

LINDA LINGLE
GOVERNOR OF HAWAII



LAURA H. THIELEN
CHAIRPERSON
MEREDITH J. CHING
JAMES A. FRAZIER
NEAL S. FUJIIWARA
CHIYOME L. FUKINO, M.D.
DONNA FAY K. KIYOSAKI, P.E.
LAWRENCE H. MIIKE, M.D., J.D.
KEN C. KAWAHARA, P.E.
DEPUTY DIRECTOR

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

STAFF SUBMITTAL

for the meeting of the
COMMISSION ON WATER RESOURCE MANAGEMENT

October 28, 2008
Honolulu, Hawaii

Application for Stream Channel Alteration Permit (SCAP.1989.6)
To Stabilize an Existing Retaining Wall on Kanaha Stream
Lahaina, Maui, TMK: (2) 4-6-017:012

APPLICANT:

Mr. Hans F. Michel
1404 Olona Place
Lahaina, HI 96761

LANDOWNER:

Same

SUMMARY OF REQUEST:

Application for a Stream Channel Alteration Permit (SCAP) to stabilize an existing retaining wall on Kanaha Stream in Lahaina, Maui, TMK: (2) 4-6-017:012.

LOCATION: Exhibits 1a and 1b.

BACKGROUND:

The applicant was leasing his property at TMK: (2) 4-6-017:012 from Pioneer Mill from 1968 until 1981 when he purchased his property from Pioneer Mill. The applicant's property is approximately 3.6 acres and is bisected by Kanaha Stream which flows from an easterly to westerly direction.

Kanaha Stream is a perennial stream, but two diversion intakes upstream from the applicant's property divert water from Kanaha Stream. The first diversion intake is a three-way split which previously delivered water to Pioneer Mill for its boiler plant operation, to Maui County Department of Water Supply's (DWS) reservoir tanks, and to Lahainaluna High School. The second upstream intake handled overflows from the first intake and delivered water in Pioneer Mill's irrigation ditch to its sugar cane fields.

Pioneer Mill lined a portion of the irrigation ditch on the applicant's property and constructed a retaining wall along the irrigation ditch to protect it. In 1992 a landslide destroyed a portion of Pioneer Mill's

ITEM C1

retaining wall, and the applicant did not have the resources to rebuild the retaining wall until 1999. In 1999 Pioneer Mill ceased operation and closed off its irrigation ditch. (See Exhibit 3, Photo #5.)

Over a period of two years, the applicant rebuilt the retaining wall that had been destroyed with a new retaining wall approximately 35 feet long and six feet high. After building the first retaining wall, the applicant constructed a second wall approximately 14 feet long and 4.5 feet high above the first retaining wall and the third wall approximately 10 feet long and nine feet high. A series of steps connect all three retaining walls. The second and third retaining walls were completed in 2006. (See Exhibit 3, Photos #1 and #2.)

During storm events, storm waters from Kanaha Stream flow downstream past the applicant's property. During a two-day storm event in December 2007, storm waters eroded the base of the applicant's retaining wall adjacent to the stream. (See Exhibit 3, Photos #6 and #7.)

DESCRIPTION:

The applicant plans to stabilize the base of his existing retaining wall by placing approximately 10 cubic yards of rock under the base of his retaining wall adjacent to the stream and an additional 25 cubic yards of rocks and boulders in the streambed. The rocks and boulders at the base of the retaining wall and in the streambed will all be grouted together and anchored to a large boulder that is approximately 20 feet long and 12 to 15 feet wide in size in the streambed.

Best management practices (BMPs) include: placing a backhoe at the top of the stream bank and working from there; doing work in the streambed by hand; and only working in the stream when there is no water. Work in the streambed is expected to last three to five days.

ANALYSIS:

Agency Reviews

The Department of Health Clean Water Branch made the following comments:

- Any project and its potential impacts to State waters must meet the State's anti-degradation policy that requires the existing level of water quality to be maintained and protected.
- The applicant should contact the U.S. Army Corps of Engineers for permitting requirements pursuant to the Federal Water Pollution Control Act (commonly known as the "Clean Water Act") regarding Section 401 Water Quality Certification (WQC) requirements.
- Additional information is needed on when the wall was constructed and more details/drawings to demonstrate how and where the retaining wall will be grouted to the large boulder in the streambed.
- A similar but slightly larger project located on Oahu did not require grouting the wall to the streambed or to the boulder in the streambed. The need to grout the retaining wall to the streambed and its impact to the natural streambed should be carefully re-evaluated.
- Any discharges related to project construction or operation activities must comply with State Water Quality Standards (WQS).

