DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P. O. BOX 60267
NEW ORLEANS, LOUISIANA 701600267

REPLY TO
ATTENTION OF

CEMVN-OD-W

MEMORANDUM FOR Commander, Mississippi Valley Division,
ATTN: CEMVD-TD

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.

/s/
Rowan

PETER J. ROWAN
Colonel, EN
Commanding

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

COLLETTI
OD-T

BK
KELLER
OD-W

BREERWOOD
OD

EXEC OFC

ORIGINAL MEMO WAS FORWARDED TO CEMVD-TD ON 8 DEC 03
BK

2003 Annual Inspection for Maintenance of Completed Flood Control Works in the New Orleans District

1. The 2003 inspections of levees, floodwalls, and drainage structures operated and maintained by local interests were conducted during the period 22 May through 14 November 2003.

2. All inspections were conducted by the District Commander, his Deputy or his authorized representative, appropriate members of Operations Division, Engineering Division, Construction Division, Planning, Programs, and Project Management Division, 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. **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 & Vicinity Hurricane Protection Project, in Jefferson Parish.

The mainline river levee was inspected on 12 September 2003. The river levee and floodwall segments were in excellent condition. All construction work on the Mississippi River in this district has been completed except for three gap closures. The deficiencies are considered minor since they are within the allowable freeboard. Due to funding constraints, the contract to raise these gaps in FY 03 has been delayed indefinitely. Although the hurricane protection levees are not totally complete, we conducted an interim joint inspection of the system on 30 May 2003. The levees and floodwalls are in excellent condition. An ACCEPTABLE rating is assigned.

b. **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 19 September 2003. The only remaining river levee work in this district is 0.8 miles in the Jefferson Heights area and it is scheduled for FY 04. The deficiencies are minor (1 to 2 feet) and are considered low priority since they are within freeboard. The remaining

hurricane protection work in Jefferson Parish consists of lakefront levee enlargements, and completion of the construction of floodproofing of the Hammond Highway Bridge crossing the 17th St. Canal. In FY 04, work will continue on the replacement of the Hammond Highway Bridge with completion planned in April 2004. If funding is available, levee enlargement contracts will be awarded in Reach 1 (delayed from 2003) and in Reach 4 (scheduled for March 2004). The river and hurricane protection levees and floodwalls are exceptionally well maintained. An ACCEPTABLE 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 (20.1 miles), Bayou des Glaises fuse plug levee (8.1 miles), right descending Atchafalaya River levee, including ring levees at Simmesport, Melville, and Krotz Springs (48.6 miles), and a portion of the West Atchafalaya Basin Protection Levee from Hamburg to the Bayou Courtableau control structure (35.3 miles). All 112.1 miles of levees within MVN's jurisdiction have been completed for years; however, recent profile information indicates that portions of the Krotz Springs and Melville Front and Ring Levees have grade deficiencies along with the Morganza Guide Levees, Bayou Des Glaises Fuse Plug Levee and the West Atchafalaya River Levee. Plans and specifications are nearing completion for both the Krotz Springs and Melville levees. Contracts to restore these two items back to design grade and section are currently scheduled for FY05 (October 2004). The other items are scheduled for later in the future (FY07 and FY08).

The inspection was conducted on 30 September 2003, and the levees, cattle guards, and fence lines are all well maintained. An ACCEPTABLE 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 Concordia-West Feliciana Parish boundary line just above Old River lock. They are also responsible for 338 miles of levees in MVK.

The inspection was conducted on 1 October 2003, and the levee is well maintained. There is one remaining contract for 3.5 miles of levee construction in this levee district. The

awarding of the last contract has been delayed from FY 03 to FY 04 due to funding constraints, relatively minor grade deficiency, and the uncertainty of the availability of borrow material. The levee deficiencies are minor and are considered low priority since they are within the allowable freeboard. An ACCEPTABLE rating is assigned.

e. **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 9 October 2003, and is in excellent condition. All work in this district has been completed except for some small gap closures. The gap closure in the vicinity of the Edgard ferry landing is scheduled to be awarded in FY04. The remaining gap closures are considered minor since they are within the allowable freeboard. Due to funding constraints, contracts to close these gaps have been delayed indefinitely. An ACCEPTABLE rating is assigned.

f. **ORLEANS LEVEE DISTRICT**

This district is responsible for maintaining 128.7 miles of levees and floodwalls in Orleans Parish; 13.2 miles on the east bank of the Mississippi River and 14.3 miles on the west bank, and 101.2 miles of hurricane protection along the shore of Lake Pontchartrain and canals connected thereto. The levee district is also responsible for operating and maintaining the Bayou Bienvenue control structure. The structure is well maintained in and in excellent condition.

