

INTERAGENCY LEVEL COORDINATION COMMITTEE REVIEW FORM

LEVEE NAME <i>Site B Bank Protection</i>		RIVER <i>Skagit</i>	COUNTY <i>Skagit</i>	STATE <i>WA</i>
DATE SUBMITTED <i>1/18/96</i>	DSR No. <i>499645</i>	FEMA ID No. <i>057-91006</i>	CONGRESSIONAL DISTRICT	
TYPE OF AREA PROTECTED <i>Mt. Vernon, Residential</i>		MAP REFERENCE <i>River Bend Rd 1/4 mi. W of I 5, SW 1/4, SE 1/4, T34N, R4E</i>		
SPONSOR INFORMATION <i>N 48.44423 W 122.34285</i>				
NAME:	<i>Dike District #17</i>		PHONE:	<i>360-424-7600</i>
STREET:	<i>2332 Riverbend Rd 98273</i>			
CITY:	<i>Mt. Vernon</i>	STATE:	POINT OF CONTACT:	PHONE:
	<i>WA</i>	<i>Neil Hamburg</i>	<i>360-424-1591</i>	
TO BE COMPLETED BY THE REVIEWING AGENCIES (ANSWER ALL QUESTIONS)				
COE:	<input checked="" type="checkbox"/>	NRCS:		FEMA:
EPA:		USF&W:		STATE:
YES	NO	?	QUESTION	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	IS THIS PROJECT ELIGIBLE FOR ASSISTANCE FROM YOUR AGENCY?	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	IS THIS PROJECT A FLOOD CONTROL PROJECT?	
			IF NOT, IS IT A: <input type="checkbox"/> DRAINAGE STRUCTURE	
			<input checked="" type="checkbox"/> BANK PROTECTION PROJECT	
			OTHER: EXPLAIN _____	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	IS RESTORATION THE BEST AND MOST COST EFFECTIVE SOLUTION?	
			IF NOT, WHAT IS THE BEST ALTERNATIVE?	
			WHAT PUBLIC BENEFITS WILL RESULT FROM THE BEST SOLUTION?	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ARE THERE ANY ENVIROMENTAL PROBLEMS INVOLVED WITH THIS PROJECT?	
			IF YES, EXPLAIN:	
COMMENTS (USE ANOTHER SHEET IF NECESSARY)				
SIGNATURE	<i>[Signature]</i>		DATE	<i>3/11/96</i>

ENCL 3

EXHIBIT "A"

DATE: 02/28/96
TIME: 11:20AM

FEDERAL EMERGENCY MANAGEMENT AGENCY
DAMAGE SURVEY REPORT
PART I - PROJECT DESCRIPTION

DSR NO: 49965
SUPP TO DSR:

APPLICANT NAME - DIKE DISTRICT #17

COUNTY - SKAGIT

PROJECT TITLE - BANK PROTECTION
DAMAGED FACILITY - SITE B, RIPRAP ON BANK

INSPECTION DATE: 01/18/96
DISASTER NO: 1079
P.A.ID 057-91006

LOCATION - RIVER BEND RD, 1/10 MI WEST OF I-5, SW 1/4, SE
1/4, T34N, R4E, N48.44423, W122.34285

CATEGORY D
PROJECT NO: 499
% COMPLETE 0
WORK ACCOM BY: CONTRACT

DAMAGE DESCRIPTION AND SCOPE OF ELIGIBLE WORK:

100 LF OF RIPRAP BANK EROSION ON RIVERWARD BENCH ADJACENT TO LEVEE SECTION. RESLOPE BANK AND REPLACE RIPRAP LOST DUE TO SCOURING AND SLOUGHING DURING THE HIGH WATER FLOOD EVENT. REPLACE WITH 3' THICK BLANKET OF LIGHT-LOOSE PLACED RIPRAP, SLOPE PROTECTION WITH MINIMUM 6' X 12' TOE. FAILURE TO REPLACE BANK PROTECTION WILL ALLOW THE DETERIORATION OF THE RIVERWARD BENCH, EVENTUALLY JEOPARDIZING THE ADJACENT LEVEE SECTION.

RECOMMENDATION BY INSPECTOR	INSP NO.	AGENCY	ELIGIBLE	F.O
FEDERAL - LAZO, BEN	0616	COE	Y	
STATE - BLAIR, LINDA	0944	WSDOT		
LOCAL - HAMBURG, NEIL				

PART II - ESTIMATED COST OF PROPOSED WORK

ITEM	CODE	MATERIAL AND/OR DESCRIPTION	UNIT	QTY	UNIT PRICE	COST
1	4011	SLOPE GRADING	SY	500.00	\$.60	\$300
2	4081	SLOPE PROTECTION (PLACED)	CY	684.00	\$35.00	\$23,940
3	9999	DEBRIS TREES (BROKEN UPROOTED 4-6" DIA)	EA	50.00	\$10.00	\$500
					TOTAL:	\$24,740
					AMOUNT ELIGIBLE:	\$24,740
					75 % FEDERAL SHARE:	\$18,555