The Division of Aquatic Resources (DAR) inquired if the stream was being diverted at a higher elevation and commented that erosion will be a continual problem if extreme flows are allowed to flush downstream. Large boulders would need to be placed in the eroded streambed, and the "big stone" should allow substrate to flow downstream naturally.

The Engineering Division commented that the project is located in Flood Zone C according to the Flood Insurance Rate Map (FIRM), and the National Flood Insurance Program (NFIP) does not have any regulations for developments within Zone C.

The Office of Hawaiian Affairs wanted assurances that the size, functionality and character of the retaining wall will remain the same and commented that whatever is introduced into the streambed will be discharged and that the limited scope of the proposed project does not appear to generate sizeable negative impacts.

Land Division commented that the abutting property owner owned the stream, and there were no permitting issues.

The Department of Hawaiian Home Lands, State Parks and Forestry and Wildlife had no objections to the project.

The U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, University of Hawaii Environmental Center, Maui County Department of Planning, State Parks and Historic Preservation did not submit comments as of the date of preparation of this submittal.

RECOMMENDATION:

That the Commission:

Approve a Stream Channel Alteration Permit (SCAP) to stabilize an existing retaining wall on Kanaha Stream in Lahaina, Maui, TMK: (2) 4-6-017:012. The permit shall have a term of two (2) years subject to the Commission's standard permit conditions in Exhibit 4.

Respectfully submitted,



KEN C. KAWAHARA, P.E.
Deputy Director

- Exhibits:
1. Location Maps 1a and 1b
 2. Site diagram
 3. Photos
 4. Standard Stream Channel Alteration Permit Conditions

APPROVED FOR SUBMITTAL:



LAURA H. THIELEN
Chairperson

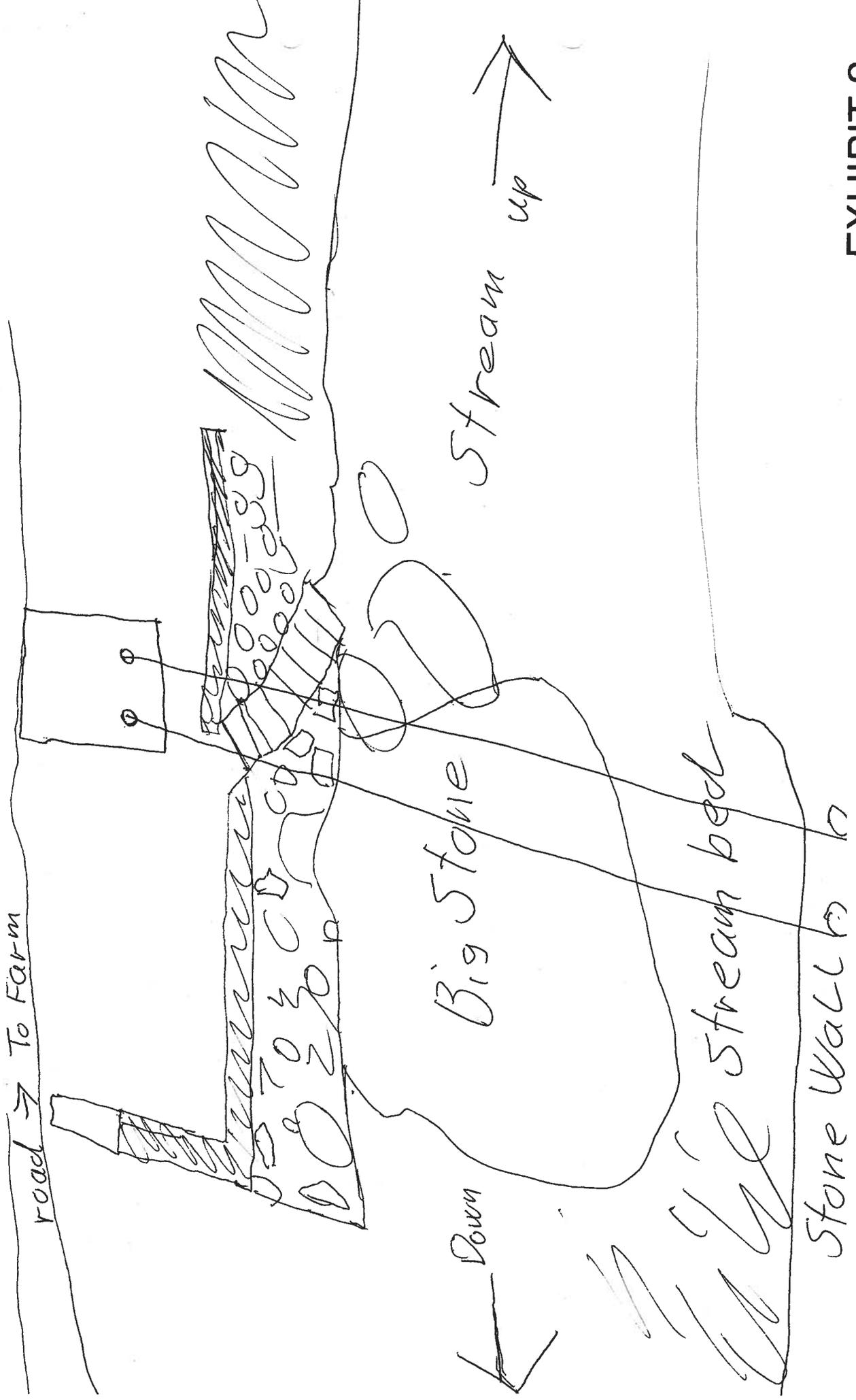


EXHIBIT 2



Photo #1

Downstream view of applicant's retaining wall on north bank of stream.



Photo #2

Upstream view of applicant's retaining wall on north and south banks of stream.

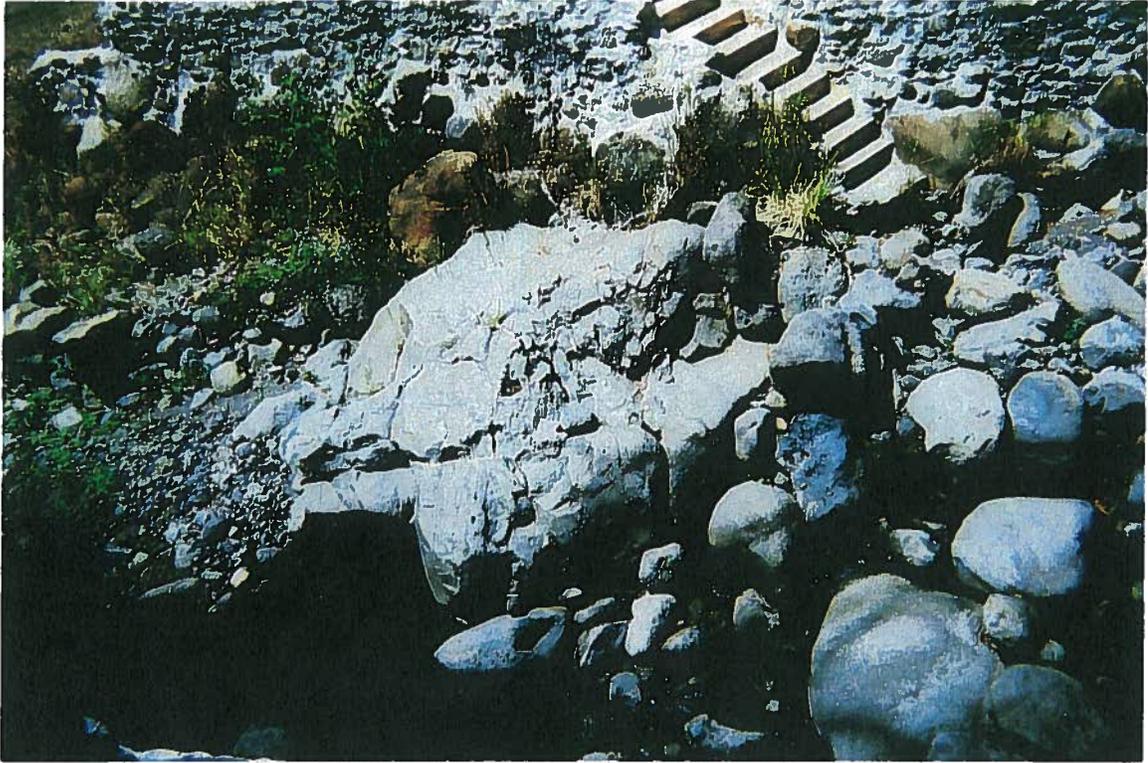


Photo #3 View of large rock in streambed where applicant will grout rocks and boulders in stream bed to.