The mainline river levees and floodwalls were inspected on 17 October 2003, and the hurricane protection levees were inspected on 4 June 2003. Both flood protection systems were in exceptional condition. There are still 2.3 miles of MR&T flood protection work remaining in this district. The remaining work is on the east bank of the Mississippi River 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 delayed indefinitely.

Hurricane flood protection work within Orleans Parish is approximately 97% complete and all work is scheduled to be completed by 2004-2005. The remaining major construction work

involves the floodproofing of the bridges along 17th St. and London Avenue outfall canals, the fronting protection structures for the pumping stations, levee enlargements, and miscellaneous floodwall cappings. An ACCEPTABLE 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, in 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 21 and 22 October 2003. There were no Mississippi River levee contracts on going at the time of the inspection. However, there are two contracts scheduled to be awarded in FY 04, Alhambra to Hohen Solms, 1.8 miles, and Hohen Solms to Modeste, 1.8 miles. The New Orleans District is currently preparing a report for the completed archeological investigations of the Braziel Baptist Church cemetery that was discovered partially buried under the Mississippi River levee and batture within the Alhambra-Modeste

reach. Human remains and caskets have been recovered during the investigation. The Corps has approved a plan to relocate the cemetery which includes a temporary set-forwarding of the existing levee in order to remove the remains under the levee. The New Orleans District is preparing a relocations design memorandum to be approved at its headquarters office for the relocation of the cemetery. The report is scheduled to be completed in December 2003, and the first construction contract is estimated to be awarded in FY 05.

There were three second lift levee enlargement contracts awarded in FY 03 in the Atchafalaya Basin that are within the jurisdiction of the Atchafalaya Basin Levee District. W52 and W85 A&B are underway along the West Atchafalaya Basin Protection Levee and E69/73 is underway along the East Atchafalaya Basin Protection Levee. Due to funding constraints, no new contracts will be awarded in FY 04. All levees and floodwalls are well maintained. An ACCEPTABLE 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 earthen 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 extend 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 22 October 2003. The levees and floodwalls were well maintained, and there were no significant maintenance deficiencies noted. There are a few areas along the floodwall where there are some encroachments within the right-of-way. Morgan City is addressing the issues with the local businesses to have them remove equipment and other items from the right-of-way. None of the encroachments are endangering the integrity of the flood protection system or our ability to flood fight the area. This system is in the best condition it has been in several years. An ACCEPTABLE 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 22 October 2003. The levees and floodwalls were well maintained, and there were no significant maintenance deficiencies noted. An ACCEPTABLE 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 23 October 2003, and at the time of the inspection there were three on going contracts (Wax Lake Outlet West Levee, 2.5 miles; Wax Lake West Drainage Structure; and Todd Levee and pumping station, 1.5 miles). If funding becomes available a contract will be awarded for the Wax Lake Outlet East Levee. There were no significant maintenance deficiencies noted. An ACCEPTABLE 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, and the Bayou Dupre floodgate. In addition, the levee district is also responsible for operating and maintaining St. Bernard Parish's eight pumping stations and 19 internal drainage canals.

The mainline river levee was inspected on 31 October 2003. All construction work on the Mississippi River levee in this district has been completed for years. We also conducted a joint inspection of the hurricane protection levee on 22 May 2003, since the majority of the levee system is up to grade and section. The levees, floodwalls, and the Bayou Dupre flood control structure are all well maintained. An ACCEPTABLE rating is assigned.

l. **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 16 miles of hurricane protection levee (Reach C) behind the mainline river levee.

The mainline Mississippi River levee was inspected on 31 October 2003. The levee is well maintained and in excellent condition. All construction work along the Mississippi River levee in this district is now complete. On 28 May 2003, we also conducted a joint inspection of the Reach C hurricane protection levee since 90 percent of the levee system is now up to grade and section. The hurricane protection levee is well maintained and in excellent condition. An ACCEPTABLE rating is assigned.

m. **PONTCHARTRAIN LEVEE DISTRICT**

This district is responsible for maintaining 124.9 miles of levee on the east bank of the Mississippi River from 0.3 miles below the I-10 bridge in Baton Rouge to the St. Charles-Jefferson Parish line.