PART III - FLOOD PLAIN MANAGEMENT/HAZARD MITIGATION REVIEW

IN OR AFFECTS FLOOD- PLAIN OR WETLAND: F	FLOODPLAIN LOCATION: 3	% DAMAGE 1	DISASTER HISTORY: U	LAND USE U3 - D3	FPM RECOMMEN- DATION: 5
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PART IV - FOR FEMA USE ONLY

AMOUNT	ELIGIBLE	SPECIAL CONSIDERATIONS	FLOODPLAIN REV. NO.	WORKSITE
\$24,740	Y		1X31310525	

SUPP# DATE PAPPED

FEMA REVIEWER _____ DATE / /

MS 2/29/96
Similar to other dikes ASRS

DSR NO: 49965

FEDERAL EMERGENCY MANAGEMENT AGENCY DAMAGE SURVEY REPORT - DATA SHEET	1. DECLARATION NO. FEMA-1079-DR-WA	2. DSR NO. 49965	SUPP TO DSR NO.
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PART I - PROJECT DESCRIPTION

APPLICANT NAME/COUNTY DIKE DISTRICT #17 / SKAGIT		3. PA IDENTIFICATION NO. 057-91006
10. PROJECT TITLE BANK PROTECTION	4. INSPECTION DATE 18 JAN 96	5. PROJECT NO. 499
11. DAMAGED FACILITY SITE B RIP RAP ON BANK	6. % COMPLETE 0	7. WORK ACCOM BY C
12. FACILITY LOCATION RIVER BOUND RD / S.W. 1/4 SE 1/4 S7 / N 48.44423° 1/2 MI WEST OF I-5 / T34N, R4E / W 122.34265°	8. FINAL DSR YES <input type="checkbox"/>	9. CATEGORY D

13. DAMAGE DIMENSIONS/DESCRIPTION/SCOPE OF ELIGIBLE WORK
 DIMENSIONS: **100 LF OF RIP RAP BANK EROSION ADJACENT TO LEVEL SECTION**
 DESCRIPTION/SCOPE: **ON RIVERWARD BENCH
 RESLOPE BANK AND REPLACE RIP RAP LOST DUE TO SCOURING AND SLOUGHING DURING
 THE HIGH WATER FLOOD EVENT. REPLACE WITH 3 FT THICK BLANKET OF LIGHT-LOOSE
 PLACED RIP RAP SLOPE PROTECTION WITH MINIMUM 6 FT X 12 FT TOE. FAILURE TO
 REPLACE BANK PROTECTION WILL ALLOW THE DETERIORATION OF THE RIVERWARD BENCH
 EVENTUALLY JEOPARDIZING THE ADJACENT LEVEL SECTION.**

14. INSP NO. 0616	15. NAME OF FEDERAL INSPECTOR (Print) LARO, BENITO C., JR	16. AGENCY CODE CCE	RECOMMENDATION (Y) N	ATTACHMENTS 11
18. INSP NO. 0944	NAME OF STATE INSPECTOR (Print) BLAIR, LINDA	AGENCY CODE WSDOT	RECOMMENDATION (Y) N	ATTACHMENTS 0
19. NAME OF LOCAL REPRESENTATIVE (Print) FULL NAME HAMBURG, NEIL Douglas Hamburg			CONCUR (Y) N	ATTACHMENTS 0

PART II - ESTIMATED COST OF PROPOSED WORK

ITEM	CODE	MATERIAL AND/OR DESCRIPTION (a)	UNIT OF MEAS (b)	QUANTITY (c)	UNIT PRICE (d)	COST (e)
1	4011	SLOPE GRADING	SY	500	0.60	300.00
2	4061	SLOPE PROTECTION (PLACED)	CY	684	35.00	23940.00
3	9999	DEBRIS TREES (BROKEN UNROOTED 4-6" DIA)	EA	50	10.00	500.00
4						
5						
6						
7						
8						

20. EXISTING INSURANCE None	TYPE - F: <input type="checkbox"/> G: <input type="checkbox"/>	21. TOTAL \$ 24740.00
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PART III - FLOODPLAIN MANAGEMENT/HAZARD MITIGATION REVIEW