Photo #4 Upstream view of large rock in streambed and eroded retaining wall.



Photo #5 Upstream view of former Pioneer Mill irrigation ditch which Pioneer Mill closed off and in which no water is flowing.

Photo #6

Two-day storm event in December 2007 which eroded the base of the applicant's retaining wall.

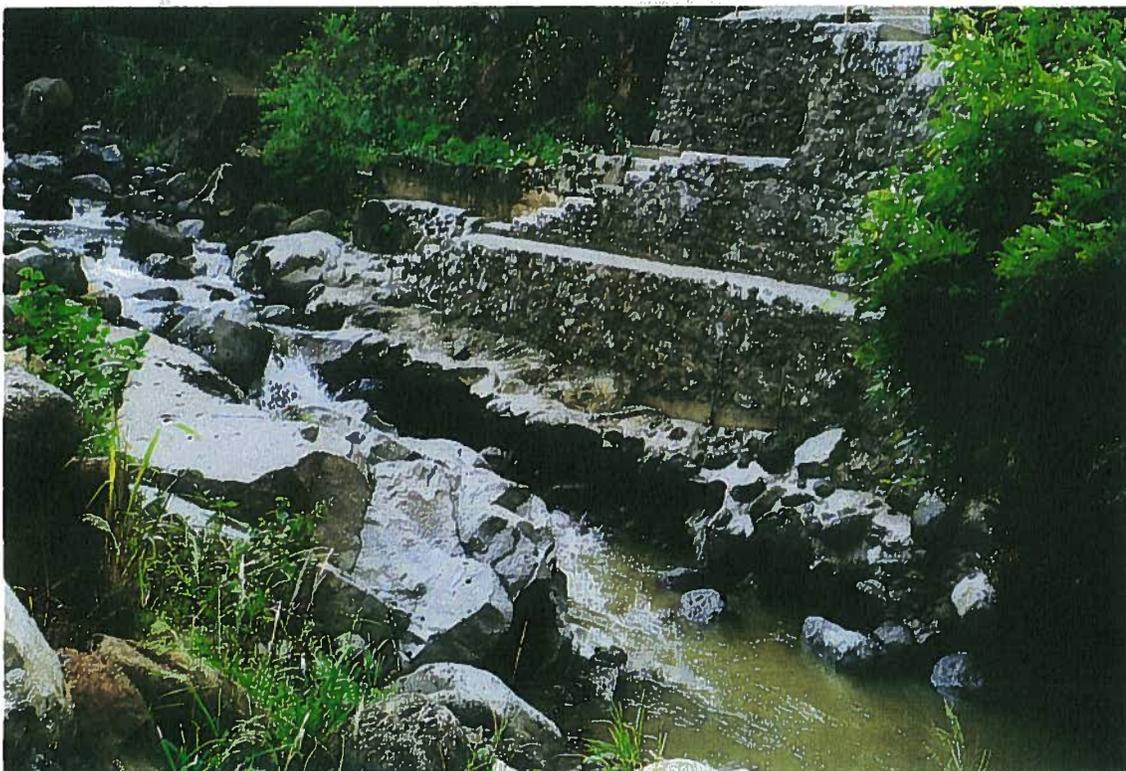
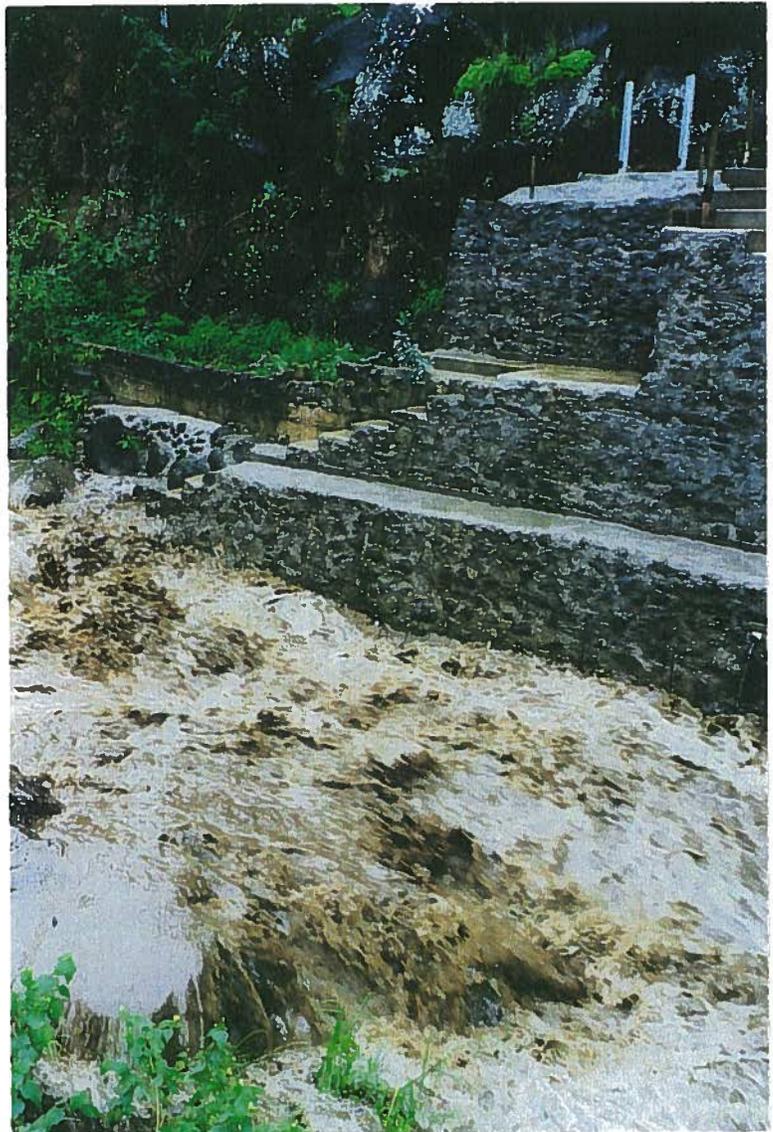