The levee was inspected on 6 November 2003. The levee, cattle guards, and fences are all well maintained and no significant deficiencies were noted. All major levee construction work within this levee district is now complete, except for several small gap closures, which are scheduled to be performed in FY04. An ACCEPTABLE rating is assigned.

n. **METROPOLITAN COUNCIL OF BATON ROUGE**

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

The levee was inspected on 6 November 2003, and is in excellent condition. The last item of levee construction work scheduled for this area is the Baton Rouge Front Phase 2 (0.2 miles). The project has been delayed several times in order to resolve borrow area concerns. The concept is for the construction of a small segment of low-level levee on the upstream end of the previously completed Phase 1 construction contract.

Two soil nailing contracts that have been completed in an attempt to arrest the bank movement in this upstream area. The results will be monitored for several years before proceeding with further levee construction work, including the repair of the concrete slope pavement that has cracked as a result of this movement. We are also continuing to evaluate the results from the inclinometers that were previously installed at the site to monitor the movement in this area. An ACCEPTABLE rating is assigned.

o. **PLAQUEMINES PARISH WEST BANK LEVEE DISTRICT**

This district is one of three levee districts under the direction of the Plaquemines Parish Government. This district is responsible for maintaining approximately 37.9 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. This levee district is also responsible for maintaining 3 miles of the New Orleans to Venice, Louisiana Hurricane Protection Project from St. Jude to City Price, LA.

The inspection for the mainline Mississippi River levee was conducted on 14 November 2003. The levee is well maintained and in excellent condition. All MR&T levee construction work within this district is now complete. We also conducted an inspection of the hurricane protection levees within this district and the Buras Levee District on 24 September 2003, and all of the levees were well maintained and in excellent condition. An ACCEPTABLE 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 approximately 34 miles of hurricane protection levees (Reach A, Reach B-1, and Reach B-2) behind the river levee.

The mainline Mississippi River levee was inspected on 14 November 2003, and it is well maintained and in excellent condition. All MR&T construction work on the Mississippi River levee in this district is now complete; however, additional levee enlargement work to incorporate hurricane protection above the MR&T design grade is still ongoing within this district. There are several second lift levee enlargement projects scheduled for

FY04. We also conducted an inspection of the hurricane protection levees within this district on 24 September 2003. All of the levees were well maintained and in excellent condition. An ACCEPTABLE 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 43 miles of hurricane protection levee, six pumping stations, and two floodgates (Larose and Leon Theriot, formerly Golden Meadow).

Since the hurricane protection levees are still under construction, a formal inspection will not be conducted until completed reaches of the levee system have been "turned over" to the levee district. However, in the interim a joint inspection of the system was conducted on 26 June 2003, and although the levees are still under various stages of construction they, along with the Larose and Leon Theriot floodgates, are well maintained. We also conducted a periodic inspection of the Larose floodgate on 17 June 2003, and it was determined that the structure is well maintained and in excellent condition. An ACCEPTABLE rating is assigned.

r. **TOWN OF GRAND ISLE**

The Town of Grand Isle and LA DOTD (Office of Public Works) are co-sponsors on the project. Grand Isle is a low-lying barrier island located along the Gulf of Mexico in Jefferson Parish, Louisiana, approximately 50 miles south of New Orleans, Louisiana. The island extends approximately 7.5 miles along the Gulf shore generally in a northeast to southwest direction, and is approximately 0.75 mile wide at its center. The main feature of the project consists of a sand berm and vegetated dune extending the length of Grand Isle's Gulf shore. The project stabilizes the island's Gulf shore and provides protection from Gulf waves generated by hurricanes of a magnitude that recur with an average frequency of once in every 50 years. The project provides no protection from still water flooding.

An inspection of the beach and sand dune hurricane protection project was conducted on 26 August 2003. At the time of the inspection, there were still some areas of the sand dune and beach within the project limits that were deficient as a result of being impacted by storms over the last several years, most recently by Tropical Storm Isidore and Hurricane Lili in

2002, and by Tropical Storm Bill in June 2003. After being impacted by Tropical Storm Bill in June 2003, PL84-99 Advanced Measure funds were once again approved and work was performed in July 2003 to close the gap in the same area of the dune that was previously impacted by the storms in 2002. Advanced Measure funds were used to place broken concrete (source: Louis Armstrong airport runway that was being replaced) in the damaged area of the dune in an effort to restore the dune to an acceptable elevation that would afford interim protection for the remainder of the 2003 hurricane season. The Corps H/L unit installed concrete in a 500 linear foot section and a contractor installed concrete in a 1000 - 2000 linear foot section. This work was 100% federally funded. It should be noted that as a result of the two storms in 2002, the Town of Grand Isle has once again requested PL84-99 funding for the damages sustained to the project. The request has been reviewed and HQUSACE has approved funding in the amount of $1,182,000.

