CEMVN-OD-R

MEMORANDUM FOR Commander, U.S. Army Engineer Division, Mississippi Valley, ATTN: CEMVD-ET-CE

SUBJECT: Annual Inspection of Completed Works Program

In accordance with ER 1150-2-301, ER 1130-2-339, and DIVR 1130-2-304, the following report (Eng Form 4390-R) is submitted herewith for maintenance performance by local interests for all features originally authorized under the Mississippi River and Tributaries Project and under Construction General. Included also are inspection reports for New Orleans District projects.

WILLIAM L. CONNER Colonel, EN Commanding

BREERWOOD OD-R GUILLOT OD OFC

-78

Keller/2344

- 2 Encls
  1. Rept, MR&T Levees
  and Small Flood
  Control Projects
- 2. Rept, Completed Eng Form 4390-R

DEC | 5 |998

1998 Annual Inspection for Maintenance of Completed MR&T Flood Control Works in the New Orleans District

1. The 1998 inspections of FCMR&T levees, floodwalls, and drainage structures operated and maintained by local interests were conducted during the period 18 September through 19 November 1998.

2. All inspections were conducted by the District Commander and/or his Deputy, appropriate members of Operations Division, Engineering Division, Construction Division, Programs and Project Management, the Louisiana Department of Transportation and Development (LA DOTD), and Levee Board Commissioners and their staff.

3. Comments on the condition of levees, of maintenance performed by local interests during the year, and our ratings are as follows:

## a. EAST JEFFERSON LEVEE DISTRICT

This district is responsible for maintaining 11.6 miles of levee on the east bank of the Mississippi River and 17.5 miles of hurricane protection levees and floodwalls along and adjacent to Lake Pontchartrain, within Jefferson Parish.

The river levee, hurricane protection levees, and floodwalls were inspected on October 9, 1998. The only remaining river levee work in this district is 0.8 miles in the Jefferson Heights area and it is scheduled for FY 2000. The deficiencies are minor (1 to 2 feet) and are considered low priority since they are within freeboard. In FY 1998, we initiated land side drainage (runoff control) projects on four of the five lakefront reaches and a levee enlargement project in Reach 3. In FY 1999, we will initiate the Reach 5 land side runoff project, fronting protection at Pump Station No. 6, fronting protection at Pump Stations nos. 2 and 3, and replacement of the Hammond Highway Bridge at the 17th St. Canal with a flood proofed bridge. The levees and floodwalls were exceptionally well maintained. An OUTSTANDING rating is assigned.

## b. ORLEANS LEVEE DISTRICT

This district is responsible for maintaining 125.9 miles of levees and floodwalls in Orleans Parish; 13.3 miles on the east bank of the Mississippi River and 13.9 miles on the west bank, and 98.7 miles along the shore of Lake Pontchartrain and canals connected thereto. The mainline river levees and floodwalls were inspected on November 10, 1998, and the hurricane protection levees were inspected on May 29, 1998. Both flood protection systems were in exceptional condition. There are still 2.3 miles of flood protection work remaining in this district. The remaining work is on the east bank and consists of the Carrollton levee (1.9 miles) and the New Orleans District floodwall Phase I (0.4 miles). These items are considered low priority and are scheduled at the end of the project. An OUTSTANDING rating is assigned.

# c. RED RIVER, ATCHAFALAYA and BAYOU BOEUF LEVEE DISTRICT

The levee system within MVN consists of the Mansura Hills to Hamburg levee (20.3 miles), Bayou des Glaises fuse plug levee (8.1 miles), Atchafalaya River levee - right descending bank (43.0 miles) and a portion of the west Atchafalaya Basin protection levee (34 miles).

The inspection was conducted on November 18, 1998. The levees, cattle guards, and fence lines were all well maintained. An OUTSTANDING rating is assigned.

#### d. FIFTH LOUISIANA LEVEE DISTRICT

The levee system within MVN consists only of the right descending Mississippi River levee (16.8 miles) between Black Hawk, LA, and the Old River lock. They are also responsible for 338 miles of levees in MVK.

The inspection was conducted on November 19, 1998, and the levee was found to be well maintained. There is one remaining contract for 3.5 miles of levee construction in this levee district. The award of this last contract has been delayed to FY03 due to funding constraints, relatively minor grade deficiency, and the uncertainty of the availability of borrow material. Levee grade deficiencies within this contract area are minor (2.5 feet) and are considered low priority since they are within the allowable freeboard. If the borrow issue is resolved soon, funds could probably be made available to advance the award since the contract cost estimate is relatively minor. An OUTSTANDING rating is assigned.