22. IN OR AFFECTS FLOOD-PLAIN OR WETLAND (F) W N	23. FLOODPLAIN LOC 1 2 (3) 4 5	24. % DAMAGE (1) 2 3 4	25. DISASTER HISTORY (U) N	26. LAND USE U1 2 (3) 4-D1 2 (3) 4	27. FPM REC 1 2 3 4 (5) 6 7
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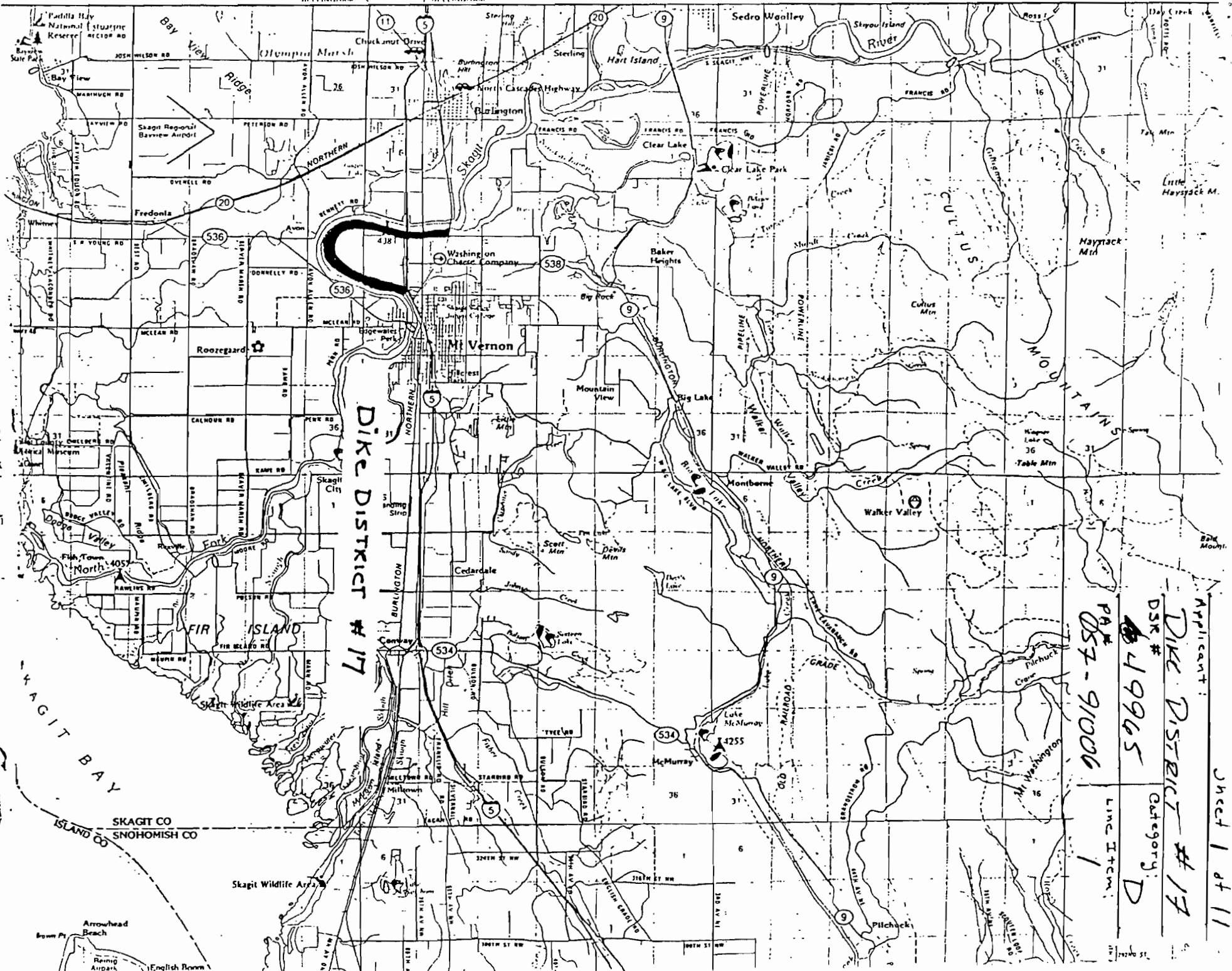
PART IV - FOR FEMA USE ONLY

28. AMOUNT ELIG \$	29. ELIGIBLE Y N S V	30. SPECIAL CONSIDERATIONS	31. FLOODPLAIN REVIEW NO. 1 X 3 1 3 1 0 5 2 5	32. WORKSITE NO.
33. INSURANCE COMMITMENT REQUIRED F - Building: <input type="checkbox"/> Content: <input type="checkbox"/>		G - Building: <input type="checkbox"/> Content: <input type="checkbox"/>		34. DURATION (Years) F - B - G - P - C - C:

35. COMMENTS/CHANGES

FIRST REVIEW (Signature) <i>[Signature]</i>	DATE 2-27-96	SECOND REVIEW (Signature)	DATE
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BILLINGHAM BILLINGHAM