After HQUSACE decided that the damages sustained to the project by past storms dating back from the 1990's did not qualify for PL84-99 funding, the co-sponsors (LA DOTD and the Town of Grand Isle) have had to request additional funding from the State legislature to offset this loss of funding. The co-sponsors have advised us that they have secured the necessary funding from the State legislature, and are preparing plans and specifications to have a contract awarded to restore the sand dune and beach back to project conditions prior to the 2004 hurricane season. The co-sponsors are also proposing to make modifications to the sand dune, however, since PL84-99 funding is involved, their request for modifications still need to be resolved and approved. The co-sponsors are proposing to add a clay core and stone armor on the gulf side slope prior to capping it with sand.

As stated above, the work performed with the Advanced Measures funding has essentially closed the gap in the damaged area of the sand dune and will afford interim protection until the local sponsors can take corrective action to permanently restore the sand dune and beach back to project conditions. Corrective action by the local sponsors is currently in the engineering and design phase and it is anticipated that construction work to restore the project back to project conditions should be completed by the beginning of the 2004 hurricane season.

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.

LOCAL PROTECTION PROJECTS (Local Maintenance Responsibility) CONSIDERED DEFICIENT AS OF DECEMBER 2003
(ER 1130-2-339)

REPORTS CONTROL SYMBOL (DAEN-CWO-10)

PROJECT	READINESS FOR FLOOD EMERGENCY	LOCAL MAINTENANCE PROGRAM	DEFICIENT IN MAINTENANCE OF: FLOODWALLS	SAND DUNE ~~LEVEE~~ SECTION AND GRADE	LEVEE CROWN ROADWAYS & GATES	REVETTED AREAS	DRAINAGE STRUCTURES	PUMPING PLANTS	PONDING AREAS	CHANNELS & FLOODWAYS	CLOSURE STRUCTURES	DEFICIENT IN CONTROL OF: ENCROACHMENT & TRESPASS	WILD GROWTH	BURROWING ANIMALS	GRAZING	BEACH MAINTENANCE			LOCAL INTEREST NOTIFIED OF EXISTING DEFN.	ESTIMATED COST: RESTORING PROJECT TO SATISFACTORY CONDITION ($000's)	ANNUAL MAINTENANCE ($000's)	REMARKS
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
TOWN OF GRAND ISLE	✓	✓		✓												✓			✓	7.830		The segment of the sand dune that has been damaged by past storms was repaired with riprap in July 2003 using PL 84-99 Advance Measure funding. It should be noted that no Advance Measure funds were used to restore the beach, and therefore, the beach still remains deficient in the area of the damaged dune. The closure of this gap will afford interim protection until the local sponsors can take corrective action to restore the project back to project conditions. See subparagraph "r" of the inspection report.

ENG FORM 1 JUL 73 4390-R REPLACES ENG FORM 4390-R(Text) WHICH IS OBSOLETE.

LOCAL PROTECTION PROJECTS (Local Maintenance Responsibility) CONSIDERED DEFICIENT AS OF DECEMBER 2003
(ER 1130-2-339)

REPORTS CONTROL SYMBOL
(DAEN-CWO-40)

PROJECT	READINESS FOR FLOOD EMERGENCY	LOCAL MAINTENANCE PROGRAM	DEFICIENT IN MAINTENANCE OF: FLOODWALLS	SAND DUNE ~~LEVEE~~ SECTION AND GRADE	LEVEE CROWN ROADWAYS & GATES	REVETTED AREAS	DRAINAGE STRUCTURES	PUMPING PLANTS	PONDING AREAS	CHANNELS & FLOODWAYS	CLOSURE STRUCTURES	DEFICIENT IN CONTROL OF: ENCROACHMENT & TRESPASS	WILD GROWTH	BURROWING ANIMALS	GRAZING	BEACH MAINTENANCE			LOCAL INTEREST NOTIFIED OF EXISTING DEFN.	ESTIMATED COST: RESTORING PROJECT TO SATISFACTORY CONDITION ($000's)	ANNUAL MAINTENANCE ($000's)	REMARKS
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
TOWN OF GRAND ISLE	✓	✓		✓												✓			✓	7,830		The segment of the sand dune that has been damaged by past storms was repaired with riprap in July 2003 using PL 84-99 Advance Measure funding. It should be noted that no Advance Measure funds were used to restore the beach, and therefore, the beach still remains deficient in the area of the damaged dune. The closure of this gap will afford interim protection until the local sponsors can take corrective action to restore the project back to project conditions. See subparagraph "r" of the inspection report.

ENG FORM 1 JUL 73 4390-R REPLACES ENG FORM 4390-R(Test) WHICH IS OBSOLETE.