Photo #7

View of the eroded base of the applicant's retaining wall on north bank of stream after the 2007 event.

STANDARD STREAM CHANNEL ALTERATION PERMIT CONDITIONS
(Revised 9/19/07)

1. The permit application and staff submittal approved by the Commission at its meeting on October 28, 2008, shall be incorporated herein by reference.
2. The applicant shall comply with all other applicable statutes, ordinances, and regulations of the Federal, State and county governments.
3. The applicant, his successors, assigns, officers, employees, contractors, agents, and representatives, shall indemnify, defend, and hold the State of Hawaii harmless from and against any claim or demand for loss, liability, or damage including claims for property damage, personal injury, or death arising out of any act or omission of the applicant or his successors, assigns, officers, employees, contractors, and agents under this permit or related to the granting of this permit.
4. The applicant shall notify the Commission, by letter, of the actual dates of project initiation and completion. The applicant shall submit a set of as-built plans and photos of the completed work to the Commission upon completion of this project. This permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The proposed work under this stream channel alteration permit shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Commission upon showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Commission no later than three (3) months prior to the date the permit expires. If the commencement or completion date is not met, the Commission may revoke the permit after giving the permittee notice of the proposed action and an opportunity to be heard.
5. Before proceeding with any work authorized by the Commission, the applicant shall submit one set of construction plans and specifications to determine consistency with the conditions of the permit and the declarations set forth in the permit application.
6. *The applicant shall develop site-specific, construction best management practices (BMPs) that are designed, implemented, operated, and maintained by the applicant and its contractor to properly isolate and confine construction activities and to contain and prevent any potential pollutant(s) discharges from adversely impacting state waters. BMPs shall control erosion and dust during construction and schedule construction activities during periods of low stream flow.*
7. *The applicant shall protect and preserve the natural character of the stream bank and stream bed to the greatest extent possible. The applicant shall plant or cover lands denuded of vegetation as quickly as possible to prevent erosion and use native plant species common to riparian environments to improve the habitat quality of the stream environment.*
8. In the event that subsurface cultural remains such as artifacts, burials or deposits of shells or charcoal are encountered during excavation work, the applicant shall stop work in the area of the find and contact the Department's Historic Preservation Division immediately. Work may commence only after written concurrence by the State Historic Preservation Division.