DAM SAFETY INFORMATION PACKET

PROCEDURES FOR THE APPROVAL OF DAM CONSTRUCTION PLANS

EXPLANATION OF UTAH STATE ENGINEER'S APPROVAL PROCESS TO CONSTRUCT, ENLARGE, OR REPAIR A DAM

EXAMPLE DRAWINGS FOR DAMS NOT REQUIRING THE SUBMISSION OF FORMAL PLANS

Location Map

Plan View

Cross-Section and Profile

PROCEDURES FOR THE APPROVAL OF DAM CONSTRUCTION PLANS

73-5a-201. Approval of state engineer necessary to construct, alter, or abandon dams.

No person may construct, enlarge, repair, alter, remove, or abandon any dam or reservoir without obtaining written approval from the state engineer. Routine maintenance of the structure does not require approval from the state engineer.

73-5a-202. Submission of plans.

(1) Before a dam is constructed, enlarged, repaired, altered, removed, or abandoned, plans for the work shall be submitted to the state engineer for his approval, unless the dam:
   (a) impounds less than 20 acre-feet of water; and
   (b) is not classified as a high hazard structure under Section 73-5a-106.

(2) (a) The plans shall be submitted 90 days before:
      (i) awarding the construction contract; or
      (ii) the commencement of construction, if the owner constructs the dam.
   (b) The state engineer may shorten the 90-day review period if the owner and the design engineer submit satisfactory preliminary plans and design reports for review.

(3) The state engineer may waive the requirement of plans if it can be demonstrated that failure of the proposed dam:
   (a) does not constitute a threat to human life; and
   (b) may result in only minor property damage that would be limited to property held by the owner of the structure.

73-5a-203. Review of plans.

(1) The state engineer shall establish a formal written procedure for the review of plans submitted pursuant to Section 73-5a-202. Plans shall be reviewed according to:
   (a) design criteria which the state engineer shall specify in rules; and
   (b) data or criteria generally accepted by the general dam design community.

(2) Upon review of the plans, the state engineer will:
   (a) approve them with appropriate conditions;
   (b) reject them; or
   (c) return them for correction.

(3) The state engineer shall document each review indicating:
   (a) how the plans were reviewed; and
   (b) the state engineer's evaluation of the plans.

73-5a-204. Application for approval.

(1) If the submission of plans is not required by Subsection 73-5a-202(1) or is waived pursuant to Subsection 73-5a-202(3), approval to construct, enlarge, repair, alter, remove, or abandon the dam must be obtained by submitting an application to the state engineer.

(2) The application shall contain:
- (a) the location of the dam;
- (b) physical dimensions of the dam;
- (c) water rights attached to the dam; and
- (d) any other information or drawings as required by the state engineer to evaluate the application.

(3) Upon review, the application will be approved, rejected, or approved with conditions.

73-5a-205. Approvals void after one year if construction delayed -- Exceptions.

(1) Any approval granted under Section 73-5a-203 is void one year after the date of approval if construction has not started.

(2) The state engineer may extend the approval in one year increments:
- (a) upon a showing of reasonable cause for delay; and
- (b) provided state-of-the-art design criteria has not changed in the intervening period.

EXPLANATION OF
UTAH STATE ENGINEER'S APPROVAL PROCESS
TO CONSTRUCT, ENLARGE, OR REPAIR A DAM

DEFINITIONS

Definitions (Section 73-5a-106 of the Utah Code) Hazard classifications are as follows:

(A) **High Hazard** - those dams which, if they fail, have a high probability of causing loss of human life or extensive economic loss, including damage to critical public utilities.

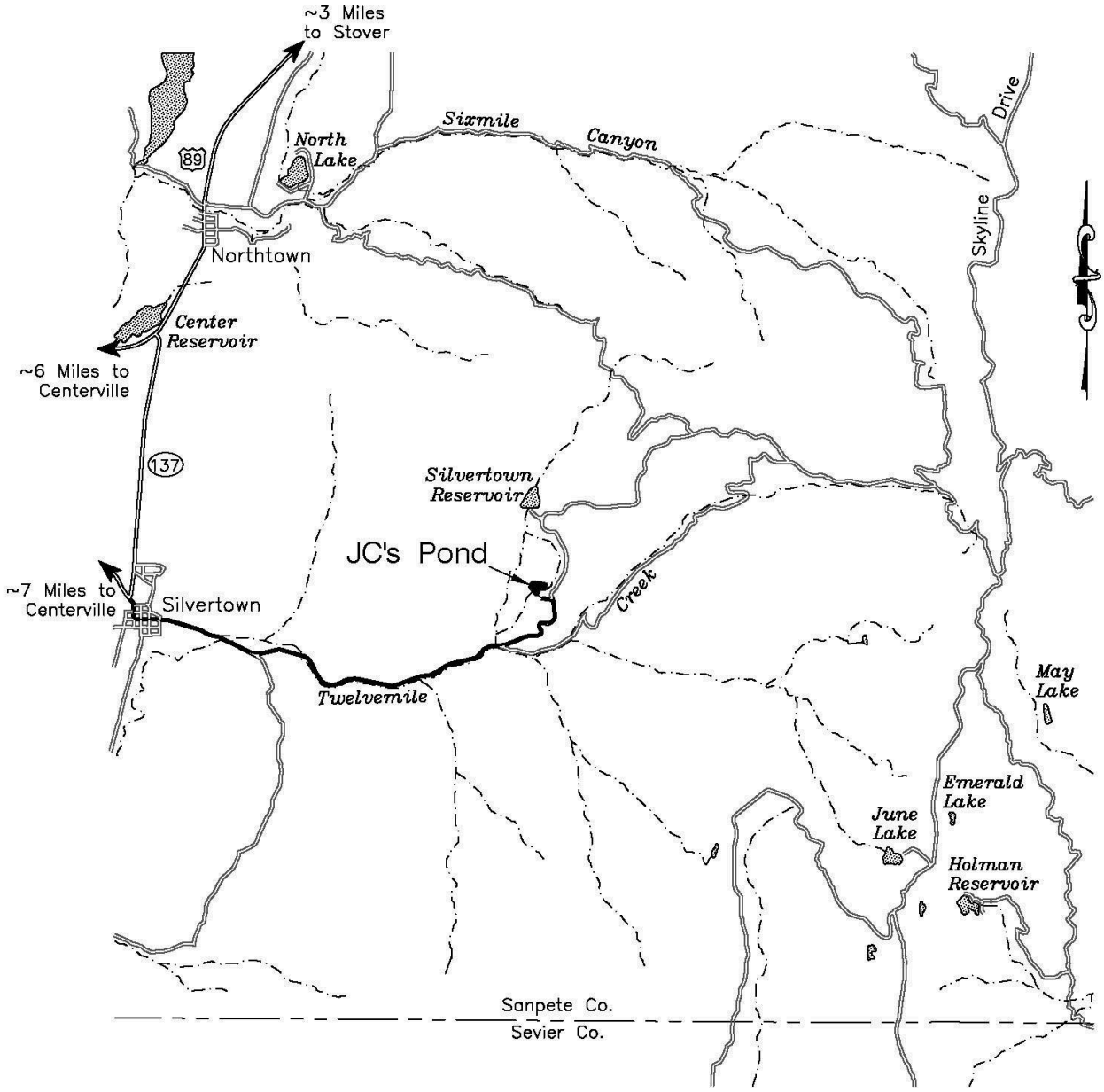
(B) **Moderate Hazard** - those dams which, if they fail, have a low probability of causing loss of human life, but would cause appreciable property damage, including damage to public utilities.

(C) **Low Hazard** - those dams which, if they fail, would cause minimal threat to human life, and economic losses would be minor or limited to damage sustained by the owner of the structure.