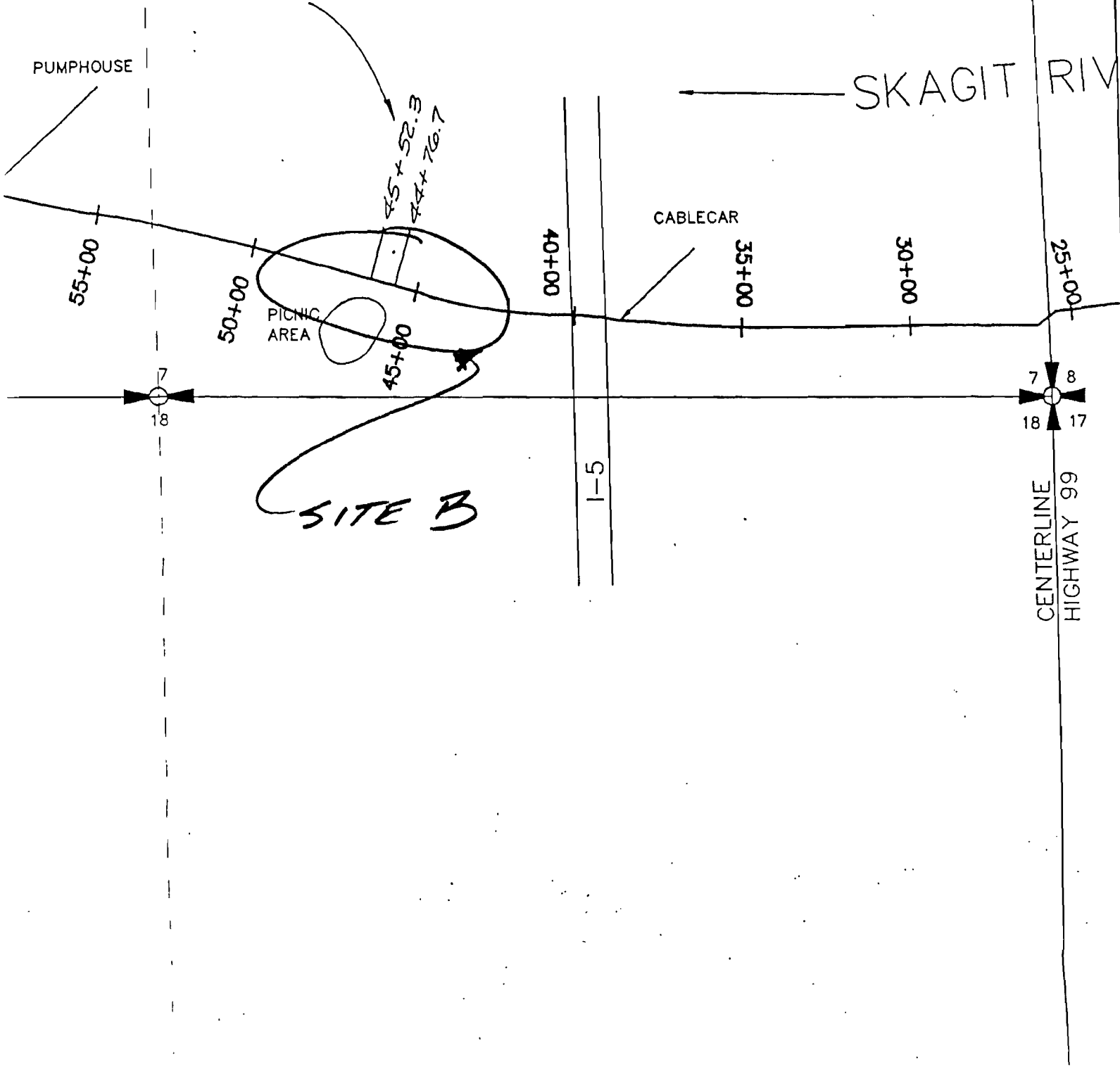


Dike District #17

Applicant: Dike District #17
 DSR # 49965 Category: D
 PA # 057-91006 Line Item: 1
 Sheet 1 of 11

Applicant:	
DIKE DISTRICT #17	
DSR #	Category:
49965	D
PA #	Line Item:
057-91006	1

AREA OF RIVER CROSS SECTIONS. SEE SHEET 12 DATED 1-9-96.



NARRATIVE, SKETCH, AND CALCULATION SHEET

APPLICANT: DIKE DISTRICT #17 / SKAGIT

DISASTER NO: FEMA 1079
DR WA

PA NO: 057-91006

DSR NO. 49965

CATEGORY: D

ITEM #1

RESHAPE EXISTING BANK TO A 1 1/2 H : 1 V
SLOPE IN PREPARATION FOR THE SLOPE
PROTECTION REPLACEMENT. CUT AND FILL
SHALL BE ESSENTIALLY EQUAL, AS PER
DETAIL, TO ELIMINATE ADDITIONAL COSTS
FOR FILL MATERIAL OR EXCAVATION REMOVAL.

USING THE SLOPE PROTECTION DETAIL AND A
SCALE OF 1" = 10' :

OVERALL REPAIR SECTION LENGTH = 100 LF
CROSS SECTION LENGTH (FROM DETAIL) = 45 ft

SLOPE GRADING = 100 LF x 45 ft = 4500 ft²
≈ 500 SY

USE COST CODE # 4011
SLOPE GRADING

NARRATIVE, SKETCH, AND CALCULATION SHEET

APPLICANT: DIKE DISTRICT #17 / SKAGIT

DISASTER NO: FEMA 1079
DR WA

PA NO: 057-91006

DSR NO. 49965

CATEGORY: D

ITEM #2

AS PER DETAIL, REPLACE LOST BANK PROTECTION WITH 3 FT THICK BLANKET OF LIGHT-LOOSE, PLACED, RIP RAP SLOPE PROTECTION. INCORPORATE A MINIMUM 6 FT X 12 FT TOE. TO SUPPORT SLOPE PROTECTION BLANKET, AND TO STABILIZE BANK.