## e. WEST JEFFERSON LEVEE DISTRICT

This district is responsible for maintaining 20.2 miles of levee on the west bank of the Mississippi River and 40 miles of back levees, which are being upgraded under the West Bank Hurricane Protection Project, in Jefferson Parish.

The mainline river levee was inspected on November 6, 1998. The river levee and floodwall segments were in excellent condition. All construction work on the Mississippi River in this district is complete. Although the hurricane protection levees are not totally complete, we will conduct an interim joint inspection of the system in the spring of 1999 prior to the hurricane season. An OUTSTANDING rating is assigned.

## f. LAFOURCHE BASIN LEVEE DISTRICT

This district is responsible for maintaining 61.7 miles of levee on the west bank of the Mississippi River between Donaldsonville, LA, and the Jefferson-St. Charles Parish line.

The levee was inspected on October 15, 1998, and was found to be in excellent condition. All work in this district has been completed. An OUTSTANDING rating is assigned.

## g. ATCHAFALAYA BASIN LEVEE DISTRICT

The levee system consists of the following reaches of river and floodway levees:

Levee along the south and west banks of lower Old River and the right descending Mississippi River levees from Barbre Landing in Pointe Coupee Parish to Bayou Lafourche at Donaldsonville, Ascension Parish (length is 119 miles, including 1.2 miles of spur dikes and the 3,906-foot length of the Morganza control structure) the upper Morganza floodway levee (length is 12.0 miles including 3.0 miles which are a part of the mainline levee at Morganza control structure); the lower Morganza floodway levee and the east Atchafalaya Basin protection levee extending from the west Mississippi River levee at Morganza, along the east side of the Atchafalaya Basin to a point approximately 6 miles south of Morgan City, in St. Mary Parish (length is 92.6 miles, of which 5.8 miles are maintained by the City of Morgan City and St. Mary Parish); the west Atchafalaya Basin protection levee from Bayou Courtableau in St. Landry Parish along the west side of the Atchafalaya Basin to the Gulf Intracoastal Waterway below

Berwick, in St. Mary Parish (length is 92.6 miles, of which 4.9 miles below the lower Atchafalaya River are maintained by the Town of Berwick and St. Mary Parish); the left descending Atchafalaya River levee from Barbre Landing in Pointe Coupee Parish to a point about 1.5 miles above the head of Whiskey Bay Pilot Channel in St. Martin Parish (length is 51.1 miles); the right descending Atchafalaya River levee from Bayou Courtableau in St. Landry Parish to a point below Butte Larose settlement in St. Martin Parish (length is 18.0 miles); total length of levees in the district is 387.0 miles.

The levee inspection was conducted on October 19 and 20, 1998. There were no ongoing Mississippi River levee contracts, however, there are three contracts scheduled to be awarded in FY00. They are Alhambra to Hohen Solms, 1.8 miles; Hohen Solms to Modeste, 1.8 miles; and Reveille to Point Pleasant, 2.6 miles. There was one ongoing contract along the east Atchafalaya Basin protection levee and one ongoing contract along the west Atchafalaya Basin protection levee (WABPL). The levees and floodwalls were well maintained. An OUTSTANDING rating is assigned.

## h. MORGAN CITY

The protection system north of the Southern Pacific Railroad is known as "Morgan City Front", which consists of 213 feet of earthern levee, 1.3 miles of concrete floodwall, a pumping station and 1600 feet of storm drainage facilities; south of the railroad is known as "Tiger Island", which consists of 1.6 miles of levee, 2,000 feet of concrete floodwall, a pumping station, and 2,500 feet of storm drainage facilities. Morgan City's flood protection and maintenance responsibilities also extends north beyond the "Morgan City Front" area to include the east Atchafalaya Basin protection levee up to the Morgan City corporate limits, which correlates with approximate east Atchafalaya Basin protection levee station 2276+30.3.

The inspection was conducted on October 20, 1998. There were no significant maintenance deficiencies noted. A SATISFACTORY rating is assigned.

## i. TOWN OF BERWICK

The protection system consists of 1.6 miles of levee, 0.9 mile of concrete floodwall, and a gated drainage structure to provide protection for a 32-inch storm sewer passing through the floodwall.

The inspection was conducted on October 20, 1998. There were no significant maintenance deficiencies noted. A SATISFACTORY rating is assigned.

