33

3316.1	SLOPES

This code of the UBC needs to be address regarding erosion control. The plan and specs has no erosion control for fill slopes.

DRAINAGE REVIEW AND OTHER COMMENTS

1. Water shed area = 368ac. Engineer used the Rational Method with a 100 yr storm freq, 600 CFS. For an open channel design.

2. Hydro/Hydra Calculations were checked . OK

OTHER COMMENTS

1. Sheet b7 of 7 makes reference to test pits in Geo report. Test pits are not in report.

Information needed to complete review processes:

1. Need recommendations. Fish & Game Stream Alteration #253-97. Note: recommendations missing from front page, report incomplete.

Additional Concerns:

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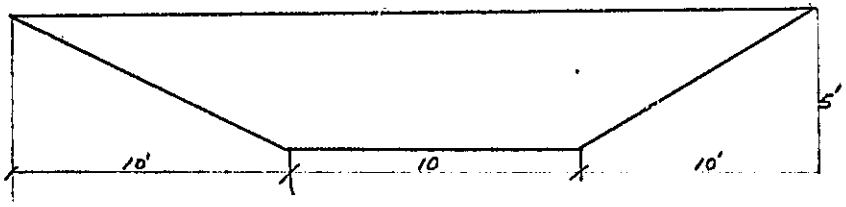
COUNTY OF SONOMA

PERMIT AND RESOURCE MANAGEMENT DEPARTMENT

2550 Ventura Avenue, Santa Rosa, CA 95403
(707) 527-1900 FAX (707) 527-1103

Field Operations • Code Enforcement • Permits • Environmental & Comprehensive Planning

Miller Bridge 1" = B-143158
SCALE 1" = 5'



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Development Submittal Information for Drainage Review

Please type or print the following information:	
Name of Development: Bridge #1 over Miller Creek	
Property Address: 4400 Geysers Roadn	City, Zip Geyserville, CA
Nearest Cross Street:: Red WInery Road	
Assessor's Parcel Number: 131-040-017	Developer:
Design Engineer: Morris Engineering Address: 817 Dora Avenue City, State, Zip: Ukiah, CA Phone No.: (707) 463-1243	Applicant Name: Kendall-Jackson Address: Attn: Julie Collins 421 Aviaition Blvd. City, State, Zip: Santa Rosa, CA 95403 Phone No.: (707) 547-4763
Land Use (Planning) File #:	Permit Application # B14315B
Number of Units:	Area:

To Be Completed by Drainage Review (527-3505)

File/Unique #:	Quad Maps:	
Major Dev. (MJS/UP/DR): Minor Dev. (MNS/UP/DR):	Permit Referral: Public Project:	Flood Zone:

Fee based on: _____ minimum, _____ Units @ _____ per unit = _____

Permit Referral Fee: _____ Flood Zone Fee _____ Date: _____ Receipt #: _____

MJS/UP/DR Fee:	Amount	Date	Receipt #:
Base/minimum			
Balance or Total			

Review Engineer/Technician:	Final Letter Date:

Comments: