

Melvin A. Coonrod  
Co-Op Mining Company  
P.O. Box 1245  
Huntington, Utah 84528

August 27, 1983

Mr. Mark Page  
State Engineer  
Division of Water Rights  
74 W. Main St.  
Price, Utah 84501

REF: 93-R Permit Application  
Bear Creek, Co-Op Mine

Dear Mark:

Attached is our 93-R permit application along with some additional data which I felt may be of value in determining the degree of impact of our proposed activity.

The Co-Op Mine has committed to U.D.O.G.&Mining to remove the culvert upon abandonment of the mine and to reclaim the stream channel in such a manner as to enhance the area. Presently, there is little or no riparian zone along this portion of the creek due to the eroded nature of the channel and the angle of the opposing banks. Co-Op mine has committed to remove the culvert, decrease the angle of the side slopes and attempt to create a riparian zone along the creek. Also, establish a more stable vegetative cover on the banks.

Please contact me in the event that you have any questions or concerns relative to this activity. As usual, I appreciate your assistance in addressing this situation.

Sincerely,



Melvin A. Coonrod  
Permitting & Compliance Director

MC/nc

cc: Army Corp Engineer - Robert Kramer  
D.O.G.M. - James Smith

## APPLICATION TO ALTER NATURAL STREAM

Note: Information given in the following blanks should be free from explanatory matter, but when necessary, a complete supplementary statement should be made under the heading "Explanatory".

For the purpose of acquiring permission to alter a natural stream channel, application is hereby made to the State Engineer, based on the following facts, submitted in accordance with the requirements of the laws of the State of Utah, Section 73-3-29, Utah Code Annotated 1953, as amended.

1. Relocate  Revetment Work  Change  Divert Stream Flow
2. Name of applicant Co-Op Mining Company
3. Address of applicant P.O. Box 1245  
Huntington, Utah 84528
4. The stream to be altered or relocated is Bear Creek
5. The channel to be altered is in the drainage area of Bear Creek  
Canyon, Huntington Canyon
6. The location of the channel to be altered is in Emery County.  
Located in SE $\frac{1}{4}$ , SW $\frac{1}{4}$ , Sec 25 Township 16 S Range 7E SBM  
(Give location within 40-acre tract of section, township, and range.)
7. The nature of the proposed channel change is To install 200' linear  
feet of 60" culvert.
8. The alteration or relocation is made for the purpose of To  
protect the drainage from possible contamination by coal fines  
in the area of the Scale House.
9. The existing condition of the channel is Eroded to a near stable  
configuration.
10. The estimated streamflow is less than 1.5 second-feet.
11. The description of the proposed work involved is To install 200' of  
60" culvert in the existing stream channel. (See attachment on  
location) to protect the drainage and facilitate surface drainage  
and handling of coal.
12. Is the land owned by the applicant? Yes  No  If the answer is  
"No", has written permission to proceed with the work been obtained?

Note: The approval of this application does not grant the applicant the right of egress or trespass. Such authorization must be accomplished in accordance with the standard legal procedures.

13. Channel Improvement Grouping (for federal agencies only) \_\_\_\_\_

## Explanatory

The following additional facts are set forth in order to define more clearly the full purpose of the proposed application: The culvert is designed to  
allow the Co-Op Mining Co. to handle the weighing of coal trucks in such  
a manner and location to prevent surface waters which may contain coal  
finer to go through a sediment pond prior to reaching the creek. It will  
facilitate storage of materials, handling of coal, and future construction  
in the area. (See attachments for site specific information)



SEC 26

SEC 25

ROCK

7100

7125

SEDIMENT POND

x 7081.3

7075

CATCH BASIN

CULVERT

PARKING

200'

PROPOSED CULVERT

SALES OFFICE

PARKING

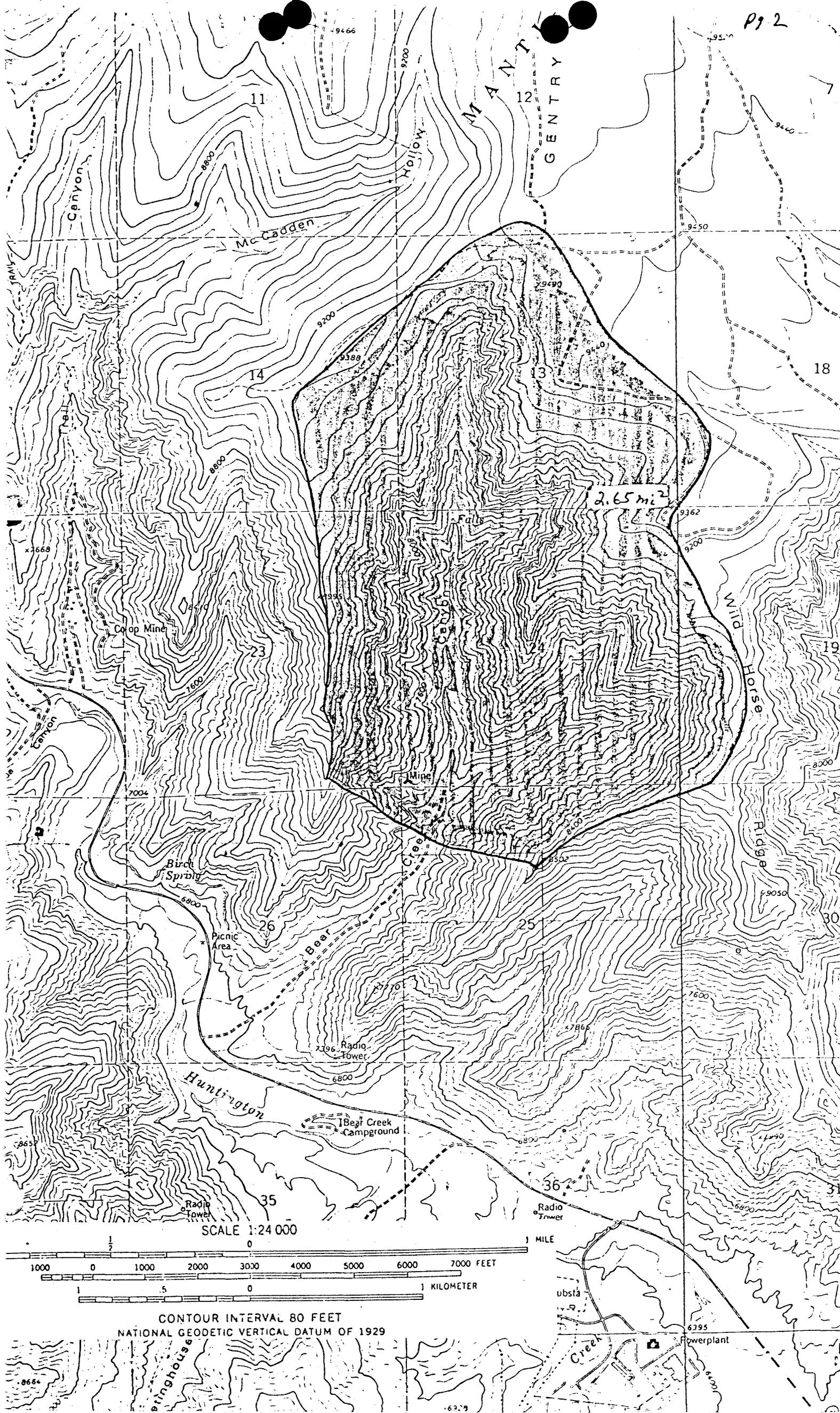
FUEL PUMPS

STREAM  
EARTH AND

PROPOSED HAUL ROAD

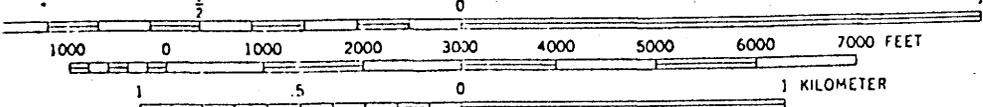
UNDISTURBED DRAINAGE

7125



2.65 mi<sup>2</sup>

SCALE 1:24 000



CONTOUR INTERVAL 80 FEET  
 NATIONAL GEODETIC VERTICAL DATUM OF 1929

subst  
 powerplant  
 6395

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Prepared by U.S. Department of Commerce  
National Oceanic and Atmospheric Administration  
National Weather Service, Office of Hydrology  
Prepared for U.S. Department of Agriculture,  
Soil Conservation Service, Engineering Division

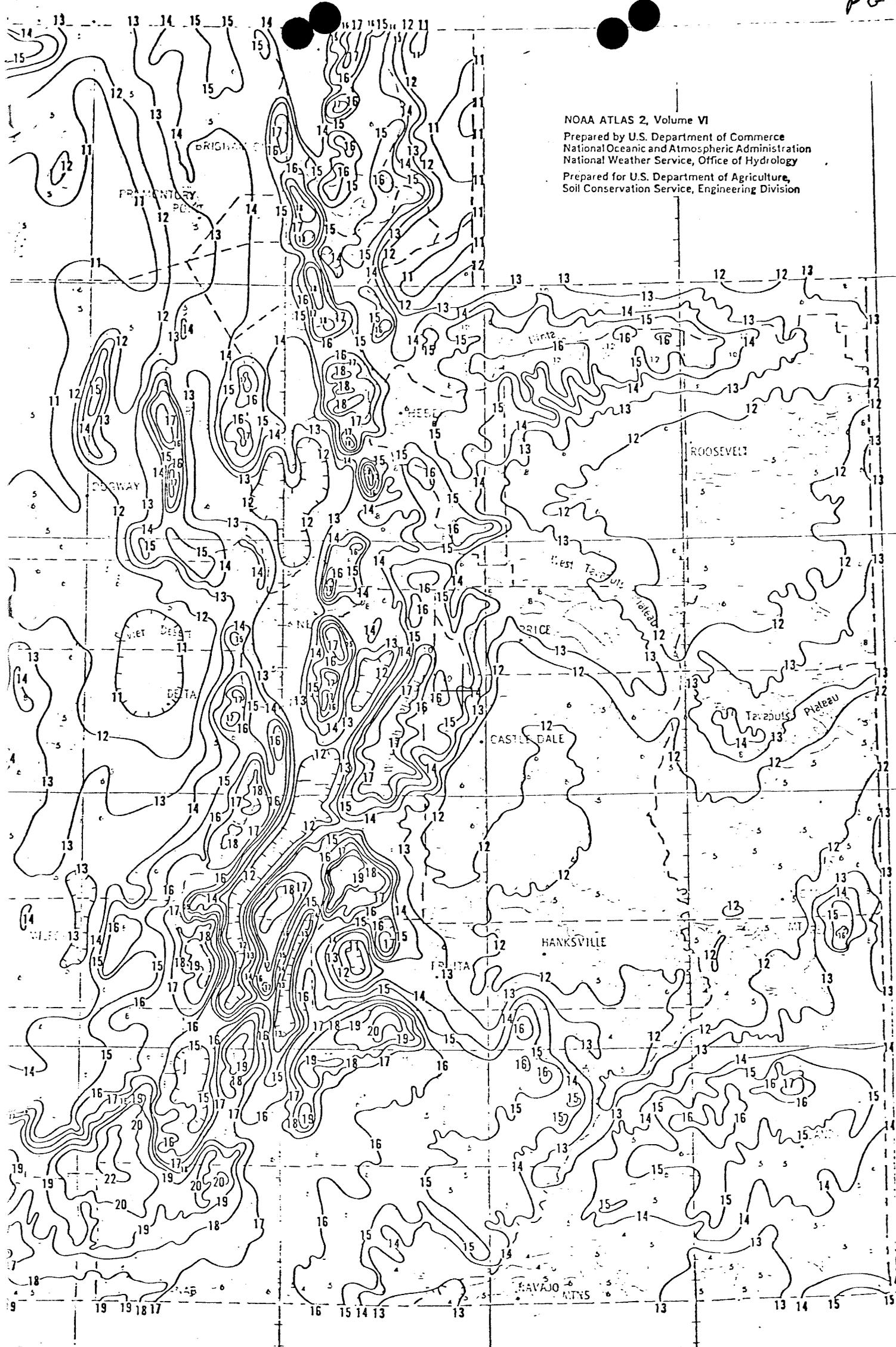
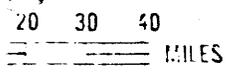


Figure 21  
ISOPLUVIALS OF 10-YR 6-HR PRECIPITATION IN  
TENTHS OF AN INCH



NOAA ATLAS 2, Volume VI

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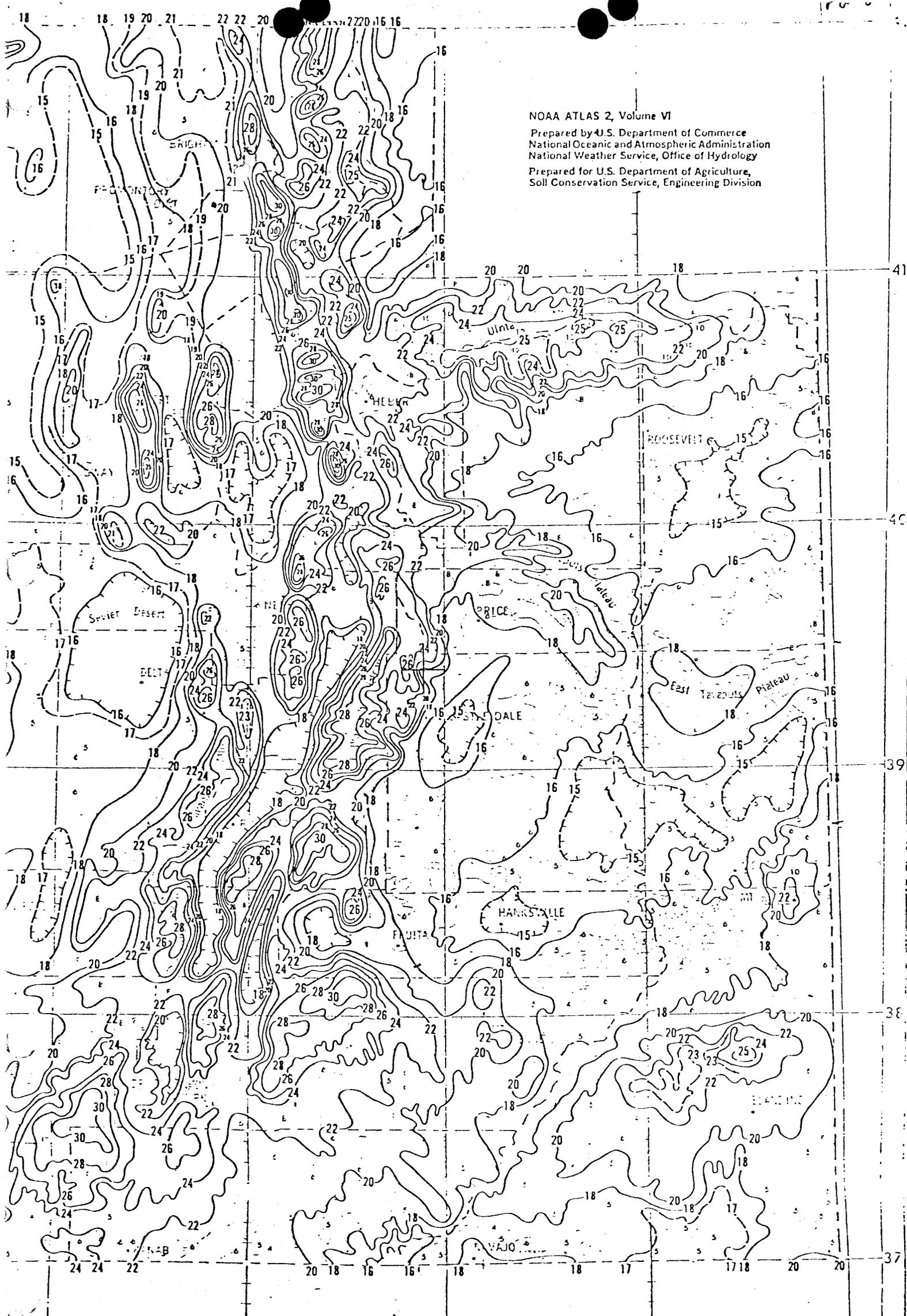


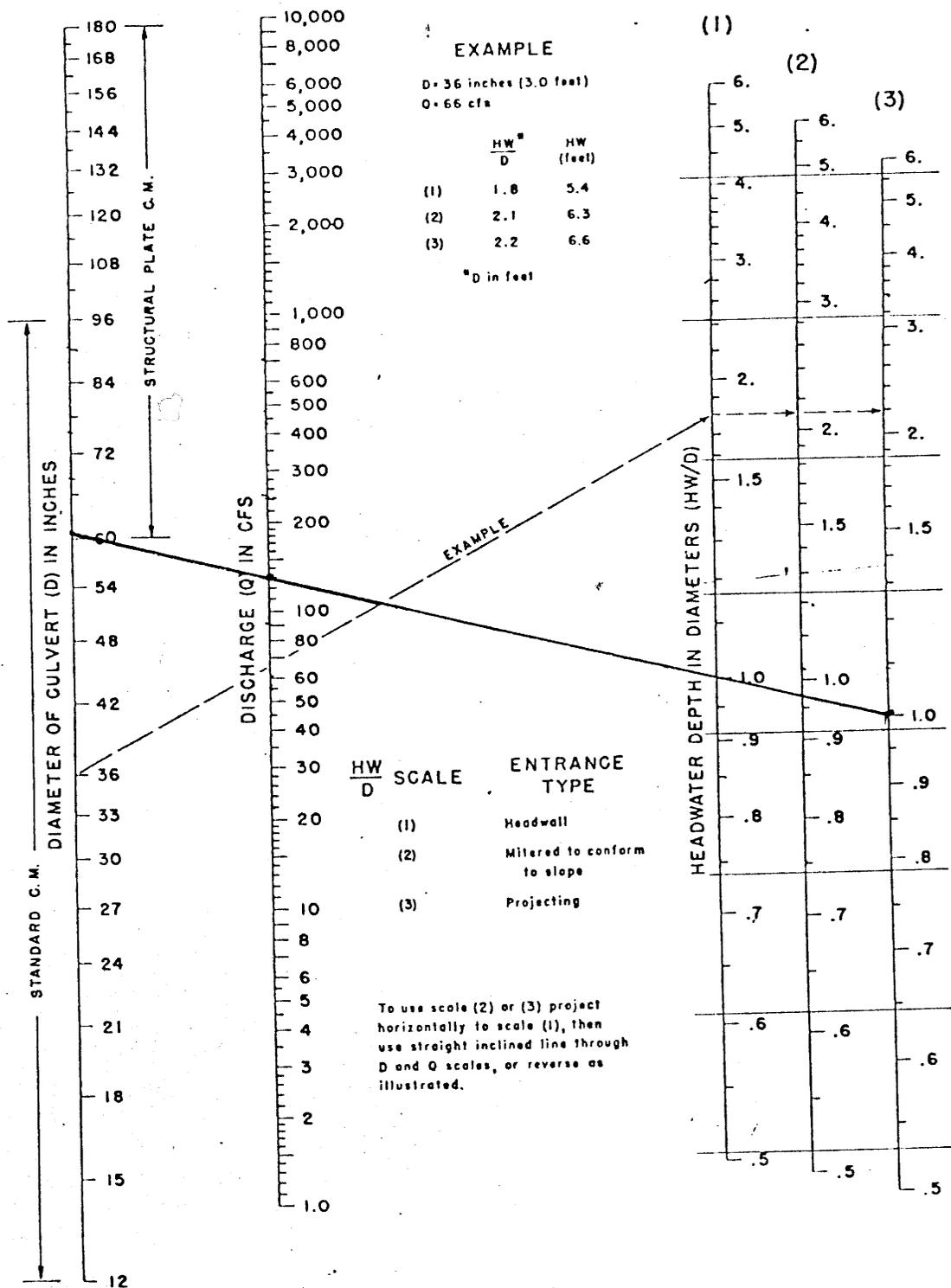
Figure 27

ISOPLUVIALS OF 10-YR 24-HR PRECIPITATION  
IN TENTHS OF AN INCH

30 40  
MILES

If Multiple Culvert Design, Divide  $Q(cfs)$  eq. between them & use  $\Phi$  for 1 pipe to determine culvert diameter.

Chart 2-53: HEADWATER DEPTH FOR C.M.P. CULVERTS WITH INLET CONTROL



BUREAU OF PUBLIC ROADS JAN. 1963

Culvert adequacy - Stream Crossing

Design Peak Flow = 130 cfs

Design for headwater no higher than culvert  
 $HW/D = 1$

Assume - Culvert is not mitered to slope of embankment

Culvert diameter required = 60 inches