USING THE SLOPE PROTECTION DETAIL AND A SCALE OF 1" = 10' :

OVERALL REPAIR SECTION LENGTH = 100 LF.

$$\text{BLANKET: } \left[(34)(3) + \frac{1}{2}(3)(7) \right] \times 100 = 11250 \text{ ft}^3 \\ \approx 417 \text{ CY}$$

$$\text{TOE: } (6)(12) \times 100 = 7200 \text{ ft}^3 \\ \approx 267 \text{ CY}$$

$$\text{TOTAL } \approx 417 + 267 = \underline{\underline{684 \text{ CY}}}$$

USE COST CODE # 4081

SLOPE PROTECTION (PLACED)

DAMAGE SURVEY CONTINUATION SHEET

Applicant

Dike District 17

DSR No.

49965

Category

D

Sheet 6 of 11

PA 057-91006

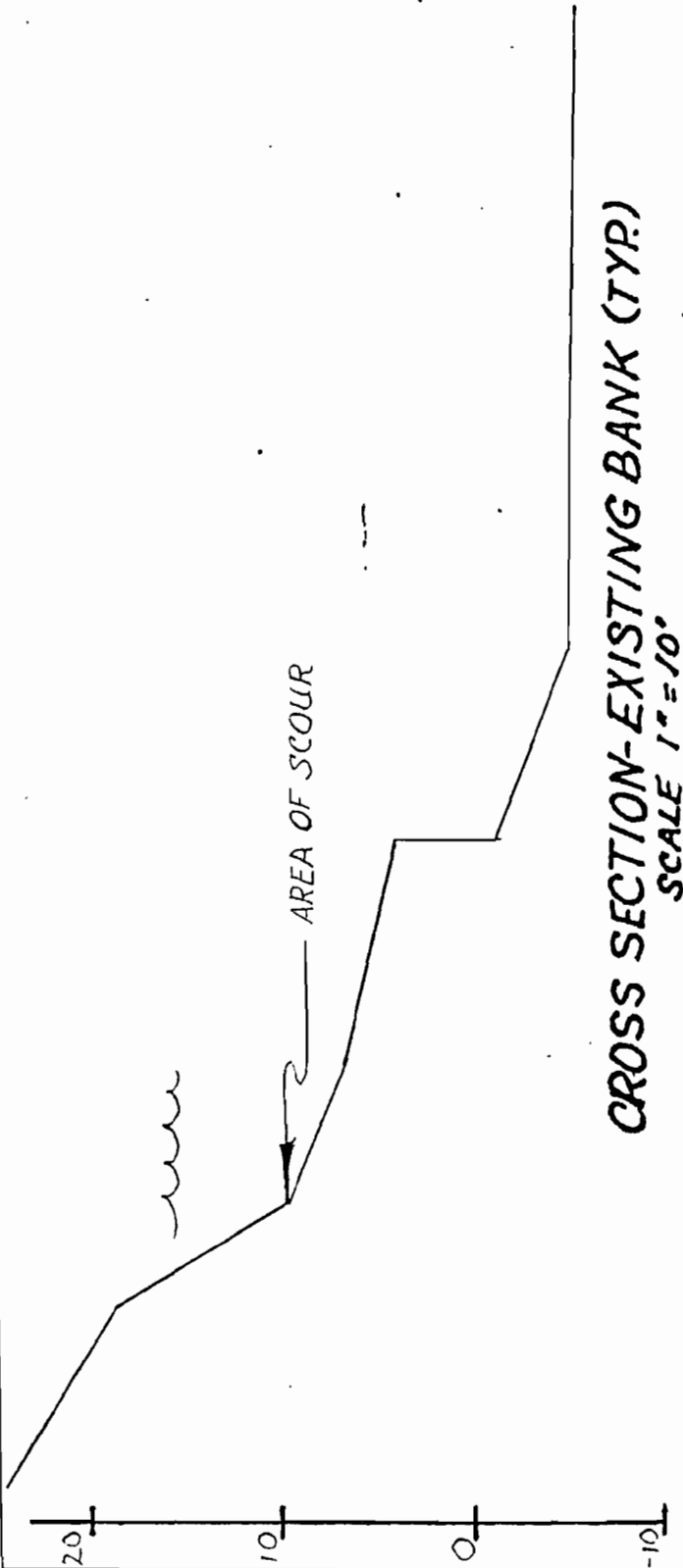
Photos, Sketches and/or Narrative

AREA B

CROSS SECTION-EXISTING BANK (TYP.)