Note: The State Engineer has the final authority in assigning Hazard Ratings. If a person proposing to construct a dam has any doubt as to the appropriate Hazard Rating they can submit the location of the project, the height of the dam, and the storage capacity to the State Engineer who will make a determination and inform the applicant of their findings.

CATEGORIES

Hazard Rating	Storage	Approval Process	Statutes	Explanation
High	Any Amount	Submit Formal Plans	73-5a-202 (1) 73-5a-203	Formal Plans required because failure constitutes a threat to Human Life and/or could cause extensive economic loss.
Moderate	Over 20 Ac-ft	Submit Formal Plans	73-5a-202 (1) 73-5a-203	Formal Plans required since the reservoir impounds over 20 ac-ft and failure could cause appreciable property damage.
Moderate	Under 20 Ac-ft	Application Procedure	73-5a-202 (1) 73-5a-204	Application Procedure since the reservoir impounds less than 20 ac-ft and failure of the dam does not constitute a threat to Human Life.
Low	Over 20 Ac-ft	Submit Formal Plans	73-5a-202 (1) 73-5a-203	Formal Plans required since the reservoir impounds over 20 ac-ft and failure would damage property not held by the owner.
Low	Over 20 Ac-ft	Application Procedure	73-5a-202 (3) 73-5a-204	Application Procedure since failure of the dam would be limited to property held by the owner (requires waiver from State Engineer).
Low	Under 20 Ac-ft	Application Procedure	73-5a-202 (1) 73-5a-204	Application Procedure since the reservoir impounds less than 20 ac-ft and failure of the dam does not constitute a threat to Human Life.