#### j. ST. MARY PARISH

The protection system consists of 63 miles of levees, 11 drainage pumping stations, drainage structures, and numerous culverts, making up the Levees West of Berwick, LA, protection system.

The inspection was conducted on October 21, 1998. There were two ongoing levee enlargement contracts (Wax Lake West "B" and Teche Ridge Centerville). In FY 1999, we are scheduled to award two levee enlargement projects (Teche Ridge Franklin and Wax Lake West "A"). There were no significant maintenance deficiencies noted. A SATISFACTORY rating is assigned.

#### k. LAKE BORGNE BASIN LEVEE DISTRICT

This district is responsible for maintaining 11.6 miles of levee on the east bank of the Mississippi River, 43 miles of hurricane protection levee along and adjacent to the MRGO, 8 pumping stations, and 19 internal drainage canals in St. Bernard Parish.

The mainline river levee was inspected on October 30, 1998. The levee and sections of floodwall were well maintained. All construction work on the Mississippi River levee in this district has been completed for years. In the spring of 1999 prior to the hurricane season, we will start conducting an annual joint inspection of the hurricane protection levees, since the majority of the levee system is now up to design grade. The Bayou Dupre Control Structure is scheduled to be dewatered and completely refurbished in February 1999. We will be inspecting and monitoring the structure during its refurbishment. An OUTSTANDING rating is assigned.

## 1. GRAND PRAIRIE LEVEE DISTRICT

This district is one of three under the direction of Plaquemines Parish Government and is responsible for maintaining 37.4 miles of levee on the east bank of the Mississippi River between the St. Bernard-Plaquemines Parish line and the Bohemia Spillway, and 33.4 miles of hurricane protection levee behind the mainline river levee.

The levee was inspected on October 30, 1998. The levee was well maintained and in excellent condition. All construction work along the Mississippi River levee in this district in now complete. Although the hurricane protection levees are not totally complete, we will conduct an interim joint inspection of the system in the spring of 1999 prior to the hurricane season. An OUTSTANDING rating is assigned.

#### m. PONTCHARTRAIN LEVEE DISTRICT

This district is responsible for maintaining 111 miles of levee on the east bank of the Mississippi River from a point just below Baton Rouge to the St. Charles-Jefferson Parish line.

The levee was inspected on November 2, 1998. The levee, cattle guards, and fences were well maintained and no significant deficiencies were noted. There are two ongoing contracts for levee construction within the levee district. They are Romeville-Remy, 5.6 miles and Remy-Garyville, 5.2 miles. The Marchand-Darrow project consisting of 1.7 miles of construction work was recently completed in November 1998. The only remaining MR&T levee construction work within the levee district is the Carville-Marchand contract. It consists of 1.2 miles of levee construction and is scheduled to be awarded in October 1999. An OUTSTANDING rating is assigned.

#### n. METROPOLITAN COUNCIL OF BATON ROUGE

This Department of Public Works is responsible for maintaining only 2.1 miles of levee on the east bank of the Mississippi River at Baton Rouge.

The levee was inspected on November 2, 1998, and was observed to be in excellent condition. There was no ongoing levee construction work in the area. The last item of work is the Baton Rouge Front Phase 2 (0.2 mile) which is scheduled for October 1999. A soil nailing contract was completed 1997 as an attempt to arrest the bank movement in this upstream area before proceeding with further levee construction. The results of the soil nailing will be monitored for several years before proceeding with any further levee construction work in this area. The area just downstream of where the soil nailing contract ended has continued to experience foundations problems. As a result, the concrete slope pavement along this reach of levee has developed some serious cracks. The area is being evaluated to determine what remedial action is required. Inclinometers have been installed at the site to monitor the movement in this area. It is our contention that this area will also require soil nailing in order to stabilize the movement. An OUTSTANDING rating is assigned.

#### O. PLAQUEMINES PARISH WEST BANK LEVEE DISTRICT

This district is another of three levee districts under the direction of the Plaquemines Parish Government and is responsible for maintaining approximately 37.4 miles of levee on the west bank of the Mississippi River from the Orleans-Plaquemines Parish line to approximate river mile 44.0 AHP at Point Michel.

The inspection was conducted on November 13, 1998, and the levee was well maintained. There was no ongoing levee enlargement work within the district, however, there is one last contract for 7.2 miles of levee enlargement work (second lift) scheduled to be awarded in the beginning of FY 99. An OUTSTANDING rating is assigned.