SCALE 1" = 10'

AREA OF SCOUR

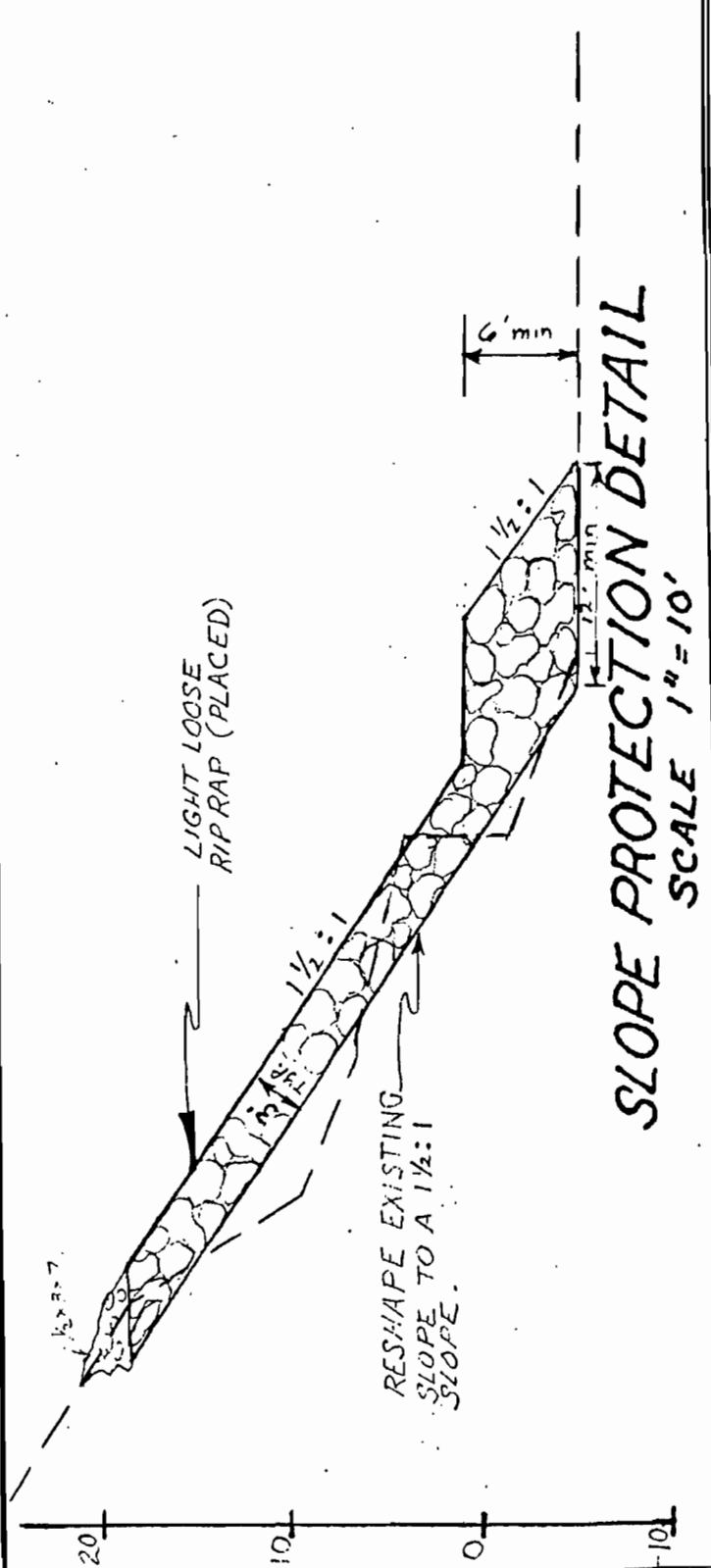


SLOPE PROTECTION DETAIL

SCALE 1" = 10'

LIGHT LOOSE RIP RAP (PLACED)

RESHAPE EXISTING SLOPE TO A 1 1/2:1 SLOPE.



NARRATIVE, SKETCH, AND CALCULATION SHEET

APPLICANT: DIKE DISTRICT #17 / SKAGIT

DISASTER NO: FEMA 1079
DR WA

PA NO: 057-91006

DSR NO. 49965

CATEGORY: D

ITEM #3

OVER THE YEARS, TREES (4-6" DIAMETER) HAVE GROWN ALONG THE BANK, UP THROUGH THE EXISTING SLOPE PROTECTION. THESE TREES MUST BE REMOVED TO ALLOW FOR RESHAPING OF THE BANK AND REPLACEMENT OF THE RIP RAP SLOPE PROTECTION. THE EXISTING TREES HAVE SHALLOW FOOT BALLS, CAN BE REMOVED DURING THE SLOPE GRADING PROCESS, AND STOCKPILED FOR DISPOSAL. BASED ON FEMA COST CODES FOR BROKEN, UPROOTED TREE DEBRIS REMOVAL (#1030-1032), 4-6" DIAMETER TREES CAN BE DISPOSED OF FOR APPROXIMATELY \$10.00 EACH

OVERALL REPAIR SECTION LENGTH = 100 LF
AVG 5 TREES (4-6" DIAMETER) PER 10 LF

$$\# \text{ TREES} = (100 \text{ LF}) \left(\frac{5 \text{ TREES}}{10 \text{ LF}} \right) = 50 \text{ TREES}$$

TO BE REMOVED

USE COST CODE #9999

DEBRIS TREES (BROKEN UPROOTED 4-6" DIAMETER)

DAMAGE SURVEY CONTINUATION SHEET

Site # B

APPLICANT

DSR NO.