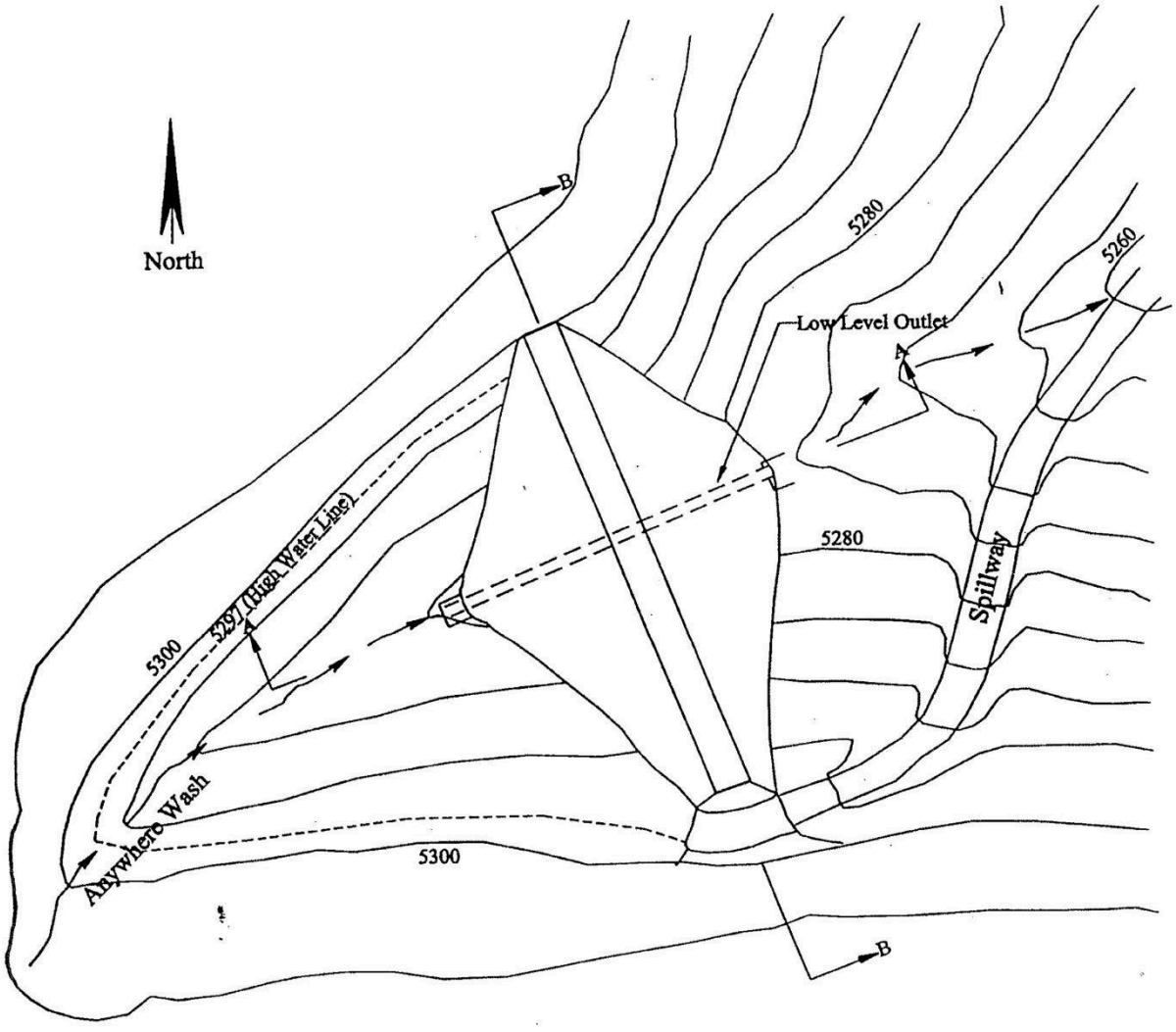


LOCATION MAP

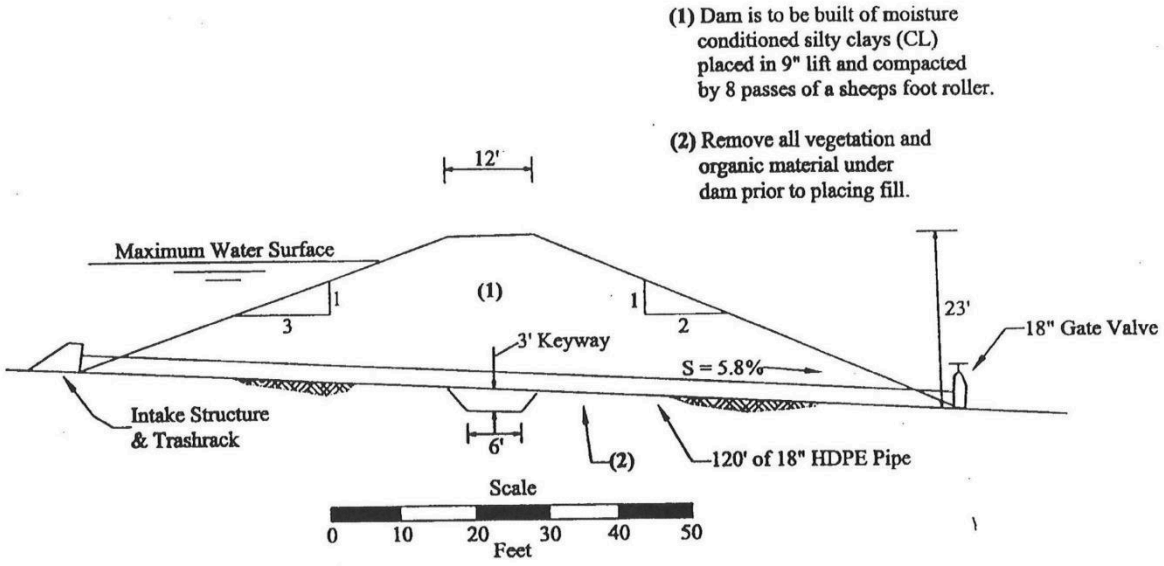
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Scale in Miles

PLAN VIEW


North
B
5280
5260
Low Level Outlet
A
5280
Spillway
5300
5297 (High Water Line)
A
Anywhere Wash
5300
B

Section A - A
(Cross-Section of Dam)



Section B-B
(Profile of Dam)