## p. BURAS LEVEE DISTRICT

This district is also under the direction of the Plaquemines Parish Government and is responsible for maintaining 34.1 miles of levee on the west bank of the Mississippi River from Point Michel to Venice, LA, and 34.1 miles of hurricane protection levees behind the river levee.

The river levee was inspected on November 13, 1998, and it was well maintained. All construction work on the Mississippi River levee is now complete. Although the hurricane protection levees are not yet complete, we will conduct an interim joint inspection of the system in the spring of 1999 prior to the hurricane season. An OUTSTANDING rating is assigned.

## q. SOUTH LAFOURCHE LEVEE DISTRICT

This district is responsible for maintaining the Larose to Golden Meadow Hurricane Protection Project which consists of 40 miles of hurricane protection levee, six pumping stations, and two floodgates.

Since the hurricane protection levees are still in the early stages of construction, a formal inspection will not be conducted until completed reaches of levee have been "turned over" to the levee district. However, we will conduct an interim joint inspection of the system in the spring of 1999 prior to the hurricane season. Although the levees are in the early stages of construction they are well maintained, including the Larose and Golden Meadow floodgates. A periodic inspection of the Larose floodgate was conducted in March 1998, and the structure was found to be in excellent condition. An OUTSTANDING rating is assigned.

## r. Town of Grand Isle

The beach and sand dune features of the Grand Isle and Vicinity Hurricane Protection project were inspected throughout the year, and deficiencies resulting from lack of maintenance by the Town of Grand Isle still exist. The Town of Grand Isle and the Louisiana Department of Transportation and Development (LA DOTD), a co-sponsor of the project, have been advised, by letters and meetings of our concern for the lack of maintenance and the need for corrective action. We are extremely concerned about their inability to appropriate funds to correct maintenance deficiencies (now and in the future), and therefore, no additional Federal funding will be committed for maintenance or for emergency repairs until funding for maintenance of the project is assured by the local sponsors. Funding was approved by the legislature during the last session; however, it was given a very low level of priority. LA DOTD will try again in the next legislative session to have the funding moved to a higher level of priority. However, in the interim LA DOTD has been granted approval to proceed working on the necessary engineering and design repair plans and to prepare the plans and specifications.

It is now estimated that it will cost approximately \$5.5 million to restore the project, of which Grand Isle and the Louisiana Department of Transportation and Development are responsible for 88 percent of the total cost. Prior to the storms of 1998, it has been estimated that out of the \$5.5 million, Tropical storm Josephine and Hurricane Danny are responsible for approximately \$755,000 in damages. As a result of the storms of 1998, surveys will be performed to determine how much damage is attributable to these storms. The previous estimate of \$755,000 will be adjusted to include these damages. A request for PL-99 funds will then be prepared and forwarded to HQUSACE for approval.

## s. SMALL FLOOD CONTROL PROJECTS, NEW ORLEANS AREA

In accordance with ER 1130-2-530 dated 30 October 1996, Chapter 3, Section 3b., small flood control projects authorized under Section 2 of the Flood Control Act of 1937 or Section 5 of the Flood Control Act of 1948 need not be inspected unless they are being considered for emergency rehabilitation under PL 84-99. The small flood control projects that we have inspected and reported on annually in the past are not under PL84-99 consideration, and therefore, were not inspected this year.

Historically, we have not had any problems with these projects, and unless we receive complaints or any reports of problems they will not be inspected. We will continue to monitor the semi-annual reports that the local sponsors are required to submit, and will investigate any problems that are reported. The semi-annual inspection reports that our office has received in the past from the local interests have indicated that the projects are in satisfactory condition.

-9-

ENG 1 JUL 73 4390-R TOWN OF LOCAL PROTECTION PROJECTS (Local Maintenance Responsibility) CONSIDERED DEFICIENT AS OF DECEMBER 19 98 GRAND PROJECT REPLACES ENG FORM 4390-R(Test) WHICH IS OBSOLETE ISLE READINESS FOR ٢ 5 LOCAL MAINTENANCE PROGRAM N FLOODWALLS -AND GRADE ٢ DEFICIENT IN MAINTENANCE LEVEE CROWN ROADWAYS & GATES v AREAS 0 DRAINAGE STRUCTURES PUMPING 00 9 PONDING AREAS CHANNELS & PF 10 FLOODWAYS CLOSURE STRUCTURES = ENCROACHMENT 12 & TRESPASS CONTROL OF 3 WILD GROWTH BURROWING 14 ANIMALS 15 GRAZING BEACH 16 MAINTENANCE 7 18 LOCAL INTEREST NOTI-FIED OF EXISTING DEFN. ٢ 19 RESTORING PROJECT TO SATISFACTORY CONDITION (\$000's) ESTIMATED COST 20 S ANNUAL MAINTENANCE (\$000's) 500 1 AND LADOTD THE AND LADOTD TH ADVISED BOTHES ADVISED BOTHES ADVISED BOTHES AND MEETING LACK OF MAINT RESPONDED THE SUBPROVISECTION THE INSTECTION SINCE LAST YER SINCE LAST YER AND IT IS NOW APPROXIMATED THE FULLY RESEA PROSECTION APPROXIMATED STIMATED COVLATES ATTAC TROPICAL STOR TO DAMAGE D REPORTS CONTROL. REMARKS 100 いまれまするない 4 11