CATEGORY

SHEET

OF

Dike District #17

49965

D

8 11

PA 057-91006

Photos, Sketches and/or Narrative

Line Item #1

Location: Site B

Date: 1/18/96

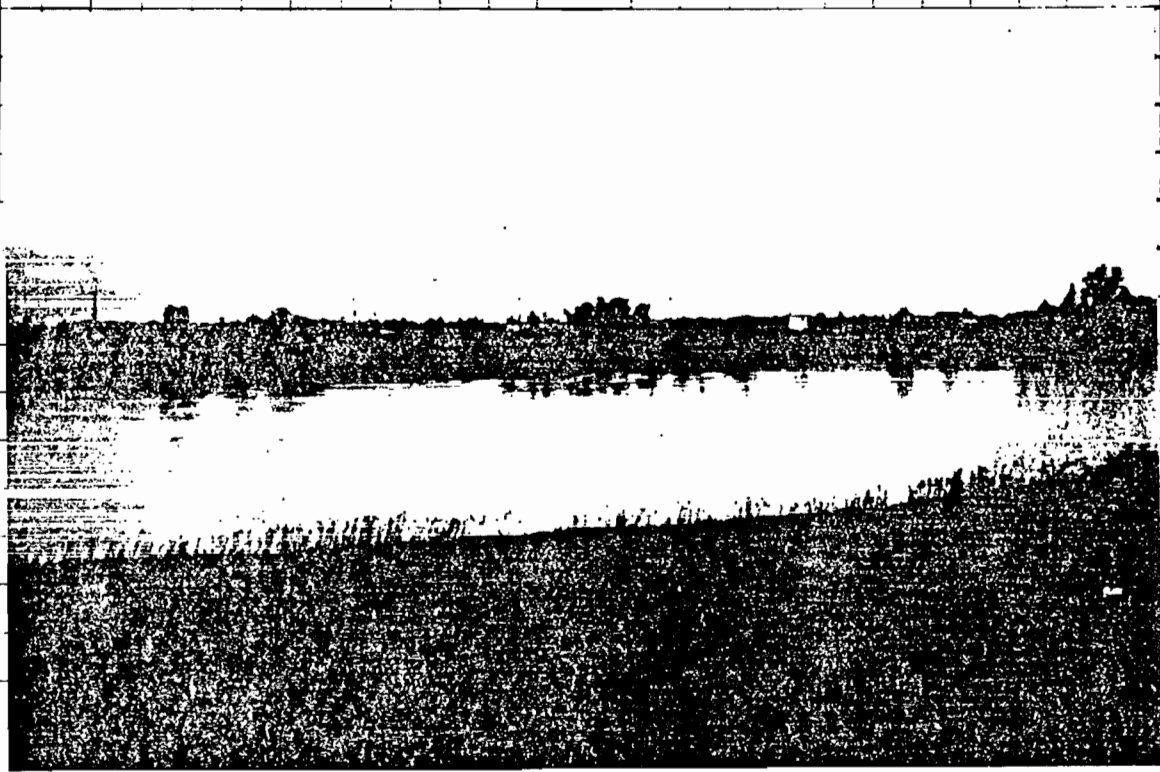


Photo 1 of 2

View from across river looking at scour on river bank.

Scour was caused by high water flood activity. Riprap needs to be replaced on river bank to stop sloughing and scouring.

DAMAGE SURVEY CONTINUATION SHEET

Site B

APPLICANT

Dike District #17

DSR NO.

49965

CATEGORY

D

SHEET

9

OF

11

PA 057-91006

Photos, Sketches and/or Narrative

Line Item #1

Location: Site B

Date: 1/18/96



Photo 2 of 2

Closeup of scour on river bank caused by high water during flood event.

PRELIMINARY ENVIRONMENTAL REVIEW (P.A.)

PROJECT NAME: BANK PROTECTION P.A.# 057-91006 DR# ¹⁰⁷⁹ ~~1008~~
 DSR#: 49965 WORKSITE# _____

PART A - ENVIRONMENTAL CONCERNS/EXTRAORDINARY CIRCUMSTANCES

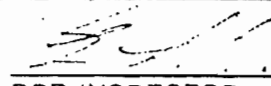
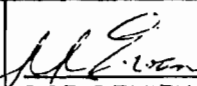
CHECK YES OR NO FOR EACH QUESTION BELOW, INDICATE A "MAYBE" RESPONSE BY CHECKING BOTH YES OR NO. EXPLAIN EACH YES OR MAYBE RESPONSE IN COMMENT SPACE BELOW.

PROPOSED PROJECT/ACTION INVOLVES:		YES	NO
1.	TOXIC OR ANY OTHER HAZARDOUS MATERIALS		X
2.	SPECIAL STATUS LAND (WILDERNESS/ROADLESS AREA, ETC)		X
3.	UNIQUE GEOLOGIC OR PHYSICAL FEATURES, OR UNSTABLE SOILS OR STEEP SLOPES	X	
4.	PROJECT MAY BE CONTROVERSIAL OR AFFECT MANY PEOPLE		X
5.	ENDANGERED/THREATENED SPECIES OR HABITAT		X
6.	EFFECT TO FLOODPLAIN (CHECK MAP) OR WETLAND		X
7.	BUILDING OVER 45 YEARS OLD OR IN HISTORIC DISTRICT		X
8.	ARCHEOLOGICAL RESOURCES, RELICS, OR ANY HUMAN REMAINS		X
9.	NATIVE AMERICAN LANDS/TREATY RIGHTS		X
10.	IMPACT TO OTHER IMPORTANT RESOURCES NOT LISTED		X
11.	ANY OTHER CONCERNS ABOUT PROJECT		X

COMMENTS: HIGH WATER DURING FLOOD CAUSED UNSTABLE SLOPE ON RIP RAP BANK ADJACENT TO LEVEL CAUSING FAILURE

PART B - CATEGORICAL EXCLUSIONS - CHECK BOX, IF ANY, WHICH APPLY

- EMERGENCY ASSISTANCE (SECTIONS 403, 502 OF THE STAFFORD ACT) REDUCTION OF IMMEDIATE THREAT TO LIFE, PROPERTY, PUBLIC HEALTH OR SAFETY
- EMERGENCY DEBRIS REMOVAL (SECTION 407) EMERGENCY DISPOSAL OR REMOVAL OF DEBRIS
- DISASTER REPAIR (SECTION 406) RESTORE FACILITY SUBSTANTIALLY AS IT EXISTED PRIOR TO DISASTER. INCLUDES MODIFICATION FOR CURRENT CODES AND STANDARDS. ALTERNATE PROJECTS MAY REQUIRE FURTHER ENVIRONMENTAL REVIEW

 DSR INSPECTOR	<u>30 Jan 96</u> DATE	 DSR REVIEWER	<u>2-27-96</u> DATE	_____ PAO OR REO	_____ DATE
<u>BEN LAZRUS</u>		[] C	[] E	[] C	[] E

FEDERAL EMERGENCY MANAGEMENT AGENCY
 RECONNAISSANCE/REVIEW REPORT FOR FLOODPLAIN MANAGEMENT

PA 057-91086

(FOR PROJECTS OVER \$ 5,000 ONLY)

A	B	1	C	D	E	2	6	7	8
1	X	3	1	3					

APPLICANT DIKE DISTRICT #17 CATEGORY D
 DSR NUMBER 49965

A
1. Facility
2. Bldg/Structure
3. Non-Emergency Debris Disposal

Is the project in a Wetland (Swamp, marsh, etc.)? Yes No

B
1. Yes
2. No

Is the project in one of the following zones on a FIA/FEMA map? If it is, give map no.
 _____ If an FIA/FEMA map is unavailable, please estimate.

STEP 1
1
2
3
4
5

(CHECK ONLY ONE)

- (1) _____ 100-year Floodplain
- (2) _____ 500-year Floodplain (CRITICAL ACTION)
- (3) Floodway
- (4) _____ Coastal High Hazard Area
- (5) _____ Check if project is outside floodplain but supports development in floodplain

IF PROJECT IS NEITHER IN NOR AFFECTS THE FLOODPLAIN OR WETLAND, CHECK "NO" IN BLOCK 8A OF THE DSR AND DO NOT FILL OUT THIS FORM.

Total DSR estimated cost of restoration. (Check one)

- (1) 0-49% of replacement cost
- (2) _____ 50-99% of replacement cost
- (3) _____ 100% of replacement cost
- (4) _____ Not applicable (Example - Debris Disposal)

C
1
2
3
4

Has this project been structurally damaged by flooding before? _____ yes _____ no. If yes, when _____
 Has a flood insurance payment(s) ever been received? (BUILDINGS ONLY)
 _____ yes _____ no.

D
Declared Disaster/ Insurance Payment?
1. Yes
2. No
3. Don't know or N/A

Mark type of land use upstream and downstream.

- (a) Pasture/Cropland (Sparse development)
- (b) Forest/Desert (Undeveloped)
- (c) Urban (Developed)
- (d) Wetland (Marsh or Sloughs)

	UPSTREAM	DOWNSTREAM
	_____	_____
	_____	_____
	_____	_____
	_____	_____

Recommendation (Check one)

- 1. Relocate outside base floodplain _____
- 2. Restore facility/structure with mitigation _____
- 3. Transfer function to another facility _____
- 4. Reduce scope of work or cost _____
- 5. Restore facility/structure without mitigation _____
- 6. No Action (Disapprove project) _____
- 7. More Information Required (Explain) _____

NOTES: For each recommendation except 5 and 6, complete and attach a Hazard Mitigation Proposal showing the estimated work and costs. Submit signed reports with DSR.

Federal Inspector _____ Date 30 Jan 96