125

	(DAEN-CHO-40)		REMARKS	22	THE TOWN OF GO	LADOTD		ADVISED BOTH BY	Ē	RESPONSIBILITIES	SUBPARABLAPH T	THE INSPECTION		SINCE LAST YER	YERY MINDE NAIN	A TUN AN BURN A	13		APPROXIMATELY \$	TO FULLY RESTORE	H S. S. M.L. P. S.	ESTIMATED TH	APPROX IM ATCLA	COULD BE ATTA	TO DAMAGE CAN	TROPICAL STDR	TOSE PHINE AND	CHNRY - I HIS F	Sel		
		ATED	<b>BONANBTNIAM</b>	21	5,500	Π	T	Ι						T	T			Í						1							1
		ESTIM. COS	TO SATISFACTORY	20			T	T					1	T	t	T			1	T	T			1	1	+	t	t			1
		TI-	FIED OF EXISTING DE	19	5			T	T				1	T	T	T	Π	1	1	t	t		1	1	†	t	t	t	H	Η	+
			×	18			Ι														T			1	1	T	T	T	H		†
			SONNAININW				1																								
		H2A38 32MAM3TNÍAM		16	7		+	1				4		$\downarrow$					$\downarrow$	$\downarrow$			$\downarrow$	$\downarrow$							
		NP		15			$\downarrow$							$\downarrow$				$\downarrow$		$\downarrow$											
Image: Construct of the state of the s	1	ROL	1 State of the	14			1		Ц		4	4		$\perp$				4		$\downarrow$			$\downarrow$	$\downarrow$	$\downarrow$	$\downarrow$			Ц		
Image: Construct of the state of the s		CONT		13			$\downarrow$				4	_	4	1				$\downarrow$	-	╞			$\downarrow$	$\downarrow$	$\downarrow$	$\downarrow$	$\downarrow$				1
		00	ENCROACHMENT	12	1		+				4	4	+	$\downarrow$	-			_	$\downarrow$	_	Ц		4	$\downarrow$	$\downarrow$						
			CLOSURE	=		-	+	_	Ц		4	4	4	1	L			4	$\downarrow$		Ц		-	4	1	1					4
				10				L			$\downarrow$		1	$\downarrow$				_	$\downarrow$						1				Ц		
ОССТАНИВНИЕЗСТОВ         ОССТАНИВНИЕЗСТОВ           С         <		ANCI		6									$\downarrow$	1				$\downarrow$	$\downarrow$				$\downarrow$			$\downarrow$			Ц		
ОССТАНИВНИЕЗСТОВ         ОССТАНИВНИЕЗСТОВ           С         <		NTEN	римрис	80			_						$\downarrow$	1																	
	600-			2		_	$\downarrow$	L			4	$\downarrow$	$\downarrow$	$\downarrow$	_				$\downarrow$				$\downarrow$	1	$\downarrow$	$\downarrow$	$\downarrow$				
				9					Ц				1													$\perp$					
	EK	ICIEI	<b>LEVEE CROWN</b>	2			$\perp$	L				4	+										_								
	-			4	7								$\downarrow$								Ц		$\downarrow$								
			FLOODWALLS	3																	Ц		$\downarrow$						Ц		
			LOCAL MAINTENAN	2	7		_		Ц		_	_	$\downarrow$	$\downarrow$				$\downarrow$	$\downarrow$				$\downarrow$		$\downarrow$	$\downarrow$	1		Ц		
				-	>		$\downarrow$				$\downarrow$	$\downarrow$	4	$\downarrow$				$\downarrow$	-		Ц		4	1	1	1					
PROJECT			PROJECT		RAND ISL																										